

North Eastern Region Vision 2020

Volume 1

**Ministry of Development of North Eastern Region
&
North Eastern Council**

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**PEACE, PROGRESS AND PROSPERITY IN
THE NORTH EASTERN REGION:
VISION 2020**

I. A SUMMARY AND A STARTING POINT

(a). Introduction

India's North Eastern region is a "*rainbow country ...extraordinarily diverse and colourful, mysterious when seen through parted clouds*". It stretches from the foothills of the Himalayas in the eastern range and is surrounded by Bangladesh, Bhutan, China, Nepal and Myanmar (Map 1). It includes the seven sisters - Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura, along with a small and beautiful cousin in the Himalayan fringes, namely, Sikkim. The region is rich in natural resources, covered with dense forests, has the highest rainfall in the country, with large and small river systems nesting the land and is a treasure house of flora and fauna. Marked by diversity in customs, cultures, traditions and languages, it is home to multifarious social, ethnic and linguistic groups.

Troubled by history and geo-politics, the North East has remained one of the most backward regions of the country. The trauma of partition in 1947 not only took the region backwards by at least a quarter of a century, but also placed hurdles on future economic progress. It isolated the region, sealed both land and sea routes for commerce and trade, and severed access to traditional markets and the gateway to the East and South-East Asia – the Chittagong port in East Bengal (now Bangladesh). It distanced the approach to the rest of India by confining connectivity to a narrow 27-km-wide Siliguri corridor, making it a "remote land" and constraining access for movement of goods and people. The uneasy relationship with most of the neighbouring countries has not helped the cause of development of the region either: with 96 per cent of the boundary of the region forming international borders, private investment has shied away from the region.

Poor infrastructure and governance is combined with low productivity and market access. Inability of governments to control floods and river bank erosion causes unmitigated damage to properties and lives of millions of people every year in the region. If the quest for ethnic and cultural identities has sowed the seeds, frustration and dissatisfaction from seclusion, backwardness, remoteness and problems of governance have provided fertile ground for breeding armed insurgencies. There is overwhelming dependence for resources on the Central Government, public investment in the region has sub-optimal productivity due to weak of forward and backward linkages.

Map 1: Political Map of North Eastern Region



b. Vision 2020: Ushering in peace and prosperity for the people

People of the region have an ambitious vision: by 2020, they aspire to see their region emerge peaceful, strong, confident, and ready to engage with the global economy. They would like to march on the path of economic, social and cultural progress towards prosperity and well-being, to participate in governance and determine the allocation of public resources and public services they receive. Political empowerment in evolving responsive governance would help to achieve social and economic empowerment as well. They want to banish poverty and illiteracy and ensure that every family in the region has the opportunity to live a healthy and secure life with dignity and self-respect. Moving away from the dependency syndrome, people in the region would like to acquire the capability and self-confidence to shape their own destinies. They would like to enjoy their freedoms – freedom from hunger and poverty, the freedom to exercise choice in their avocations, income-earning and spending decisions, and political, economic and social freedoms without fear. They would like to enjoy peace and achieve sustainable progress and prosperity.

c. Challenges and strategy

The challenges to ensuring peace and progress in the region are formidable. The gap between the region and the rest of the country in terms of various developmental outcomes, productivities and capacities of people and institutions is large and growing, and has to be bridged. Even within the region, there are vast differences, particularly between populations living in the hills and in the plains and between those living in the towns and villages. Given the vast disparities within the region, a development strategy will have to be evolved depending upon prevailing resources, conditions and people's needs and priorities. Further, the development strategy for the various tribes in the region will have to be participatory and should be calibrated in their own setting. Given the complexity of the task, augmenting

investment to accelerate growth in the region is only a part of the story. The successful transformation of investments into developmental outcomes requires a variety of strategic initiatives.

We have put forward a strategy for encompassing (inclusive) development of the region, to meet the challenge of realising the vision, which comprises six interdependent components:

- (i) Empowerment of the people by maximizing self-governance and participatory development through grass-roots planning. Such planning will help to evolve development strategy based on the resources, needs and aspirations of the people.
- (ii) Rural development with a focus on improving agricultural productivity and the creation of non-farm avocations and employment.
- (iii) Development of sectors with comparative advantage agro-processing industries, modernization and development of sericulture, investment in manufacturing units based on the resources available in the region, harnessing the large hydroelectric power generation potential and focus on developing services such as tourism that will help to accelerate development and create productive employment opportunities.
- (iv) Maximising self-governance, introduction of participatory planning, rural development and development of sectors with comparative advantage call for significant augmentation of capacity of the people and institutions both in the government and private sectors. Capacity development will have to address the issue of imparting skills among the people to enhance their productivity, generating a class of entrepreneurs within the region willing to take risks. They will also have to be provided with the necessary support through the creation and development of institutions at all levels to undertake planning.
- (v) Augmenting infrastructure, including rail, road, inland water and air transportation to facilitate a two-way movement of people and goods within the region and outside, communication networks including broadband and wireless connectivity, and harnessing of the vast power generation potential, all of which will open up markets for produce from the region, attract private investment, create greater employment opportunities and expand choices for people of the region. Making the Look East Policy meaningful for the region by connecting it with Southeast Asian markets. Connectivity of NER with ASEAN would require opening up the sea route through the Chittagong port and the land routes through Myanmar and China. In addition, opening up the land route through Bangladesh could enormously benefit both countries and diplomatic efforts should focus on improving relations with the neighbours.
- (vi) Ensuring adequate flow of resources for public investments in infrastructure, implementing a framework for private participation in augmenting infrastructure and creating an enabling environment for the flow of investments to harness the physical resources of the region for the welfare of the people.

The road from the current anarchic situation to progress and prosperity is long and arduous, but it has to be trekked. This is a necessity, an imperative, for peace and prosperity in the region not only determines the future of 39 million people of the region but also the unity and integrity of the country. In what follows we trace the terrain to understand the enormity of the task. The next section presents the starting point of the analysis, which is the current state of development and the problems faced in the region. Section III presents a detailed projection of the vision of development in quantitative and qualitative terms and the magnitude of the challenges to achieving the goals. The strategy for meeting these challenges is presented in Section IV, and the final section (V) presents a perspective of the vision of development for the region.

II. NORTH EASTERN REGION: ECONOMIC, SOCIAL AND DEMOGRAPHIC PROFILE

The eight states located in India's north-east cover an area of 2,62,179 sq. km. constituting 7.9 per cent of the country's total geographical area, but have only 39 million people or about 3.8 per cent of the total population of the country (2001 census). Over 68 per cent of the population of the region lives in the state of Assam alone. The density of population varies from 13 per sq. km. in Arunachal Pradesh to 340 per sq. km. in Assam. The predominantly hilly terrain in all the states except Assam is host to an overwhelming proportion of tribal population ranging from 19.3 per cent in Assam to 94.5 per cent in Mizoram. The region has over 160 scheduled tribes and over 400 other tribal and sub-tribal communities and groups. It is predominantly rural with over 84 per cent of the population living in the countryside. According to the 2001 Census, the total literacy rate of the population in the region at 68.5 per cent, with a female literacy rate at 61.5 per cent, is higher than the country's average of 64.8 per cent and 53.7 per cent, respectively. Of course, there are significant variations in the literacy rates among different states with Assam, Arunachal Pradesh and Meghalaya below the national average. Even as the average literacy rate in the region is higher than the national average, there are concerns about the quality of education. More importantly, the literacy rate has not translated into higher employability or productivity.

Richly endowed with natural resources, the region is identified as one of the world's biodiversity hotspots; it hosts species-rich tropical rain forests and supports diverse flora and fauna and several crop species. The forest cover in the region constitutes 52 per cent of its total geographical area. Thus, a large part of the area of the region is used to providing global public goods, which limits the availability of arable land and enhances the cost of delivering public services to the sparse population. Similarly, reserves of petroleum and natural gas in the region constitute a fifth of the country's total potential. The region is covered by the mighty Brahmaputra-Barak river systems and their tributaries, but water has been a source of misery rather than a resource. Erosion of river banks caused by floods has been an annual feature involving enormous loss of life, property and livelihood. Geographically, apart from the Brahmaputra, Barak and Imphal valleys and some flat lands in between the hills of Meghalaya and Tripura, the remaining two-thirds of the area is hilly terrain.

Driven by expanding global trade and investment, the region was in the forefront of development almost 150 years ago. The vast river systems and small rivulets were a means of livelihood for a majority of the population in the valleys and plains. Global trade was conducted through the sea-route, a network of inland waterways, and land transportation through road and railways. In fact, the railway network between Dibrugarh and Chittagong was one of the earliest projects in India implemented by the British in the late-nineteenth century. The natural transportation route through East Bengal not only reduced the physical distance but also provided emotional closeness. The rapid spread of tea gardens followed the establishment of the first tea garden in 1835 and the export of the first consignment of tea to London in 1838. The discovery of oil in Makum and establishment of a refinery in Digboi in 1890 laid the foundation for the development of an undivided Assam. The zeal of missionaries was largely responsible for spreading literacy.

At the stroke of midnight on August 15, 1947, India gained independence. The partition of the country leading to the creation of East Pakistan changed the economic landscape of the region, virtually disconnecting it from the rest of the country, with the only remaining link being the narrow 27 km Siliguri corridor. Today, almost the entire boundary of the region (98 per cent) is an international border shared with China and Bhutan in the north, Myanmar in the east, Bangladesh in the south and west, and Nepal to the west of Sikkim. The carving out of East Pakistan from Bengal blocked the natural sea route through the port city of Chittagong. Thus, the partition of the country land-locked the region, blocked natural transportation routes and severed its market access. The geo-political distancing of the region from its main port of Kolkata combined with economic insulation has caused immense structural damage to the NER economy.

The quest for ethnic and regional identity, nationalism, and ideological motivations have fomented a climate of insurgency in several parts of the North Eastern region, which has led to political fragmentation of the region; the climate has been further fuelled by with the slow pace of development. The difficult terrain, dense forest cover and open borders with Myanmar and Bangladesh have provided a congenial environment for this.

The standard of living of the people in the region, as measured by per capita Gross State Domestic Product (GSDP), has lagged significantly behind the rest of the country. At Rs. 18,027 in 2004-05, it was less than the all-state average of Rs. 25,968 by 31 per cent. Interestingly, available information shows that at the time of independence per capita income in the undivided state of Assam was higher than the national average by 4 per cent. Thus, even under the British colonial rule the economic performance of the region was better than the rest of the country and this shows its vast developmental potential. However, as the growth rate of per capita GSDP lagged behind the rest of the country the gap narrowed, and by the late 1960s per capita income in the region had fallen behind. With the introduction of market-based economic reforms, differences in the growth rates in per capita GSDP between the region and the country increased further. During the period 1990-91 to 2004-05, on an average, while the aggregate GSDP of all states in constant prices increased at the rate of 6 per cent per year, the corresponding growth in the region was 4.4 per cent. Similarly, the region's growth rate of per capita income (2.5 per cent) lagged behind the average growth rate of the country (4 per cent) during the period by 1.5 percentage points. Not surprisingly, the difference in per capita incomes between the country and the region has steadily diverged. In 1990-91, the region's per capita

income at current prices was lower than the national average by 20 per cent, a gap that widened to 31 per cent by 2004-05.

The aggregate picture presented above, however, hides vast differences between the urban and rural areas, the hills and the plains and among the other states. In the region, except for Mizoram, Nagaland and Sikkim which recorded marginally higher growth rates than the country average, per capita income levels in all other states were lower by varying magnitudes. Assam, the largest among the North Eastern states had the lowest per capita income at Rs. 15,661 which was lower than the country average by 40 per cent. Furthermore, even in the three states with per capita income levels higher than the national average, much of the income generated was in public administration. In fact, the share of income generated by public administration at 10.6 per cent was significantly higher in the region than in the country (6.3 per cent). It was as high as 17 per cent in Arunachal Pradesh, Manipur and Sikkim. This underlines the overwhelming dependence of the population on the government for generating income, and a lack of productive economic activities in the primary, secondary and tertiary sectors of the economy.

The region lags behind the rest of the country not only in terms of per capita GSDP but in several other development indicators as well. People do not have access to basic services in adequate measure. The standard development indicators such as road length, access to healthcare, and power consumption in the region are below the national average (Table 1). The region generates less than 8 per cent of its 63,257 MW of hydroelectric power generation potential and its per capita power consumption at 110 Kwh. is almost a fourth of the national average (411 Kwh.). In Assam, Manipur and Nagaland, the per capita power consumption is as low as 85 Kwh., 70 Kwh. and 87 Kwh., respectively. The literacy rate in the region is high, but the slow pace of industrialisation and limited capacity of the population to engage in productive economic activities means a high rate of unemployment and underemployment. The incidence of poverty in the region is high and the official income-poverty measure does not accurately reflect the deprivation. The usual calorific headcount measure of poverty estimated on the basis of National Sample Survey (NSS) consumption surveys in Assam does not reflect the deprivation in the hilly regions of the North East. Besides unrepresentative sampling, admittedly the calorie requirement in hill areas is higher and they are also handicapped by higher cost of living than the plains.

Table 1: NER States: Various Indicators

<i>State</i>	<i>Area (sq. km) 2001</i>	<i>Popul ation (lakh perso ns) 2001</i>	<i>Lit era cy rat e (%) 20 01</i>	<i>Inf ant mort ality rate (per '000) 2005 -06</i>	<i>Povert y ratio based on MRP- con sump tion 2004- 05</i>	<i>Per capita GSDP (Rs) 2004-05</i>	<i>Forest covera ge (%) 2003</i>	<i>Per capita electric ity con sump tion (kwh) 2004- 05</i>	<i>Road length (km/10 00 sq. km. area) 2002</i>
	1	2	3	4	5	6	7	8	9
Arunachal Pradesh	83,743	10.98	54.3	61	13.4	21,919	61.55	144.8	219.3

<i>State</i>	<i>Area (sq. km) 2001</i>	<i>Popul ation (lakh perso ns) 2001</i>	<i>Lit era cy rat e (%) 20 01</i>	<i>Inf an t m ort ali ty rate (per '000) 2005 -06</i>	<i>Povert y ratio based on MRP- consu mption 2004- 05</i>	<i>Per capita GSDP (Rs) 2004-05</i>	<i>Forest covera ge (%) 2003</i>	<i>Per capita electric ity consu mption (kwh) 2004- 05</i>	<i>Road length (km/10 00 sq. km. 2002</i>
Assam	78,438	266.55	64.3	66	15.0	15,661	34.45	85.3	1140.9
Manipur	22,327	22.94	70.	30	13.2	16,299	78.01	70.05	512.1
Meghalaya	22,429	23.19	62.6	45	14.1	20,775	42.34	352.2	426.5
Mizoram	22,081	8.98	88.8	34	9.5	30,357+	75.71	133.7	229.8
Nagaland	16,579	19.90	66.6	38	16.5	26,129+	52.05	87.2	1267.9
Sikkim	7,098	5.41	68.8	34	15.2	26,215	82.29	397.7	284.4
Tripura	10,486	31.99	73.2	52	14.4	24,984+ +	60.01	113.1	1554.1
NER States	262179	389.84	68.5	45#	13.9#	18,032	54.52	110.4	660.9
India	3287240	10,287.37	64.8	57	23.6	25,944*	23.57	411.1	755.4

Sources:

1. *Statistical Abstract of India (2006)*, used for Col. 1, 2, 7, 8, 9, downloaded from www.mospi.nic.in
2. *NEDFi Data Quarterly (2005)*, Vol. 4, No. II, April, used for Col. 3.
3. Chapter 7 on Human Development (Table 7.20) of this report used for Col. 4.
4. www.mospi.nic.in used for Col. 6.
5. <http://www.planningcommission.nic.in> used for Col. 5.

Note: # Simple averages used for NER; + Refers to estimated per capita GSDP for 2003-04 and 2004-05; ++ refers to its estimated value for 2004-05; * Per capita GDP at factor cost (RE) from RBI, *Handbook of Statistics on the Indian Economy, 2005-06*.

The problems of the region are not merely confined to lagging income levels, but extend to the process of development itself. A top-down development planning strategy has not involved people in designing and implementing the strategy and, not surprisingly, the relationship between public spending and service delivery outcomes has been tenuous. The various public investment projects in the region have not yielded commensurate benefits. Lack of people's involvement has robbed the system of a sense of belonging and led to inefficient and wasteful resource allocation on the one hand and a lack of social accountability on the other.

The partition of the region not only took the economy backwards by over a quarter of a century but also caused structural retrogression to a patronage-dependent economy from the Centre and Government-spending propelled economic growth. The trauma of partition in the NER was to imprison the economic fortunes of the region by international frontiers. At the same time, the top-down planning process did not create any scope for developing forward and backward linkages within the economy. The weak administrative capacity of the state has resulted in very high rates of return for armed insurgency and extortion and even more the perception of insurgency which has been a major deterrent to private sector initiatives in economic activities. Weak and unresponsive institutions of governance and market further added to the problem.

III. PROGRESS TO PEACE AND PROSPERITY

(a). *Catching up with the rest of the country*

Improving the standard of living of the people would require sustained increases in per capita income levels and its fair distribution amongst all sections. By 2020, people of the North East should have living standards comparable to people in the rest of the country. Given that income levels in the region are lower than the national average by over 30 per cent and that the region has lagged behind, catching up with the average income level in the country by 2020 would require significant acceleration in the growth rate in the NER. The task has been made even more formidable with the Indian economy reaching a higher growth path and the GDP estimated to grow at almost 8 per cent per year during the Tenth Plan.

The continued growth of the Indian economy at 9 per cent per year from 2006-07 to 2020 would, on an average, increase per capita income by about 7.61 per cent (Table 2). As over the period, population growth is expected to decelerate, per capita income growth is expected to accelerate from 7.51 per cent in the Eleventh Plan period (2007-12) to 7.80 per cent during the Thirteenth Plan (2017-22). Thus, by 2020, per capita income in the Indian economy is expected to be about Rs. 87,459 at the 2006-07 prices or about USD 2,250 at the prevailing exchange rate. To reach this level of income, between 2006-07 and 2019-20, GSDP in the North Eastern region will have to grow at 12.95 per cent per year on an average, or at 11.64 per cent in per capita terms (Table 3 and Exhibit 1).

Table 2: Plan-wise Projected Per Capita GDP at 2006-07 Prices

<i>Plan</i>	<i>GDP (FC) at 2006-07 Prices</i>		<i>Average GR of Population (%)</i>	<i>Per Capita GDP at 2006-07 Prices</i>	
	<i>Level (Rs. crore)</i>	<i>Average annual growth rate (%)</i>		<i>Level (Rs.)</i>	<i>Average annual growth rate (%)</i>
<i>2006-07 (Base year)</i>	3,743,472		111.22	33,659	
XI FY Plan (2007-08 to 2011-12)	24,419,920	9.00	1.39	42,079	7.51
XII FY Plan (2012-13 to 2016-17)	37,573,074	9.00	1.24	60,665	7.67
XIII FY Plan (2017-18 to 2019-20)	31,665,640	9.00	1.11	81,322	7.80

<i>Plan</i>	<i>GDP (FC) at 2006-07 Prices</i>		<i>Average GR of Population (%)</i>	<i>Per Capita GDP at 2006-07 Prices</i>	
	<i>Level (Rs. crore)</i>	<i>Average annual growth rate (%)</i>		<i>Level (Rs.)</i>	<i>Average annual growth rate (%)</i>
<i>Growth rate per annum (%)</i>		9.00	1.26		7.61
Estimated per capita GDP at 2006-07 prices in 2019-20				87,459	

Note: Growth rate of real GDP at 1993-94 prices for the period 2000-01 to 2004-05 was 5.86 per cent per annum.

Table 3: Projected Per Capita GSDP at 2006-07 Prices of NE States: 2007-08 to 2019-20

<i>Year</i>	<i>Average Required Growth Rate of GSDP at 2006-07 prices (%)</i>	<i>Average growth rate of population (%)</i>	<i>Per Capita GSDP at 2006-07 Prices</i>	
			<i>Level (Rs)</i>	<i>Average Growth Rate (%)</i>
<i>2006-07 (Base year)</i>	92,233	4.17	22,139	
XI FY Plan	10.00	1.25	32,718	8.64
XII FY Plan	13.67	1.17	57,724	12.35
XIII FY Plan	16.37	1.05	87,462	15.16
Required GR (% pa)	12.95	1.18		11.64
Actual growth rate per annum (%)	5.34			
Target level			87,459	
Projected level			87,462	
Gap between target and achieved			-3	

Source: NIPFP computation.

Data Sources:

1. Population estimates: Registrar General of India, Census 2001.
2. Quick estimates of GDP at factor cost: Government of India, Press Note on Revised Estimates of GDP, dated 31 May 2007
3. GSDP: mospi.nic.in

The process should be put in place expeditiously to accelerate the growth process in the region. However, it would be unrealistic to expect that the growth rate of per capita income will accelerate from 4.6 per cent recorded during 2000-05 to 11.64 per cent immediately. It is, therefore, necessary to split the time-frame into three Plan periods and set targets to steadily accelerate the growth rate in a phased manner to achieve the desired targeted per capita income growth rate of 11.64 per cent during the period. An illustrative scheme of acceleration is shown in Table 3, according to which, the growth rate of per capita GSDP should accelerate from the average of 4.6 per cent during 2000-05 to 8.64 per cent during the Eleventh Plan (2007-12), 12.35 per cent during the Twelfth Plan (2012-17) and 15.16 per cent

during the Thirteenth Plan (2017-22). The changes required in the governance system, development strategy, reforms in policies and institutions, capacity-building in people and institutions and creation of a market friendly environment to achieve this acceleration will be discussed later in the document.

Accelerating growth in the NER to catch up with the rest of the country requires a massive increase in investments as well as a significant improvement in productivity. The crude estimate of additional investment needed by assuming an incremental capital-output ratio (ICOR) of 4, works out to Rs 1,329,891 crore (Table 1.7A in Annexure 1.1 in Volume III) at 2006-07 prices or 48.1 per cent of the GSDP during the period. Thus, estimated investment is placed at Rs 211,613 crore (or 35.3 per cent of GSDP) during the Eleventh Plan; Rs. 505,499 crore (47.7 per cent of GSDP) during Twelfth Plan and Rs 612,779 crore (55.6 per cent of GSDP) during the first three years of the Thirteenth Plan period. An alternative estimate of investment by assuming declining ICORs from 4 during the Eleventh Plan to 3.6 during the Twelfth Plan and 3.2 during the Thirteenth Plan periods places the total investment requirement at Rs 1,156,785 crore or 41.9 per cent of GSDP in the region for the period. While the two estimates made under alternative assumptions look very large in absolute terms, as a proportion of GDP of the country they are only 1.4 per cent and 1.2 per cent, respectively. If the national investment rate relative to GDP during the period is assumed at 36 per cent, investment of 1.4 per cent in the region works out to a national investment share of about 3.8 per cent which is broadly equivalent to the population share of the region.

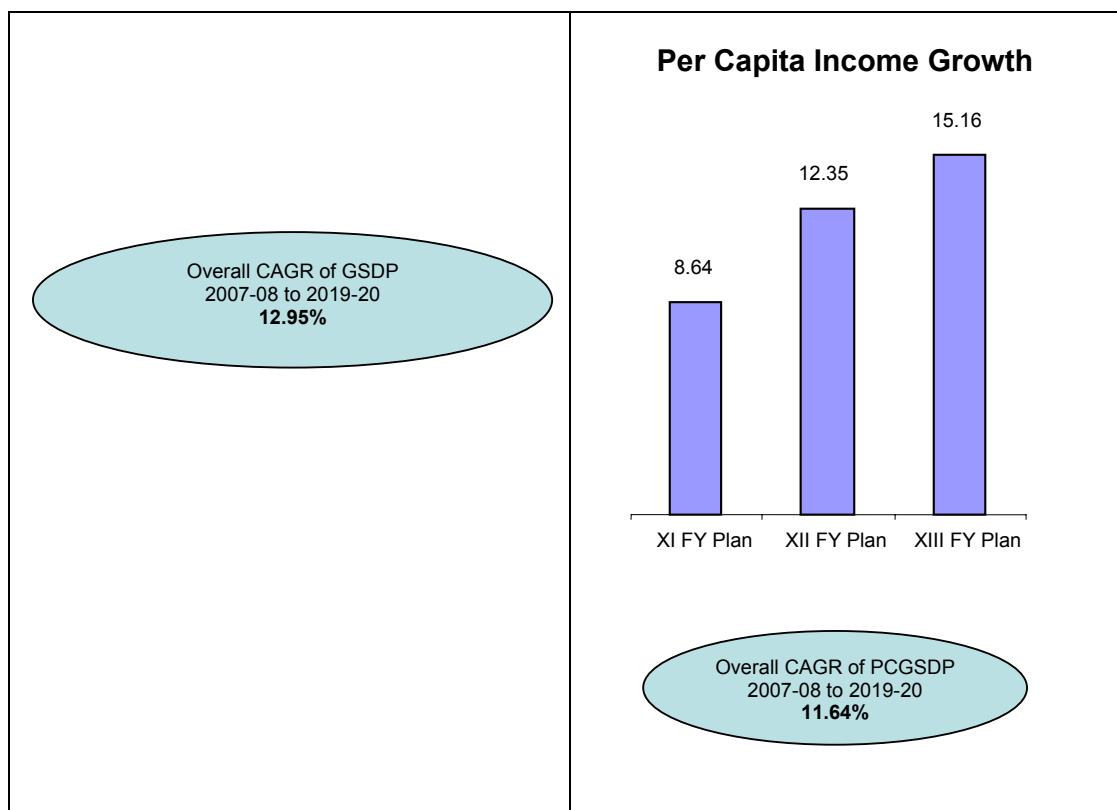
Indeed, increasing the investment share in the region to equal its population share requires considerable stepping up of public investment in the physical and the social infrastructure and creating an accommodating climate for private sector investment. This calls for significant initiatives in policies and institutions. There needs to be a paradigm shift in development strategy to increase the productivity of public investment by strengthening forward and backward linkages. This would call for empowerment of the people to have maximum self-governance and grassroots planning, building capacity in people and institutions to take the development agenda forward and a quantum leap in the quality of infrastructure and connectivity. Provision of world-class infrastructure and connectivity would require a significant increase in public investment. In the initial years, it is necessary also to expand the social infrastructure, particularly education including vocational education and skill development. Given the low level of entrepreneurial activity in the region, in the initial years, the government also has to take a proactive role and make investments in promotional areas as well.

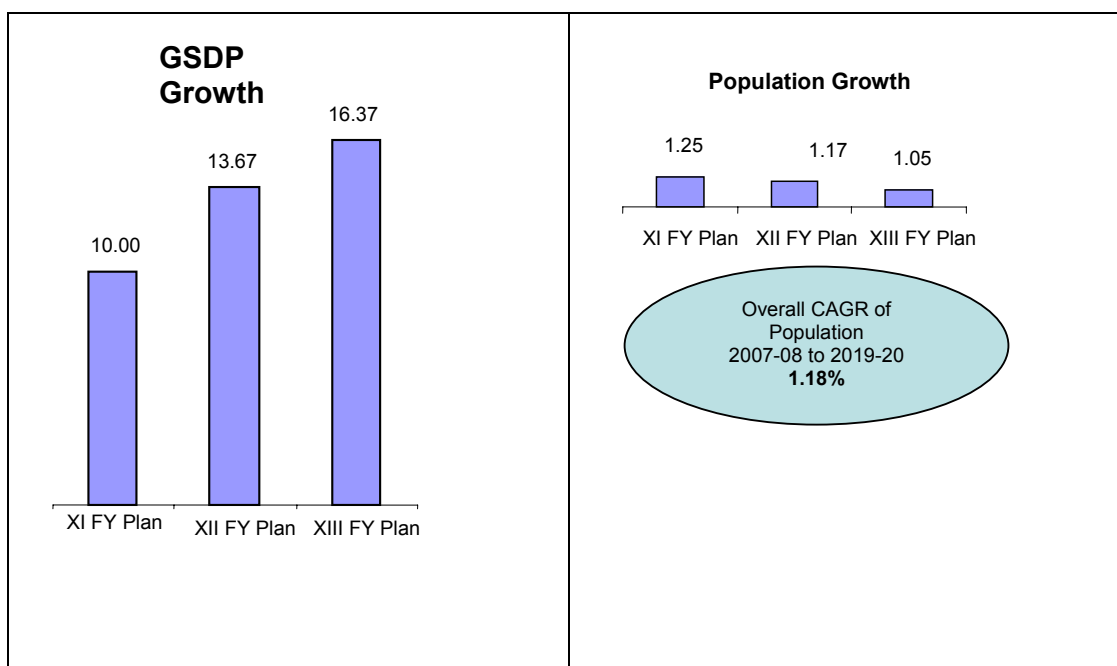
Thus, both Central and State Governments in the region will have to make large investments to overcome the infrastructural deficit, particularly in the initial years, though in course of time, it should be possible to involve the private sector in this task through Public-Private Partnerships (PPPs). In order to enable this, it is necessary to create a proper framework for PPPs in infrastructure investments. Budgetary support for public investment too needs to be augmented to provide the required volume of viability gap funding.

(b). Structural transformation

Acceleration in the growth process in the region requires changes in the structure of the economies of the various states in the region. The growth rates in different states required to catch up with the per capita GDP of the country is summarised in Table 4. The increase in the growth rates required varies across states. Assam, the largest state in the region contributes close to 60 per cent of the regional GSDP. It also lags behind the country's average per capita income by about 17 per cent. Therefore, to catch up with the country's average per capita income, the state should accelerate its GSDP growth to an annual rate of 14.75 per cent, with a per capita GSDP growth of 13.39 per cent during the period 2006-20. Similarly, Manipur has to accelerate its growth of GSDP to 12.87 per cent. Every state in the region except Nagaland has to grow faster than the national average, whereas Sikkim and Tripura can afford to match their pace with the national economy.

Exhibit 1: Assumed Real Growth Rates of the NER Economy to Achieve the Economic Target by 2020





Growth acceleration in most of the North Eastern states requires structural changes in these economies. In most of the economies, income from public administration constitutes a major source and the Government Sector dominates the economy. Acceleration in economic growth will have to come from agriculture, manufacturing and non-government service sectors. This calls for significant changes in the development strategy followed so far, and the creation of an enabling environment for private investment in productive sectors.

Table 4: NER States: Average Annual Growth Rates Required to Reach India's Per Capita GDP Level in 2019-20
(Per cent)

State	Growth Rate of GSDP				Growth Rate of Per Capita GSDP			
	2007-12	2012-17	2017-20	2007-20	2007-12	2012-17	2017-20	2007-20
Arunachal Pradesh	8.75	11.90	14.25	11.18	7.47	10.64	13.10	9.93
Assam	10.00	16.00	20.25	14.75	8.61	14.63	18.98	13.39
Manipur	10.75	13.25	15.75	12.87	9.45	11.98	14.57	11.60
Meghalaya	8.75	11.03	14.25	10.96	7.47	10.10	13.11	9.72
Mizoram	9.50	9.50	9.50	9.50	8.22	8.27	8.40	8.27
Nagaland	8.50	8.50	8.50	8.50	7.22	7.28	7.41	7.28
Sikkim	9.00	9.00	9.00	9.00	7.69	7.79	7.92	7.92
Tripura	9.00	9.00	11.50	9.02	6.73	7.78	10.38	7.80
NER	10.00	13.67	16.37	12.95	8.84	12.35	15.16	11.64
India	9.0	9.0	9.0	9.00	7.51	7.67	7.80	7.61

Source: NIPFP estimates

Note: GSDP is at fixed costs at 2006-07 prices

(c). Poverty Eradication in North East

The vision of the people is to banish poverty from the region by 2020. The estimated poverty ratio in the region using the mixed recall period in 2004-05 was 17 per cent which was lower than the country's overall poverty ratio of 22 per cent, but the measure is beset with several problems and is unreliable. Apart from inadequate sample sizes for states other than Assam in the National Sample Survey (NSS), this general measure does not adequately take into account specific consumption requirements and higher costs of living of the region. Empowering people with capabilities ensures they receive adequate food, clothing and shelter so that every family is free from hunger, leads a healthy life and participates productively in the growth process. This, too, requires a structural change in the region from government-dominated economies and economic structures shaped by planning from above, to those based on participatory planning with private sector participation in the growth process.

The eradication of poverty, inequality and deprivation in democratic India should invariably be addressed in a participative, holistic manner reflecting the letter and spirit of the provisions relating to 'The Panchayats' and 'The Municipalities' in Parts IX and IXA of the Constitution brought into force by the 73rd and 74th amendments to the Constitution, passed by the Parliament in December 1992 and gazetted in April-May 1993.

This will ensure grassroots development through democracy in a people-oriented and people-centric manner, with community supervision and people's control over the provision of basic services and public goods. Such assured access to entitlements is the surest path to poverty eradication, especially when livelihood sustenance is dependent on sustained and sustainable development initiatives at the village and mohalla level.¹

Inclusive and sustainable programmes, and schemes through a participative process of planning and implementation call for substantial and concerted capacity building of Panchayati Raj and other institutions of local self-government as well as effective communitization. Such capacity building, of both the elected representatives (with special emphasis on SC/ST and women) as also of administrative and technical officials, should focus on all dimensions of poverty eradication including

- The Institutional Development perspective;
- The Human Development perspective; and
- The Participatory Development perspective.

The need for a thorough and comprehensive study of the profile of poverty in the North East is emphasized to lay the ground for an effective time-bound strategy of eradicating poverty. Such a survey must capture the multiple deprivations of the people of the North East, including the facets of

- Economic Poverty (EP);
- Nutritional Poverty (NP);
- Human Poverty (HP); and
- Basic Amenities Poverty (BAP),

¹ see page no... (volume II- Chapter III Poverty Eradication in North East).

which are inter-related but distinct, with the conviction that an in-depth analysis on these dimensions can alone help to understand the living conditions of the poor.²

A five-fold programme of development perspectives for the eradication of poverty in NER is elaborated below –

1. Economic Development Perspectives (EDP)
2. Institutional Development Perspectives (IDP)
3. Participatory Development Perspectives (PDP)
4. Human Resource Development Perspectives (HRDP)
5. Infrastructure Development Perspectives (Infr. DP)³

(d). Maximising self-governance

Maximising self-governance for the people and building capacity in people and institutions to achieve it in all the areas in the NER is extremely important not only for the political and economic empowerment of the people to determine their own destiny but also to create a sense of pride and belonging through participation in the development strategy. Sustainable peace and prosperity in the NER is possible only when people participate actively in political and economic decisions. Empowerment of the people comes from their active participation in government and control over resources, to determine resource allocation to various public services and determine the developmental strategy. Devolution of power to villages is necessary for participatory governance and economic progress. In areas covered under Parts IX and IX-A of the Constitution, the Panchayati Raj institutions need to be strengthened. However, large parts of the region are covered under Schedule VI of the Constitution and in these areas, village development councils will have to be activated and evolved to undertake grassroots planning. The state of Nagaland is covered under Article 371-A of the Constitution and the communitization process prevailing in the state should be developed to undertake developmental activities. Indeed, rejuvenation of institutions for such planning should be done in harmony with the traditional institutions in the region.

Active participation of people in the political processes and in grassroots planning can bring about the desired transformation of the region by helping to establish peace and set in motion the wheels of progress towards prosperity. The planning process will have to build upwards from the level of villages and wards with active participation of people. The selection of various projects and their prioritisation, adaptation of central and state schemes to meet the priorities of the people, ensuring untied funds for implementation, and compilation of an information system required for planning and creation of a system of social accountability would empower people to determine their own economic destiny.

² *see page no... (volume II- Chapter III Poverty Eradication in North East).*
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³ *See page no... (volume II- Chapter III Poverty Eradication in North East).*
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An equally important component of Vision 2020 is the establishment of peace and harmony. Security of life and property is essential for the happiness of the people. Besides, this is an important precondition for prosperity as it contributes to creating an investment climate in the region. There is a strong perception that the region is infested with insurgency. While much of the perception may not be accurate – large parts of the region are as peaceful as anywhere else in the country – it is necessary to deal with the issue of insurgency where it exists in a spirit of accommodation, pluralism and sub-nationalism.

(e). Harnessing resources for the benefit of the people

The vision of prosperity for the people requires participatory development by harnessing the resources of the region. The region is rich in resources, including natural resources such as land, water, minerals, forests and of course, people. It is also important to utilise the savings of the people which are deposited in financial institutions for investment in the region. The people would like to see the large river systems converted into a source of prosperity. Mineral wealth can be used to create opportunities to increase employment and income. They would like to harness the vast hydroelectric energy potential and use the comparative advantage to expand economic activities in the region. They would like to see that the global public goods they provide through the vast forest cover recognised. They would like to overcome their saving-investment deficit by increasing the credit-deposit ratio through the generation of economic activity in the region.

Participatory development in agriculture will have to adopt a different approach in the hills and the plains. Tribal populations in the hills have practiced shifting (*jhum*) cultivation for generations. Indeed the shifting cultivation, when it started had a cycle long enough to recoup the soil fertility, but with the population pressure on land, the shifting cycle has got considerably reduced with enormous environmental damage. Although some people believe that this traditional system should continue as the tribals are comfortable with it, from the viewpoint of preserving forest cover increasing productivity, and improving the incomes and living conditions of the tribal population, it is necessary to gradually demonstrate the benefits of moving to settled cultivation. The progression from *jhum* to settled cultivation, particularly in horticultural crops, organic farming and smallholder plantations through proper extension services, could increase income levels in their own setting in a sustainable manner. In the short-run, however, until the tribals are weaned away, it may be necessary to minimize the damage of *jhumming* through measures such as ‘contour building’, growing pulses, and the use of improved seeds. In contrast, in the plains, the strategy would be to enhance land productivity by increasing crop intensity, making better use of water resources and a balanced use of organic manures and chemical fertilisers to make up for deficiencies in the soil. Using the resources of the region for development will strengthen backward linkages. A manufacturing sector based on these resources, particularly agro-based manufacturing, would help create productive employment opportunities. The enormous hydroelectric power potential and mineral wealth in the region could be tapped to create comparative advantage for private sector participation in manufacturing activity.

(f). Building capacity in people and institutions

An important component of the people's Vision 2020 is to achieve a high level of human development. Raising the quality of education and health is as much a goal in itself as it is a means to enrich the quality of life for people, and expand their life choices.

An important aspect of human development is building capacities of the population, through raising the quality of and access to health and education. The ability of the region to harness resources for sustainable development also requires significant private initiative and investment, which in turn depends on the availability of a skilled workforce. A development strategy based on the resources of the region will occur simultaneously with the emergence of a group of strong, indigenous entrepreneurs, which in turn calls for an enhancement of the skill levels.

An important factor constraining economic progress in the region is the poor capacity of both public and market institutions. Responsive governance is possible only when institutions have the capacity to undertake governance and developmental functions efficiently. Such planning requires capacity building right from the village level. It is necessary to facilitate such planning by creating district planning agencies and developing capacity in them to coordinate and implement plans right from the village level. There is an urgent need to clarify the roles of different institutions including the roles of the NEC and the MDONER. The NEC should be evolved as a professional planning agency.

Capacity development is as important for market institutions as it is for government institutions. Most of the economic activities in the region are government-dependent and, as very high proportions of the resources of the states in the region come from central transfers, development has been transfer-dependent. This has made the NER economy dormant and the markets for factors and products inactive. Often, the non-existence of markets in the region is seen as an indication of market failure calling for more government intervention. Indeed, government intervention is necessary to nurse market institutions and create conditions for them to grow and perform the task of intermediation. The promotion of markets and institutions to disseminate information on prices and products is extremely important.

(g). Strengthening infrastructure

The people in the region envision having state-of-the-art infrastructure not only to enhance the quality of life but also to dictate the pace of economic activity, and the nature and quality of economic growth. The infrastructure deficit is a major deficit in the region, and acceleration in economic growth and the region's emergence as a powerhouse depend on how fast this deficit is overcome. The lack of connectivity has virtually segregated and isolated the region not only from the rest of the country and the world, but also within itself. Poor density of road and rail transportation within the region has not only hampered mobility but also hindered the development of markets. The traditional transportation routes through inland waterways have become virtually non-functional after Partition and although the agreement with Bangladesh allows the transportation of goods, these routes have become inactive and in any case, the agreement does not permit transportation of people. The region is also poorly linked by air, and sea routes have been blocked. Air inter-connectivity between different states in the region is extremely poor the location of the air hub at Kolkata means that travelling even to neighbouring states has enormous costs in terms

of time, effort and money. It is important to locate the hub at Guwahati to reduce the turnaround time within the region. The blocking of access to the Chittagong port and the land route through Bangladesh, has closed the sea transportation routes for the region altogether. Inland waterways, which were an important means of transportation, have all but vanished due to the complexities in the political and economic relationship with Bangladesh. Although the region has tremendous potential for generating hydroelectric power, the actual generation is less than 8 per cent of the potential.

Improving connectivity is an important precondition for social and economic mobility and market integration. With various insurgency groups operating in different parts of the region, land transportation within the region has become hazardous. Critical to improving connectivity are issues of diplomacy and an improvement in border infrastructure and trade facilitation with neighbouring countries, particularly China and Bangladesh. Diplomatic initiatives and an extension of the rail network to Chittagong could help open up India's access to the Chittagong port and significantly reduce transportation time and cost. Diplomatic initiatives could also help to open up access through inland waterways with neighbours, to provide better connectivity to the region.

(h). Creating a centre for trade and commerce

The Look East Policy should focus on the North Eastern region so that Southeast Asia should begin from North Eastern India. Opening up trade routes will expand economic opportunities for the region and accelerate its growth process. The region can regain its place as a centre of flourishing trade with East and Southeast Asia through the land (silk) route to China and Myanmar and through the sea port from Chittagong and Kolkata. Recent initiatives in improving relations with neighbouring countries, particularly the MOU with Myanmar, restoring border trade and, more importantly, the Ganga treaty with Bangladesh, have kindled hopes of resurgence of the region based on flourishing international commerce.

(i). Effective governance: Establishing peace and harmony

An integral part of the people's vision of development is of a land living in peace and harmony, and free from insurgency. Without peace, progress is not possible. Insurgency has taken a heavy toll on economic progress and people's happiness in the region. The people of the North East would like peace to return to their lives, leakages to cease and development to take precedence.

IV. REALISING THE VISION: THE NEW DEVELOPMENT STRATEGY

The challenge of accelerating development in the North Eastern region to realise the Vision is formidable, and the road to peace and prosperity is long and arduous. The people's vision requires a participatory development strategy. The High-Level Commission appointed by the Prime Minister in its report submitted in 1997 (India, 1997) has stated that there are four basic deficits confronting the North East and these are:

- a basic needs deficit;
- an infrastructure deficit;
- a resource deficit; and

- a two-way deficit of understanding with the rest of the country.
- to this should be added the governance deficit.

Overcoming these deficits will call for a paradigm shift in development strategy, supplemented by reforms in policies and institutions, including capacity building and strengthening governance.

(a). Components of the development strategy

Inclusive development in the region requires participatory governance and planning, which calls for maximisation of self-governance. This requires the creation and activation of governance institutions right from the village level upward. There is a need for a complete shift in the development strategy and the planning process towards designing and implementing people-centric programmes based on harnessing the natural resources of the region. Only such a strategy can ensure inclusive development, help alleviate poverty and ensure a reasonable standard of living for every family in the region. Participatory development requires capacity development of people as well as institutions, and here, education and skill development will be a cornerstone of the vision. Another important element of the strategy will be the creation of an enabling environment for market-based development, the most important component of which will be the establishment of peace, law and order and an institutional framework for ensuring property rights. Equally important is the need to provide state-of-the-art infrastructure, especially connectivity both within the region and with the rest of the world, to open up markets and increase mobility. The fortunes of the people of the region are inextricably intertwined with those of the people of Bangladesh, and there is much to be gained by removing trade barriers to enable access to seaports and inland waterways. Many of the problems of the region stem from weak governance, which has contributed to the rent-seeking, 'easy-money' culture, and created a law and order situation which has deterred investment.

The six components of the strategy are:

- I. Empowerment of people by maximising self-governance and participatory development through grass-roots planning. Decentralised governance from the village level onward, built with maximum participation of the people should ensure people's role in decision making and help create a responsive system. Grassroot plans, prepared and implemented from the village and ward levels and consolidated at the district level should help in the provision of public services according to the needs of people and the building of infrastructure to harness the resources of the region for people's benefit. Providing a secure and responsive environment is necessary for creating an economic climate for the development of the region which, apart from people's participation in planning, involves creating a secure climate for investment including protecting investors' property rights and ensuring a corruption-free administration. This would call for making the Panchayats effective governance institutions. However, the provisions of the Sixth Schedule of the Constitution apply to significant portions of hilly areas and here it is important to activate village development councils and undertake district planning exercises beginning from the villages. The state of Nagaland comes within the purview of Article 371-A of the Constitution and here planning should take cognisance of the prevailing system of communitization.

- II. Creation of development opportunities for a majority of the people living in villages through rural development initiatives. This calls for a rise in agricultural productivity through an expansion in the area under cultivation and increase in crop intensity. In hilly areas, it is important to expand horticulture, floriculture, plantation crops and organic farming. An expansion in agricultural extension and the creation of cold storages and market infrastructure are necessary to link markets to agricultural producing areas in the region. Even with improvements in agriculture, it would be difficult to provide productive employment to over 80 per cent of the population residing in rural areas of the region and therefore, expansion of non-farm economic activities in the rural areas is extremely important.
- III. Developing sectors with comparative advantage so as to utilise the resources of the region productively for the benefit and welfare of the people. In particular, the focus on agro-processing industries and industries based on resources of the region are extremely important. Similarly, in the services sector, there is considerable potential for expanding tourism including high-value tourism such as hill and adventure tourism. Exploitation of the vast power generation potential could, in the short run, help to augment revenues and in the medium and long term could create cost advantages for making investments in manufacturing units.
- IV. Capacity development of people and institutions is an extremely important component of the strategy. Human development increases capabilities and with it enhances political and economic freedoms of the people. Creating state-of-the-art hospitals and higher educational institutions in the region could also attract people from neighbouring countries to avail the benefits, besides improving education and health security to the people of the region. It is also important to develop people's capacities to equip them to participate productively in economic activities. Capacity building of institutions should address both government and market institutions. Responsive governance and planning from below require significant augmentation of capacity. Similarly, large parts of the region are marked by severe market imperfections and non-existence of markets altogether. Considerable efforts are needed to create markets and improve them.
- V. Creating a hospitable investment climate is equally important. An enabling environment for private investment in the region would require significant public investment to create state-of-the-art infrastructure, especially connectivity both within the region and with the rest of the country, translation of the Look East Policy to promote economic relationships with East Asian and Southeast Asian economies and beyond, and ensuring proactive governance. Augmentation of the transport and communication networks and ensuring adequate and stable power supply will improve the quality of people's lives, and attract the private investment needed for development. The fortunes of the people of the region are inextricably intertwined with those of their neighbours, and there is much to be gained by removing trade barriers with the neighbouring countries to enable access to seaports and inland waterways.

- VI. Realising the vision will require significant investment by both public and private sectors. In the initial years, much of the investment required for strengthening physical and social infrastructure will have to come from governments – both the Centre and States, though with the passage of time and progress it may be possible to forge public-private partnerships. Ensuring adequate resources for public investment in infrastructure, implementing a framework for private participation in augmenting infrastructure and creating an enabling environment for the flow of private investments to harness the physical resources of the region for the welfare of the people are issues that need to be addressed on a priority basis. It is also important to ensure - for reasons of both efficiency and accountability - that states in the region do not depend entirely on outside capital, but also generate resources from their own tax and non-tax sources.

Implementation of the six components of the strategy will not be easy or straightforward, nor are these elements independent of each other. Their interdependence implies that they have to be calibrated simultaneously. Given the large number of stakeholders, the variety of groups demanding various concessions, and the international dimension mired in diplomatic tangles, various issues need to be addressed delicately, using both the carrot and the stick. The details of the five-fold strategy are spelt out in Volume II. In what follows, some essential elements of the strategy are laid out.

(b). Empowering People through Inclusive Governance

Establishing peace, security and responsive governance are essential prerequisites for development. An integral part of a vision of development is of peace and harmony, and free from violent confrontations.⁴ Armed conflict has taken a heavy toll on economic progress, goodwill and happiness in the region. Governance is weak and there are widespread leakages – of revenues that should have accrued to the public exchequer, of expenditures on various development schemes due to rent-seeking of various kinds, and of large amounts of funds through rigging of contracts, according to the NIPFP report. It is a fact that armed conflict, going back more than five decades, “has dampened private investment in potentially productive sectors”. The NIPFP adds, “Nor have initiatives by the Central and State Governments to accelerate development through various plans had the desired results. The system is full of leakages, perverse incentives towards economically productive initiatives and rent-seeking behaviour.” It describes the widespread practices of parallel tax collections, random extortion, kidnapping and similar acts may be characterised as ‘roving banditry.’

(GOVT. OF ASSAM VIDE LETTER DATED 8.5.2008 OF SECRETARY (PLANNING) HAS SAID THAT EXPLICIT REFERENCES TO “PARALLEL TAX COLLECTION”, “RANDOM EXTORTION”, “KIDNAPPING” ETC. MAY BE SUITABLY MODIFIED OR DELETED. *We may delete the above line*)

In our view, added to poor governance, they create a situation of extreme tension and pressure, especially on the weak and vulnerable.

⁴Excerpts from North Eastern Region Vision 2020 Volume I Peace, Progress and Prosperity in the North Eastern Region: Vision 2020, National Institute for Public Finance and Policy, New Delhi, 2007, pg 8, 17

It is therefore significant that “Inclusive Growth” is both the title and the overarching goal of the Eleventh Five Year Plan. The key component of the “strategy of inclusive growth” must be inclusive governance as the means of empowering the disadvantaged with the aim of enabling them to overcome their poverty. It is the effective empowerment of the disadvantaged through the effective devolution of Functions, Finances and Functionaries to representative institutions of local self-government such as Panchayats (where part IX of the Constitution applies) and Village Councils, Village Development Boards and similar such institutions elsewhere, on the principle of subsidiarity, which states that anything which can be done at a lower level should be done at that very level. This will pave the way to the effective implementation of other measures of inclusive growth such as:

- stepping up investment in rural areas, in rural infrastructure and agriculture;
- increased credit availability, particularly to farmers and others, and offering them remunerative prices for their crops;
- increased rural employment, including the provision of a unique social safety net in the shape of the National Rural Employment Guarantee Programme;
- increased public spending on education and health care, including strengthening the mid-day meal programme and offering scholarships to the needy;
- investment in urban renewal, improving the quality of life for the urban poor;
- empowering the Scheduled Castes, Scheduled Tribes, Other Backward Classes, minorities, women and children socially, economically and educationally; and
- Ensuring that, through public investment, the growth process spreads to backward regions and districts of our country.⁵
- Ensuring that, through public investment, the growth process spreads to backward regions and districts of the North Eastern Region.
- Three-fold increase in annual allocations to rural development and welfare, and the launching of new schemes like NREGA, BRGF and RTI require involvement and supervision of village communities and their elected representatives
- It is important that Panchayat Raj be brought centre-stage as the principal governance reform to reinforce economic reform in such a manner as to secure inclusive growth.
- Gram Sabhas to be made functional and all elected representatives at the grass-roots level involved to enable equitable access to rural development and welfare schemes.
- In keeping with the federal structure of India, the North Eastern states should be given flexibility to articulate policies for optimizing the use of natural and human resources within their states, without of course losing touch with the greater national imperatives.

⁵ Based on the foreword by the Prime Minister, Dr. Manmohan Singh, in Report to the People 2004 - 2007

- Activating and strengthening institutions of local self government calls for conformity to certain broad and generally well-accepted principles of institutional design.
- Village councils or Dorbars should be elected every five years and mandatory representation for women ensured as in the case of PRIs.
- For effective local self-government, major governance reforms are required as much in Panchayati Raj areas in the North East Region as in exempted areas. Governance needs to be strengthened by (a) laying out clear policy objectives (b) concurrent audit (c) post completion audit in all of which communities themselves play a role.
- A Review and Monitoring Mechanism to ensure transparency and time-bound implementation of all projects above Rs. Five crore, with representation from the concerned government line department, independent technical and audit specialists as well as from the NGO sector (working in the specific field) and local government (Panchayat/Council etc.)
- Activity Maps to be prepared or activated to clearly delineate the attribution of activities comprised within each devolved function to the appropriate tier of the three-tier Panchayati Raj system so that there is no ambiguity at any level about the tasks entrusted to them nor any overlapping of duties between different tiers.
- States with Panchayati Raj areas to clearly identify budgetary line items that ought to go to the Panchayats and separately earmark them through a Panchayat sector window in the budgets of the relevant state line departments to ensure the flow of funds for undertaking devolved activities to the Panchayats.
- By 2020 participative planning from the grassroots level upwards to culminate in the preparation of a district plan as a key step in the strengthening of Panchayats to be institutionalized as mandated in the Constitution. District Planning Committees (DPCs) are required to be *elected* to the extent of 80 per cent of the membership by and from amongst the elected members of the district level Panchayat (Zilla Parishad) and the Municipalities within a district. Most states falling under Part IX of the Constitution have now constituted DPCs, States like Nagaland, Mizoram and Meghalaya which have not begun this exercise need to expedite the process.
- Engagement of all stakeholders, particularly of historically discriminated and marginalized sections, including women, in participatory planning and implementation. This has to be done to assess the resources in the villages and towns, identify and priorities the needs and requirements and monitoring and evaluation of various projects, schemes and programmes.
- Devolution of adequate funds in an untied manner patterned on activity mapping of each level of governance. State governments will need to undertake a detailed analysis of their annual budgets, both non-plan and plan, to separate allocations to be transferred to Panchayats in accordance with the activities devolved to them. The funds available under various schemes can be allotted to the projects selected and prioritized by the people.
- Streamlining and consolidation of schemes to ensure flexibility and a measure of autonomy. This has to be done mainly at the state and central levels.

- Assignment of significant revenue raising powers and building capacity of local governments to raise revenues from the sources assigned to them.
- Attention must be paid to the democratization of the functions of TIs (Traditional Institutions), especially with gender representation. These include systems such as the Syiemships, Dorbars and Rangbah Shnong of the Khasi Hills, the Dolois of the Jaintia Hills and the Nokmas of the Garo Hills of Meghalaya as well as other groups such as the Kuki-Impis, various clubs, associations and peoples' organizations of Manipur, Nagaland and other states. TIs have varying levels of influence in different states although they are not recognized constitutionally and their demand for such recognition may be considered if these institutions are democratized and representative of all groups, instead of being exclusive entities. The IFAD model described below as well as the Naga communitization process (for details see Volume II, Chapter One, Inclusive Growth through Inclusive Governance) are possible models to bring these into a greater democratic space, which protects their traditions but is respectful to other groups as well.
- The Autonomous Councils will have to become the harbingers of economic transformation and not merely be legislative, regulatory and administrative agencies. To effectively assume a central role in local development, they will need to adopt a more participatory approach. Such a transition will need to emerge from within, as tribal communities themselves proceed to adapt their time-honoured traditional systems to the needs of inclusive participation and development. It may be desirable to consider the approach adopted in the Fifth Schedule areas, where democratic elections based on adult franchise and reservations to women in elected seats and leadership positions have been applied without reducing the importance of tribal customs and traditions.
- Para 4 of the Sixth Schedule makes a provision for village councils to be established by District or Regional Councils mainly for the dispensation of justice in disputes that involve two or more tribal persons. Examples of initiatives in communitization at the village level, aimed at harmonizing the 'village community with the traditional tribal body' which have shown significant success can be replicable models. The most celebrated example is Nagaland's experience of communitization for effective public service delivery. Other examples include the NEC sponsored "North Eastern Community Resource Management Project" (NERCORMP) in Assam, Manipur and Meghalaya involving the International Fund for Agricultural Development (IFAD). Examples drawn from the IFAD project have shown that unlike government schemes, the IFAD funded projects have not been afflicted by the malaise of extortion primarily because they are community-driven and people-owned. This vindicates the notion that many systems can co-exist if delivery mechanisms work.
- Meghalaya was granted Sixth Schedule status when it was a part of the composite state of Assam, mainly as a safeguard for customary laws and practices of tribal minorities. Now that the state is ruled by a tribal majority, there may be merit in examining whether the ADCs should continue in their present form. The continuance of an institution which is virtually a stand-alone body with few linkages either with the State Government or with village-based institutions merits reconsideration.

Gender Sensitive Governance: Key to Inclusive Growth

There is an increasing need for local government reforms to be associated with improving service delivery through local governments. A major cross-cutting concern that merits more attention is the gender dimension of the local development and in particular women's effective participation in it, to help meet their specific needs and address gender inequalities. Major indicators of gender equality are exercise of rights, social control, access to decision making and public voice to defend rights. Progress towards gender equality is slow, and this is in part due to the failure to attach money to policy commitments. Not enough attention is given to the impact of allocated resources and this serves to perpetuate gender biases, although budgets offer the potential to transform gender inequalities.

- Gender Budget Initiatives or Gender Responsive Budgets are tools and processes designed to facilitate a gender analysis in the formulation of government budgets and the allocation of resources. Gender budgets are not separate budgets for women, or for men. They are attempts to break down or disaggregate the government's mainstream budget according to its impacts on women and men. The way in which national budgets are usually formulated ignores the responsibilities and capabilities of men and women. Budgets formed from a gender-neutral perspective ignore the different impacts on men and women because their roles, responsibilities and capacities in any society are never the same. These differences are generally structured in a way that leaves women at a disadvantage in society by creating inequalities.
- Major issues relating to women and children in the NER are the persistently high infant, child and maternal mortality ratios. Other important concerns are the feminization of poverty and the exploitation of women in low paid, hazardous and insecure jobs in the unorganized sector. These issues require a sensitive approach which cut across all projects/programmes and schemes. Good policy requires understanding both the impact of the policy and how it might be better designed to achieve outcomes which meet the needs of women, men, girls and boys as well as different groups of women, men and children. There is no single approach or model of a gender sensitive budgetary exercise. Evidence suggests that the economic gains of gender equality lead to increased output and better development of people's capacities.
- Gender Commitments must be translated into Budgetary Commitments. For re-prioritizing public spending we must prepare our 'bottom up budgets' and work for its realisation in collaboration with the elected representatives. Gender economists must lift the veil of statistical invisibility of the unpaid 'care economy' managed by poor women and highlight the equality & efficiency dimension and transform macro-policies so that they become women friendly.⁶

(c). Accelerating agricultural growth, rural development and expanding non-farm employment opportunities

⁶ see page no... (volume II- Chapter II Inclusive Growth through Inclusive Governance).

Participatory development is based on harnessing the natural resources of the region, so it will give priority to the primary sector in the development process. Over 86 per cent of the population in the region resides in villages and, therefore, encompassing development is possible only with improvements in agriculture and allied activities. At present, of about 40 lakh hectares under cultivation, 39 lakh or over 97 per cent is under foodgrain production. At about 1,520 kg/hectare⁷, land productivity is very low in the region. Despite a vast potential, only 20 per cent of the net sown area is under irrigation. Almost 95 per cent of the region's soil is acidic with pH value below 5.6. *Jhum* cultivation, widely practiced in the hills by the tribal population has kept productivity low and contributed to deforestation and erosion of soil.

The target should be to increase foodgrain production in the NER to 75 lakh MT in 2010, 87 lakh MT by 2015 and 110 lakh MT in 2020, which would require accelerating the growth rate to 2 per cent in the first phase, 3 per cent in the second and 4 per cent in the third. This implies increasing the productivity of land to 1,570 kg/ha in the first phase, 1,610 kg/ha in the second phase and 1,650 kg/ha in the third.

There should be different strategies for accelerating growth in agriculture in the plains and the hill. In the plains, the goal should be to increase crop intensity by better utilisation of irrigation potential and cultivation of short-duration crops. In the plains, increasing the land area (about 1.5 million hectares) under double-cropping to 25 per cent in a phased manner would considerably enhance productivity. Measures such as expanding area under High-Yielding Varieties (HYV), more balanced use of organic manure and chemical fertilisers and pesticides, and steps to balance soil conditions to reduce soil acidity are needed (Borthakur, (2005). It is also important to expand the area under cultivation from the current 17.8 lakh/ha to 25 lakh/ha by bringing under cultivation, the cultivable waste land and areas developed under the command area development.

Controlling the annual floods in the Brahmaputra and Barak valleys and strengthening embankments to control soil erosion should be an important part of strategy for the development of agriculture in Assam and parts of Arunachal Pradesh. The elevated river bed along several sections of the Brahmaputra has increased over-bank discharge, expanded the area prone to floods, and increased erosion of the river banks. Several expert committees have made recommendations for flood control, with little effect on the devastating effects of annual floods on the marginalised population living along the whole stretch of the *chars* and *chaporis*. The Brahmaputra Board that has emerged as a regional institution to design, implement and monitor flood management strategies in the valleys of the NER, has also failed to evolve a workable solution. Various government schemes for flood management have been constrained by embankment failures on one hand and bureaucratic apathy and technocratic arrogance that exclude people's participation on the other. Measures to mitigate the fury of floods necessarily entail creation of flood-detention structures, which involves agreements between Arunachal Pradesh and Assam. In this context, the creation of 'trusteeship zones' in disputed areas bordering the two states could provide an opportunity to harness the water resource of the region for the betterment of living conditions of the dwellers in these areas.

⁷ Draft Vision VER 2020, Vol II. North Eastern Council, p. 36

In the hills, the tribal population has, for generations adopted shifting (*jhum*) cultivation. While the strategy should be to wean them away from this practice, this has to be done not through displacement, which would endanger their food security, but through persuasion and demonstration of alternative livelihood systems and building their capacity to engage in productive and sustainable livelihoods. There is tremendous potential for cultivating horticultural crops in the hills, but success depends on the development of rural infrastructure including marketing links, cold storages and processing facilities. Extension services need improvement, with better provision of good quality seeds, inputs and seedlings. The potential for growing various commercial crops such as tea, pineapple, large cardamom, oranges, banana, rubber and ginger have been clearly demonstrated in the region. Of course, some believe that expansion of rubber cultivation reduces soil fertility and should be replaced by other crops. In any case, there is a need for significant research and extension services to adopt improved practices and control pests, and for the provision of cold storages, transportation infrastructure, processing facilities and marketing support. At present much of the research in horticulture is conducted by the Horticulture Department of Assam Agricultural University in Jorhat, which needs to be upgraded to a national-level research organisation capable of serving the entire region. The Assam Small Farmers' Agri-business Consortium (ASFAC) station in Guwahati too will have to be upgraded to undertake research and development of horticulture for the benefit of the region as a whole. Expansion of horticulture in tribal areas to replace *jhumming* is a challenging task and the strategy for this has to be worked out carefully. It is extremely important that the tribal population in the region should voluntarily adopt the practice after a demonstration of the gains.

Communitization as a developmental strategy will have a significant role in increasing the participation of people in development and historically the systems adopted in Nagaland in this are as important. A clear success story in communitization in rural livelihood systems is the NEC-sponsored North Eastern Community Resource Management Project (NERCORMP) in Assam, Meghalaya and Manipur involving the International Fund for Agricultural Development (IFAD). This is the largest and the most successful rural social livelihood project and the World Bank has shown interest in up-scaling it. The NEC estimates that if fruit production is taken up in 'Mission Mode' and with the provision of complementary infrastructure and services, by 2020 the area under fruit cultivation could be increased by 50 per cent (from the present level of 4 lakh hectares to 6 lakh hectares) and production of fruit crops could be raised from the prevailing 40 lmt to 60 lmt. The high fertility of virgin land in hill areas of the region is conducive for the introduction of organic farming of horticultural crops under the National Programme for Organic Production (NPOP). It would be useful to tie up with private sector companies both to introduce organic farming and to market the products. Companies such as Indian Tobacco Company and Dabur India have shown considerable interest in the region. To ensure economies of scale in their operation, it is important to take the initiative of harmonising the policies among different states in the region. The NEC should take the initiative of bringing states together to negotiate with large agro-processing firms. It is also important to encourage the formation of Self-Help Groups comprising fruit, vegetable and flower growers, and to arrange facilities for their training and micro-finance support.

The people of the region are predominantly non-vegetarian and the production of meat and eggs is inadequate to meet the demand. Thus, the NER has to import

about 50 per cent of its milk consumption and over 87 per cent of the eggs consumed; over time as the population increases, this shortfall will increase. This shows the vast potential for expanding poultry and animal husbandry, which would increase productive employment as well as incomes. Similarly, despite nesting of large and small river systems, the region imports almost 55 per cent of its fish consumption from outside. Marketing and storage infrastructure will provide a boost to pisciculture, which will also create significant employment earning opportunities.

A thrust to agriculture and allied activities requires significant government initiatives in terms of providing rural infrastructure and extension services. An extensive rural road network is necessary to increase the mobility of people as well as the movement of goods, while the electrification of villages is necessary for increasing crop intensity and spreading rural industrialisation. Extension services are critical both for enhancing production and improving marketing and, therefore, need significant upgradation. Establishing a network of cold storage facilities and information centres and organising marketing and financial support through self-help groups will have to be initiated on a large scale.

Even as expansion in agriculture and allied activities such as animal husbandry, poultry, forestry and fisheries increase rural employment and incomes, the overwhelming dependence on agriculture and resulting large underemployment and unemployment in rural areas will need to be addressed by creating non-farm employment opportunities. Thrust will have to be given to handlooms, handicrafts and traditional crafts by providing artisans with modern, computerised design, and exposure to technology and through creating access to markets. There is also considerable scope for promoting small-scale, agro-processing units like oil-extraction, and ginger and turmeric processing. The products from NER have a unique quality and texture and there is considerable scope for marketing them all over the world. These avocations will significantly increase non-farm employment opportunities for the rural population.

(d). Developing sectors with comparative advantage

(i) Strategy for the manufacturing sector

Providing a thrust to sectors with comparative advantage will require focussing on manufacturing services based on the region's resource endowments. In the manufacturing sector, agro-processing industries will have to play an important role in the emerging scenario. Horticultural crops need cold storages and processing support and it would be necessary to tie up with the corporate sector for the processing and marketing of fruits and vegetables, including organic products. Similarly, there is considerable scope for expanding food-processing, handlooms and handicrafts, which currently provide the largest employment, after agriculture. Almost 96 per cent of NE is having International border & there is ample opportunity to develop trade & commerce in the region. The traditional ethnic designs can capture South-East Asian market which requires design inputs & skill development. In particular, there is considerable scope for the expansion of sericulture as the climate of the North East is congenial for the expansion of the silk industry. It is important to modernise the sector and help producers with design inputs, financial support and marketing assistance, including access to overseas markets.

There are about 181 large and medium-scale industries in the region, over 70 per cent of which are in Assam. Most of the units are based on resources, such as oil, gas and wood. Tea plays vital role in Assam's economy. Also the scope of downstream industries on petroleum & gas cracker project needs to be explored. The significant deposits of limestone in Meghalaya and Arunachal Pradesh can be used for setting up medium-sized cement industries by using the deposits of natural gas in the region. It is also important to augment production by exploiting the enormous hydroelectric potential of the region, as regular and quality power supply can be an important incentive for setting up manufacturing units. Regular power supply is also an important necessity for cold storage infrastructure. While in the initial years the increase in power generation may not be absorbed entirely and states would be able to generate financial resources by selling power to the national grid (as in the case of Sikkim), over time the absorptive capacity of the region for power consumption would increase and a significant portion of the power generated would be used for expanding economic activities.

(ii). Strategy for the service sector

In services, the participatory approach will aim to accelerate growth by focussing on the development of non-governmental services and their interaction with agriculture and manufacturing. Tourism is a sector with a very high potential for generating income and employment. With its moderate climate most of the year, scenic splendour, and robust and varied cultural attractions, the region is ideal for tourism. The focus, however, should be on high-value tourism which will require close collaboration with the private sector hospitality industry, building high-quality infrastructure and well-targeted promotion. Several tourist circuits could be developed in the region, depending on the attractions and experiences they present. Annual music and dance carnivals held in different parts of the North East, with national and international participation, could help attract visitors at these times. Similarly, tourist visits and circuits could be built around the colourful *Bihu* festival in Assam and *Dussehra* festival in Manipur, which could also be promoted. Hill tourism, skiing, river-rafting, adventure tourism, etc can be developed. However this should be done although in a sustainable manner, keeping in mind the fragile environment.

Other important services that present an opportunity for development are in the financial sector including banking, and insurance, the information technology industry. The IT industry however, requires significant capacity building, a larger emphasis within the education system towards mathematics and science, and creating the environment to induce information technology companies to operate in the region. Some information technology companies have found significant potential for sourcing employees in the region and it is important to create favourable conditions for their operation. Creation of education and training facilities for the youth of the region in Information Technology (IT) and Information Technology Enabling Services (ITES) could provide a great impetus in generating a pool of personnel increasing employment opportunities for the youth.

(e). Capacity building of people and institutions

(i) Human development and manpower planning

Development of human resources is critical for the development of the region. While the literacy rate in the region is high, the employability of the youth in the

region in skill-intensive activities and within the manufacturing and service sectors is not very high. The region does not have an entrepreneurial class to take up the challenge of generating economic activities. The structural transformation of the economy can only take place by creating and enhancing the multidimensional capacities that are linked to the human resource requirements for expanding the primary, manufacturing and service sectors. A focus on children, women and youth is also vital in this region. It is also important to emphasise the need to improve the human development indicators of the tribal population. Recent population growth in many of the NE states has meant that a substantial proportion of the population is younger than 14 years, in Arunachal Pradesh and Meghalaya, accounting for as much as 40 and 42 per cent of the state population, respectively. In its broadest sense, education will be the most critical input to empower these young people with the ability to expand their life's choices. Similarly, providing access and incentives for the education of women and tribal populations in the region is extremely important for its social and economic transformation and to provide sustainable livelihood systems. Besides expanding the educational infrastructure, particularly in technical areas such as engineering, medicine, information technology, and bio-technology, it is necessary to remove barriers in accessing education for tribal people and women through appropriate policies including creation of hostels in towns and special coaching for admissions and to improve their overall performance. Affirmative action will have to extend all the way from school education through to higher education levels. It is also necessary to strengthen infrastructure for vocational education and skill development to enable the youth to improve their productivity and incomes.

Capacity building in the primary sector will have to focus on providing skills and training for improved agricultural practices. The transformation of the agricultural sector from subsistence to commercial farming will be based on farmers developing their capacity to adopt improved practices and market their products. Adoption of improved agricultural practices in the plains requires training through agricultural extension services to raise high-yielding, short-duration crops. In the hills, introducing horticultural crops and organic farming should gradually help the tribal population to switch from shifting cultivation to commercial crops. Surely, this requires significant efforts at building capacity for the cultivation of horticultural crops and organic farming. This also calls for building market institutions and strengthening the cold storage and processing facilities.

In general, as mentioned earlier, the literacy rate is high in the region, but this has not translated into employability in productive occupations. There also appears to be reluctance among people to enter into self-employment ventures, perhaps because of the absence of such a tradition in most NER states, so that those who do are first-generation entrepreneurs. This is evident from the slow response to various proposals for self-employment initiated by the central and state governments. However, the region has a large base of very talented people who, with training, can be gainfully employed in a variety of areas including agro-processing, information technology, paramedical, biotechnology, aviation, and the entertainment and hospitality industries.

At present youth in the region have few opportunities for expanding their horizons and realise their potential. Remedial measures need to be taken as early as primary and secondary school, where the goal will be to increase access to schooling for all, improve the quality of education, especially mathematics and science, through appropriate teacher training and curricula oriented to the local environments, and fully equipped schools and classrooms. There are few higher educational institutions, and

the focus of those that exist has been to prepare the youth for routine government jobs. Indeed, the NEC has taken the initiative to constitute the North Eastern Regional Educational Council (NEREC) for the holistic development of education in the region. The NEREC's proposed 15-year perspective plan would do well to emphasise scientific and technical subjects such as engineering, mathematics, science, information technology and bio-chemistry. It is equally important to initiate measures aimed at qualitative improvements in the education system.

While there has been a tendency to emphasise general subjects in education, vocational education does not find the required focus. Skill development is extremely important to expand people's employment opportunities in the manufacturing and tertiary sectors and to create a pool of employable skilled personnel, which would act as an attraction for private investment. For example, the expansion of the hospitality industry, which has great potential in the region, requires a large number of trained personnel. In fact, development of the hospitality industry can expand employment opportunities, particularly for women. Similarly, increasing training opportunities in nursing can expand productive employment opportunities for women in the region. In fact, as the employability of people increases, the private sector will also enter to provide the required skills. Proper regulation of the quality of training and education and ensuring access to vocational education through proper financial support, such as bank loans, would also be required to improve the quality of the skilled workforce.

Focus on other aspects of human development such as basic health needs is equally important for capacity development. Health indicators in the region show significant improvement over the years, nevertheless, there is considerable scope for raising the health and nutrition status of the region especially for children and women. The shortage of medical specialists and lack of tertiary facilities in several states needs to be addressed, along with issue such as the high incidence of AIDS, cancer, malaria, and other diseases, and the wide gaps in rural-urban provisioning of basic services. Good sanitation and drainage, clean water, electricity and permanent structures for all homes are now considered necessities and pre-conditions for development. While states have made efforts to increase the reach of these services, thousands of households still do not have access to them. The poor access to amenities in rural areas coupled with the lack of non-farm employment opportunities has propelled young people to urban centres. Increasing urbanisation along with the expansion of the administrative sector over the past decade have in almost every state resulted in untrammelled, unplanned urban growth, and pressures on urban amenities, with serious implications for the environmental and economic sustainability of these towns.

An important part of capacity building is increasing awareness in the rest of the country about people in the NER, and within the region itself through increased social interaction. This would require promotion of sports and cultural exchanges within the North Eastern region as also between the region and the rest of the country. Capitalising on the rich cultural heritage of the region by engaging the youth in creative activities while promoting a two-way understanding with the rest of the country is a possibility. Organising annual music and dance carnivals in different parts of the NER with competitions at the district, state and regional levels would increase youth involvement in creative activities. These events could become important tourist attractions, with national and international participation, which, with good publicity should attract a large number of tourists, who can be ferried through chartered flights. Increased sports activity including regular inter-district, inter-state and regional-level

competitions would also engage young people creatively. This would, inter alia, require significant upgradation in sports infrastructure.

(ii) Building capacity in institutions

Building capacity in the institutions is important for maximising self-governance, to design and implement planning at the grass root level and ensuring efficient delivery of public services. Creating institutions of self-governance right from the village level and activating them to ensure maximum participation of the people, particularly women and vulnerable sections, is necessary to maximise self governance. Planning will require capacity building at all levels beginning with villages and municipalities, at the block, district, state and even at the level of the NEC. The planning process, as mentioned earlier will have to start from the level of Gram Sabhas and Ward Sabhas in the areas covered under Part IX and IX-A of the Constitution and from VDCs in Schedule VI areas. In some states, it is necessary to create VDCs and build their capacity to design and implement plans. Capacity-building for planning entails preparation of plans, their implementation and instituting monitoring and control systems. Similarly, capacity building for efficient service delivery calls for proactive administration and instituting a system of checks and balances. This calls for capacity building at the level of government right from the village level and including the line departments of various ministries of the state governments. Responsive administration requires competent personnel and special efforts will have to be put in place to ensure this. Given that many of the states are small and there are considerable gains to be had by states working in coordination, the institutions for capacity-building could be created through joint initiatives by states in the region.

Capacity development is not confined to government departments alone. There is considerable need to educate the public on their rights and responsibilities and how to demand accountability from government departments. Similarly, there is a need to build capacity in various non-governmental organizations.

The NEC has the responsibility of coordinating the policies of different states, promote cooperation among them and undertake planning for the region. It is important to have people with sector specialisation in the various departments of the NEC rather than having people drawn from the military. The Council should develop capacity not only in coordinating policies and programmes among states but also in preparing and coordinating plans drawn up by different states through the grassroots process described earlier. It should also draw up plans for creating infrastructures spilling over to more than one state. Building capacity to design and implement plans, and undertake the task of monitoring and control is necessary to make it an effective institution in fostering the developmental process in the region.

(f). Strengthening infrastructure and connectivity

The vision of peace and prosperity can not be realised without providing the region with world-class infrastructure and building a network of connectivity. Improving connectivity is the most important measure for the resurgence of the NER. Good transportation networks are necessary to inter-link potential growth centres, promote tourism, connect to border trade points and support economic, social and security needs. Creation of a common market is necessary for the region to develop as an entity and realise the goals of peace and prosperity (Barua, 2005). Faster

movement of goods and people at lower costs is essential to provide impetus to economic activity. It helps the development of markets, reduces exploitation by middlemen, and in the process improves livelihoods of people in remote areas by enabling them to market their products at higher prices. By increasing social interaction among people of different states in the region, it promotes awareness and harmony. Opening up remote areas can also help improve the law and order situation, especially in areas affected by insurgency, and help protect people's property rights. All these are important preconditions for attracting the private investment needed for development in the region. In the human development context, better roads mean easier access to health centres for people and to schools for children, which, apart from being desirable outcomes in themselves, will promote a more productive and better skilled workforce.

The biggest constraint in the NER has been the poor state of infrastructure, in particular, roads, railways, waterways and power. At 66 km/100 sq. km area, the road length in the region is lower than that the average of the country (75 km/sq. km) and the quality of roads in the region is extremely poor. The total railway track length in the entire region is 2,592 km, with broad-gauge track confined to Assam. Inland waterways in the Brahmaputra and smaller rivers, such as the Kolodyne in Mizoram and Barak in Assam, have become virtually non-functional after the partition of the country and at best, they can be used for the transportation of goods and not people. Air connectivity to the region is poor: three of the state capitals do not have airports, and feeder services from Delhi/Kolkata/Guwahati to the state capitals where airports exist are scarce. Most intra-regional connection is routed through Kolkata, which is expensive in terms of both time and money.

Realising the vision of peace and prosperity through participatory growth is impossible unless significant initiatives are taken to improve connectivity. Given the difficult terrain and strategic situation of the region, road density should be even higher than the national average of 75 km/100 sq.km. and the quality of the roads should be improved significantly to make them motorable. The Central Master Plan for road connectivity in the region should be executed at a faster pace and completed by 2015, and sub-divisional headquarters should be connected through all-weather roads. National highways need to be upgraded to four lanes. A detailed plan should be prepared and implemented for connecting all state capitals in the region with a broad-gauge rail line by 2020. Rail projects under construction must be completed by 2010 and more trains introduced, particularly from Guwahati to New Jalpaiguri. The extension of the railway line to Sabroom would improve connectivity to the Chittagong port. Air connectivity must be improved by shifting the hub to Guwahati from Kolkata. The nine old airstrips in different parts of the region should be developed for commercial use and a reliable private airline could begin operating regional air services between the different state capitals, with a hub at Guwahati, which could be subsidised until it becomes economically viable.

Activating inland waterways and providing access to the sea port requires significant diplomatic initiatives with Bangladesh. The eventual goal would be to have a common market with Bangladesh. Indeed, with the threat of terrorism looming large, and a number of terrorist groups reportedly operating from Bangladesh, a complete change in the mindsets of both countries would be beneficial. It will not be easy to initiate the process, but there are significant gains to be had for both countries from a common market. Access to the Chittagong port and opening up of the inland water route could lead to economic resurgence of the region. In fact, the Chittagong

port is only 75 km from Sabroom in Tripura and could become an important gateway for India to East Asian countries. The construction of a bridge by India across the 110-metre wide Feni River, and helping Bangladesh modernise the Chittagong port, could go a long way in building confidence and goodwill for the benefit of the peoples of Bangladesh as well as of North Eastern India. Bangladesh could have access to Indian markets by enabling free trade in the land routes, which would mitigate its unfavourable balance of trade with India considerably. Besides, taking the gas pipeline from Myanmar to Kolkata through Bangladesh could enable the latter to earn substantial amounts by charging transit fees. The people-to-people contact could bring in greater understanding and social harmony.

Infrastructure and connectivity could support the Look East Policy and provide an impetus to trade with the Eastern part of the globe. Although the policy has been in place for a decade and a half and has benefited the rest of the country appreciably, the NER has gained very little. It is important to note that the NER shares 98 per cent of its borders with the neighbouring countries of Bhutan, Nepal, China, Bangladesh and Myanmar and the “look east” policy focus on the region can help it to access the markets in East Asian and Southeast Asia. Indeed, there is considerable potential for the policy to benefit the region but that would call for a qualitative change in the relationship with the neighbouring countries, particularly the larger countries of Bangladesh, China and Myanmar. Given that the fortunes of over 38 million people depend on good neighbourliness, the bureaucratic and defence-dominated approach to relationships must give way to the one based on mutual economic gains. A qualitative change in the relationship is necessary to improve connectivity, provide for better management of water resources of the region including flood control, foster trade and improve cultural exchanges. Bangladesh, by allowing transit facilities for goods and gas pipelines from Myanmar to India can charge transit fees which could significantly reduce the trade imbalance with India. The latter, on her part should unilaterally abolish import duties on Bangladesh goods traded in the areas bordering Bangladesh, which could also help to reduce the trade imbalance, besides improving confidence between the two countries. Given the implications of good neighbourliness to the NER, there must be a consultation process for involving the states of the region with the Ministry of External Affairs, and the MDONER should play a vital role in facilitating the consultation process. Furthermore, the policy focus of the “look east” policy should shift so that South East Asia begins with North Eastern India itself. To this end, it is necessary to build bridges – diplomatic and infrastructural. Therefore, since the late 1990s, India has taken a number of measures to expand its trade with East Asia. Apart from economic and trade-related factors, closer links with Bangladesh and Myanmar are crucial to the issue of controlling insurgency in the NER states. On the other hand, China is an economic hotspot in the world today and needs to be factored into India’s economic and foreign policies.

Despite improvements in infrastructure linkages at points like Moreh, very little trade benefits seem to accrue to the NER states. This is probably due to the fact that existing trade agreements (like the one with Myanmar) are restrictive towards trade in agricultural products. This is also true of agreements on border trade with Bangladesh and China (*via* the Nathu La). Yet, it is these products that have the potential for trade in the NER in the near future. Sikkim however, is likely to benefit as a ‘transit location’ for border trade with China, but this may not bring in significant dividends to other NER states.

The Prime Minister of India, during the SAARC Summit in May 2007 announced that India would follow a duty-free policy with the least-developed SAARC countries from 2008. This is an important measure and calls for immediate follow-up to ensure its smooth implementation. The most important and immediate initiative required is the significant upgradation of infrastructure along the borders to facilitate trade and ensure the faster movement of goods to and from neighbouring countries. In fact, facilities such as approach roads, telecommunications, electricity, weighbridges, customs/immigration posts and bonded warehouses should be taken up on a priority basis. Initially, support should be given to private initiatives to start restaurants, petrol bunks, repair stations, banks, cyber cafes, convenience stores and repair stations. In fact, this should be taken up on both sides of the borders in Bangladesh, Bhutan and Nepal through persuasion and assistance to these countries, as a border infrastructure bottleneck on either side could hinder the movement of goods.

(g). Raising resources for development

Critical to implementing the development strategy to realise the vision of peace and prosperity to the region is the issue of raising the required resources. Indeed, much of the investment will have to come from the private sector and the government will have to create an enabling environment for private initiative in economic activities. This will include controlling insurgency, improving governance, creating world-class infrastructure and developing people's capacity to participate in economic activities.

In creating the enabling environment, therefore, public expenditure has to play an important role and state governments will have to significantly enhance the level of spending on development and also improve the efficiency of delivery systems. Meeting basic needs such as elementary and secondary education, primary healthcare, water supply and sanitation, anti-poverty interventions, and housing, and ensuring law and order, are important for this process. State Governments will have to allocate the required resources for the purpose.

An analysis of state finances in the region shows that the dependence of the NER on subventions from the centre is overwhelming. Thus, fluctuations in central transfers add to volatility in spending at state levels. This also creates a patronage syndrome, increases mutual suspicion and reduces social accountability. Analysis shows that in 2005-06 the contribution of own-revenue in the region was just about 20 per cent of states' total revenues and the remaining was received as tax devolution and grants from the central government. In fact, when Assam is excluded, the share of own-revenue to total revenue falls to just about 11 per cent. On the other hand, a much larger proportion of the income of the people in the region is taken by insurgent groups as 'taxes' and extortions. Thus, while people continue to pay a much larger proportion of their income as taxes to the government and insurgent groups, the government receives only a small proportion of this.

Augmenting the quality and supply of public services such as education, healthcare, drinking water, sanitation, housing, and building a network of village and district roads and state highways would require significant commitment of additional resources by state governments. Public investment is also required to increase irrigation potential in the region and harness water resources. It is important that states in the region mobilise additional resources from tax and non-tax revenue bases assigned to them. At present, the tax-GSDP ratio in every state in the region is far

below the national average of 7 per cent. The own-tax-to-GSDP ratio ranged from 1.0 to 2.5 per cent in all the states, except Sikkim (6.5 per cent), Assam (4.8 per cent), and Meghalaya (3.4 per cent). With the introduction of Value Added Tax (VAT), the buoyancy of tax revenues is likely to improve. More importantly, immediate measures to strengthen the tax administration and institute a modern information system could enhance revenue productivity.

Revenue increases from states' own sources, though important and necessary, will not bring in the large volume of resources necessary to provide the required levels of public services and infrastructure. There is a significant need to augment infrastructure spending directly by the central government for building national highways, a rail network, and airports and ensuring access to the sea route. Given the strategic location of the region and the paramount importance of infrastructure in promoting peace and prosperity, the central government will have to allocate a much higher proportion of resources for strengthening infrastructure in the region.

The Shukla Commission estimated the overall investment requirements for basic minimum services and infrastructure at Rs. 22,758 crore during the mid-1990s. It recommended the creation of a non-lapsable central pool with an annual accrual of Rs. 1,500 crore (Planning Commission, 1997). However, actual investment during the last few years has been less than a third of this amount, thus adding to the backlog. If the overall growth rate of the region has to be accelerated to 11.5 per cent, the investment requirements of the region are staggering, and much of it will have to come from the private sector. For this to materialise, the creation of an enabling environment is critical.

V. CONVERTING DREAMS INTO REALITY

The vision of achieving peace and prosperity outlined above is eminently feasible but by no means easy. Realising the vision requires mobilisation of the people. Implementing a people-based development strategy, infrastructure development, building capacity, and responsive administration and governance will attract significant investment and open up avenues for the development of the region. Acceleration in the growth of the agricultural sector will benefit over 80 per cent of the people who reside in rural areas. Capacity development of the people should equip them to take advantage of the expansion in manufacturing and services. The strategy of development outlined in the document, thus, can promote all encompassing development in the region to realise the vision of achieving peace and prosperity.

The six components of the strategy described in the previous paragraphs are interdependent and therefore, need to be designed and implemented concurrently. Maximising self governance is critical to establishing peace and development and the latter contributes to improved governance. Peace will bring in development dividends and vice versa. Development requires infrastructure and capacity development. Similarly connectivity can dampen insurgency. All these can be done only when there is an appropriate environment for which responsive administration is necessary.

The formulation of the five-year plans should take into account the overall vision outlined in this document and adopt the development strategy to implement the plans. We have lost opportunities in the past and any further delay in adopting an integrated development strategy will only further delay the development of the region

and alienate the people. It is hoped that this document will bring into focus the vision of peace and prosperity the North Eastern Region and the Eleventh Plan will initiate operationalising the and strategy to realise people's dreams.

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North Eastern Region Vision 2020

Volume II

**Ministry of Development of North Eastern Region
&
North Eastern Council**

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Chapter 1

The North Eastern Region: Profile and Projection

The North Eastern Region (NER) extends to north and east of the narrow Siliguri corridor and comprises Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. These eight states cover an area of 2,62,189 sq. km. constituting 7.98 per cent of the country's total geographical area and account for only around 3.79 per cent of the total population of the country (2001 Census). The region has a long international boundary, about 96 per cent, with China and Bhutan in the north, Myanmar in the east, Nepal in the west and Bangladesh in the south and west. Most of the hill states in the region like Arunachal Pradesh, Meghalaya, Mizoram and Nagaland are predominantly inhabited by tribal people with a fairly high degree of diversity even within the tribal groups.

It would be erroneous to consider the region as a homogenous entity. The significant linguistic, ethnic and cultural diversity, not only among the people of different states but also within each state in the region, is an important feature that needs to be taken into account in designing policies and programmes. Marked by diversity in customs, cultures, traditions and languages, the region is home to over 200 of the 635 tribal groups in the country, speaking a variety of Tibeto-Burmese languages and dialects with a strong tradition of social and cultural identity. Each of the states has its own history and the tribal groups in the states have their own culture, tradition and governance systems. The region is a treasure house of exceptional natural beauty, floral and faunal biodiversity and abundant mineral, water and forests resources.

The political and administrative milieu of the region has gone through several changes from pre-colonial to colonial and post-colonial times (Verghese, 2004). Besides, the partition of the country in 1948 imposed severe economic handicaps on the region. Although the various states in the region have made some socio-economic progress, this has not been sufficient to propel the region out of its low equilibrium to a higher sustainable growth path. The Eleventh Plan envisages higher growth in GDP and more importantly inclusive growth requiring rapid increase in employment, significant improvement in human development, particularly of the disadvantaged sections and a sharp decline in poverty. All these underline the necessity and urgency with which the NER needs to be brought in sync with the rest of the country to enable it to participate as an equal partner in India's march to progress.

This report presents a vision of the development goals of the people of NER and the strategy and approach that would best serve to achieve these goals. Unlike other reports, it has a regional perspective aimed at integrated development through cooperation among constituent states, built on a foundation of participative planning and

implementation. The section that follows gives a brief description of the region, placing it in the context of development and growth in the rest of the country.

1.1 THE LAND AND ITS PEOPLE

The NER is home to 39 million or about 3.8 per cent of the total population of the country, of which 68 per cent live in the state of Assam alone. Apart from Tripura, the population of all the NER states grew at a much faster rate than the national average in the 1980s and 1990s, with Nagaland's population growth reportedly touching 64.46 per cent in the latter decade (Table 1.1).¹ Migration is seen as an important factor contributing to high population growth. Most of the states in the region (apart from Assam and Tripura) are sparsely populated, with densities far below the national average. Arunachal's population density is only 13 people per sq. km. and Mizoram's is 42. Within states, densities vary greatly depending on the terrain, with fewer people in hill districts than in the plains.

Table 1.1: Population Growth and Density

<i>States</i>	<i>Population (lakh)</i>			<i>Decadal Growth (%)</i>		<i>Density*</i>	<i>Urban Population (%)</i>
	<i>1981</i>	<i>1991</i>	<i>2001</i>	<i>1981- 91</i>	<i>1991-01</i>	<i>2001</i>	<i>2001</i>
Arunachal Pradesh	6.3	8.6	11.0	36.8	28.0	13	20.4
Assam	180.4	224.1	266.6	24.2	18.9	340	12.8
Manipur	14.2	18.4	22.9	29.3	24.9	108	23.9
Meghalaya	13.4	18.8	23.2	32.9	30.8	103	19.6
Mizoram	4.9	6.9	8.9	39.8	28.8	42	49.5
Nagaland	8.8	12.1	19.9	56.1	64.5	120	18.8
Sikkim	3.2	4.1	5.4	28.5	33.1	86	11.1
Tripura	20.5	28.6	32.0	34.3	16.0	304	18.0
India	6,833.3	8,464.2	10,288.4	23.9	21.5	324	28.8

Source: Office of the Registrar General of India, Ministry of Home Affairs.

Note: *Population density is measured in number of people per square kilometre

The region is predominantly rural with over 84 per cent of the population living outside towns and cities (except in Mizoram where only half the population lives in the villages and Manipur where around 76 per cent are rural). Since the 1990s, however, Arunachal Pradesh, Mizoram and Sikkim have registered an increase in urban population,

¹ According to the Chief Secretary of Nagaland, 14-15 lakh would be a realistic population figure for Nagaland in 2001. Assuming that the population in the state in 2001 was 14.5 lakh, the decadal growth rate works out to 19.8 per cent.

as people have started moving to towns and cities in search of better livelihood opportunities and better access to basic services.

The region is identified as one of the world's biodiversity hotspots; it hosts species-rich tropical rain forests, supports a diverse flora and fauna and is the centre of origin of several crop species. The reserves of petroleum and gas in the region constitute a fifth of the country's total potential. Other mineral resources, forests and water resources (rivers, streams and rivulets) are also available in abundance. However, the region is yet to harness the vast developmental potential of these resources for the benefit of its inhabitants.

1.2 SOCIAL CHARACTERISTICS

The North East is home to over 200 of the 635 tribal communities in the country, most of whom live in the hill states of Mizoram, Nagaland, Meghalaya and Arunachal Pradesh, and form an overwhelming majority of the population of these states. The tribal population constitutes about one-fourth of the population of the region. In four states, i.e., Mizoram, Meghalaya, Nagaland and Arunachal Pradesh the tribal people comprise a majority of the population.

The total literacy rate of the population in the region at 68.5 per cent, with a female literacy rate at 61.5 per cent, is higher than the country's average of 64.8 per cent and 53.8 per cent, respectively (Table 1.2). Mizoram has the second highest literacy rate in the country, while Assam, Arunachal Pradesh and Meghalaya are below the country average.

Table 1.2: Demographic Profile of the Region

(Per cent)

<i>State</i>	<i>Literacy Rate</i>			<i>Sex Ratio*</i>	<i>Scheduled Castes in Total Population</i>	<i>Scheduled Tribes in Total Population</i>	<i>Population Below the Poverty Line</i>
	<i>Total</i>	<i>Male</i>	<i>Female</i>				
Arunachal Pradesh	54.8	64.1	44.2	901	0.56	64.22	33.5
Assam	64.3	81.9	56.0	932	6.85	12.41	36.1
Manipur	68.9	88.9	59.8	988	2.88	34.20	28.5
Meghalaya	63.3	66.1	60.4	985	0.48	85.94	33.9
Mizoram	88.5	90.8	86.1	938	0.03	94.46	19.5
Nagaland	68.1	81.8	61.9	909	0.00	89.15	32.8
Sikkim	69.8	86.8	61.5	885	5.02	20.60	36.4
Tripura	83.8	81.5	65.4	950	18.38	31.05	34.4
India	65.4	86.0	54.3	933	16.20	8.20	26.1

Source:

1. www.censusindia.net/results/index.html
2. NEDFI Databank Quarterly, April 2005
3. Below poverty line figures are from the Tenth Plan, Volume III.

Notes: *Sex ratio is number of females per 1,000 males.

All figures are for 2001, except for the BPL population which is for 1999-2001.

1.3 POVERTY TRENDS

In spite of good progress in poverty reduction it remains a concern in all NER states, especially in Assam and Sikkim. Poverty estimates of the NER states are, however, limited. They are based on consumer expenditure data collected by the National Sample Survey (NSS) relating to Assam. Only price variations and the rural-urban population shares influence state-specific estimates. Studies show that there are marked differences in the nature of poverty between the valley and the hills. However, the egalitarian basis of tribal societies which form a majority of the population in the hill states means that these states do not have the “abject poverty found in many other parts of India.”²

1.4 THE ECONOMY OF NER: LEVEL AND COMPOSITION OF GSDP

1.4.1 Per capita income levels

The gross state domestic product (GSDP) is an important indicator of the economic development of a state. Per capita income broadly represents the overall level of living of the people. An analysis of NER shows that (i) the per capita income level in the region is significantly below the average of the country; (ii) the divergence in per capita income between the country and the region has shown a steady increase over the years; and (iii) there are significant differences in the levels of living between different states, between the people of urban and rural areas and between people in the plains and hill areas of the region.

Ironically, the region was at the forefront of development almost 150 years ago. Its rich natural resources supported significant economic activities. The proximity to Chittagong port, a network of inland waterways and land transportation through road and railways provided the support network for the transportation of goods and people. The railway network between Dibrugarh and Chittagong was one of the earliest projects implemented by the erstwhile colonial rulers in the late 19th century. The natural transportation route through East Bengal not only reduced physical distances but also provided emotional closeness. A rapid spread of tea gardens followed the establishment of the first tea garden in 1835 and the export of the first consignment of tea to London in 1838. The discovery of oil in Makum and the establishment of a refinery in Digboi in 1890 laid the foundation for the development of undivided Assam. The colonial rulers found significant potential for the exploitation of natural resources and invested in infrastructure in the region.

The partition of the country in 1947 was extremely retrogressive for the nation. It changed the economic landscape of the region, virtually disconnecting it from the rest of

² NEC Secretariat: Annual Plan 2008-09 for the North East.

the country. The only link that remained was the narrow 28 km. Siliguri corridor. It severed access to the Chittagong port to make it land-locked and blocked natural transportation routes to cut off market access. In fact, per capita income in the undivided state of Assam was higher than that of the country's average on the eve of independence. Even during the 1950s and the 1960s it was higher than the average of the country, but the trend was reversed in the 1980s and the divergence continued to widen thereafter. Thus, in 1995-96, per capita income of the region at 1993-94 prices (Rs. 6,890) in the region was 80 per cent of the national average (Rs. 9,804). In 2004-05, as the country's average per capita income increased to Rs. 14,031, the region's income increased only to Rs. 8,869 constituting just about 62 per cent of the national average. In other words, while the per capita income in the country in real terms increased at the average annual rate of 3.89 per cent, the region's per capita income increased only at 3 per cent. In fact some of the states like Arunachal Pradesh, Assam, Mizoram and Nagaland registered a decline in their per capita incomes during 1995-2000.

1.4.2. Structure of state income

As in the rest of India, an overwhelming proportion of the population of the northeast depends on agriculture for its livelihood, but a large majority of the people engaged in agriculture have subsistence living. The population residing in the rural areas of NER in 2001 constituted 84.39 per cent of the total, but the income generated from agriculture on average during 2000-04 was just about 26 per cent, while the contribution of the primary sector as a whole was 34 per cent. This is marginally higher than the contribution of the agricultural and primary sectors in the country at 20.2 per cent and 24.4 per cent, respectively (Table 1.2A in Annexure 1.1). In contrast, the share of the secondary sector at 16.9 per cent was much lower than that of the country (23.4 per cent). The contribution of the service sector at 49 per cent in NER was marginally lower than that of the country at 52.2 per cent. Within the service sector, NER had a significantly higher share of public administration (10.6 per cent) than that of India (6.3 per cent).

Thus, the NER is characterized by low levels of manufacturing and non-governmental service activities resulting in the population's overwhelming dependence on the agricultural sector. This general observation however, obscures inter-state differences within the region. The dominance of Assam in the economic landscape of NER replicates the picture. In Assam and Nagaland, the contribution of the primary sector was over one-third, but in Sikkim it was lower than the national average. Services share was higher than the national average in Mizoram and Sikkim. However, public administration contributed 21 per cent in Mizoram and 18.5 per cent in Sikkim. It is also seen that over time, there has been a gradual decline in the share of the primary sector in almost all the states in the region except Nagaland and Tripura (Table 1.3A in Annexure 1.1).

1.5 THE WAY FORWARD

People in the region, like those in the rest of the country, have a vision of achieving prosperity and happiness for their children, if not for themselves. In the least, they would like to catch up with the standard of living in the country by 2020. If the national economy grows at an average annual rate of 9 per cent; and the population

grows at a rate of 1.26 per cent; the per capita GDP is likely to grow at a rate of 6.65 per cent to give a per capita level of Rs. 87,459 by 2020 (Table 1.4A in Annexure 1.1)³. To achieve this level of income in 2020, the GSDP in NER has to grow at an average rate of 12.95 per cent from 2006-07 to 2019-20 and the per capita GSDP has to increase at an annual average rate of 11.64 per cent (Table 1.5A in Annexure 1.1).

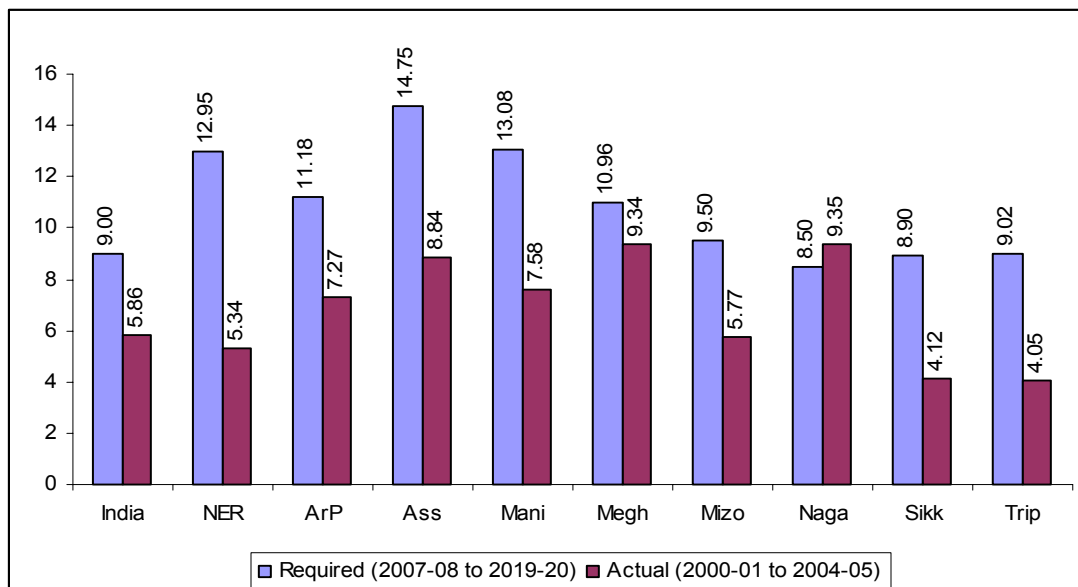
It must be noted that per capita GSDP in NER during 1995-96 to 2004-05 grew at just about 3 per cent per year and since 2000-01, it was marginally higher at 3.6 per cent. Given that the required growth rate of per capita GSDP to catch up with the rest of the country in 2020 is 11.6 per cent, the region has to accelerate its growth rate of per capita GSDP by more than three times the present rate. If the region grows at this rate, the country could grow even faster and the challenge of catching up could remain. But there will be significant improvement in the living conditions of the people and the large differences in the levels of living seen at present will substantially narrow down.

Achieving this order of acceleration in the annual growth rate of GDP is a daunting task and has to be carried out in phases. Table 1.5A in Annexure 1.1 presents phased acceleration in the growth of GSDP in the region which may be taken as indicative. According to this, the growth rate of GSDP in the region should accelerate to 8.64 per cent during the Eleventh Plan, 12.35 per cent during the Twelfth Plan and 15.16 per cent during the Thirteenth Plan, if the goal of achieving the per capita income level of the country is to be achieved by 2020. This would require significant acceleration in manufacturing and non-government related service sectors to mitigate the region's dependence on the agricultural sector. Acceleration in growth in manufacturing and services sectors should, however, expand employment opportunities to absorb those released from the agricultural sector.

The average picture presented above hides significant inter-state differences within the region. In the past, GDP in different states of the region has grown at very different rates resulting in wide variations in per capita income levels. While the people of the region aspire to be equally prosperous, this would require differential growth targets for different states. Indeed over time, with increased connectivity and interaction within the region, migration of people can help to achieve a measure of convergence. Nevertheless, different states in the region will have different growth targets. The plan-wise growth target for each state shown in Table 1.6A in Annexure 1.1 indicates that a significant acceleration in growth is required for each state, with states presently growing faster requiring more moderate acceleration. Thus, Mizoram, Nagaland, Sikkim and Tripura which are presently growing at annual rates ranging from 8.5 to 9.8 per cent would have to grow at 9.5, 8.5, 9 and 9.02 per cent, respectively. In contrast, Arunachal Pradesh, Assam, Manipur and Meghalaya, which are presently growing at less than 6 per cent, will have to grow at 11.18 per cent, 14.85 per cent, 12.88 per cent and 10.96 per cent, respectively.

³ We have taken the growth rate of 9 per cent - the target growth for the country for the Eleventh Plan-as indicative to highlight the magnitude of the developmental challenge of the region to catch up with the rest of the country.

Exhibit 1.1: Actual and Required Growth Rates of GDP (India) and GSDP (NE States): 2006-07 to 2019-20



Although the required acceleration in growth rates to achieve the target is slightly lower in some of the smaller states of the region, they will have to undergo structural changes to expand the productive sectors of their economies. It is important to note that economic activities in these states are predominantly determined by the government with public administration constituting a major proportion of their GSDP. The vibrant growth in these states would require significant structural changes to expand the role of the market and the private sector in determining their economic activities. This in turn calls for the creation of a climate for undertaking investments in the region to harness the resources in a productive manner for creating employment and income earning opportunities for the people of the region.

1.8 RESOURCES FOR INVESTMENT

The required acceleration in the growth of GSDP in the region would necessitate massive additional investments as well as significant improvement in productivity. At the prevailing national Incremental Capital-Output Ratio (ICOR) of 4, the increase in investment required works out to Rs. 1,329,891 crore (Table 1.8A) at 2006-08 prices or 48.1 per cent of the GSDP during the period. This works out to an estimated investment of Rs. 211,613 crore (or 35.3 per cent of GSDP) during the Eleventh Plan; Rs. 505,499 crore (48.8 per cent of GSDP) during the Twelfth Plan and Rs. 6,12,889 crore (55.6 per cent of GSDP) during the three years of the Thirteenth Plan period. An alternative estimate of investment by assuming declining ICOR from 4 during the Eleventh Plan to 3.6 during the Twelfth Plan and 3.2 during the Thirteenth Plan periods places the total investment requirement at Rs. 1,156,885 crore or 41.9 per cent of GSDP in the region for the period. While the two estimates made under alternative assumptions look very large

in absolute terms, as a proportion of the GDP of the country they are 1.4 per cent and 1.2 per cent respectively. Surely, the nation can spend this order of investment in the region.

1.8 THE MIX OF PRIVATE AND PUBLIC INVESTMENT

The large investments necessary for development will have to come from both the public and private sectors. This would require creating proper incentives and environment, the most important being the creation of world-class infrastructure and connectivity. Since, the partition of the country has made the region land-locked, connectivity has to be improved not only between the region and the rest of the world but also within the region. This will help in creating and expanding markets for the products of the region and help in faster movement of goods and people. Provision of world class infrastructure and connectivity would require a significant increase in public investment in infrastructure. Given that the entrepreneurial activity in the region is slack, in the initial years the government will also have to play a proactive role and make investments in promotional areas as well.

Thus, both Central and State Governments in the region will have to make large investments to overcome the infrastructure deficit, particularly in the initial years, though in course of time, it should be possible to involve the private sector in this task through Public-Private Partnerships (PPPs). In order to enable this, it is necessary to create a proper framework for public-private partnerships in infrastructure investments. Budgetary support for public investment too needs to be augmented to provide the required volume of viability gap funding.

Vision 2020 for the people does not imply merely increasing per capita income levels as improvement in per capita income is necessary but not sufficient to improve the welfare of the people. Besides improving per capita incomes, Vision 2020 includes the economic, social and political empowerment of the people. Political empowerment arises from participatory governance. Decentralized governance with active participation of the people is an end in itself as it empowers them. It is also a means to ensuring participatory development and earning economic and social empowerment. In local governance, while some parts of the region are covered by Schedule XI of the Constitution, there are significant parts that are covered under the Sixth Schedule and Nagaland is entirely covered by special arrangement under Article 381-A. The region has a strong tradition of local self-governance and it is important to ensure that the institution of governance established in the different states of the region should work in harmony with Traditional Institutions (TIs).

An equally important component of Vision 2020 is peace and harmony. Human security, an end to the disruptive bandhs and work stoppages which characterize life today in many parts of NER and mutual respect are central for peace and harmony in the region. This represents an important ingredient in developing and maximizing opportunities for investment. There is a strong perception that the region is infested with insurgency. While much of the perception is incorrect - large parts of the region are as peaceful as anywhere else in the country - it is necessary to deal with the issue of insurgency in a spirit of accommodation, pluralism and sub-nationalism.

While increase in income levels provide material prosperity, leading to the happiness and welfare of the people, it is also important for ensuring human development. Improving the living conditions of the people and banishing poverty, eradicating illiteracy and reducing maternal and infant mortality are necessary not only as they contribute directly to human happiness but also because they enhance capabilities. Increases in capabilities contribute to an increase in freedoms - freedom from hunger, freedom to choose avocations and employment and freedom to make informed political and social decisions.

1.9 THE WAY FORWARD

The Vision 2020 detailed above requires a significant change in the development strategy. The entire strategy has to rely on the bedrock of decentralized governance and within its framework, participatory planning. Strengthening the institutions of decentralized governance, working in harmony with traditional institutions of local self-governance and planning and building grassroots planning within its framework can bring the insurgent groups into the mainstream of development. It is also necessary to engage with the groups in the spirit of sub-nationalism and recognizing their ethnic and group identities. Controlling insurgency and creating responsive governance is critical to peace and development in the region. Peace brings in prosperity and vice versa, and the two need to be dealt with simultaneously. The creation of a proper climate for development in the region is equally important. Appropriate strategies will have to be evolved to ensure participatory and encompassing growth in each of the productive sectors in agriculture, manufacturing and services. Capacity development of the people to meaningfully participate in economic activities is as important as development strategies for the sectors. Capacity development is equally important for the institutions in the region to take up a promotional role for private participation in economic activities.

It is widely believed that the approach to development adopted hitherto has not helped in creating a developmental momentum in the region. Much of the investment made in the region has spilled over the jurisdiction and has not produced the required degree of backward and forward linkages. Besides, the pattern of development enjoined in that strategy has not involved the people. Thus, the development strategy proposed for NER calls for a complete shift in planning and implementation from “top-down” to “people-centric” and “people-determined” programmes, based on harnessing the resources of the region, creation and expansion of the markets and attracting private sector participation in economic activities. This will ensure inclusive development, help alleviate poverty and ensure a reasonable standard of living for every family.

The six components of the strategy are:

- (i) Empowerment of the people to maximise self-governance and participatory development through grassroots planning. Providing a secure and responsive environment is necessary for creating an economic climate for the development of the region. Besides people’s participation in planning, this includes creating a secure climate for investment including protecting investors’ property rights and ensuring a corruption-free

administration.

- (ii) Expanding opportunities for a majority of the people living in villages through rural development initiatives encompassing acceleration in agricultural growth and the creation of non-farm employment and economic activities in rural areas.
- (iii) Developing sectors with comparative advantage so as to utilize the resources of the region productively for the benefit and welfare of the people.
- (iv) Capacity development of the people and creating and building capacity of governance and development institutions both in the private and public sectors. Developing people's capacities will equip them to participate productively in economic activities and to benefit from the changes in the economy. Creation and capacity building of institutions will help in grassroots planning, develop the markets and generate a climate for investment and opportunities. Human development is not merely a means to realizing the vision, but is by itself a component of the vision.
- (v) Equally important is the creation of an investment climate by providing state-of-the-art infrastructure, especially connectivity both within the region and with the rest of the world, translation of the "look east" policy for the benefit of the region and ensuring a proactive governance. Augmentation of transport and communication networks and power infrastructure will improve the quality of people's lives and attract the private investment needed for development. The fortunes of the people of the region are inextricably intertwined with those of their neighbours, and there is much to be gained by removing trade barriers to enable access to seaports and inland waterways.
- (vi) Realizing the vision will require significant investment. Generating adequate resources for public investment in infrastructure, implementing a framework for private participation in augmenting infrastructure and creating an enabling environment for the flow of investments to harness the physical resources of the region for the welfare of the people are issues that need to be addressed on a priority basis.

Chapter 2

Inclusive Growth through Inclusive Governance

2.1. Inclusive Growth and Inclusive Governance: An Overview

2.1.1 “Inclusive Growth” is both the title and the overarching goal of the Eleventh Five Year Plan. The key component of our “strategy of inclusive growth” must be inclusive governance as a means of empowering the disadvantaged with the aim of enabling them to overcome their poverty. It is effective empowerment of the disadvantaged through the effective devolution of functions, finances and functionaries to representative institutions of local self-government such as Panchayats (where Part IX of the Constitution applies) and Village Councils (VCs), Village Development Boards (VDBs) and similar institutions elsewhere, on the principle of subsidiarity, which states that anything which can be done at a lower level should be done at that level and no higher level, that will pave the way for the effective implementation of other measures of inclusive growth such as:

- stepping up investment in rural areas, in rural infrastructure and agriculture;
- increased credit availability, particularly to farmers and others and offering them remunerative prices for their crops;
- increased rural employment including the provision of a unique social safety net in the shape of the National Rural Employment Guarantee Programme (NREGP);
- increased public spending on education and healthcare, including strengthening the mid-day meal programme and offering scholarships to the needy;
- investment in urban renewal, improving the quality of life for the urban poor;
- empowering the Scheduled Castes (SCs), Scheduled Tribes (STs), Other Backward Classes (OBCs), minorities, women and children socially, economically and educationally; and
- ensuring that, through public investment, the growth process spreads to backward regions and districts of our country.¹

2.1.2 The hard fact is that while India is prospering, most Indians are not. Although over the last four years India has witnessed a sustained GDP growth rate of 8-9 per cent per

¹ **Based on the** foreword by Prime Minister Dr. Manmohan Singh, in *Report to the People 2004 - 2008*

annum, which is set to rise even higher, poverty levels remain unacceptably high. The Gini co-efficient tilts against the 800 million or so Indians who are still to access the higher trajectory of growth. In this sense, the rich-poor divide has increased and poverty reduction figures in India are now lower than those in Bangladesh. More than 300 million people in India still live in deep poverty at less than a dollar a day while another 350 million live on less than two dollars a day. There are also disparities among regions, states, sectors and communities. Among the states, the North Eastern Region as a whole and the central regions, which have large tribal populations, are lagging behind. Among sectors, agriculture has fallen behind industry and the service sector. Although some of the poorest states are rich in natural and forest resources, the predominantly tribal population in these states needs to be enabled and empowered to take advantage of this. Large sections of the Scheduled Castes (SCs) and Scheduled Tribes (STs), religious minorities and women in all social categories and across the country still do not have access to many job opportunities and human development. The informal sector, which has emerged as the largest job creator, is characterized by low wages and income insecurity while wage growth is concentrated at the top end of the organized sector. The Report of the Arjun Sengupta Committee on the unorganized sector has brought into sharp relief the pressing need to reinforce accelerated growth with inclusive growth.

Table 2.1: Areas in the NER Not Covered Under Parts IX and IX A of the Constitution

<i>State/Area within a State</i>	<i>Provisions under which exempt</i>
Nagaland	Exempt under Article 243M and not covered under
Hill areas of Manipur	Sixth Schedule
Meghalaya	Exempt under Article 243M and covered by the provisions of the Sixth Schedule
Mizoram	Exempt under Article 243M, with some areas of the State covered by the provisions of the Sixth Schedule
Bodoland, North Cachar and Karbi Anglong districts of Assam	Covered under Sixth Schedule

2.1.3 Local self-government, as elaborated in our Constitution, provides the essential means of reconciling “accelerated growth” with “inclusive growth”. We cannot secure inclusive growth without inclusive governance. The virtually three-fold increase in annual allocations to rural development and welfare, and the launching of new schemes like the National Rural Employment Guarantee Act (NREGA), Backward Region Grants Fund (BRGF) and Right To Information Act (RTI), are inadequately impacting on inclusive growth because governance at the grassroots is still far from inclusive. Too large a proportion of the centre’s Rs.81, 000 crore per annum for rural development and welfare reaches the people - if it reaches them at all - through Government-run or officially managed silos. Too small a proportion of it is actually planned and implemented with the participation, involvement and supervision of village communities and their elected representatives. If Gram Sabhas are largely non-functional and most

elected representatives (other than Panchayat presidents) left uninvolved and, therefore, frustrated, this is because even as they see more and more money being poured into rural areas, they also see that much of it is beyond their control or responsibility. The overarching components of governance include (a) policy formulation (b) implementation and (c) monitoring and evaluation. If these three components are tightly packed there is little room for manipulation and corruption. Policies formulated by the centre and superimposed on states are often at odds with ground realities. They do not reflect the aspirations of the people and defy the very logic of governance which is meant to be participatory in nature and where people are at the core of policy making.

2.1.4 That this should be so is an anomaly considering that Constitution amendments have so firmly rooted Panchayati Raj in our system of governance that 3.2 million elected representatives, including 1.2 million women and well over 22 per cent SC/ST (their estimated share in the rural population), are serving in the local bodies of our vibrantly democratic society at the grassroots. This anomaly is caused by:

- (i) Inadequate effective devolution of finances and functions by state legislatures/governments to Panchayati Raj Institutions (PRIs); and
- (ii) Inadequate provisions for planning and implementation by PRIs in the guidelines issued by Central Ministries for centrally sponsored and central sector schemes that directly impinge on inclusive growth.

It is important that Panchayati Raj be brought centre-stage as the principal governance reform to reinforce economic reform in such a manner as to secure inclusive growth (Parallel measures of empowering the grassroots are required in those areas, many in the North East, which the Constitution exempts from Panchayati Raj, such as the Sixth Schedule areas).

2.1.5 The purpose of the Constitutional amendments that were first placed in Parliament in 1989 by Prime Minister Rajiv Gandhi and eventually enacted in 1992 as Parts IX and IXA of the Constitution, dealing respectively with institutions of local self-government in rural India and urban India, came about from the recognition, to quote Prime Minister Rajiv Gandhi, that we needed to take “Power to the People”. The expression “Power to the People” is, of course, Leninist in origin but it was not in the Leninist sense that Prime Minister Rajiv Gandhi used this expression; rather it was in the Gandhian sense. Mahatma Gandhi believed that the function of our democracy is to serve the people, beginning with their immediate neighbourhoods. He, therefore, called for self-governing “village republics”. We have now arrived at the stage where institutions of local self-government, numbering nearly 2,50,000, have been irrevocably institutionalized and established virtually country-wide, particularly after Constitutional sanction and sanctity was accorded to Panchayati Raj through the 83rd and 84th amendments to the Constitution (passed by Parliament in December 1992; gazetted and entered into force in April-May 1993). Now, in addition to about 554 directly elected members of Parliament and about 4,500 directly elected Members of State Assemblies, making a total of approximately 5000 elected members at the higher reaches of

democracy, we have about 3.2 million elected representatives at the grassroots in areas covered by Part IX and Part IXA of the Constitution, besides other kinds of institutions of local self-government in the exempted areas. It is critically important now that we succeed in empowering institutions of local self-government with the functions, the finances and the functionaries that are essential for the running of effective local self-governance. Only when this is done will high and accelerating rates of growth get translated into growth for the people.

2.1.6 Activating and strengthening institutions of local self government calls for conformity to certain broad and generally well-accepted principles of institutional design. Holding of regular elections to local bodies; clarity in the functional assignments of different levels of local bodies in rural and urban areas; matching the devolution of functions with the concomitant devolution of funds and functionaries so that the devolved functions might be effectively performed; ensuring that elected representatives of local bodies effectively wield their powers; building capacity in local bodies to undertake planning; ensuring a healthy, constructive and mutually fruitful relationship between officials appointed by the State Government and elected local bodies and; providing for collective decision-making through Gram and Ward Sabhas and holding the local body to account for its performance are some of the features of a good design for local self-government. In addition, it is important to create systems and institutions for planning and delivery of public services, including the creation of information systems and those for monitoring evaluation and ensuring accountability.

2.1.7 As suggested by the National Commission to review the working of the Constitution in its chapter on “Empowering and Strengthening of Panchayat Raj Institutions/ Autonomous District Councils/ Traditional Tribal Governing Institutions in NE India”, the functioning of Autonomous District Councils (ADCs) should be amended to make them more accountable through the insertion of a clause that makes the creation of village councils/bodies with a fair representation for traditional institutions without giving the latter any primacy mandatory. Village councils or *Dorbars* should be elected every five years and mandatory representation for women ensured as in the case of PRIs.

2.1.8 Government policy is looking beyond just maintaining rapid growth to making growth more inclusive by addressing imbalances in the pattern of growth: too few jobs, too little growth in agriculture, lagging states and regions and groups and people left out of the path of progress. The foundation of these efforts is empowerment, which is key to expanding equity of opportunity. But while social protection remains one element of inclusive growth, empowerment does not seek to protect people *from* the market but rather seeks to facilitate opportunity for all *in* the market. This makes empowerment foundational both for greater accountability and service delivery as well as for spreading the benefits of economic growth.

2.2. Systems of Inclusive Governance in the North East Region

2.2.1 Systems of decentralized governance in NER show a wide diversity, unparalleled in any other region of the country. While the Panchayati Raj system fully covers two of the eight states of the region Sikkim and Arunachal Pradesh three other states Mizoram, Meghalaya and Nagaland are entirely exempted and have their own local systems. The remaining three states Assam, Tripura and Manipur have both Panchayati Raj and non-Panchayati Raj areas existing side by side. Such diversity is as it should be, even though it makes local governance exceedingly complex. Adding to the complexity is the fact that local governance is based on the immense ethnic, linguistic and religious diversity seen in the region. However, a common feature of these diverse systems of self-governance is that they all need strengthening. This is as true of NER as it is of most parts of the country.

2.2.2 For effective local self-government, major governance reforms are required as much in Panchayati Raj areas in the North Eastern Region as in the exempted areas. Governance needs to be strengthened by (a) laying out clear policy objectives (b) concurrent audit and (c) post-completion audit in all of which communities themselves play a role.

2.2.3 Although Sikkim, Arunachal Pradesh and parts of Assam, Tripura and Manipur are covered under the provisions of Part IX of the Constitution, the extent of powers devolved upon Panchayats in these States is uneven. Sikkim has been adjudged the third best state in the country in the implementation of Panchayati Raj; Assam the best for activity mapping; Tripura and Manipur among the better states for their pattern of devolution and; Arunachal Pradesh has been commended for recent steps taken to move towards effective devolution. Yet, in all five States, there is considerable scope for advancing the cause of devolution. Happily, all the five states are party to the 150 conclusions of the seven Round Table Conferences held in 2004 covering all 18 identified dimensions of Panchayati Raj, reinforced by Memoranda of Understanding or joint statements of conclusions signed by the Chief Minister and the Union Minister of Panchayati Raj in all five states, to reinforce the consensual action points of the Round Tables with state-specific action points. These documents are reproduced in Annexure 2.3 A. The accelerated implementation by state and central governments of these agreed points of action will contribute greatly to securing inclusive growth through inclusive governance in the North Eastern Region. This then is the crucial foundational perspective for NER Vision 2020.

2.3 Steps to be taken on a priority basis for strengthening Panchayati Raj in NER

2.3.1 Activity maps need to be prepared or activated to clearly delineate the attribution of activities comprised within each devolved function to the appropriate tier of the three-tier Panchayati Raj system so that there is no ambiguity at any level about the tasks entrusted to it nor any overlapping of duties between different tiers. The states are at various stages of implementation and coverage with regard to activity mapping (Table 2.5A in

Annexure 2.1): while in all the concerned states in NER, preliminary work on the assignment of functions has been completed, these still need to be universally formalized and operationalized. Since activity mapping is the trigger for the devolution of finances and functionaries, states need to expedite this (an educative model which may be replicated for other functions is given in Table 2.5A in Annexure 2.1 and activity mapping by distribution of functions into district Panchayats, intermediate Panchayats and village Panchayats is shown in Table 2.6A in Annexure 2.1)

2.3.2 Sikkim and Assam have completed their activity mapping. Sikkim's activity mapping includes detailed assignment of funds to Panchayats as also precise details of the officials who will be attached to each Panchayat for the performance of devolved activities. Assam's activity map is comprehensive as far as the devolution with respect each devolved function but it still to be operationalized in terms of the matching devolution of funds through Panchayat sector windows in the budgets of the respective line departments, and full deployment, as envisaged in the activity map, of officials to the appropriate tier of the system. Tripura's activity mapping is operational but needs fine-tuning. Manipur has sound legislative and even administrative provisions but scientific mapping could lead to more effective devolution and, therefore, more effective and far-reaching empowerment. In Arunachal, the activity map is ready but will not get operationalized until it is backed by the required government orders which have been left to each department to issue. This needs to be done with deliberate speed and coordinated at the highest levels of Government for till this is done, devolution will remain only on paper. Equally, all five states will need to clearly identify those budgetary line items that ought to go to the Panchayats and separately earmark them through a Panchayat sector window in the budgets of the relevant state line departments to ensure the flow of funds for undertaking devolved activities to the Panchayats. Functionaries will need to be devolved to that level of the Panchayati Raj system to which any given activity has been assigned in the activity map, in conformity with the pattern of devolution of functions and finances. All these are works in progress and the progress recorded in the last few years has been encouraging. The stage is, therefore, well and truly set for inclusive growth through inclusive governance provided this is prioritized and followed through assiduously and conscientiously.

2.3.3 Institutionalizing participative planning from the grassroots level upwards to culminate in the preparation of a district plan is another key step in the strengthening of Panchayats. As mandated in the Constitution, District Planning Committees (DPCs) are required to be *elected* to the extent of 80 per cent of the membership by and from amongst the elected members of the district level Panchayat (Zilla Parishad) and the Municipalities within a district. Although most states falling under Part IX of the Constitution have now constituted DPCs, Nagaland, Mizoram and Meghalaya are yet to get into this exercise. However, in Arunachal Pradesh and Tripura, some issues relating to the composition of the DPCs, owing to the special circumstances of these states, still remain to be clarified. The district plan must emerge from plans prepared by each village Panchayat intermediate Panchayat, district Panchayat, and municipality for their respective geographical areas and functional competencies. To this end, state

governments need to clearly inform Panchayats at each level (and the municipalities) of the resources likely to be available and the activities entrusted to them. DPCs are entrusted the responsibility to “consolidate” these Panchayat/Nagar Palika plans into a draft district development plan and forward it to the state government.

2.3.4 The Ministry of Panchayati Raj constituted an Expert Group on Grassroots Level Planning under the chairmanship of Shri V. Ramachandran, former Chief Secretary and Vice Chairman of the Planning Board of Kerala, which set out the steps for operationalizing grassroots planning. The expert group, after a close examination of the prevailing status of the planning process and decentralization outlined six preconditions to strengthen the decentralization system and design and implementation of grassroots planning to ensure that the benefits of participatory planning accrue to the people:

- (i) A clear and unambiguous activity mapping for different levels of Panchayats based on the principle of subsidiarity. Activity mapping is the key to the effective devolution of functions to Panchayats.
- (ii) Engagement of all stakeholders, particularly of historically discriminated and marginalized sections including women, in participatory planning and implementation. This has to be done to assess the resources in the villages and towns, identifying and prioritizing the needs and requirements and monitoring and evaluation of various projects, schemes and programmes.
- (iii) Devolution of adequate funds in an untied manner. The devolution of funds should be patterned on activity mapping of each level of governance. For this, state governments will need to undertake a detailed analysis of their annual budgets, both non-plan and plan, to separate allocations to be transferred to Panchayats in accordance with the activities devolved to them. The funds available under various schemes can be allotted to the projects selected and prioritized by the people.
- (iv) Streamlining and consolidation of schemes to ensure flexibility and a measure of autonomy. This has to be done mainly at the State and Central levels.
- (v) Assignment of significant revenue raising powers and building capacity of local governments to raise revenues from the sources assigned to them.
- (vi) Maintenance of a proper management and statistical information system to enable local governments to efficiently design and implement plans and raise resources and undertake evaluation of programmes. Based on the recommendations of the expert group, the Planning Commission issued detailed guidelines to state governments on bottom-up planning through the Panchayats, Municipalities and DPCs in conformity with the Constitutional provisions on 25 August 2006. These guidelines have been followed for the Backward Regions Grant Fund (BRGF), which makes it clear that beyond a brief transitional period, releases from BRGF would be contingent on the receipt of district plans prepared in accordance with the provisions of the Constitution.

The concerned NER States have commenced the process of district planning through Panchayats in BRGF districts. However, steps will need to be taken to ensure that these guidelines are fully followed and district planning becomes established as a practice in all districts in NER.

2.4. Governance Reforms in NER areas exempted from Panchayati Raj

2.4.1 All of Meghalaya and Mizoram, and large tracts of Tripura, come under the provisions of the Sixth Schedule of the Constitution. Nagaland and the hill areas of Manipur are governed by similar arrangements through state legislation. Such special arrangements are aimed at the protection of tribal areas and interests, by mandating district or regional local self-government institutions for them through Constitutional arrangements or state legislation. These institutions have been entrusted with the twin tasks of i) protecting tribal culture and customs and ii) undertaking development tasks. However, the Autonomous Developmental Councils which are supposed to establish responsive administrations and undertake development-planning functions with the maximum participation of the people are yet, like their Panchayati Raj counterparts, to fulfill their role effectively.

2.4.2 In order to maximize people's participation in governance and to chart out a clear roadmap to involve these institutions in grassroots planning, the Ministry of Panchayati Raj appointed an expert group on planning for the Sixth Schedule Areas and those areas not covered by Parts IX and IX A of the Constitution, again under the Chairmanship of Shri V. Ramachandran. The important recommendations of the Committee with regard to strengthening decentralized governance in these areas by maximizing people's participation are:

(i) On paper, the Autonomous Councils are vested with more powers than those given to the equivalent institution of the District Panchayats by Part IX of the Constitution. However, there are significant variations in the powers given from one Autonomous Council to another depending on the nature of the Memorandum of Settlement and negotiations that preceded the assignment of the special status under the Sixth Schedule. Thus, the Bodoland Territorial Council has much more powers than the NC Hills Autonomous District Council, even though both are in Assam. It is advisable to adopt an even approach to devolution of powers under the Sixth Schedule. As a guide, the matters enunciated in the Eleventh Schedule of the Constitution may be considered for entrustment to the Autonomous District Councils.

(ii) While designing local planning approaches, care must be taken to harmonize the functions and rights of traditional tribal self-governing village institutions such as the *Syiemships* and *Dorbars* of the Khasi hills of Meghalaya, the *Kuki-Impi* of the Kukis in Manipur, the *Clubs* of the Manipur valley and peoples' organizations of various

tribes in Nagaland, with institutional mechanisms designed for modern development and service delivery.

(iii) The Autonomous Councils will have to be oriented to become the harbingers of economic transformation and not merely be legislative, regulatory and administrative agencies. However, in order to effectively assume a central role in local development, they will need to adopt a more participatory approach. Such a transition will need to emerge from within, as tribal communities themselves proceed to adapt their time-honoured traditional systems to the needs of inclusive participation and development. In this context, it may be desirable to consider the approach adopted in the Fifth Schedule areas, where democratic elections based on adult franchise and reservations for women in elected seats and leadership positions have been applied without reducing the importance of tribal customs and traditions.

(iii) Para 4 of the Sixth Schedule makes a provision for village councils to be established by District or Regional Councils mainly for the dispensation of justice in disputes that involve two or more tribal persons. However, recent initiatives in communitization at the village level, aimed at harmonizing the “village community with the traditional tribal body” have shown significant success. The most celebrated example is Nagaland’s experience of communitization for effective public service delivery (see Box 2.1). Other examples include the NEC sponsored “North Eastern Community Resource Management Project” (NERCORMP) in Assam, Manipur and Meghalaya involving the International Fund for Agricultural Development (IFAD). Such initiatives are worthy of emulation to accelerate participative village development. Examples from IFAD project have shown that unlike government schemes, the IFAD funded projects have not been afflicted by the malaise of extortion primarily because they are community-driven and because people have shown a keen sense of ownership of the projects. This clearly indicates that many systems can co-exist if the delivery mechanisms work.

Box 2.1 Communitization and Resurgence of Naga Social Capital

“Once the whole State is brought under the Communitization programme, it would be model a for the whole country to follow,” said the President of India, Dr. A.P.J. Abdul Kalam during his visit to the Communitized Khuzama Village in Nagaland on October 26 2002. Government of Nagaland has enacted the Nagaland Communitization of Public Institutions and Service (NCPIS) Act, 2002 enlarging the scope of community participation in development and welfare programmes in areas such as education, health, power, rural water supply, rural tourism, roads, forest, sanitation and rural childcare. Earlier, since 1963, only elementary education, health service and electricity management were under the Communitization scheme. This is a partnership between the government and the people through delegation of management responsibilities to the community so that the performance of public utilities improves. The community’s responsibilities include checking attendance of staff, repair and maintenance work, purchase of books/medicines, receiving funds from the government for salaries of the staff and disbursing the same after operating the principles of “No Work, No Pay”. The watchwords are trust, training and transfer of power and resources. For an impact assessment of this experiment in the context of elementary education, grassroot health services and electricity management.

(v) To deepen participation at the village level, there is a need to form village councils. Where such bodies have not been set up, the Central and State Government should persuade the District or Regional Councils to set up village level bodies. Ideally, there should be a democratically chosen Village Development Committee or Board, consisting of about ten to 20 members formed at the habitation level through an open meeting of the community with adequate representation of women and youth. This provision may be made wherever the village population is more than an identified threshold (say 100) and should take into account the tribal composition of the area. This body should have the responsibility of participatory planning from the village and habitation level upwards and protection and management of natural resources. Such Village Development Committees/Boards could activate participative decentralized planning at the habitation, village or cluster level. They should also be responsible for implementing the National Rural Employment Guarantee Act linked to the overall village level plan. Defining a village in NER could pose special problems given the wide dispersal of habitations and the tendency to practice shifting cultivation. The principle adopted in Section 4 of the Panchayats (Extension to Scheduled Areas) Act 1996, which defines each tribal habitation as a Panchayat could be adopted for the constitution of Village Development Committees/ Boards in NER.

(vi) Bodies for participative planning in urban areas will need to follow the provisions of Part IX A if not exempt from its application.

(vii) Inclusive committees may be set up at the district level, analogous to the District Planning Committee, to consolidate the District Plan.

(viii) Unlike in the areas under the purview of Parts IX and IX A of the Constitution, there is no compulsion to appoint the State Finance Commission (SFC) to enable

the assignment and devolution of taxes, non-tax revenues and grants to village, district and regional councils the State Governments. This is a lacuna and, therefore, the states should be required to constitute such bodies. The terms of reference of these SFC-like bodies may be patterned on the provisions of Article 243-I of the Constitution. The Union Government will have to take the necessary action to persuade states to make such arrangements.

(ix) Despite the fact that the Sixth Schedule has declared that certain functions should be entirely transferred to District and Regional Councils, some departments have not or have only been partially transferred. Some states have persisted with retaining their parallel development and administrative machinery in council areas particularly in vital areas such as rural development, education and health. Clarity in the assignments would avoid waste of resources and improve efficiency in service delivery. It is also important to wind up the parallel institutions or merge them with the councils, with respect to assigned departments.

(x) The success of the Autonomous District Councils fulfilling their developmental role will depend crucially on their capacity to design and implement plans. Almost all councils do not have access to planning professionals. There is also no specialized set-up within the councils for planning. This results in short-term thinking on development, leading to an ad-hoc conception of development projects without proper technical and financial considerations. Therefore, capacity development to gain expertise in planning, monitoring and evaluation is important at the council level.

(xi) The Governors of the states concerned have a special role in the context of District and Regional Councils. Special provisions have been added to the Sixth Schedule to give discretion to the Governor on some important matters. Under Para 14 of the Sixth Schedule, a provision has been made for the Governor of the state concerned to appoint a commission to inquire into and report from time to time on the administration of autonomous districts and regions and to examine and report on any matter specified by him. The report of every such commission with the recommendations of the Governor is to be laid before the legislature of the State by the minister concerned together with an explanatory memorandum regarding the action proposed to be taken by the government of the state. Considering the fast-changing scenario in the scheduled areas, the need to ensure true autonomy in the letter and spirit of the Sixth Schedule and to ensure that development initiatives proceed smoothly, this provision of the Constitution should now be invoked. All the Governors concerned could appoint a common high level commission, to examine and report on the Autonomous Councils in these States in the light of changes that have taken place, the challenges and the demands of local development.

2.5. Grassroots Planning and Service Delivery in NER

2.5.1 Improvement of service delivery by local self-governments in NER would vitally depend upon the quality of planning undertaken by these bodies. Implementation of the recommendations on grassroots planning by the expert group would help in the preparation and implementation of people-based district plans. Such guidelines would also need to cover non Panchayati Raj areas.

2.5.2 The expert group on grassroots planning has suggested a series of sequential steps for building the district plan from the village level upwards. First, a district vision setting out the goals and outcomes for the next 10-15 years will need to be fashioned through participative processes starting from the grassroots level upwards. Each planning unit starting from the Gram Panchayat and municipalities in areas covered by Parts IX and IX A of the Constitution (and Village Development Committees in areas covered by Schedule VI of the Constitution and similar other areas discussed above) should articulate the vision and set out the goals and outcomes in terms of human development indicators, infrastructure development and development in the productive sectors of the economy based on physical and human resources. This vision for human development would ideally cover health, education, women and child welfare, social justice and availability of minimum services. Similarly, the vision for infrastructure should be in tune with the targets under the Bharat Nirman Programme. The vision for productive sectors should take account of the natural and human resources such as agricultural production, and improvement, irrigation and water management and security. The vision built from the lowest level should be coordinated and compiled at block and district levels to draw up the district vision. Each state government in the region should coordinate and compile the visions prepared by the districts and based on there build a vision for the state.

2.5.3 Assessing the prevailing conditions, including the status of human, physical, social and financial resources and the available infrastructure, would proceed in parallel to the envisioning process. This would require preparing accurate and detailed databases on the available standards of public services, prevailing physical assets right from the Panchayat level, inventory of the projects undertaken in the plans, details of works that spill over from one plan to the other, the financial resources required during the plan, the provision of public services such as education and healthcare by both the public and private sector credit plan and the status of micro-finance or similar self-help systems of finance. The planning process itself should start at the level of Gram Sabhas or Ward Sabhas and in Autonomous Council areas at the level of villages or habitations. At the grassroots level, based on consultations with the people, the needs and requirements as articulated by the people can be put into a matrix following which specific grants, partly untied funds and fully untied funds can be allocated based on the prioritization done by the Panchayats or the Village Councils.

2.5.4 The plans prepared by various Gram Panchayats/VDCs should be compiled at the block and district levels by the DPCs. Here again, the projects relevant to the activities of these bodies will have to be added to those prepared by the grassroots level. The DPCs, in addition, have to put together the plans prepared by urban local bodies. Similarly, the State Government should compile the district plans prepared by the DPCs and add their own plans relating to the activities assigned to them. The NEC should put together the

plans prepared by various state governments in the NER and also prepare investment plans relating to infrastructure and services with inter-state spillovers within the region. Thus, the centrality of Village Panchayats and Village Development Committees, as well as urban local bodies, would be made central to grassroots planning. Considerable effort will be needed to build capacity to prepare and implement plans at all levels, particularly at the village level. The use of Information and Communication Technology (ICT) will also improve the monitoring of service delivery through local Governments and introduce greater transparency in Government processes, better streamlining of procurement procedures and enable better planning and decision-making. The detailed suggestions in the report of the expert group should be taken as a guide and decentralized planning from the people upwards should be institutionalized without any further loss of time.

In states like Meghalaya which were granted Sixth Schedule status when they were part of the composite state of Assam, mainly as a safeguard for the customary laws and practices of the tribal minorities, there may be merit in examining whether the ADCs should continue in their present form, now that the state is ruled by a tribal majority. ADCs in Meghalaya have virtually no role as development agencies. They continue to function as regulatory bodies collecting royalty and taxes from forest products, minerals and markets, exercise minimal control over water bodies and regulate trade by non-tribals. The mere continuance of an institution which is virtually a stand-alone body having no linkages either with the State Government or with village-based institutions requires some new thinking. ADCs would either need to be empowered with requisite delivery mechanisms and adequate funds both of which they are lacking, along the models of a Zilla Parishad.

2.6 Gender Sensitive Governance: Key to Inclusive Growth

There is increasing need for local government reforms to be associated with improving service delivery through local governments. A major cross-cutting concern that merits more attention is the gender dimension of local development, in particular women's effective participation in local government, to help meet their specific needs and addressing gender inequalities. Major indicators of gender equality are exercise of rights, social control, access to decision making and a public voice to defend rights. Progress towards gender equality is slow, and this is in part due to the failure to attach money to policy commitments. Not enough attention is given to the impact of allocated resources and this serves to perpetuate gender biases, although budgets offer the potential to transform gender inequalities.

- Gender budget initiatives or gender responsive budgets are tools and processes designed to facilitate a gender analysis in the formulation of Government budgets and the allocation of resources. Gender budgets are not separate budgets for women, or for men. They are attempts to break down or disaggregate the government's mainstream budget according to its impact on women and men. The way in which national budgets are usually formulated ignores the responsibilities and capabilities of men and women. Budgets formed from a

gender-neutral perspective ignore the different impacts on men and women because their roles, responsibilities and capacities are never the same. These differences are generally structured in a way that leaves women at a disadvantage by creating inequality gaps.

- Major issues relating to women and children in NER are persistently high infant, child and maternal mortality ratios. Other important concerns are the feminization of poverty and the exploitation of women in low paid, hazardous and insecure jobs in the unorganized sector. These issues require a sensitive approach which cuts across all projects/programmes and schemes. Good policy requires understanding both its impact and how it might be better designed to achieve outcomes which meet the needs of women, men, and girls and boys as well as different groups of women, men and children. There is no single approach or model of a gender sensitive budget. Evidence suggests that the economic gains of gender equality lead to increased output and better development of people's capacities.
- Lack of awareness about reproductive rights and health tie the women of NER, in particular to domestic chores and play a role` in replicating poverty and nullifying development initiatives. There is a propensity to see women only as members of Self-Help Groups (SHGs), as vehicles for savings and credit. The self-help concept should cover mass-based organizations of women who are legitimately concerned about the lack of food, drudgery, housing, potable water and employment.
- Environmental and social impact assessments of projects are necessary during policy formulation to mitigate the gender-negative impacts of projects such as coal and uranium mining and mega dams. Women bear multiple burdens in the process of displacement as a result of large development projects and they bear greater responsibility of rehabilitating all the members of their household in the process of involuntary resettlement. It is proposed that gender outcomes be clearly enunciated at the policy formulation stage to mitigate negative impacts. Appropriate gender tools should be developed for evaluating those outcomes.
- Programmes cutting across all Ministries and Departments could clearly identify and disaggregate the group of intended stakeholders and beneficiaries in terms of gender. Gender budgeting, which involves translation of stated gender commitments into budgetary allocations and dissects the government budget to ensure its gender-differential impact, is integral to ensuring gender justice.
- To address the gender gap, it is important to launch a joint programme to ensure gender equitable local development and improved access to resources and services for women. The programme should concentrate on gender responsive planning, budgeting, implementation, monitoring and evaluation.

- Economic agencies are, with liberalization, more concerned with regulation (or de-regulation) than with implementation. In this role, it is much more difficult to have a direct effect on gender relations. It is important that an annex be produced with the last budget papers setting out some gender sensitive indicators that could be used to monitor the budget. The result of facilitating policy dialogue to include gender and macro-economic issues will lead to an improvement of economic growth and human development performance in ways that also empower women.
- Gender auditing of schemes and programmes and impact analyses inform policy makers about the need for course correction and more gender nuanced planning. Also the outcomes from gender auditing will push women's advocacy groups to ask for affirmative and corrective action by the Government. The ultimate aim is to give women a greater say at different levels and stages of developmental planning and in the formulation of policy and programmes.
- Women's economic empowerment could provide the possibility of combination of increased productivity, less stress and better overall health. It is important to develop and implement strategies for women's participation in economic decision making through their engagement in budgetary processes. It is also important to engender economic governance processes by increasing their transparency and holding national actors accountable to their policy commitments to women.
- Gender commitments must be translated into budgetary commitments. For reprioritization in public spending we must prepare "bottom up budgets" and work for their realization in collaboration with elected representatives. Gender economists must lift the veil of statistical invisibility of the unpaid "care economy" managed by poor women and highlight its equality and efficiency dimension and transform macro-policies so that they become women friendly.

Chapter 3

Poverty Eradication in North East

3.1. Poverty Eradication: An Overview

The concept of poverty is not restricted to economic inequality, but subsumes an inequality of opportunities, capabilities, choices and social basics. The eradication of poverty, inequality and deprivation in democratic India should invariably be addressed in a participative and holistic manner reflecting the letter and spirit of the provisions relating to “The Panchayats” and “The Municipalities” in Parts IX and IXA of the Constitution brought into force by the 83rd and 84th amendments passed by Parliament in December 1992 and gazetted in April-May 1993.

The previous Chapter on “Inclusive Growth through Inclusive Governance in NER”, set the stage through the North East’s panoply of institutions of local self-government for fostering and sustaining equitable and inclusive growth within the framework of a harmonious society. This will ensure grassroots development through grassroots democracy in a people-oriented and people-centric manner, with community supervision and people’s control over the provision of basic services and public goods. Such assured access to entitlements is the surest path to poverty eradication, especially when livelihood sustenance is married to sustained and sustainable development initiatives at the village and *mohalla* levels.

Economic development does not of itself necessarily ensure the eradication of poverty. Development has to positively impact on the augmentation of employment opportunities and the diversification of economic opportunities for the poor to secure an improvement in the distribution of income that will lead to the alleviation, reduction and eventual time-bound eradication of poverty. Moreover, in recognition of the various levels of poverty that exist, special efforts have to be made to clearly identify families living below the poverty line, especially the substantial chunk constituting the poorest of the poor and other vulnerable sections of society. This requires a technical identification of the parameters of poverty and the community’s involvement in the identification process.

Inclusive and sustainable programmes and schemes through a participative process of planning and implementation call for substantial and concerted capacity building of Panchayati Raj and other institutions of local self-government as well as effective communitization. Such capacity building, of both the elected representatives (with special emphasis on SC/ST and women) as also of administrative and technical officials, should focus on all dimensions of poverty eradication including:

- the Institutional Development Perspective;
- the Human Development Perspective; and
- the Participatory Development Perspective.

3.2. Poverty Issues in the North East

3.2.1 Issues relating to poverty alleviation are of critical importance in NER, underlined by its geographic isolation from the rest of the country and large tracts in the region which are remote, difficult to access and sparsely populated. The estimated poverty ratio in the Region, in terms of the mixed recall data 2004-05, was 14 per cent. This is lower than the country's overall poverty ratio of 22 per cent, but the general and widespread view in the North East, both among governments and the people is that the measure grossly underestimates the true extent of poverty in the region and, moreover, extrapolates limited data on to states and areas that have not been properly surveyed or have not been surveyed at all. It is also widely believed, in academic and popular circles, that wide inter- and intra-state variations in the socio-economic conditions have not been adequately taken into account. Further, the adoption of one poverty line (rural and urban) for all NER states needs re-examination. The lower value for the urban poverty line as compared to the rural poverty line is not consistent with ground realities. There are also significant variations in the cost of living in different states that have not been adequately taken into account in determining levels of poverty. The need for a thorough and comprehensive study of the profile of poverty in the North East is emphasized to lay the ground for an effective time-bound strategy of eradicating poverty. Such a survey must capture the multiple deprivations of the people including the facets of

- (i) Economic Poverty (EP);
- (ii) Nutritional Poverty (NP);
- (iii) Human Poverty (HP); and
- (iv) Basic Amenities Poverty (BAP)

which are inter-related but distinct, with the conviction that an in-depth analysis of these dimensions can alone help in understanding the living conditions of the poor.

Economic Poverty (EP) of the region, as per the estimates of the Planning Commission, is 19.1 per cent, as against 28.5 per cent in the country as a whole, and is being reduced at a faster rate in NER as compared to the all-India average. Poverty appears to be largely rural in nature and heavily concentrated in Assam and Tripura. The composition of the poor shows that the self-employed in agriculture constitute the bulk of the poor, followed by the self-employed in non-agricultural occupations, labourers in rural areas and self-employed and casual labour in urban areas. The participation of the poor in the processes of planning is low and only some of the poor are organized in groups such as Self-Help Groups (SHGs). Local self-governments need to be empowered to address issues of poverty eradication. Relatively high per capita GDP levels (at constant prices) in five of the eight states suggests that the prospects of reducing and eventually eradicating economic poverty are promising provided economic growth rates are high and inclusive.

Human Poverty (HP): This is related to access to human resources. The human poverty level is high and rural-urban and gender disparities are considerable. While the literacy rate is high, skill development is low. In consequence, most of the poor lack skills and

good educational standards. And as about 40 per cent of them are young (15 – 35 years), the problem of youth unemployment is perhaps the most serious and disturbing of the social and economic problems of the region, accounting, in turn, for serious political and law and order problems in many parts of NER. The participation of women in agriculture is higher than men but productivity is low. Productivity in the handloom and handicraft sectors is also low. For economic development, both knowledge and skill are of equal importance. This necessitates the strongest possible emphasis on, and priority to, the upgradation of the quality of human resources.

Nutritional Poverty (NP) in NER as a whole is considerable and can be addressed by increasing the purchasing power (with emphasis on economic growth and equity), imparting nutrition education and effectively implementing supplementary nutrition programmes for children and pregnant and lactating mothers. Above all, it is most disturbing that there are serious deficiencies in the PDS systems. The shortage of institutional arrangements for effective interventions to tackle nutritional poverty can best be made up by deeply involving the village community through Gram Sabhas and Panchayati Raj Institutions (and equivalent bodies in exempted areas) in all matters relating to the alleviation, reduction and eradication of nutritional poverty.

Basic Amenities Poverty (BAP): This relates to having access to proper houses, sanitation, safe drinking water, electricity etc. Access to basic requirements is very important for any improvement in the quality of life. In the ultimate analysis, it is only by involving local self-government institutions and local communities in service delivery programmes aimed at tackling BAP that substantially enhanced funding for such programmes can palpably impact on people's access to basic amenities.

3.3. Perspectives for Poverty Eradication

There are multiple deprivations associated with poverty and in order to address them effectively, there is a need for giving special focus and attention in the NE region, both at policy and implementation levels, so that absolute poverty and basic deprivation are first alleviated, and eventually eradicated, within a time-bound framework of action. A five-fold programme of development perspectives for the eradication of poverty includes:

1. Economic Development Perspectives (EDP)
2. Institutional Development Perspectives (IDP)
3. Participatory Development Perspectives (PDP)
4. Human Resource Development Perspectives (HRDP)
5. Infrastructure Development Perspectives (Infr. DP)

3.3.1 Economic Development Perspectives (EDP)

EDP envisages the optimal use of resources and inclusive/participatory growth. Under this rubric, ***agriculture*** development, based on different soil–water–forest conditions

in different regions (high and low altitude hilly areas, chronically and occasionally flood-affected plains and flood-free zones) constitutes the major subset of the overall development perspective. While the short-term development strategy deals with the issue of viability and stability of agriculture and related sectors, profitability and sustainability of economic activities are concerns of a long-term strategy. The envisaged rural diversification initially supplements incomes from subsistence agriculture and gradually modernizes agriculture even while preserving the ecological balance. Rural prosperity facilitates the eradication of abject poverty and nutritional insecurity and in the process reduces the share of agriculture in the net domestic product at the aggregate and household levels.

Some of the key areas identified include the following-

Agriculture and Allied Activities:

Agriculture: The priority sector must be agriculture for with the region's high dependence on agriculture and allied activities, comprising over 80 per cent of its GDP it is only through a Green Revolution that the back of the region's poverty can be broken and the people as a whole placed on the parabola of progress. Such a Green Revolution must compromise the following essential elements:

- Rapid replacement of traditional cropping patterns by short-duration, high-yielding varieties of paddy in the kharif season followed by wheat, maize, mustard or vegetables in the rabi season along with soil nutrients like lime and the judicious use of pesticides, to dramatically augment agriculture productivity.
- Widespread promotion of horticulture and floriculture, as well as medicinal and aromatic plants and herbs including organic farming, to capture highly remunerative niche markets abroad.
- Plantations, especially for bamboo, rubber, spices and fruit and the rejuvenation of tea gardens, especially through small farmers and farmers' groups.
- Forestry and conservation to ensure the premier position of the North East in forest cover, bio-diversity, genetic wealth, and wild life.
- The progressive phasing out of the practice of *jhum* but only after guaranteeing alternative, remunerative local means of livelihood to the tribal communities concerned.
- Determined promotion of all forms of animal husbandry, fisheries, dairying and bird life (the decline in all of which has substantially contributed to low nutritional standards in the North East).

Increased Productivity: It is critical to promote increased productivity and diversification of crops to monetize all sections of the economy and generate surpluses. This calls for the injection of investment in rural areas on a much augmented scale. It also calls for bringing under the plough vast tracts of vacant land lying largely unused. Double cropping in Assam has yielded very encouraging results and this should be replicated in the other states. Allied activities such as poultry, piggery and dairying need

encouragement. For all these programmes, a cluster approach for increasing productivity would be very important.

Special attention is required for securing increases in the productivity of tiny land holdings of marginal and small farmers as most of the poor are concentrated among the self-employed in agriculture. This holds the key to self-sufficiency followed by surplus production. This may lead :

- To increased cereal production through field crop agriculture production–
 - Cultivation of short duration HYV crops leaving paddy fields free for rabi crops by October in flood-free plains valleys, and the application of an advance package of practices with limited slake lime treatment for removing soil acidity.
 - HYV *Bao* paddy cultivation in flood low-lying / flood prone areas.
 - Cultivation of *Ahu* (summer) and *Boro* paddy in the flood prone areas.
 - Production of HYV seeds locally.
- To increase production of horticulture –
 - Cultivation of pineapple, banana, orange, passion fruit, ginger, chili, turmeric, large cardamom and vegetables.
 - Promotion of cash and horticultural crops, using forest as the basis, in all shifting cultivation areas.
 - Promotion of cluster-based floriculture.
- To increase sericulture production –
 - Promotion of integrated plantation and rearing of *Eri*.
 - Promotion of indoor *Muga* culture.
- To increase protein production
 - Animal protein: Milk, meat, egg and fish through clusters.
 - Others: Mushroom and bamboo shoots.
- To increase production of non-conventional items (endemic and high value)
 - Promotion of production of medicinal and aromatic plants.
 - Development of area-specific minor forest products.
 - Promotion of bamboo and cane production.
 - Development of area-specific ornamental fish culture.
 - Floriculture.

As with investment in industry and infrastructure which is governed by the North East Industrial and Investment Promotion Policy 2008, the rural sector requires a ***North East Agriculture and Allied Activities Development and Export Promotion Policy***.

Modernizing Agriculture: The North Eastern Region has a work force of 41.6 per cent cultivators and 13 per cent agricultural labourers who depend on the land for their

subsistence. The primary sector of the economy is agriculture and hence the aim should be achieving self-sufficiency in foodgrains. Horticulture, plantations and allied activities have to grow in strength with every passing year. Agri and forest-based industries and cottage and small-scale industries draw sustenance from a vibrant primary sector economy and, in their trail, open windows for gainful employment to substantial segments of the rural population. What is needed is to modernize agriculture, practice mechanized farming, promote hybrid varieties of seeds and foster minor irrigation to make the transition to high-value agriculture as also to move from subsistence farming to cash crop farming. The formation of a federated body of marketing units at the field level should also be done.

Market Development and Monetization of the Rural Economy: Enhancement of yields and output in agriculture and allied activities would need to be complemented by market development and monetization of the rural economy, calling for integrated attention to:

- Agricultural extension, including mobilizing the Panchayats and other institutions of local self-government for this purpose
- Land reforms.
- Rural credit and banking: One of the stumbling blocks in the eradication of poverty is the low performing micro-credit mechanism, which records a 31 per cent CD ratio. Banks, which were supposed to provide affordable credit to the disadvantaged segments on a priority basis are proving to be risk-shy in practice on account of unwarranted perceptions of credit unworthiness. Most of the intended beneficiaries are unable to provide collateral security for loans from the banks. This has crippled socio-economic development in the region. An effective credit guarantee scheme is required to cover crop loans and term loans given by banks to farmers, artisans and small business. Such guarantees will motivate banks and financial institutions to give loans and advances to poor people who have no collateral security to offer. This step will substantially boost investment in agriculture and allied activities as well as handlooms and handicrafts and thus give a much-needed fillip to on-farm and non-farm rural employment and income generation, thus facilitating the subsequent growth of the secondary and tertiary sectors of the rural economy.
- Agricultural link roads to reach farm output to markets.
- Cold chain links and cold storages.
- Export and fiscal incentives.
- Non-farm rural employment and income generation, especially handlooms, handicrafts and animal husbandry.

Secondary Sector: The accelerated development of the secondary sector, comprising the following elements, is a necessary adjunct to tackling rural poverty through the development of agriculture and allied activities in the primary sector:

- Post-harvest processing and value addition
 - Fruits (pineapple, banana, orange and passion fruit)
 - Spices (ginger, chilli, turmeric and large cardamom)
 - Vegetables
- Rural artisan- handicrafts (tools, design and finishing)
- Handloom, weaving (improved looms, product diversification, design and finishing)
- Quality & branding -“Regional Identity”

Business & Services Sector

- Tourism, particularly eco-tourism: Tourism has tremendous potential in the region. The promotion of tourism calls for widespread augmentation of infrastructure for the hospitality industry (always moderated by ecological and environmental considerations), skill up-gradation in hotel management and in the skills of officials promoting tourism, and a thrust on domestic tourists and low budget hospitality services. Tourism may be constructed around four concentric circles:
 - (a) state based i.e., intra-state tourism;
 - (b) multi-state tourism circuits;
 - (c) pan-regional tourism within NER and other regions of the country, particularly the eastern region; and
 - (d) international tourism with connectivity with neighbouring foreign countries.
- Repair and maintenance-based services
- Marketing/business enterprises:
- Banking and insurance
- Human resource-based employment opportunities to avail of opportunities both within NER and outside
- ICT

3.3.2 Institutional Development Perspectives (IDP)

Economic development in NER is seriously hampered by inadequate institutional infrastructure to address issues of development in a concerted manner. It is essential to focus on creating and strengthening institutions that cater to the poor for enlarging the availability of social capital and making delivery and support systems effective and accountable to the community. The poor need to be organized for collective action and federations of producers’ organizations have to be enabled to negotiate with the market and demand services from government agencies. R&D and extension agencies, input suppliers including credit delivery agencies, PDS, marketing organizations, local bodies/government etc., have to be revamped, restructured and enabled with the requisite capabilities to compete and excel in their performance. Training and capacity-building for institutions of local self-government assume special importance for ensuring the success of the devolution of functions, funds and functionaries. These institutional building efforts in conjunction with HDP initiatives would facilitate the strengthening of social

capital of the poor and create conditions for the emergence of a responsive and effective delivery system. Key areas that require immediate attention include:

- Land
 - Reforms, distribution, updating of land records (computerization)
 - Codification of customary land tenure system and recognition
 - Use of forest land.
- Forests

Enactment of farmer-friendly forest legislation (liberalization of legal aspects encouraging community participation). Tribals have traditionally been forest dwellers and forests have always been the source of their livelihood. The maintenance and growth of forests is, therefore, of prime importance to the region. Joint forest management should be encouraged for tribal communities dwelling in the forest so that they protect the forest while extracting minor forest produce for their livelihood. Any disconnect between the forest department and the tribals will neither help in preserving the forest coverage nor protect the livelihood activities of the tribals depending on the forest.
- State policy for SHG and activity-based cluster development.
- Access to formal credit, increased KCC coverage, linkages with insurance companies.
- Actions for improvement of PDS and other delivery of services.
- Improvement of micro-finance in terms of quantum and coverage.
- Research and Development on –
 - Disease control of *Muga*, HYV paddy for low-lying water-logged areas, value addition through post-harvest processing and management in agriculture.
 - Product diversification of handlooms and handicrafts, design and quality improvement. Improvement of looms/toolkits and Computer aided designs (CAD).
- Participation in trade fairs, exhibitions.
- Communitization of public facilities and services.
- Involvement of traditional institutions.

3.3.3 Participatory Development Perspectives (PDP)

Massive investment and outlays in plans and projects have not adequately reached the grassroots level. The delivery does not measure up to the outlay and developmental schemes do not trickle down to, nor reach the target groups. Outcomes, with which people are concerned, have to match with outlays. It is, therefore, necessary to bridge the gap between expectations and performance by mobilizing social energies, forging and fostering creative and collaborative partnerships with civil society, target groups, stakeholders and grassroots institutions to induct people into the planning and

implementation process in a participatory mode. Fortunately, most of the indigenous communities in the North East exhibit substantial social cohesion and the communities are willing to work in teams and groups. These social dynamics can and must be harnessed to accelerate the socio-economic development of the region.

Poverty eradication, therefore, calls for:

- Social / community mobilization
This envisages making the poor and the community at large aware of development programmes, organizing the poor to act in groups and nurturing group action. Therefore, social and community mobilization needs to be made mandatory both at the policy and implementation levels for all Poverty Alleviation Programmes (PAPs), backed by adequate funds and functionaries.
- Digital Information System (DIS)
To assist decision making processes in programmes for the poor, there is need for a Decision Support System (DSS) to bench-mark natural and bio-resources and their use; secure connectivity and infrastructure; establish required public and private institutions; improve service delivery and; undertake action research and analysis.
- Management Information System (MIS) to assist programme implementation and monitoring effectively.
- Planning for development
Planning for socio-economic development should fully take into account differentiated local realities and local potentialities, local geo-physical features, local resource endowments and local core competencies. The planning profile must respond to different situations, conditions and felt needs of the people and be integrated into holistic regional planning. Participatory planning may be facilitated by DSS to make collective decisions that suit the people better based on the local realities and wisdom. Participatory planning and implementation should be made mandatory for all poverty eradication programmes.

3.3.4 Infrastructure Development Perspectives (Infr. DP)

If inclusive growth calls for attention to inclusive governance and rural development, the single biggest constraint on accelerated growth is poor infrastructure affecting:

- road connectivity
- rail connectivity
- air connectivity
- cyber and telecom connectivity
- inland waterways
- power

This lays emphasis on the development of necessary socio-economic infrastructure for

providing backward and forward linkages for production, value addition/processing and marketing of rural products thereby integrating the rural community with the rest of society. This, while facilitating the process of modernization of production sectors, would also pave the way for the promotion of a rural-urban continuum. The aspects to be covered include:

- District headquarters/towns should be improved making them as growth centres. The block headquarters should be made as rural business hubs.
- Connectivity improvement
 - Rural roads (all weather and agriculture road)
- Storage and others
 - Warehousing, godown, cold chain etc.
 - Seed bank, raw material / yarn bank.
- Irrigation and Power
 - Power (micro, mini)
 - Irrigation (Small and micro), flood control, soil and water conservation works and drainage systems to prevent water logging, are directly associated with the spread of the Green Revolution. Water harvesting, especially in hill areas, is of crucial importance. Floods cause havoc, wiping out most of the gains of economic development virtually on an annual basis. Massive investment, accompanied by imaginative technical innovation in irrigation and flood control, must be integral to the spread of the Green Revolution.
- Basic Amenities
Provisions of minimum nutrition, literacy, clean drinking water, reasonably good infrastructure and medical coverage is a prerequisite for promoting meaningful socio-economic transformation in the region. An economic superstructure can be built only on a sound social and physical infrastructure guaranteeing food security, universal education, health coverage and basic amenities. The state and civil society have to ensure the basic minimum needs of the people. A safe drinking water supply system, sanitation, electricity and schools in line with the Nagaland model of communitized for sustainability.
- Market and Production
 - Common facility centres: These can help traditional artisans and craftsmen of the region who possess a profound fund of talent, by providing them vocational training and easy access to modern designs preferred by the customers. Their skills need to be honed and upgraded. They need marketing techniques, market outlets and supply agencies which can procure raw materials for them at cheaper rates and can fetch good prices for their finished products neutralizing middlemen in the sale of their products. It may be mentioned here that Self-Help Groups in Coimbatore in Tamil Nadu have organized a district supply and marketing agency on the lines of DRDA and have set up a shopping centre in the heart of the town which caters to the needs of hundreds of low income people in the

- city. In the process they have generated and accelerated income for SHGs. Similar attempts can be made in the North Eastern states.
- Self-Help Groups (SHGs): Users associations and NGO change agents in different socio-economic–human resource sectors can be co-opted for securing creative and supportive energies and turned into catalysts for an economic breakthrough for the impoverished people of the North Eastern Region.
 - Development of a rural marketing platform in large market places.
 - Establishment of a regional Organic Farming Certification Agency (OFCA) in Guwahati to begin with.
 - Capacity building facilities
 - Establishment of farmers’ school at block level to act as change agents.
 - Block Level Resource Centre (BLRC).
 - Private Sector:

While the North East States can undertake determined efforts to augment domestic absorptive capacity, it would be essential to bring in the private sector from the rest of the country, as well as foreign direct investment, equipment, management and technical expertise to exponentially increase the absorptive capacity to take in the financial resources available for building infrastructure in the North East. It would also be critical to inclusive growth to ensure that the first beneficiaries of infrastructure development, especially with regard to power and road connectivity, are the people of the North East in their far-flung villages and towns.

3.3.5 Human Development Perspectives (HDP)

The development of human resources and basic services is of prime importance. At present, the quality of education in the region as a whole is woefully sub-standard. There is a serious shortage of trained teachers and infrastructure in educational institutions. Higher education lacks centres of excellence. In consequence, high literacy rates in the region are yet to be converted into knowledge or economic endowment.

HDP calls for the augmentation of human capital to absorb people productively into gainful economic opportunities and enabling all people to lead decent lives with human dignity as well as health and nutritional security. The human development initiatives pave the way for empowerment, enabling the people in general and the poor in particular to access the development process. Building awareness and capability up-gradation should be a continuous process and should be compatible with the needs of the market. HDP envisages attention to the following aspects:

1. Awareness creation for enhancement of knowledge about the various programmes at the local level.
2. Dissemination of Community Based Disaster Management (CBDM) skills.

3. Social/community mobilization helping people to act in groups for the planning and implementation of all programmes.
4. Upgradation of skills of poor farmers (men and women) in the areas of –
 - (i) Attitudinal changes to switch from a subsistence mindset towards commercialization,
 - (ii) Techno-managerial skills to enhance the productivity of agriculture and allied activities, and
 - (iii) Techno-managerial skills to enhance production of non-conventional land based items like aromatic and medicinal plants, cane and bamboo cultivation, ornamental fish culture, minor forest products; and skill development for organic farming practices.
5. Upgradation of the techno-managerial skill of poor rural artisans and handloom weavers in the areas of –
 - (i) Improved tool kits/looms,
 - (ii) Product diversification,
 - (iii) Design and finish, and
 - (iv) Packaging.
6. Development of entrepreneurial skills particularly among the educated unemployed youth both men and women, in the areas of –
 - (i) Marketing and business,
 - (ii) Repair and maintenance,
 - (iii) Banking and insurance, and
 - (iv) Tourism.
7. Exposure visit both at the national and international levels.
8. Development of market oriented skills in ITI and other technical institutes that are in demand in the present day market.

Another area which requires emphasis is capacity building for value addition. Employment oriented training programmes are being taken up but the emphasis should be on creation of opportunities for self-employment. Promotion of handloom and handicrafts should be addressed and border trade should be encouraged. What is imperative is imparting employable skills, vocational training, toning up standard of education from the micro to macro level and promoting skills, knowledge acquisition and upgradation and capacity building for job absorption, employability and entrepreneurship.

3.4.1 Plan of Action

We to take active part in the five development perspectives for poverty eradication, the initiative and efforts that are required to create an encouraging environment by the government at the national, state and regional levels for participation of the poor have also been envisaged. As a part of such an initiative, the actions/roles at different levels are:

Government of India

1. Generation of state-specific poverty data.
2. Provision for adequate resource support.
3. Providing funds in a transparent and equitable manner.

North Eastern Council

1. Regional planning and development of regional infrastructure.
2. Intra-regional cooperation.
3. Adequate resources.

State Governments

1. State policy on decentralization.
2. Empowerment of PRIs /other LS Government and urban bodies.
3. State policy for the promotion of the SHG movement, activity based cluster development and forest policy encouraging community participation.
4. Revamping of the functioning of the public distribution system including social security.
5. Land -
 - Reforms, distribution, updating of land records and their computerization.
 - Codification of customary land tenure system and recognition.
 - Laws related to use of forest
6. Heavy concentration on agriculture extension programmes.

Chapter 4

The Rural Sector: **Basic Crops, Cash Crops, Rural Development, Non-Farm** **Rural Employment, Irrigation and Flood Control**

The development of the rural economy is central to the development of the North Eastern region for two main reasons: first, over 80 per cent of the population of the region lives in rural areas and its livelihood depends on spreading economic activities in rural areas. Second, the region is rich in natural resources and harnessing these for the benefit of the population would require strengthening forward and backward linkages. The rural economy, therefore, needs to be given a big boost in envisioning a meaningful agenda for rapid economic development for enduring peace and prosperity in the region.

Development of rural economies in the region will rest on the following main activities: agriculture, forestry, livestock, minerals and rural non-farm activity. The region has vast potential for increasing primary sector output: the wide diversity in topography and geo-climatic conditions across the region offer scope for cultivation of a variety of agricultural crops and for horticulture and floriculture; it hosts 38 per cent of the country's river waters which provide enormous scope for irrigation, fishery and maintenance of livestock; its rich deposits of hydrocarbon (oil and gas) provide huge potential for mineral extraction and; its vast areas of dense forests offers rich biodiversity, medicinal plants and other valuable forest resources most of which are still unexplored. The torrential Brahmaputra and Barak rivers and their tributaries deposit their rich alluvial silt along the banks of the plains of Assam making the soil very fertile.

4.1 THE AGRICULTURAL SECTOR

Agriculture is the mainstay of the economies of the northeast. This sector accounted for close to 30 per cent of the region's NSDP in 2002-03, and is a major source of employment and livelihood for around 80 per cent of the population. However agricultural growth has been uneven across regions and crops. NER continues to be a net importer of foodgrains. In spite of covering 8.8 per cent of the country's total geographical area, NER produces only 1.5 per cent of the country's total foodgrain production.

A people-based strategy will be aimed at increasing agricultural productivity, which will boost rural incomes and enable a shift of workers from agriculture to other activities, mainly in the manufacturing sector, which will provide most of the employment opportunities being created in the region.

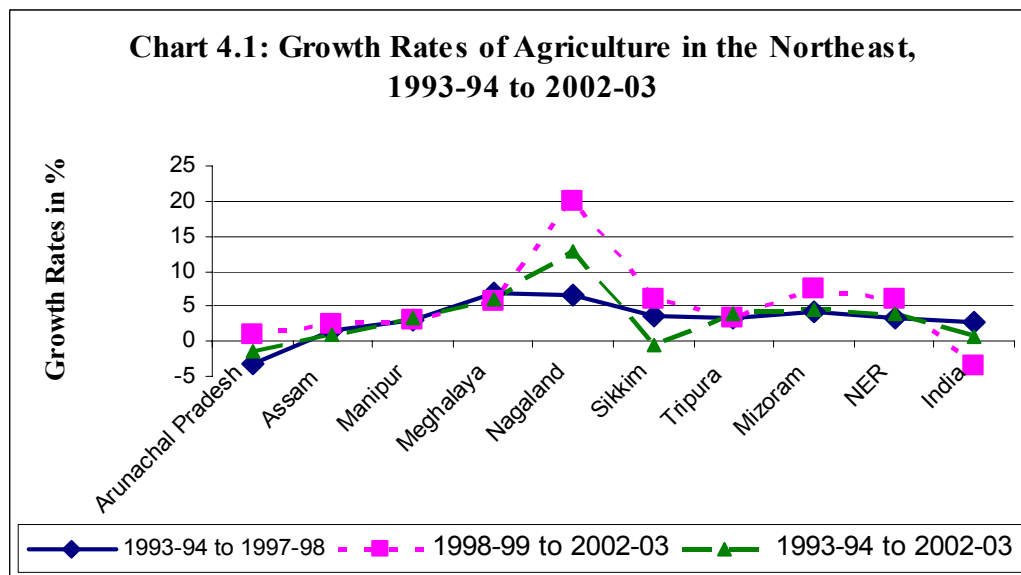
This will be done by focusing on areas, activities and sectors in which the NER as well as each state in it has a comparative advantage. The analysis that follows shows how the pattern and trends in agricultural production in the region have important implications for a development strategy. The similarities in production and demand patterns across

states are a reflection of the fact that every state produces almost all products though in varying proportions. Despite these similarities, each state has specific productivity advantages possibly conditioned by difference in their natural environment. However, a lack of trading opportunities has prevented the North Eastern states from specializing in producing those items in which they have a comparative advantage. Instead the goods they produce depend on the demand emanating from within each state. Employment opportunities are, therefore, limited by the extent of the local market.

The relatively small size of almost all the NER states indicates that none of them have the resources to concentrate in all areas of production. Hence, the strategy for agriculture will identify products in which NER states should specialize in the short run; it will also indicate areas that need to be focussed on from a 20 year perspective.

4.2 THE PERFORMANCE OF AGRICULTURE IN THE REGION

Agriculture accounts for a major share of the economies of all the North Eastern states, from 48 per cent in Arunachal Pradesh to 26 per cent in Nagaland in 1993-94 (Table 4.1A, Annexure 4.1). However, the share of agriculture has been declining in all the states (except Nagaland), indicating that these states have undergone significant structural changes. With the exception of Meghalaya, the share of manufacturing in general has been falling, accompanied by an increasing share of services.



Source: *Central Statistical Organization*, various years.

While agriculture in NER grew at a much higher rate (3.8 per cent) than the average for the country (0.6 per cent) between 1993-94 and 2002-03 (Chart 4.1; Table 4.2A in Annexure 4.1) growth rates differ among different states of the region: Arunachal, Sikkim and Mizoram show negative growth while growth performances of Nagaland, Manipur, Meghalaya and Tripura are impressive. Only Assam's growth rate, though slightly higher than the Indian average, is far below the NER average. Nagaland's exemplary growth rate of 13 per cent can perhaps be ascribed to remarkable dynamism

based on policy initiatives taken by the government and possibly technology upgradation and its adaptation by farmers.

4.3 THE HILLS AND THE PLAINS

The NER can be broadly divided into three geographical regions: the Surama Valley, North Eastern Hill Basin and the Brahmaputra Valley. The hills and the plain regions differ significantly in terms of the availability of water, population density, habitation patterns, climatic conditions, soil quality and forestry and biodiversity. Variations in characteristics and natural endowments determine the nature of primary activities that can flourish with differential comparative advantages in the different states of the region. The availability of large water bodies in the plains of the Surama Valley and the Brahmaputra Valley of Assam makes them suitable for agriculture and plantation crops as well as for promoting pisciculture and fisheries. On the other hand, the low percentage of cultivable land and sparse population in the hill states limits the choices for land-based activities in the hills. The lack of rivers to irrigate the land and the difficulties of storing water due to hill slopes, have compelled farmers to depend mostly on *jhum* cultivation. Herein lies the importance of water retention projects in the hills in order to move away from traditional *jhumming* to modern technology-based farming such as horticulture and floriculture.

Table 4.1: Comparative Natural Resource of NER, 2000-01

(Per cent)

STATES	forest/ land	net area sown / land	area sown more than once/ net area sown	net area sown / total cropped area	area sown more than once / total cropped area	& other grazing lands/ land	land under misc. trees & groves not included in net area sown /land	cultivable waste land / land	fallow lands other than current fallows /land	current fallows /land
Arunachal Pradesh	94.0	3.0	60.0	62.0	38.0	0.1	0.8	0.8	0.9	0.5
Assam	25.0	35.0	49.0	68.0	33.0	2.1	3.0	1.0	0.8	1.4
Manipur	28.0	6.0	49.0	68.0	33.0	-	1.1	-	-	-
Meghalaya	43.0	10.0	20.0	83.0	18.0	-	8.0	19.8	8.3	2.9
Mizoram	88.0	4.0	-	100.0	-	1.1	1.5	6.0	8.4	1.8
Nagaland	54.0	19.0	5.0	96.0	4.0	-	8.9	4.1	5.0	5.8
Sikkim	36.0	13.0	33.0	85.0	25.0	9.8	0.8	0.1	1.3	0.6
Tripura	58.0	28.0	53.0	65.0	35.0	-	2.6	0.1	0.1	0.1

STATES	forest/ land	net area sown / land	area sown more than once/ net area sown	net area sown / total cropped area	area sown more than once / total cropped area	& other grazing lands/ land	land under misc. trees & groves not included in net area sown /land	cultivable waste land / land	fallow lands other than current fallows /land	current fallows /land
North East	52.0	18.0	43.0	80.0	30.0	1.1	2.8	3.2	2.2	1.4
India	23.0	46.0	33.0	85.0	25.0	3.6	1.1	4.5	3.3	4.8

Source: *Statistical Abstracts of India 2003-04*.

Note: Figures are fractions of total available land unless otherwise specified.

Of course, the relative abundance of pasture land in Sikkim (10 per cent) makes it an ideal place for rearing cattle, poultry and other live stock.

In general, the NE region has a strong advantage in forest-based activities and biodiversity, given its very high percentage of forest land (52 per cent) compared to the Indian average of 23 per cent (Table 4.1).

4.4 CROP CULTIVATION: FROM SELF-SUFFICIENCY TO SPECIALIZATION AND TRADE

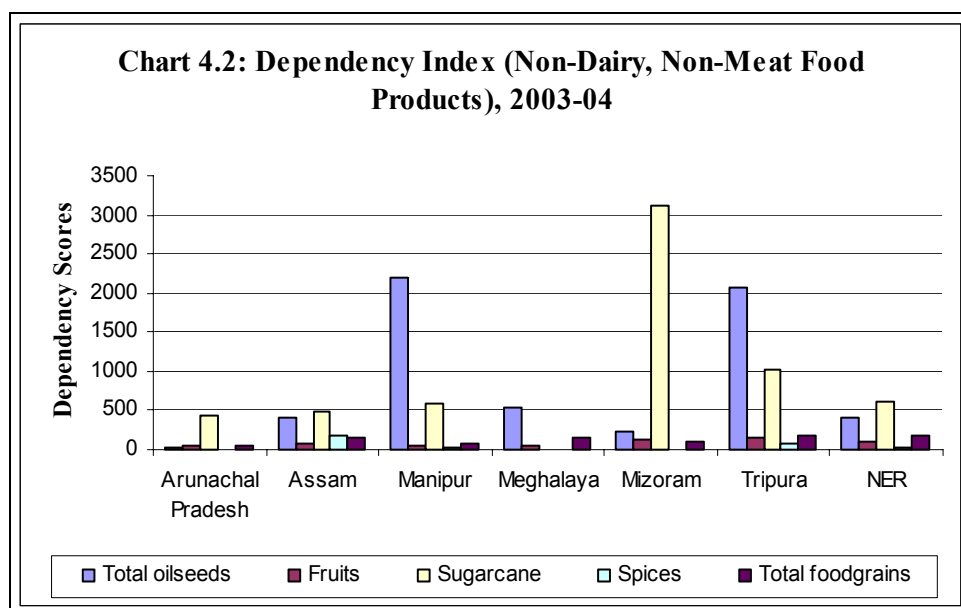
The diverse geo-climatic conditions in the northeast make it an ideal location for the cultivation of a variety of agricultural crops. These products are mainly produced for local markets, and mostly in the form of primary produce without significant value addition. Agricultural systems remain predominantly traditional. The land-to-person ratio for the NE region (0.68 hectares/person) is much higher than the national average (0.32 hectares/person), with Arunachal Pradesh having the highest ratio (8.63 hectares/person) and Assam the lowest (0.29 hectares/person). The pattern of agricultural growth has remained uneven across regions and crops. NER continues to be a net importer of foodgrains as despite covering 8.8 per cent of the country's total geographical area, it produces only 1.5 per cent of the country's total foodgrain production. All the reports (specially commissioned studies for NER, like the Shukla Commission Report, and the L. C. Jain Committee Report State Development Reports for various states and NEC Vision 2020) recognize the importance of agriculture in NER, and attribute low agricultural productivity to the low usage of HYV seeds and fertilisers, and inadequate irrigation, infrastructure and credit.

The Dependency Indices¹ (Chart 4.2; Table 4.23A (a) in Annexure 4.3) indicate that NER is highly dependent on imports for almost all the commodities for which data was available, the only exception being spices.² Cardamom, black pepper, chilli, turmeric

¹ Dependency index is the ratio of consumption share to production share. Here an attempt is made to explain whether there is any match between the crop specialized and produced with the major crop consumed.

² The Third Sectoral Summit held at Guwahati in March 2008 recommended that the Spices Board be strengthened and intensify its activities in NER intensified to promote the production and productivity of spices, particularly of organic spices.

and cinnamon, considered to be “high-value, low-volume, long-shelf-life”³ products should be patronized.⁴



Note: Indices are computed; see Annexure 4.3 for details.

Each state has distinctive production advantages vis-à-vis the other NE states and the rest of the country, yet every state produces almost all the products it needs for internal consumption (Table 4.14A in Annexure 4.1). This suggests lack of sufficient trade both amongst the NE states as well as between the NE states and the rest of the country. This coupled with similar demand and production patterns across the NE states (most people in the region prefer rice and also produce it) have prevented crop specialization. Since each state is unable to meet the consumption demand of some products internally, this has led to high import dependency of all the states.

4.5 PRODUCTION COMPARATIVE ADVANTAGE OF NER

This pattern of production has resulted in inefficient land utilization across the states; a more optimal allocation of land among crops would increase agricultural output and productivity in the region. Significant complementarities among states in agricultural products justify the need for and the basis of trade in agricultural products within the region.

³ See chapter on NER in the Eleventh Plan document.

⁴ This will also result in a reduction in *jhumming* as suggested by R. Kevichusa, Kohima.

Table 4.2: Highest Comparative Advantage for Products of NER states: Regional Specialization Index (RSI)

<i>State</i>	<i>Products</i>
Arunachal Pradesh	Small millet, maize, ginger, pineapple
Assam	Tea, rapeseed and mustard, sugarcane
Manipur	Chillies, rice, ginger, pineapple
Meghalaya	Ginger, potatoes, sesamum, pineapple
Mizoram	Ginger, maize and sesamum
Nagaland	Small millet, maize
Sikkim	Ginger
Tripura	Natural rubber, coconut, bananas, pineapple

Source: *Statistical Abstract 2003-04* and NSSO, 2002

By identifying crops in which different states have a comparative advantage, resources can be concentrated and efforts made to promote their cultivation at least in the short run. Different models are used by economists to determine comparative advantages of different states in crop production.⁵ Based on these, specialization patterns that are best suited to the different states are indicated in Table 4.2. Each state demonstrates certain production advantages: Arunachal in small millets, Assam in tea⁶, Meghalaya in ginger, Mizoram in ginger, Manipur in chillies, Nagaland in small millets and maize, Tripura in natural rubber⁷ and Sikkim in maize.⁸

⁵ Specialization patterns and comparative advantages of the different states have been analysed with the help of four indices: the regional specialization index (RSI), national specialization index (NSI) in various agricultural crops, the consumption (demand) intensities for different crops and comparative advantages in various crops for each state and the country. See Annexure 4.3 for more details.

⁶ The Sectoral Summit at Guwahati in March 2008 recommended the introduction of a transport subsidy of Rs. 1.50 per kg for tea exported directly from ICD, Amingaon, Assam, and that more mini-factories be set up. The Tea Board will also develop a separate logo for Assam Orthodox Tea. The Summit also recommended that the Assam Government issue "possession certificates" to small tea growers to enable them to register with the Tea Board.

⁷ The Third Sectoral Summit held at Guwahati in March 2008 recommended that the Rubber Board fund area expansion and rejuvenation of sick plantations and introduce technology for increasing productivity; also that it address location-specific agro-management and processing issues and maintain and support nurseries run by Gram Panchayats and SHGs.

⁸ Sikkim does not form part of this analysis, as its links are mainly with the Siliguri railhead, rather than with the other NER states.

Table 4.2 (a): Highest Comparative Advantage for Horticulture Products of NER States⁹

State	Horticulture Products
Arunachal Pradesh	Chillies, citrus, apple, passion fruits, ginger
Assam	Turmeric, potatoes, bananas, pineapple
Manipur	Chillies, ginger, pineapple, brinjal, mushroom, potatoes
Meghalaya	Turmeric, Ginger, potatoes, pineapple
Mizoram	Ginger, brinjal, mushroom
Nagaland	Passion fruit, pineapple
Sikkim	Ginger, large cardamom, flowers, seasonal vegetables
Tripura	Citrus, bananas, pineapple

4.6 CONSTRAINTS TO AGRICULTURAL GROWTH

In the plain areas, small land holdings (0.63 acre per operational holding in Assam) of the region preclude mechanization of agriculture. In high altitudes, water run-off is rapid, and therefore the region lacks water for agriculture during the winter season despite having abundant rainfall in summer. Therefore, lack of irrigation facilities and absence of water-retention practices severely limit possibilities of multiple cropping resulting in low land productivity. Of course, by planting short-duration crops (so-called HYVs) which take nearly 3.5 to 4 months from sowing to harvesting, instead of the traditional crops which take nearly 5 to 6 months, it is possible to increase crop intensity without irrigation¹⁰ (see box 4.1). However, these crops require large investments in fertilizers, seeds and pesticides which poor farmers (due to the small land holdings) may not be able to afford. Even if bank financing is possible to motivate small farmers to shift to the new crops, farmers may not find the incentives sufficient enough to induce them to take loans due to uncertainties caused by recurring floods. Further, if rainfall turns out to be scanty, then water too becomes a key issue in shifting to the cultivation of HYVs.

In the hills, agricultural productivity is constrained not only by the paucity of water but also by the fact that land is held not by individuals but by the community as a whole. In Tripura, land reforms have been accorded high priority with the aim of providing land to the tiller.

Lack of individual ownership rights may be an important reason for the popularity of *jhum* cultivation in the hills. The soil in hill areas is highly acidic and to neutralise it, hill tribes often take recourse to burning wood and leaves to increase its alkalinity. This requires keeping the land fallow after a single harvest to allow wild grass to grow to prepare it for *jhumming*. Further, as land is common property, cultivators have

⁹ The results are based on RSI, NSI and other central government documents (such as *Horticulture: Business Opportunities in the North East Region*, Horticulture Commissioner, Government of India, Ministry of Agriculture).

¹⁰ As suggested by Dr. I.K. Bharthakur.

no incentive to invest in it to improve its quality. Since the hills are sparsely populated and land is relatively abundant, shifting cultivation to a new location is easy.

Box 4.1

Provision of HYV - A Case for Paddy Crop

The justification for the introduction of HYVs in paddy had been made based on the fact that the cultivation of long-duration (six months) traditional paddy varieties requires that large areas of land, roughly 25+ lakh hectares, be kept fallow annually from mid-December to mid-June. If instead, HYV paddy is sown which takes 110 to 120 days to mature, harvesting may be completed by the end of September, which allows the cultivation of numerous crops like mustard, wheat, sunflower, maize, lintels, pulses, vegetables including potatoes, tomatoes, chilies, onion and garlic in September. This increases crop intensity and does away with the need for irrigation, since the moisture content in the land during the autumn months is sufficient for cultivation. Dr. I. K. Bharthakur, a distinguished member of NEC tested the prospect of this in Tigrai in Tinsukia District, Assam and at Balishia-Bandarmari group of villages near Tezpur during 2006-08. The paddy yield was very high to the tune of 6 to 8 tons per hectare in contrast with 1.62 tons per hectare for the traditional paddy crop.

Source: Note from Dr. I. K. Bharthakur, Member, NEC.

No discussion on increasing agricultural production in the region can be complete without an in-depth discussion of the flood situation, especially in the Brahmaputra and Barak valleys, and the land covered by their tributaries. Floods and bank erosion are annual phenomena in the Brahmaputra river basin. Geomorphic and climatic conditions in the region make it vulnerable to deluges. Historically, communities inhabiting the flood plains in the Brahmaputra rice basin have coped with floods through resilient adaptive strategies, but more recently these have become complicated by a booming population and ever-increasing technocratic intervention. The great Assam earthquake of 1950 can be considered a watershed in the Brahmaputra's flood history as it elevated the bed of the river at several places, as it led to a more intense over-bank discharge during the monsoon of 1954-55, bringing the alarming flood situation to the attention of the central government. In response, in 1955 the government drafted its first policy document related to floods in the region, which advocated a tripartite strategy to mitigate the hazard of floods. The immediate goal was to protect important towns along the south bank of the river Brahmaputra that were threatened by floods and bank erosion. Medium-term plans were creating revetments, while long-term planning was aimed at developing large structures to guard against bank failures and the incursion of flood water. In the years that followed many committees made suggestions to improve the existing strategy through innovating technological interventions from flood protection to flood proofing and flood

zoning. However, none of these strategies for flood were able to alleviate the misery and trauma faced by communities occupying plains (see Box 4.2).

To enhance land and labour productivity what is needed is:

- The transfer of excess labour in a family from primary farming to the tertiary sector;
- Use of short-duration crops and hence a provision for multiple-cropping;
- Use of fertilizers, provisions for irrigation and mechanization of agriculture;
- Skill upgradation of farmers;
- A shift to commercial farming such as horticulture and floriculture;
- Provision for market formation; and
- Provision for water-retention programmes.

The feasibility of these policy options is, however doubtful, because:

- (i) Short-duration crops, fertilizers and mechanized agriculture are basically capital-intensive and require large investments from farmers. Land productivity enhancement is typically not possible unless farmers are ensured returns on the investments made, which requires taking a gamble on floods.
- (ii) Mechanizing agriculture is not possible on a large scale, as the size of landholdings is small.

Box 4.2

Floods in the Brahmaputra Basin: Measures Taken and New Approaches

The techno-managerial approach to flood control is a colonial legacy, with added impetus from the US “New Deal,” that initiated big dams and water control projects in the United States. The Brahmaputra Flood Control Committee in its report highlighted the involvement of foreign consultants in the early 1950s and 1960s who advised the central government on appropriate measures to mitigate flood hazards. The various policy recommendations that have played a vital role in shaping the Brahmaputra flood control policy include

:

Main Recommendations of Various Committees and Experts on Flood Control Measures

Year/Committee	Recommendations/Work
1958: Bhagabati Committee on Embankment and Drainage in Assam	<ul style="list-style-type: none"> • Carry out annual sample surveys of the economic condition of people from different parts of the state to assess the impact of embankments and drainage projects. • Prepare a comprehensive plan for flood control and the provision of sluices in future embankments.
1964: Study of Erosion Problems of the Brahmaputra	<ul style="list-style-type: none"> • Carry out anti-erosion work in specific stretches where the problem is acute.
1968: Pagladiya Enquiry Committee, Assam	<ul style="list-style-type: none"> • Raise and strengthen existing structures. • Provide flood escapes at suitable locations. • Provide adequate waterways for roads and rivers. Investigate detention dams in the upper reaches of Pagladiya.
1980: Brahmaputra Flood Control Commission	(Could not be obtained)
1982: Ministers' Report on Flood Control	<ul style="list-style-type: none"> • Special assistance to Assam.
1986: Rastriya Barh Ayogh, Government of India	<ul style="list-style-type: none"> • Finalize the proposal regarding the Dehing and Subansiri dam project in the Brahmaputra valley and Tipaimukh on the Barak and their execution for moderating floods, generating large blocks of power and arresting silt. • Ensure that the location and spacing of embankments are in conformity with design requirements to minimize the danger of erosion.

1982: Brahmaputra Board	<ul style="list-style-type: none"> • Prepare a master plan for measures to manage floods and bank erosion in the Brahmaputra valley. Submit a feasibility report on the Dehing and Subansari dam project. Suggest management of major tributaries in both the valleys.
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Source: Compiled from *the Gazetteer of India Assam State, Vol 1*, 1999 and Dhar (2002).

In the last decade the emphasis has shifted to living with floods. State-sponsored schemes to minimize the impact of floods in the six decades since Independence have been severely constrained by embankment failures, bureaucratic apathy and technocratic arrogance, that has excluded participation of the local people actually affected by the situation. Pioneering works by people like Burton, Keats, White and Mustafa in the flood plains of the United States and Pakistan reveal a very complex and heterogeneous understanding of floods by communities that live with them. Not everywhere are these communities in conflict with nature, rather they have developed resilient strategies by incorporating a cognitive interpretation of flood events.

A major shift in state policy was the creation of the Rastriya Barh Ayog in 1986 that formulated a holistic plan with both long-term and short-term solutions to issue. But the efforts to push through this plan were limited. The Brahmaputra Board emerged as a regional institution to monitor, develop and implement flood management strategies in the valleys of North East India. Since its inception in 1980 it has made several recommendations to deal with floods, but has failed to evolve a workable solution to the problems faced by the marginalized population living along whole stretch of the *chars* and *chaporis* (sand bars) so frequently affected by floods.

Source: Debojyoti Das, from his unpublished M.Phil. Dissertation *Structural Vulnerability to Flood and Bank Erosion in Majuli Island: The State Policy in Flood Mitigation in the Brahmaputra River Basin*, submitted to the Centre for Studies of Science Policy, Jawaharlal Nehru University, July 2006.

4.8 HORTICULTURE AND FLORICULTURE: THE NEXT STAGE IN DEVELOPMENT

Table 4.3: North East Treasure House of Medicinal Plants

1	Acorus calamus	21	Litsea cubeba
2	Aristolochia tagala	22	Lycopodium clavatum
3	Artemisia nilagirica	23	Paedaria foetida
4	Cinnamomun bejolghota	24	Passiflora edults
5	Cinnamomun tomala	25	Piper longum
6	Clerodendrum	26	Piper nigrum

	colebraookianum		
8	Clerodendrum serratum	28	Rubia cordifolia
8	Costus speciosus	28	Solanum ferox
9	Curcuma longa	29	Solanum myriacanthum/solanum khasianum
10	Dillenia pentagyna	30	Solanum nigrum
11	Dioscorea alata	31	Solanum toryum
12	Fagopyrum dibotrys	32	Swertia charayita
13	Gloriosa superba	33	Terminalta billirica
14	Gynacardia odorata	34	Terminalia chebula
15	Hedychium coronarium	35	Viburnum foetidum
16	Hedychium spicatum	36	Zanthoxylum armatum
18	Hedytis scandens	38	zanthoxylumalatum
18	Hibiscus rosa simensis	38	Withania somnifera(Linn.)Dunal
19	Holarrhena antidysenterica	39	Plantago ovata Forsk
20	Houttuynia cordata	40	Taxus baccata/Taxus wallichiana

Table 4.3 shows the rich variety of medicinal plant grown in NER.

The strategy for agriculture which envisions a shift in farming from subsistence to cash-crop farming will lead to the expansion of what is now a nascent horticulture sector. Since farmers are naturally risk-averse, effecting changes in their cropping patterns will not be easy, unless gains from doing so are clearly demonstrated. With funds from the central government horticulture mission, states like Mizoram, Sikkim and Meghalaya have established Centres of Excellence in Horticulture which have started spreading the idea of fruit and vegetable cultivation among farmers successfully(see Box 4.3).

Box 4.3

Horticulture in the North East A Case Study from Meghalaya

A vision for the agricultural sector depends crucially on developments in the horticulture industry of the states. This is particularly important as the states also seem to be focusing on shifting farmers from subsistence to cash crop farming. Since farmers are naturally risk averse, it is not easy to get them to change their cropping pattern unless gains from doing so are clearly demonstrated. Funded by the Horticulture Mission of the Central Government states like Mizoram, Sikkim and Meghalaya have established Centres of Excellence in their districts. In Mizoram and Meghalaya,

these centres act as an interface between the private buyer of flowers, Zopar, and the farmer. The Centre for Excellence in the Shillong district of Meghalaya was visited by one of the field trip teams.

The centre is looking at the whole gamut of production of flowers (Anthurium), fruits (strawberries) and vegetables (example, cucumbers). The first step is to provide seeds (or flower pods) to farmers. In the case of Anthurium the range of operations performed by the centre is enormous. First, Zopar provides flower pods obtained from Holland to farmers. This is to avoid problems of patent violation and also because the Dutch plants are more resistant to pests. Local varieties are also developed for the national market. Second, special fabricated greenhouses are set up with drip irrigation facilities to allow the plant (roses, Anthurium etc.) to grow to sizes ready for cutting. The cut flowers are then taken to the plant for pruning and precision stem cutting for export. The stems are kept in a cold storage till they are packed for export. The stems have to reach the buyer in 24 hours to retain any value.

North Eastern India was put on the global map of flower exports when the first consignment of the exotic cut flower Anthurium from the region was exported to Dubai. The cultivation of Anthurium is taken up by farmers in Mizoram's capital Aizawl and in the East Garo Hills of Meghalaya. The plants are being grown along hill slopes under shade-houses with the latest Dutch varieties and modern irrigation systems, including fertigation. The first flowers were harvested in September 2003 and export to other states was started by October 2003, only 11 months from the date of planting. Both the department and the growers have realized that Anthurium cultivation is going to be remunerative. Therefore, the cultivation of Anthurium has been expanding every year. The number of growers increased from a mere 24 in 2002 to more than 200 in 2004.

The first shipment of 1,000 cut flowers from Mizoram and Meghalaya was exported by the Bangalore-based ZOPAR Exports Private Limited to Al Lokrit, Dubai, one of the biggest wholesalers in West Asia. Emirates Air flew the consignment from Kolkata to Dubai. Since Guwahati does not provide the timing or flight schedules which allow the 24-hour deadline to be met. Zopar not only guarantees buy back but also helps in quality control at the Centre. The controlled production at the centre also allows the economics of floriculture to be demonstrated to the farmers. The Agricultural Processed Food Products Export Development Authority (APEDA) has provided subsidy for carting the consignment from the farm to the airport for export, apart from the other general incentives on international freight.

In the coming months, both Mizoram and Meghalaya are likely to export other floriculture products, including roses, leather leaf fern, liliun, bird of paradise etc. which are being cultivated in the North Eastern region due and favourable climatic, soil and water conditions. And despite the locations being in remote areas of Aizawl and Williamnagar, farmers have been able to grasp and adopt the latest technology and produce international quality Anthurium under the supervision and guidance of ZOPAR Exports Pvt. Ltd.

Looking at the demand for anthurium within and outside the country, there is good market scope for Anthurium flowers. Further, the market is expanding. There is excellent scope for export to Japan, West Asia, Singapore and EU countries. In realizing this the Zo Anthurium Grower Society Ltd. targeted and projected that the present production would be increased to 10 fold by the end of 2006. Anthurium will be one of the major sources of state income in the near future. However, this would be highly dependent upon necessary infrastructure being available to the growers. While acting as a demonstration for farmers, the centre also takes plants, vegetables and fruits (strawberries) from the farmers and undertake quality control and their export for them. Zopar also buys directly from the farmers but the centre monitors the pricing of products to make sure that the farmers get their due. This is done by monitoring on the Internet the final prices of the relevant products purchased from the farmers.

While floriculture seems to have its market mainly in the west, there are also sales in Guwahati, Kolkata and Delhi. In fact, the first sales are made in the domestic market unless a consignment is already committed to the export market. In the case of fruits and vegetables the domestic market is the main target. There is also some evidence that some farmers are switching from producing paddy to strawberries as basic terrace farming is quite conducive to growing this fruit. In the case of floriculture, the question may be asked is: why NER states a good choice since the original plant still comes from Holland? The advantage of the NER states seems to lie in their climate (this saves air conditioning costs in greenhouses) and land availability. However, labour costs are high in NER so this is no significant advantage.

While the economics of floriculture and horticulture seems very appealing, the real issue is that without the intermediary role played by experts, the farmers would be ill-equipped to handle the process which is highly capital intensive. Once again, as in the case of all cash crops the crucial issue is marketing. Is the private sector to be allowed in or should the states form a federated body? This is a question that must be answered given the low faith that the states seem to have in NEREMAC after the fiasco of the crash in the ginger prices last year.

Source: Field Trip Visit by the Study Team to the Centre for Excellence.

ROSES IN THE NORTH EAST



NORTH EAST ORCHIDS



HORTICULTURE: GROWTH ENGINE FOR DEVELOPMENT



SIKKIM CYMBIDIUM



Box 4.4 shows the monthly availability of horticulture produce in NER. Banana, vegetables and flowers are grown at peak throughout the year. July and August are the best months for ginger and the rest of the year has low production. The cultivation of apples is possible only during August to October. Pineapple and turmeric are produced at peak and are lean in all the months. Cashew is cultivated only from April to June.

Box 4.4												
Availability of Horticultural Produce												
PRODU CTS	JA N	FE B	MA R	AP R	MA Y	JUN E	JUL Y	AU G	SEP T	OC T	NO V	DE C
Apple							■			■		■
Pineapple	■				■					■	■	■
Orange		■								■		■
Passion fruit	■				■			■		■		■
Banana												■
Turmeric		■							■			■
Ginger						■		■				■
Cardamom	■					■		■		■		■
Vegetables												■
Cashew			■			■						■
Flowers												■
PEAK	■											
LEAN	■											
OFF	■											

4.8 FORESTRY AND OTHER NATURAL RESOURCES: SIGNIFICANT UNEXPLORED POTENTIAL

Satellite data for 2002 indicate that the green cover in NER at 52 per cent was more than twice the proportion of the coverage in the country (23.68 per cent). In Arunachal Pradesh, the proportion of area under forests was the highest in the country at 94 per cent. But as a Government report in February 2008 said, India's national animal, the tiger, is

being poached to extinction in different parts of the country, and even former safe havens in Assam and Arunachal Pradesh, despite their supposed high forest cover, are not secure.

Since international environmental issues are a responsibility of the Government of India, Payment for Environment Services (PES) need to be concluded with international organizations such as GEF on fees that would accrue to the North Eastern states for their protection of watersheds, biodiversity and landscape beauty as well as for achieving carbon sequestration/storage for mitigation of greenhouse gases. The states need to prepare, with the assistance of consultants and the centre, plans for compensation for practices which can be compensated/rewarded or form environmental rewards. These would include community conserved areas, energetic conservation of natural resources and wildlife, sacred groves, conservation agriculture, well-developed agro forests and villages managed on ecological principles.

However, these are not merely to be regarded as carbon sinks for the world or repositories of biodiversity and wildlife but used for creating a better quality of life by developing a sustainable use of existing available natural resources, exploitation of resource potential e.g., hydropower that entails minimal submergence and loss of habitat for people as well as flora and fauna, bio technology applications for medical plants and herbs and exploitation of man made plantations.

India is a resource-rich country but its mining potential has been far less explored than other comparably endowed countries. The Mines and Minerals Act and the Mineral Concession Rules as well as FDI policy have been revised on several occasions with a view to attracting private investment for the exploration of mineral deposits and operation of mines, but actual investment in this area has been very meagre because of procedural hassles and numerous discretionary provisions in the laws which discourage prospective investors. The provisions for rehabilitation are also unsatisfactory.

A comprehensive review of the policy and of the laws and procedures in this area is urgently needed to identify and eliminate the constraints in the way of investments in mining activities. The High-Level Committee on the National Mineral Policy conducted such a review and submitted its Report to the Government in July 2006 making a number of important recommendations (see Box 4.5). These need to be considered for early implementation in order to stimulate investment including foreign investment, in the mining sector. The procedures should ensure that there is seamless transition from the stage of reconnaissance permit through prospective license to mining lease, and security of tenure is guaranteed to the maximum extent possible. The conditions for resettlement must also be made transparent and the rights of those whose land is acquired must be suitably protected.

Box 4.5

Main recommendations of the High Level Committee on the National Mineral Policy

- i. Mining involves broadly three stages-reconnaissance, prospecting and mining proper. The transition from Reconnaissance Permit (RP) to Prospecting License (PL) to Mining Leases (ML) should be seamless, by giving the right to the RP holder to get a PL and to the PL holder to get a ML.
- ii. Provisions in the Act and the rules that enable the centre and the states to abridge and even cancel the concession should be amended so that concessionaires have security of tenure.
- iii. RPs should be non-exclusive with an open sky policy to maximize investment in exploration.
- iv. Prospecting companies should have a right to transfer the PL with the accompanying right to be granted a ML. Easy transferability of concessions would result in unbundling of exploration from exploitation activities and stimulate investment in exploration.
- v. Where a State Government has not passed an order within the prescribed timeframe the Central Government may pass an appropriate order, after giving an opportunity to the State Government of being heard.
- vi. Mining companies should develop social infrastructure in the villages in the area where the mine is situated. One option suggested by the committee is that mining companies should spend three per cent of the turnover on social infrastructure in the villages.
- vii. The method of fixing royalty rates should be *ad valorem* rates so as to substantially augment state revenues.
- viii. Where a mineral-rich state receives multiple applications, it should be entitled to give preference to the applicant who offers to set up an industry based on the mineral. However, where no applicants make a proposal for setting up an industry, these should not be held up in the expectation that in future such an applicant might turn up.
- ix. In the best interest of the country the mining policy should provide space for both stand-alone and captive mines.
- x. The regime of quantitative restrictions and canalization of iron ore exports should be replaced by an export duty (only on high grade lumps with Fe content of 65 per cent and above) and elimination of restrictions on fines and lower grade fines.

In general, NER is endowed with considerable natural resources and hosts 38 per cent of the country's river waters, 20 per cent of the hydrocarbon (oil and gas) potential, large quantities of low-ash coal resources, limestone and dolomite deposits and other minerals. Yet the region has been unable to process many of these resources for two main reasons: the large investments required and environmental regulations. Tapping river

resources, however, would be very beneficial for power generation and irrigation, but would call for large investments and the construction of multi-purpose dams would need agreement among states (or even countries).

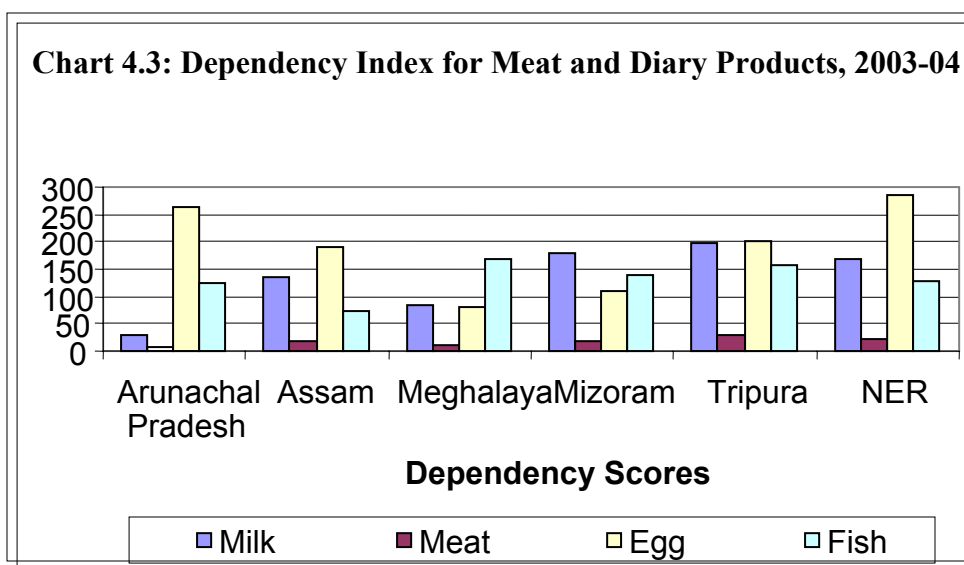
4.9 LIVESTOCK AND FISHERIES: REDUCING THE DEPENDENCY ON “IMPORTS”

All the states are surplus producers of meat but are highly dependent on “imports” to meet their demand for eggs, fish and milk. An analysis of the NER’s dependency on the rest of the country for its major livestock products is given in chart 4.3 (and Table 4.23A (b) in Annexure 4.3).¹¹ Meat production per head for the NER (1.3) is higher than the national average (0.93). The dependency on milk “imports” is high because cattle is used primarily for meat production rather than for milk, there is low buffalo per head ratio (0.02 compared to the national average of 0.09), and low milk productivity of cattle in the region.

Most of the livestock in the region (more than 65 per cent) is in Assam, with the remaining 35 per cent distributed across the other seven states (Table 4.5A in Annexure 4.1). While only 1 per cent of the total land on average in the region is available for pasture and grazing (less than the national average of 4 per cent (Table 4.1), it is as high as 10 per cent in Sikkim. While the government has been making efforts to increase the productivity of cattle through cross-breeding and other measures, so far these have not been very successful.

The two main fish-producing states in NER are Assam and Tripura, partly reflecting regional tastes and partly the availability of resources (mainly storable water) for fish cultivation. But production per capita in NER (5.9 kg.) is lower than the national average of (6.2 kg.) Coupled with the high demand intensity for fish (Table 4.22A in Annexure 4.3) this results in a high regional dependency on fish “imports”.

¹¹ Separate consumption data for meat, eggs and fish are not available, but the consumption share of these three products in total consumption is assumed to be 1:4:5 for the purposes of calculating dependency indices for each product. In general, fish is the preferred food item in the plains while meat is preferred in the hills. Since more than 80 per cent of the population of NER lives in the plains, fish has been assigned a higher weight than; eggs, as the least expensive product of the three, have been assigned a lower weight.



Source: *Statistical Abstracts 2003-04* and NSSO, 2002.

Note: Figures are calculated. See Annexure 4.2 for details.

The livestock and fisheries sectors together account for about 30 per cent of the value of the output of the agriculture and allied sector and provide full-time and part-time employment to 5.5 per cent of the total working population, a majority of whom are women. India continues to be the largest producer of milk in the world with a total production of 91 million tons in 2005-06. The contribution of milk was higher than paddy, wheat and sugarcane in 2003-04. Yet the low per capita availability of milk at 231 gm. per day during 2003-04 suggests scope for further expansion. Our calculations of the Dependency Index (DI) for NE states also justify these facts of low per capita milk availability. Matters are even worse regarding meat, with abattoir conditions bad and utilization of by-products inefficient. But the DI results show that the NE states are self-sufficient with respect to meat production. Poultry development in the country has shown better progress over the years, primarily because research and development schemes of the government have been complemented with effective management and marketing by an organized private sector. Again lack of private sector activity in the NE states in the poultry sector and the consequent high consumption of chicken meat have resulted in high dependency for eggs (see Annexure 4.3 for DI scores). Overall, the fisheries sector in India has also performed well but vast potential still exists, particularly in inland fishery. But data and results of DI contradict these average figures of the fishery sector for NE states who import bulk fishery from Andhra Pradesh (GoI, 2006)

It has been suggested that fish and poultry dependency could be substantially reduced by de-silting large water bodies and promoting integrated fish/duck/paddy farming. Some of these initiatives are being promoted through Self-Help Groups in the rural areas of the region, and have several benefits apart from increasing employment and income-generation such as more efficient use of land and possible flood control.

4.10 HORTICULTURE AND FLORICULTURE: STATE-WISE THRUST AREAS AMONG OTHERS¹²

ARUNACHAL PRADESH

Thrust areas are identified as *medicinal plants, floriculture, fish production and animal husbandry*.

Medicinal Plants: There are more than 500 species of medicinal plants in Arunachal Pradesh. Most of these are in great demand by pharmaceutical companies, so priority should be given to producing these on a commercial scale.

Floriculture: The state offers great potential for the development of floriculture. Recommended flowers are cymbidium, gladiolus, liliun, dendrobium, anthurium and foliage plants.

Fish Production: There has been a steady growth in fish production to 2,800 tons in 2005-06. Major problems faced in the production of fish are the incidence of floods, resource under-utilization and traditional and unscientific methods of production.

Animal Husbandry: This has great potential in a hill state like Arunachal Pradesh. The people of Arunachal consume high quantities of meat, a sizeable proportion of which is brought from outside the state. This conclusion is at variance with the dependency index for meat (see table 4.23A (b)), but perhaps weightage to meat for Arunachal Pradesh needs to be increased.

ASSAM

It is the biggest state in the region in terms of population and extent of economic activities. The thrust areas identified are:

Fish Production: The state has tremendous potential for fish production, which was as high as 1, 90,000 tons in 2004-05. Despite the steady growth in fish production, there is high dependency as shown by Dependency Index (see Table 4.23A, Annexure 4.3).

Tea: In the agricultural-based industries, tea occupies an important place in Assam with the tea industry contributing substantially to the economy. Both RSI and NSI (Table 4.20A and 4.21A, Annexure 4.3) show its greatest comparative advantage.

MANIPUR

Floriculture: A wide range of ornamental flowers are found in this part of the region, mainly gladiolus, lilies, chrysanthemum, roses, anthurium, gerbera and dahlia. Orchids also deserve special attention. The state can also promote the cultivation of cymbidium, paphiopedilum and dendrobium which are in great demand.

¹² Dependency index links with the recommendations of the L.C. Jain Committee Report and the Shukla Commission Report

Animal Husbandry: Livestock rearing is one of the major income-generating activities in the rural areas of Manipur. Cattle, buffalo, sheep, goat and pigs are the main livestock in the state. There is no Dependency Index data for Manipur.

MEGHALAYA

Floriculture: A variety of commercially important flowers are found in this area because of favourable climatic conditions. The main ones are orchids, bulbous plants, birds of paradise, chrysanthemum, gerbera, gladiolus, marigold and carnations.

Livestock and Fisheries: Meghalaya has witnessed a steady growth of milk, egg and meat production, and fish production is also significant in the state. Due to the high consumption of these products, several markets exist in the state, which is shown in the Dependency Index for meat, fish and eggs.

MIZORAM

Medicinal and Aromatic Plants: The steady growth of medicinal and aromatic plants in Mizoram is due mainly to agro-climatic conditions. Cultivation of these plants is more profitable than traditional agriculture because of tremendous demand in domestic and international markets.

Livestock and Fisheries: There is a wide demand for meat, fish, eggs and milk within the state because of the high consumption of these products. This is also indicated by the Dependency Index for meat, fish and eggs.

NAGALAND

Medicinal and Aromatic Plants are found in abundance in the state due to favourable climatic conditions. **Ginseng** is the most valuable medicinal plant, commonly available in Nagaland, and has tremendous commercial potential for export. The most commonly used medicinal plant from which **Citronella oil** is produced, has a good market and is also used in making perfumes, mosquito repellents, ointments and sprays.

Floriculture: Abundantly available flowers in Nagaland are cymbidium tribe, dendrobium tribe, cattle and vanda. There is great scope for the expansion of floriculture for commercial purposes.

Sericulture: The geo-climatic conditions of the state are favourable for the rearing of silk worms such as Eri, Mulberry, Oak Tasar and Muga. There is wide scope for silk production in the state.

Tea: There is a wide scope for tea plantations in the state.

Livestock and Fishery: There is huge scope for rearing poultry, birds, ducks, pigs, goats and rabbits.

SIKKIM

Floriculture: Sikkim is a paradise of flowers mainly gladioli, anthuriums, lilliums, primulas, rhododendrons and orchids.

Aquaculture: Sikkim is blessed with an extensive network of freshwater rivers, lakes and streams.

Livestock: It is primarily an agrarian economy and there is vast opportunity for rearing livestock for meat as well as milk products.

TRIPURA

Medicinal and Aromatic Plants: The major medicinal plants grown in the state include *roultia serpentine*, *withania somifera*, *chorophytum borinillianum* and *emblic myrobalans* whereas the main aromatic plants are *cymbopogon flexuosus*, *cymbopogon* spp. and *pogostemon cablin*.

Floriculture: Various varieties of flowers such as marigold, tuberose, rose, gladioli and chrysanthemum are grown in the state.

Rubber: Rubber is cultivated in large quantities, and can be used in a variety of products such as coir foam, household, industrial gloves, latex adhesive, latex foam, latex thread, rubber bands, surgical gloves and toy balloons. The RSI and NSI show greatest comparative advantage in natural rubber for Tripura.

Tea: The fertile soil and agro-climatic conditions in Tripura are suitable for the development of tea plantations. The NSI supports the cultivation of tea in this part of the region.

Animal Husbandry: There is wide scope for dairy farming and goat and pig rearing in the state.

4.11 NON-FARM ACTIVITIES

Enhancing rural incomes will also depend on making available multiple livelihood opportunities by increasing non-agricultural employment based on local strengths and resources, strengthening capital formation in the primary sector and, in the process, harnessing the inherent strengths contained in the rural economies of NER. The region has a huge potential in developing the rural industrial sector because of its large natural resource base and labour force in the plains. The addition of value to products produced locally will increase employment and income-generating opportunities. The major rural non-farm activities include handicrafts and handlooms, bamboo-based activities and processing of dairy products (into butter and cheese), poultry, fish and other livestock and agro and horticultural products.

(a) Handicrafts and Handlooms

Handicrafts from NER are famous all over India. The major crafts of this region are based on resources such as cane and bamboo, wood, terracotta, textiles, bell metal and brass. (Table 4.18 A, Annexure 4.1). Cane and bamboo based crafts are available in almost all the NE states.

The total number of handicraft units operating in NER is roughly 20 per cent of the total number in India, which provides employment to 22 per cent of the total handicraft artisans in the country (Table 4.15 A). In value terms, its share in the production is around 80 per cent of the total value of handicraft items produced in

India. Among the NE states, Manipur has the highest number of craft units followed by Tripura but in terms of the value of production, Nagaland has the highest production followed by Assam. In general, the handicraft sector is the most important industrial sector in the NE region and it has great potential for exports as well.

There are around 20, 00,000 handlooms in NER of which around 1.5 lakh are idle (Table 4.16 A, Annexure 4.1). The number of handlooms is more in Assam and it also has the highest number of idle looms. More than 60 per cent of the households are dependent on income from handicrafts and handlooms to a large extent (Table 4.19 A in Annexure 4.1).



Assam Silk



Manipuri Textile

Lack of a proper market and supply network remains a major problem in the development of handicrafts in the region. According to the strategy in the “Draft Paper of the Steering Committee on NER for the Eleventh Plan (2008-12),” the North Eastern Handicrafts and Handloom Development Corporation (NEHHDC) should be involved in the procurement and marketing of handicrafts and handlooms in the region to boost the sector.

(b) Bamboo-Based Activity

Bamboo plays an important part in the lives of the people of the NE states. It is an integral part of the socio-cultural and economic traditions of the region. Bamboo grows in natural forests, and is cultivated in homesteads, groves and on private plantations¹³. Bamboo can be used for multiple purposes, as building and reconstruction material, for food and medicinal products, handicrafts, for energy production through gasifiers and in the paper industry (Madhab, 2003). It plays a very important role in shaping the economies of the NE states by providing large employment opportunities. More than 60 per cent of country’s bamboo resources are available in the NE states and 20 per cent of

the world's resources are grown in the region (Viaphei 2005). After China, India has the richest bamboo genetic resources in 136 species including 11 exotic species of which 58 species belonging to 10 genera are found in the Northeast. According to the United Nation's Industrial Development Organization (UNIDO), the bamboo business in the Northeast region would be worth Rs. 5,000 crore in the next 10 years. The National Mission on Bamboo Technology and Trade Development envisages expansion of India's bamboo market to US \$5.5 billion by 2015 (Viaphei, 2005).

Mizoram alone contributes 14 per cent¹⁴ of the country's growing stock of bamboo with about 9,210 sq. km. (49.10 per cent) of the state's geographical area of 21,018 sq. km. (Table 4.18 A, Annexure 4.1). It is followed by Assam, Arunachal Pradesh and Manipur. Bamboo stock in million tons shows that Assam tops among the NE states followed by Manipur, Mizoram and Arunachal Pradesh. The presence of bamboo is very negligible in Tripura and Nagaland.

At present, the volume of bamboo production falls short of national demand. The current demand for bamboo in India is estimated at 28 million tons, only half of which is presently available (Madhab, 2003). So there is a need to improve the productivity of bamboo in the NE states, since more than 60 per cent of the bamboo resources are available here. The expansion of the bamboo sector in NER is handicapped by lack of scientific methods for propagation and cultivation, lack of post-harvest treatment and technology for product development, inadequate trained manpower and inadequate infrastructure for large-scale harvesting in the event of gregarious flowering¹⁵.

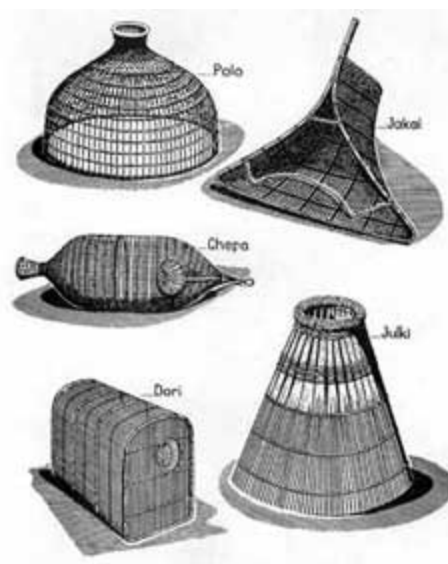
A number of initiatives have been taken by the National Mission on Bamboo Application (NMBA) to develop the bamboo sector in NER. These include development of appropriate tools for primary and secondary processing, conversion of bamboo/waste bamboo to activated carbon, process technology for bamboo boards and development of design and product initiatives, furniture development and entrepreneurs' meets (Madhab, 2003). Accordingly, provisions have been made to arrange finance for bamboo development from the Technology Information Forecasting & Assessment Council (TIFAC), the National Mission on Bamboo Applications, NEC, NEFDI and other banks.

¹³ Extracted from the website of the National Mission on Bamboo Applications (NMBA).

¹⁴ The Bamboo policy of Mizoram, 2002.



Cane Hat



Bamboo Made Fish Instruments

(c) Agro-Processing

The region's comparative advantages in producing fruit, vegetables and other products can be tapped for providing rural employment by setting up small-scale processing units for the local market. A small processing unit requires relatively little capital. Locally produced spices mustard seeds, and so on can be processed and marketed locally. Similarly, there is plenty of scope for the local processing of fruit and vegetables, spices such as ginger, chillies and so on.¹⁶ Arunachal Pradesh has taken up cultivation of horticulture produce especially of sub-tropical fruits in a large scale with assistance from the Government. In addition to infrastructural facility of cold storage and cold chain, mini processing units for processing low grade fruits are essential for the State.

There is also scope for dairy processing. More milk production would encourage the milk, butter and cheese processing industry in the region. There can also be poultry, fishery and piggery processing industry in the region. There is a huge demand for dried fish in the region, processing of which is not capital intensive. The National Dairy Development Board, which has extensive experience in mobilizing producers in milk, vegetables as well as other areas could play a key enabling role in this process.

¹⁶ The draft paper of the Steering Committee on NER for the Eleventh Plan (2008-12) also suggests encouraging the food processing industry in the region.

Box 4.6

The Role of NGOs in Diversifying Rural Livelihood Opportunities

Different community-based organizations have been working across the region to help the poorest rural people in various hill districts to improve their livelihoods through environmentally sound management of their resource base and an expansion in their livelihood opportunities. The introduction of Self-Help Groups (SHGs) have especially changed the lives of women in these areas.

IFAD also emphasises on the role of NGOs in:

- Propagating information to farmers;
- Participatory development in agriculture; and
- Micro-financing (RRBs and NABARD).¹⁷

Box 4.7

North Eastern Region Community Resource Management Project for Upland Areas (NERCRMP): IFAD

NERCRMP has been working in rural and often inaccessible villages in North East India since 1999, and currently has projects in Assam, Manipur and Meghalaya. The project aims to empower tribal communities for sustainable livelihood pursuits. Self-Help Groups (SHGs) along with Natural Resource Management Groups (NRMG) have been introduced by the project as key community institutions, which can serve as vehicles of economic and social empowerment of villagers. Financial support is provided to the SHGs, who have access to a revolving fund and micro-credit. This has allowed women to expand their livelihood opportunities and plan their livelihood strategies better.

Coupled with financial support, women have been offered training and skill development in better farming techniques and in new areas such as patchouli cultivation and distillation. Armed with these, they have set up micro-enterprises and group enterprises to earn better incomes and have also save. They have been able to access funds from banks and other financial institutions. A majority of the SHGs have received loans from banks ranging from Rs. 1,000 to 50,000.

The project has conducted workshops to train farmers and NGOs in SHG cluster formation and biodiversity, and has promoted agricultural activities like *jhum* modification, paddy-cum-fish, cattle rearing, goatery, piggery, terrace development and

¹⁷ The land tenure system prevalent in most of the states in the region (except the non-scheduled areas) restricting alienation of land from a tribal to non-tribal together with absence of personal ownership rights and commensurate land records makes it difficult for banks to lend in the region. Important suggestions by committees constituted to analyse the issues of credit supply in NER include using social capital as alternative collateral and devising alternatives to land documents for extending small credit.

various dry farming activities. Their activities cover areas such as changing traditional landholding patterns to benefit marginal and small farmers (especially in West Khasi Hills District, Meghalaya and Sadar Hills of Senapathi District, Manipur). The initiation of niche markets in medicinal plantation and handicrafts and other non-farm activities have been successful and have managed to transform farmers from traditional agriculturists to entrepreneurs.

A recent evaluation¹⁸ conducted in the West Garo Hills villages confirms that women's quality of life has improved in terms of income and savings, consumption patterns, empowerment, health and nutrition awareness, linkages with line departments and skill development. Although in general women's work burden has also increased, they did not seem to mind this since their overall quality of life has improved.

Source: IFAD: Informal Credit and Savings Groups open the way to self-reliance and empowerment of women (<http://www.ifad.org/gender/learning/sector/finance/6.htm>) Adapted from Nongbri, Tiplut. 2000. *Empowering Women through Self-help Groups: A Case Study of Three Naga Villages, Manipur*. Rome: IFAD.

4.12 THE WAY FORWARD FOR AGRICULTURE

Agriculture will fulfil its crucial role in employment generation when there is coordination in production and marketing among the states of the region. The short-run focus of the vision is to move farmers from subsistence cultivation to cash-crop-oriented production, with each state specializing in its areas of comparative advantage. Apart from these crops, where geo-climatically appropriate states will help farmers engage in commercial floriculture (roses, anthuriums, liliuems, gerberas, carnation, birds of paradise, heliconia, leather leaf and other foliage plants) and low-volume, high-value horticulture crops mainly strawberries, coloured capsicum, cherry tomatoes, gherkins asparagus and broccoli).

States and farmers will only successfully be induced to specialize in a few agricultural products when inter-state trade takes off, so the strategy in the short/run will need to concentrate on its promotion. This will depend crucially on efforts to ease constraints on natural resources such as land and labour, and on the free movement of goods within the region.

4.12.1. Easing Constraints on Natural Resources

The use of productive resources to the fullest potential will need to be promoted by easing constraints on land. The abundance of natural resources overall in the region masks the significantly differing proportions in which these resources exist across states (Table 4.1). Some states are liberally endowed with forest land, others have very little;

¹⁸ The project applied the systemization technique of participatory evaluative documentation involving NERCMP project and partner staff in October 2005. this technique has been popularized by IFAD's Latin American network FIDAMERICA. It emphasizes use of participatory tools by stakeholders and community groups in a systematic manner to evaluate and document the process of development. For more information on the systematization methodology please visit www.enrop.org.

some states have no land available for cultivation (Arunachal Pradesh) while some other have plenty (65 per cent in Manipur).

The low availability of land in most of the NER states especially the hill areas suggests a focus on those agricultural activities where land use is minimum. In addition, the scarcity of labour in these states would mean that the activities should ideally be capital-intensive agriculture and agro-based industries, such as plant nurseries, floriculture, fruits, ginger and turmeric and processing of these products. The situation, however, is very different for Assam and Tripura where population densities are high (in fact, higher than the national average for Assam), which must target relieving labour from agriculture by developing employment opportunities in industry.

A workable policy for improvement of shifting cultivation through material and technological input support needs to be in place to ensure optimal utilization of *jhum* lands. Such a policy would have to be evolved in consultation with the farming community.

The following main conclusions can be drawn about natural resource constraints in agricultural growth in the hills:

1. Availability of land severely limits the scope for land-intensive production of agriculture in most of the states of NER (barring Assam and Tripura). These states need to encourage such agricultural activities where land use is minimum such as plant nurseries, floriculture, ginger and turmeric and processing activities based on such products.
2. Providing better crop technology and micro-credit in hill states to *jhumias* or cultivators who use the slash and burn methods theirs is a sustainable process (Ramkrishnan) as well as a community activity. Their incomes and livelihoods can improve with these injections of technology and credit and they can be lifted out of the margins of economic activity.
3. A very significant proportion of cultivable land is available in the hill areas. Attempts should be made to make this land cultivable.

4.12.2. Facilitating the Movement of Goods

There needs to be greater connectivity among, between and within states, especially the hill states, in terms of roads, railways and air. The hill regions are not as yet connected by rail. There are air connections to the capitals of some states such as Manipur and Tripura but other states like Arunachal Pradesh, Meghalaya and Sikkim have no air connectivity. Nagaland is connected both by rail and air from Dimapur which is actually an outskirts plain area on the border with Assam. Thus, poor transport facilities severely limit the scope of trade and specialization particularly in agricultural products which are bulky and perishable. Farmers have taken up horticulture and floriculture production on a large scale in several NE States under various avenues of Government support. Transport of the produce from the farm to the market, both within the North Eastern Region and outside is hampered due to poor connectivity and shortage

of specialized means of transportation. On the lines of industrial produce, a transport subsidy for farm products upto Kolkata and Siliguri is being demanded by States.

4.12.3. Creating a Marketing Framework: The Cluster-Based Approach

The highly perishable nature of agricultural goods becomes an issue when there are several small farmers and little inter-state coordination. Farmers will need some support in marketing their products if they are to be induced to make the shift to cash crop production. Further, unless states coordinate their production and storage plans, excessive production can lead to a market crash as happened recently in the case of ginger production in some of the NER states. The large demand for food items created by the “captive markets” of the region such as the army and security forces, could be tapped into to expand the regional market.

The short-run development approach will be cluster-based to realize greater economies of scale and specialisation. For this, the cultivated area of the state should be divided into crop-wise clusters based on comparative advantages, with each cluster defined as a Crop Development and Marketing Unit (CDMU) which emphasizes on the marketing aspects of the cluster. Collection centres will need to be set up near the clusters, which will have linkages with clusters in other regions, to promote economical linkages with the wholesale market. Marketing intervention, especially for horticultural produce, with a full compliment of post-harvest infrastructure and market network, is fundamental. These CMDUs would be given appropriate managerial and financial flexibility for assisting producers to realize reasonable profits from their efforts.

Establishment of a cold chain along major arterial highways is critical if the region is to exploit its rich horticulture potential and market these products to the rest of the country. The operation of the cold chain could be based on a PPP model or on a lease-basis with private entrepreneurs.

4.13 SHORT AND LONGER-TERM VISION

The analysis in this chapter has concentrated on trying to isolate what should be the focus areas for agricultural development. The basic presumption is that the hilly states in particular have limited resources in terms of both land and people. Hence, highly land and labour intensive agriculture is not feasible. In addition, each state can reasonably specialize in a few agricultural products as long as inter-state trade is promoted to make cash crop production an economically viable option for the farmers.

The vision for agriculture has both short-and long-run dimensions. Given the crucial role of agriculture in employment generation, the short-run focus must lie in coordinating both production and marketing among the states NER. In other words, the short-run product focus should be to move agriculture from being subsistence to cash-crop oriented with appropriate state specialization as suggested by our study. As is obvious this short-run strategy would have an important trade focus.

The short-run development approach should be cluster-based in order to realize greater economies of scale and specialization. For this, the cultivated area of the state

should be divided into crop-wise clusters based on comparative advantages. Each cluster needs to be defined as a CDMU, stressing the marketing aspects of the cluster. Collection centres will be set up near the clusters, which will be linked with clusters in other regions, so that economic linkages with the wholesale market can be possible. Marketing intervention for horticulture produce, with a full complement of post-harvest infrastructure and network of markets, is fundamental. These CMDUs would be bolstered with appropriate managerial and financial flexibility for assisting producers to realize reasonable profits.

Establishing a cold chain along major arterial highways is critical if the region is to exploit its rich horticulture potential and market products to the rest of the country. The operation of the cold chain can be on a PPP model or on a lease basis with private entrepreneurs. The focus should be on high-value items like commercial floriculture for flowers like roses, anthuriums, lilies, gerberas, carnation, BOP, heliconia, leather leaf and other foliage plants and low-volume, high-value horticulture crops mainly strawberries, coloured capsicum, cherry tomatoes, gherkins, asparagus and broccoli.

However, in the longer run, the states must attempt to move the labour force out of primary agriculture into less land/labour intensive areas like horticulture, dairy farming and forestry based non-timber products. Examples of the latter are medicinal plants. There is already evidence of this happening in a significant way in Sikkim and Mizoram in the case of horticulture and bamboo in Assam, Meghalaya and Nagaland. However, it must be remembered that these sectors are highly capital intensive in terms of the requirements of dedicated transport corridors and specialized storage facilities.

To translate the long term-vision into reality it is worth noting again the need to coordinate the strategies of states in marketing, trade, etc. Without this no state would have a sufficient volume of production to cater to outside markets. It may also be noted that in some cases Sikkim might well be considered an outlier to the general principle of joint strategizing.

Plantation Crops and Exports (Commodity Boards and APEDA)

COFFEE

Coffee cultivation in NER started in the Cachar District of Assam in 1953. Commercial cultivation started in the 1970s in Garo Hills (Meghalaya) to wean away the local community from *jhum* cultivation practices. The initial growth and establishment of coffee in NER was encouraging. A comprehensive survey was carried out by the Board in the 1970s for coffee development in NER. Over 40,000 Ha in about 300 villages of 39 districts in seven states of NER was identified for coffee cultivation. With financial support from NABARD a coffee planting programme was undertaken by the State Plantation Crops Development Corporation in Assam, Arunachal Pradesh, Manipur, Nagaland and Tripura and Soil Conservation Department in Meghalaya and Mizoram. An extent of about 13,000 Ha was brought under coffee by this programme, of which 7,000 ha was handed over to 5,000 tribal growers. Later, coffee plantations of

corporations/departments were abandoned due to lack of financial support from state Governments. Various socio-economic reasons also led to the neglect of holdings with the tribal sector.

Coffee has a long gestation period which involves sustained investments and efforts. But the long gestation period acts as a deterrent to small growers. Lack of post-harvest and inadequate marketing facilities have been a hindrance to the growth of coffee in NER. A total of 5,473.54 ha is under coffee cultivation out of which 2,640.52 ha has reached bearing stage. The maximum plantation area is in Nagaland (2,129 ha) followed by Mizoram (933.8 ha), Meghalaya (866.20 ha) and Assam (754.39 ha). Coffee holdings are small and scattered. Of 1,453 holdings, 1,452 holdings are below 10 ha each in Nagaland. Similarly out of 1,510 holdings in Mizoram, 1,507 are below 10 ha.

Special Area Programme (SAP):

Coffee has been implementing a Special Area Programme (SAP) in NER from the Ninth Plan onwards. The objectives of SAP are to

- Promote coffee cultivation in tribal tracts.
- Wean away local communities from *jhum* cultivation.
- Generate gainful self-employment.
- Increase productivity/production.
- Expand/consolidate coffee area.
- Help afforestation through shade trees to maintain an ecological balance

Support under SAP:

Under SAP, the Coffee Board Extends:

- Subsidy @ Rs.15,000/- per ha for coffee expansion/consolidation.
- Market support @ Rs.10/kg. towards cost of collection, curing, transportation and marketing of coffee.
- Supply seed material for coffee expansion/consolidation.
- Training on cultivation aspects to growers.
- Technological inputs to growers to improve productivity and quality.
- Establishment of SHGs as part of a community approach.

Under SAP, the Coffee Board assisted expansion of coffee plantations in 3,198 ha and coffee consolidation in 690 ha during the Tenth Plan in NER. About 2,200 ha was under coffee cultivation at the end of the Ninth Plan and around 3,200 ha was brought under fresh planting during the Tenth Plan.

Production in 2005-06 was around 250 MTs comprising 175 MTs of Arabica and 75 MTs of Robusta. The present productivity levels are very low (<100 kg/ha).

Support for consolidation of existing coffee holdings

- The Board extends Rs. 15,000/ ha to take up the following cultivation practices to improve production/productivity in existing coffee holdings:
 - ❖ Infilling of vacancies and aftercare (seeds/poly bags/nursery).

- ❖ Soil management and amendment practices (trenches, soil conservation, liming and manuring).
- ❖ Shade planting and shade training.
- ❖ Bush management (centring, handling and pruning).
- ❖ Plant protection measures.

Certain Gaps identified in Coffee Development in NER:

The Coffee development programme has been taken up in a scattered manner across all states of NER. Some gaps identified are:

- There is lack of adequate technical manpower to take up development activities.
- Lack of involvement by concerned state agencies.
- Inadequate adoption of technology by growers due to socio-economic reasons.
- Poor accessibility and security issues .
- Large vacancies in coffee holdings.
- Long gestation period of coffee requiring sustained investments and involvement which is a deterrent to tribal growers.
- Only Board's support (Rs.15,000/ha) insufficient to attract growers for consolidation activity.
- Inclement weather coinciding with harvest contributing to the deterioration of quality.
- Inadequate processing and marketing facilities.
- Diseases/disorders specific to NER (black bean).

Strategies for Coffee development in N.E. Region ¹⁹

- There should be consolidation of coffee development in most suitable locations.
- Coffee development should be restricted to technically feasible regions in a cluster approach, giving priority to those areas where State Governments participate in coffee development.
- Focus should be on a coffee based cropping system to augment overall farm income.
- Emphasis should be on capacity building among stakeholders.
- There should be proper infrastructure support for processing.
- There should be financial support for expansion, consolidation, quality up-gradation and market development.
- Expansion of coffee in new areas seeds, nursery, planting (coffee+shade), after care.
- Consolidation of weak coffee holdings.
- Gap filling, plant and shade management, soil management, pest and disease control.

¹⁹ Based on the recommendations of a techno-feasibility study to assess the status of coffee development in NER conducted by a team of senior scientists and extension officers of the Coffee Board in 2006.

- Quality upgradation.
- Pulpers, drying yards, storage diversification.
- intercroops viz. banana, areca and citrus
- Market support.

The Way Forward:²⁰

The programme implemented by the Coffee Board has sensitized tribal people to coffee cultivation methods and to some extent contributed to the improvement of their economic condition. Though coffee development has improved the socio-economic conditions of tribal coffee growers to some extent, mixed cropping is needed to generate supplementary income.

- Integration with other central/state department programmes is a must to facilitate collective implementation of the programmes/schemes.
- Concerted inter-disciplinary bottom up extension approach should be implemented to trigger off the benefits of development programmes.
- Coffee Board to facilitate consolidation of holdings in NER and also provide financial support for expansion and quality upgradation. Inter-cropping in coffee plantations also to be promoted.
- States to cooperate with Coffee Board for raising coffee plantations in clusters particularly in Nagaland and Mizoram which hold maximum potential.
- Coffee Board to provide technical support and build capacity of coffee growers and State Government staff for improving production and productivity and facilitate marketing. Village Development Boards in Nagaland and credible NGOs like YMA in Mizoram be mobilized for community participation. NERAMAC to be involved in collection and transportation of produce to a central location for processing and marketing.
- Coffee Board to promote mixed cropping and provide infrastructure support for processing of the produce. Presently there is only one coffee processing unit at Bualpuii in Mizoram.
- Coffee Board to focus on promoting coffee cultivation in agro-climatically suitable areas of NER.

RUBBER

²⁰ An evaluation study was conducted by The University of Agricultural Sciences, Bangalore. These recommendations are based on their salient observations.

Natural rubber is obtained from the latex of *Hevea brasiliensis*. Rubber plant is a native of Brazil and was introduced in India in 1873. It has a 6-7 years gestation period and economic life of about 25 years natural rubber is raw material for about 35,000 products in India. India ranks 2nd in productivity (1,727 kg/ha/annum), 4th in production (7,72,000 tons) and consumption (7,89,000 tons) and 5th in area (5,97,000 ha) under cultivation. In India, rubber is traditionally grown in Kerala, Kanyakumari, NEER (mostly in Tripura and Assam), Karnataka and Tamil Nadu: 58,432 ha (comprising 9.8 per cent of the total) area in NEER is under rubber cultivation. Rubber plantations provide gainful self-employment and sustainable livelihoods. It generates direct employment – around 1,000 mandays/ha. During the immature phase it provides permanent jobs for seven persons per 10 ha. in mature phase. It provides indirect employment – nursery, production and distribution of plantation inputs, intercropping, rubber dealers, processors, rubber wood cutting, sale, processing & furniture making..It has potential for export of natural rubber NR rubber goods to neighbouring countries when production increases. Besides, it also provides ecological benefits such as a green leguminous ground cover and green umbrella above the soil. It purifies the atmosphere through carbon sequestration; improves soil properties through addition of organic matter, keeps the soil cool, enriches fertility, porosity and its water intake capacity.

Benefits of Rubber planting in North East: Socio-Economic Scenario.

- Gainful self-employment and sustainable livelihood for youth
- Generates direct employment around 1000 mandays /ha. During immature phase – Permanent job for 7 persons per 10 ha. in mature phase.
- Indirect employment nursery, production and distribution of plantation inputs, intercropping, rubber dealers, processors, rubber wood cutting, sale, processing & furniture making.
- Ancillary income through honey, rubber seeds etc.
- Effective tribal settlement programme.
- Potential for export of natural rubber (NR) rubber goods to neighbouring countries when production increases.

Ecological Benefits

- Provides a green leguminous ground cover and green umbrella above the soil.
- Rubber tree has almost all the attributes of a forest species.
- Purifies atmosphere through carbon sequestration.
- Improves soil properties through addition of organic matter, keeps the soil cool, enriches fertility, porosity & water intake capacity.

State-wise Potential

Rubber plantations are a success story in Tripura which is now the 2nd largest rubber growing state with 33.7 per cent of the potential area under rubber. Rubber has been identified as a priority crop for a rehabilitation project in Tripura. The government of Tripura and Rubber Board jointly work on block plantation projects. Around 2,750

tribal families have been settled through block planting in around 3100 ha. The Tripura Rehabilitation and Plantation Corporation has been constituted to take up rubber paste resettlement of tribal people. The Tripura Forest Development Plantation Corporation has taken up commercial planting of rubber. TTAADC is also involved in tribal settlement through rubber planting. The Government of Tripura has contributed 40 per cent of the cost of Community Processing Centres and established a Rubber Park with common facilities for rubber based industrial units.

Against a potential of 4.5 lakh ha in NER, the present rubber plantation area covers only 13 per cent. This is due to various factors including lack of technical assistance, shortage of manpower, insufficient supply of planting material and law and order problems.

Status of Operations

The Rubber Board started activities in NE by opening a field office in Agartala in 1967. From 1985 onwards special schemes for rubber development in NE with components for development, research and NRETC have been in operation. So far planted is 58,432 ha have been planted and the annual production from the region 23,837 MT.

Rubber Organizational Set-up in NE:

– Zonal Office	2
– Regional Office	8
– Residential Training Centre	1
– Regional Research Station	4
– Rubber Research & Training Centre	1
– Field Office	16
– Tappers Training School	3
– District Development Centre	4
– Regional Nurseries	6

Major Constraints for Rubber Development in NE

- There are operational difficulties due to insufficient manpower – ADRP restrictions.
- There is insufficient supply of planting material, remoteness of planting locations and poor communication facilities.
- Frequent eruption of socio political disturbances and militancy are other constraints.

Rubber Development in North East

The objective is to produce more natural rubber for the socio-economic development of the NER and restoration of soil depleted through shifting cultivation. It will also bring about Rural development through employment generation.

The Strategies for Rubber Development

- There is a need for the expansion of rubber area and rejuvenation of sick immature plantations.
- Productivity from existing plantations should be increased.
- There should be an economic settlement of tribal people.
- Location specific agro management and processing problems should be addressed through research.
- At the primary processing level there should be quality upgradation for better price for farmers.
- Farmers groups should be formed and empowered.
- There should be proper environment/soil protection.

The Activities Proposed are:

Integrated Village level Rubber Development

- **Revitalization and Restocking** To bring sick immature plantations to normal standards of growth and stand per hectare 1,750 ha will have to be covered. Assistance for holdings up to 2.00 ha only.
- **Block planting** will be undertaken in tribal belts with financial support from State Government (50 per cent). five hundred ha will be covered.
- **Input supply** Critical plantation inputs will be purchased by the Board and distributed to small growers through RPS.
- **Demonstration, NRETC, DDCs & RRTC** Demonstration plots in farmers' fields will be set up and NRETC, DDCs and RRTC in Assam will be maintained.
- **Irrigation Proposed as a life saving mechanism for the first three years only.**
- **Fencing** to protect young plants from cattle and other animals.

- **Farmer Education and group formation** Formation and strengthening of RPSs & SHGs

Quality planting material generation

- Board's nurseries will be maintained as models and Nucleus bud wood will be supplied to private nurseries. Nurseries by RPS/SHG will be promoted.

Research priorities

- Evolving high yielding and stress tolerant clones.
- Evolving rubber based sustainable farming models through trials with other crops.
- Evolving farming practices resulting in cost reduction and increase in yield.
- Studies on diseases and environmental stresses like low temperature, high altitude through velocity of wind etc.
- Evolving suitable harvesting systems.

Processing & quality upgradation

- Aimed at improving the quality of rubber sheets produced in the region.
- Promote group processing and effluent treatment through financial and technical support.

Market promotion

- Transportation assistance for input items and latex. Publication of prices, participation in trade fairs and exhibitions.

Human Resource Development

- Training for growers, tappers, workers and other stakeholders.
- Labour welfare activities.
- Equipping training centres and expansion of office space and residential buildings.

Carbon sequestration offers a major opportunity. It was recognized that rubber plantations hold tremendous potential for providing employment and sustainable livelihoods. Hence there is need for intensive extension work to convert NER into a mini-Kottayam.

Rubber should be the major thrust area, with active collaboration among the stakeholders Department of Commerce, Rubber Board, Ministry of DONER/NEC and the North Eastern States. Rubber Board to fund for area expansion and rejuvenation of sick plantations and introduce technology for increasing productivity. Rubber Board to address locations specific agro-management and processing problems. Rubber Board to upgrade quality at the primary process level for better prices for farmers and support formation and empowerment of farmer groups. Rubber Board to maintain and support nurseries by Gram Panchayats and SHGs. Department of Commerce to strengthen all commodity boards including the Rubber Board to enable intensification of their

activities in NER. States should earmark and allot land for rubber plantations and emulate the Tripura model. State Governments should designate the department and officer as nodal agency in the respective states for coordination with the Rubber Board.

TEA

China and Assam are the only two regions in the world with native tea plants. The scientific name for the tea plant is *Camellia sinensis*. Tea was placed in the genus *Camellia* by the German botanist Otto Kuntze in 1887. The Assam variety is known as *Camellia sinensis* var. *assamica*

The North Eastern States account for 55 per cent of area under tea and 53 per cent of the total production. The region has 2.8 lakh ha under tea plantations producing 455 million kg of tea. Assam and Tripura are the traditional tea growing states. Assam alone accounts for 2.7 lakh ha of tea area and 480 million kg. production. The second largest producer is Tripura with only 8,200 ha under tea and producing 7.5 million kg. Efforts have been made to introduce tea in other states since Eighth Five Year Plan. Tea production in other states is: Arunachal Pradesh (2.34 million kg), Nagaland (0.20 million kg), Sikkim (0.16 million kg), Manipur (0.11 million kg), Meghalaya (0.10 million kg) and Mizoram (0.07 million kg).

Tea Cultivation in traditional States

ASSAM

Largest contiguous tea area in the world. Produces more black tea than either Sri Lanka or Kenya. There are 780 tea estates registered with the Tea Board. The state has 527 estate factories, 197 BLF, one Cooperative and one instant tea factory. The average productivity is around 1800 kg. made tea/ha. Spread over 27 districts of Assam, there are about 50,000 small growers of whom only about 3,000 are registered with Tea Board.

TRIPURA

There are 58 big tea estates with planted area spread over the districts of Dholai, South, North and West Tripura. There are about 1,500 registered small tea growers and 11 workers' cooperative gardens, two workers cooperative gardens have their own tea factories. Durgabari Tea Estate Workers Cooperative Society Ltd., is one of the best managed cooperatives with remarkable achievements.

Non-traditional areas in Assam

KARBI ANGLONG (ASSAM)

This Autonomous District has hill areas with gentle slopes making the entire district suitable for tea cultivation. There are 15 established tea estates located in the revenue sub-division of Diphu covering about 4,160 ha, 302 small tea growers are registered with the Tea Board having a total tea area of 1,952.57 ha.

N. C. HILLS DISTRICT (ASSAM)

Declared a Non-traditional area in 1991 for extending financial assistance under the Board's schemes for control of *jhum* cultivation. The Tea Board has given registration to three projects and one small tea grower for planting tea on an area of 709.54 ha. However, one project (Kopili T.E.) was sanctioned for an area of 200 ha. with loan assistance of Rs. 80 lakh and subsidy of Rs.50 lakh from the Tea Board. Further, an amount of Rs. 2.65 lakh was provided to the small tea grower in the form of subsidy.

Tea Cultivation in Non-Traditional States

ARUNACHAL PRADESH

The state has taken a lead over the other non-traditional tea growing states of the region. Teas grown in the hill slopes of Arunachal Pradesh have distinct characteristics and are comparable with Darjeeling tea. At present there are 42 registered tea estates with a planted area of 837.39 ha, eight estate factories and seven bought leaf tea factories. Fifty small growers are registered with the Tea Board. Under the Tea Quality Upgradation and Product Diversification Scheme a sum of Rs. 32.98 lakh has been disbursed to two tea factories. Arunachal Pradesh Forest Corporation Ltd. acted as the nodal agency and had received substantial grants from the Tea Board for development of nurseries and also loan and subsidy. The project areas where planting has been taken up are located in the districts of Lohit, Tirap, Changlang, Lower Subansiri, Dibang valley, and East Siang.

SIKKIM

Temi tea estate produces tea which is comparable to Darjeeling tea. There is good scope for specialty tea and superior marketing would lead to better returns. Main constraint in the state is the availability of land.

MEGHALAYA

Tea Experimental Centres at Umsning, Rongram and Riango were established in 1976-77 with the support of the Tea Board and in 1978 planting was carried out with material brought in from Assam and Darjeeling. The Tea Board has been extending grant-in-aid for setting up nurseries since 1982-83. Planting materials are supplied free of cost to the farmers to cultivate small holdings of two hectares per family. There are 69 tea growers covering an area of 577.86 ha which are registered with Tea Board. There are two factories, one located at Umsning in Ri-Bhoi district and the other at Rongram in West Garo Hills District.

NAGALAND

Tea is grown in seven districts. Kohima, Zunhebphoto, Muckokchung, Mon, Phek, Twensang and Dimapur. Small scale tea cultivation has been taken up as an alternative to *jhum* cultivation. The Tea Board has given registration to 2,753 small farmers covering an area of 19,264.36 hectares.

MIZORAM

There are over 75 years old plantations at Biate and Ngopa extending over an area of about 140 ha. The state government launched tea development schemes in 1992-93 and targetting 2,000 ha at Biate, Ngopa, Pawlrang, N.E. Bualpui, Khawdungsei, Tlungvel, Darlawng and Selling. So far the Tea Board has given registration to nine T.E.s covering an area of 391 ha. There are 697 registered small tea growers covering an area of 1,934.34 ha. Processing is done using traditional methods and the products marketed locally.

MANIPUR

Tea is grown in the districts of Senapati, Tamenglong, Ukhrul and Jiribam. The Tea Board assisted the Manipur Plantation Crops Corporation Ltd. in 1982 and about 233.03 ha have been brought under tea. The Tea Board also provided financial assistance for setting up of nurseries. Of late, a number of NGOs have been promoting small farmers to take up tea plantations; 484 small tea growers covering an area of 1,362.61 ha have so far been registered by the Tea Board.

Tea industry in the NE Region

Assam tea is well known for its distinctive quality, especially for its strong strength and a rich body, taste and colour. In order to provide it a distinct identity the Tea Board had introduced a logo for Assam Tea. Steps have been also initiated to register Assam Orthodox tea as a G.I.

Being young and mostly colonial plantations, the tea produced in the non-traditional North Eastern States is of superior quality. There is good scope for producing organic and other specialty tea in this region

Primary marketing of tea

The Guwahati Tea Auction Centre is the biggest in India and is mainly for domestic trade. In 2005, this centre handled 143 million kg. of tea valued at Rs.865 crore. The volume handled by constitutes 31 per cent of the total tea produced in the region. Now there is demand for setting up new auction centres at Dibrugarh and Jorhat. The Tea Board is the licensing authority and licences for the new centres will be given as and when the industry or the Government comes forward with proposals. Electronic auctions expected to be functional by the second half of the year.

Tea exports from the region

World famous Assam Orthodox/CTC is mainly exported to developed markets like UK and Europe. There is scope for export of speciality tea including organic and high-grown, produced by small growers in the hilly non-traditional regions. Assam has a dry port at Amingaon. In order to facilitate direct export, incentive @Rs.1.50 per kg is provided by the Tea Board towards the cost of freight and handling charges of containers from Amingaon ICD up to the point of trans-shipment at Haldia port in West Bengal.

R& D Centres in the region

Tocklai Experimental Station at Jorhat the oldest tea R&D Centre in the world is managed by the industry under the aegis of the Tea Research Association (TRA) with 80 per cent funding by the Government through the Tea Board. TRA has five centres in Upper Assam (Dikom) and North Bank (Thakurbari), South Bank, Cachar (Silcoorie), Tripura (Agartala). These provide advisory service to their member gardens accounting for 71 per cent of the total tea area of the region. Under a Tenth Plan scheme, TRA has set up an advisory cell for providing technical support to small growers.

Special Development programmes are being implemented by Tea Board in the region including :

- Replanting/rejuvenation of old and uneconomical sections.
- Assistance to small growers for taking up tea cultivation (new planting).
- Modernization of tea factories and creation of facilities for dual manufacture of tea (orthodox and CTC).
- Marketing of Assam logo.
- Research grants to TRA (49 per cent from plan budget +31 per cent from AED funds).
- Training for plantation managers, supervisory staff and workers through the Indian Institute of Plantation Management, National Productivity Council and other institutions.

Special development programmes for small tea growers in the North Eastern Region include:

- Arranging **training programmes** through the Tea Research Association and Assam Agricultural University, Jorhat.
- Setting up of **nurseries** through State Government agencies for supplying planting materials to small tea growers.
- **Advisory services** through field visits on practical aspects of cultivation and providing soil analysis service.
- Arranging **study tours** to visit various tea growing areas in India as well as to countries such as Kenya and Sri Lanka.
- Financing **Self-Help Groups** for construction of leaf sheds, procurement of transport vehicles, weighing scales, plastic crates, plucking bags for leaf handling etc. Disbursements under plan schemes for new planting by small tea growers.

There are many symptoms and key reasons for sickness / closure of tea gardens:

Poor price realizations(1999-2005) was the last straw leading to several closures. Most sick gardens have one or all the following conditions:

- Poor condition of factories.
- Poor field assets and poor yields.
- Uneasy industrial relations scenario.
- “Remote Control “ style of management.

- Weak financials with funding strategy highly debt oriented.
- Defaults in payment of statutory and loan liabilities.

The Major Constraints are:

Transport:

Movement of Inputs i.e, Foodgrains for plantation workers, fertilisers, plant protection chemicals, machinery etc.

Movement of made tea

Points of sale for exports are major ports (63 per cent exports through Kolkata, Haldia and Cochin). Points of sale for internal market are mainly western India. While all the agricultural products are entitled to central transport subsidy in the North Eastern states, this subsidy is not given for tea. Extending this subsidy to the tea industry will help in bringing down the cost of production and make the product cost competitive in the export market.

Ownership of small tea gardens in Assam

In Assam, the reported number of small growers are more than 40,000 but only 2,927 growers have been registered with the Tea Board. Most growers do not possess proper land documents and they are not in a position to avail of any financial assistance from the Tea Board or from banks/financial institutions. There is the Need to regularize land ownership for facilitating the development of the small holdings.

System of land holding

Community ownership of land in states other than Assam and Tripura leads to difficulty in determining of the ownership and in the creation of security. A continuing guarantee by the concerned state Governments will perhaps be a solution acceptable to the banks which needs to be worked out.

Restriction of tea cultivation in Arunachal Pradesh

The union Ministry of Environment and Forests have stipulated that its clearance should be obtained before taking up tea cultivation. Clearance given by the state forest department is not acceptable. This stipulation has come in the way of many growers in taking up tea cultivation in Arunachal Pradesh.

ManPower: Limited availability of skilled labour, supervisors and the managerial cadre is a distinct impediment in the systematic development of tea plantations. Policy restrictions with regard to entry of labour from other states is one of the major hindrances in launching large scale commercial tea projects. There is also the need to set up a large infrastructure towards human resource development.

The Way Forward:

Replanting.

Replantation/rejuvenation holds the key to the long-term competitiveness of the Indian tea industry given the high age profile of tea bushes. Around 2,12,000 hectares which fall into the vulnerable category of low yielding areas needs to be targeted for replantation/rejuvenation. The Department of commerce has established a Special Purpose Tea Fund (SPTF) on January 17, 2007. With assistance from this fund 1 lakh proposed to be renovated in the NER over the next 15 years with investment of about Rs.2,500 crore. Productivity in NER is low compared to countries like Kenya where the productivity is as high as 25 tone/ha.

Factory schemes.

- Modernization of factories, creation of infrastructure for cleaning, blending and packaging are needed.
- Quality assurance certification. ISO/HACCP and Organic Tea Certification.
- Product diversification production of green tea and specialty teas is required.

Field schemes

- Incentive for orthodox tea production.
- Replanting and rejuvenation.
- Extension planting.
- Irrigation and drainage.
- Small growers: Green leaf transportation, pruning, Self-Help Groups.

Labour Welfare measures

- Drinking water Creation of water point source with hand pump and platform/ring well.
- Sanitation,
- Educational stipend for the wards of workers for pursuing higher studies.
- Capital grant for extension of school buildings and construction of hostels.
- Capital grant for extension of medical facilities and purchase of medical equipments.
- Support to sports activities.

Training programmes

Short-term executive programmes (STEPS) for plantation managerial staff. Setting up of IIPM Centre in (Assam)

Export and domestic promotion schemes

- Transport subsidy for the teas exported directly from ICD Amingaon(Assam).

- Support for export promotion to exporters part reimbursement of travel and exhibition.
- Promotion of packaged teas of Indian origin carrying logos.
- Scheme for setting up tea boutiques selling Indian specialty tea.
- Activities conducted entirely by the Tea Board include domestic tea promotion, participation by Tea Board in international fairs and exhibitions, market research, conducting buyer- seller meets, trade delegations (both inbound and outbound), Promotional activities in association with the industry include promotion of origin teas jointly with tea associations. Streamlining the electronic auction system for online trading of tea.

R & D

Support to TRA, TRF. Research Schemes through TRA, UPASI-TRF and other institutions.

Fresh Initiatives

SPTF

ISRO Schemes: 1. **Village Resource Centres covering small growers.**

2. Creating geo-database of the tea industry

- IIT Kharagpur-proposal for establishing International Tea Engineering Research Centre at IIT, Kharagpur with the the Tea Research Association collaboration of (TRA). IIT to look at development of mechanical aids to improve work efficiency; improvements in processing technology, including energy conservation and product diversification.
- Centre for Development of Advanced Computing (C-DAC)
- Scheme for creation of quality parameter database using e-nose and evision systems for all tea gardens in India.
- Establishment of Centre of Excellence in Darjeeling.
- Setting up of small grower cell within the Tea Board
- Mini factories pesticide residue infrastructure under TRA, UPASI-TRF.
- E auctions Greater stress on demand generation.

It is important for the Tea Board to introduce incentives for orthodox tea planting and setting up Village Resource Centres to assist small tea growers.

More mini factories need to be set up.

Tea Board to announce a separate logo and GI for Assam Orthodox Tea within three months. Assam Government to issue “possession certificates” to all small tea growers within one month to enable them to register with the Tea Board.

Transport subsidy for tea exported directly from ICD, Amingaon, Assam @Rs.1.50 per kg to be introduced.

Tea Board to support promotional activities in association with the industry.

Tea Board to streamline electronic auction system for online trading of tea. Tea Board should support Tea Research Association (TRA) and Tea Research Foundation (TRF).
Tea Board to support labour welfare measures including capital grants for extension of school buildings and construction of hostels, medical facilities and purchase of equipment, sports activities, sanitation and drinking water for tea garden labour.
Tea Board to support diversification/multi-cropping and intensify marketing support.

Spices

NER's climatic conditions offer vast scope for promoting production of spices, particularly high value organic spices. Spices like lakadong turmeric, bird eye chilli and ginger grown in NER have high intrinsic value and hold vast industrial and pharmaceutical potential. Hill areas of Sikkim, Nagaland, Meghalaya, Mizoram, Manipur and Arunachal Pradesh hold high potential for large cardamom, organic ginger, turmeric and chillies.

There is great scope in promoting production of organic spices in these states by popularizing organic farming practices among growers. *Various schemes are being implemented by the Spice Board in NE States including:*

1. Large cardamom development

Rs. 17,500 per ha. is offered as subsidy including the cost of planting materials in two annual installments of Rs. 15,000 and Rs. 2,500 respectively.

2. Construction of large cardamom curing houses (modified *bhatties*)

200 kg. capacity - Rs. 5,000.

400 kg. capacity - Rs. 9,000.

3. Production of Organic Pepper

Rs. 12,500 per ha. is offered as subsidy including the cost of planting material in two annual installments of Rs. 10,000 and Rs. 2,500 respectively.

4. Setting up of Vermi Compost Units

Rs.1,250/- is provided as subsidy by unit.

5. Organic cultivation of lakadong turmeric

Rs. 12,500 per ha towards 50 per cent of the cost of planting materials is offered as subsidy. Certification is organized by the Board meeting the costs.

6. Organic cultivation of ginger

Rs. 12,500 per ha. is offered as subsidy towards 50 per cent of the cost of planting materials. Certification is organized by the Board meeting the costs.

7. Supply of driers for ginger and turmeric

Rs. 10,000 per drier is provided as subsidy.

8. Construction of warehouse cum cold storage

For construction of warehouse cum cold storage by farmer's associations, market committees etc. a subsidy to the tune of 75 per cent of the cost of construction, limited to Rs. 112.50 lakh is offered by the Board.

9. Training of officers of north eastern states

The officers of the agri/horti departments in north eastern states are trained in research stations/research farms in south India on production and processing of spices every year. The entire expenditure on travel, TA/DA, accommodation and training expenses are fully met by the Board.

10. Training of farmers of north eastern states

Selected farmers are taken to Kerala for training on production and processing of spices every year. The entire expenditure for this is met by the Board.

11. Extension advisory services

Technical/extension support to growers on scientific aspects of cultivation and processing are provided through personal contact, field visits, group meetings and through distribution of literature by the technical officers of the board.

12. Recognition of large cardamom growers

For encouraging healthy competition among large cardamom growers the board has instituted large cardamom productivity awards.

13. Rapid multiplication units in the North East region

- All Mizoram farmers Union, Aizwal, Mizoram
- Agro Tech Composite Nursery, Dimapur, Assam
- Marjum Welfare Society, Arunachal Pradesh
- A.B. Tanyam Society, Ziro, Arunachal Pradesh
- P.D.Pasaria Foundation, Narangi, Guwahati
- Santhi Sadan Ashram, Guwahati, Assam
- Rural Resource & Training Centre, Umran

Equity fund to promote spice processing in the North East

To motivate entrepreneurs/NGOs/farmers' group to set up processing units as a forward linkage to their spice cultivation

- Support for export processing units set up in the north east or by organic farmers elsewhere.
- Up to 49 per cent or Rs.1 crore whichever is less.
- Two unit being considered.

New Initiatives

Training in Good Agricultural Practices (GAP) is being given to unemployed rural youth who have a background in spice farming (10+2 science).

- 3 months duration
- stipendiary
- residential

MAJOR PROBLEMS FACED ARE:

- Lack of active support from the state horti/agri departments
- Non-availability of quality planting materials
- Inadequate knowledge on better post-harvest practices
- Lack of adequate infrastructure for quality testing, packing and storage
- Non-availability of organic certification facilities

Support required

- Technical input on selection of seed/planting material, cultivation practices and pest and disease management by state / spices board
- Promoting NGO/Self Help Groups among farmers
- Development of departmental nurseries for raising high yielding disease resistance planting material
- Establishing contract farming/common facilities for cleaning, grading, packing and storing
- Special campaign for organic spices
- Cultivation/certification for chillie, ginger and turmeric

The Way Forward for North East Spice Industry

- It is important to prepare the North Eastern Region to compete with Far Eastern countries by encouraging organic production, value addition and export of:

1. Pepper
2. Large cardamom
3. Turmeric
4. Ginger

5. High colour chilli and
6. Culinary spices
7. Rosemary, thyme, parsley and oregano
 - Promotion of spices grown in north eastern states under common logo preferably on retail packaging is required.

ITC has shown its willingness to work in association with Sikkim, Meghalaya and Nagaland and the Spice Board for cultivation, processing and export of cardamom, ginger, turmeric and Naga chillies. Tata Tea is investing in the cultivation of black pepper and marketing of ginger and other spices. The Spice Board pays the cost for obtaining organic certification for the growers and has recognized 12 agencies for this purpose. The Spice Board needs to strengthen its presence in NER and assist the states and growers for improving productivity and marketing the produce. Current investments by the Spice Board in the NER are inadequate (Rs.17 crore proposed to be invested during the Eleventh Plan). Low productivity also affects spice production in NER.

Spice Board to be strengthened and to intensify its activities in NER to promote the production of spices particularly of organic spices. Investments by the Spice Board to be increased commensurate with the proposed intensified programmes in the region. The tripartite agreement between ITC, State Governments and the Spice Board be signed during the 3rd N.E. Business Summit being organized jointly by M/o DONER and ICC, Kolkata at New Delhi from 10-11 April 2007.

APEDA:

Agro potential in North East Role of APEDA

The goal of APEDA is to maximize foreign exchange earnings through increased agro exports; to provide better income to the farmers through higher unit value realization and; to create employment opportunities in rural areas by encouraging value added exports of farm produce. Its vision is to establish India as a reliable supplier of quality agro products at competitive prices.

Agro products from NER are:

- **Major fruits:** banana, citrus, pineapple
- **Thrust fruit:** jackfruit, apple, guava, papaya, mango, plum, peach pear
- **Spices:** ginger, cardamom, pepper and turmeric
- **Medicinal and aromatic plants:** Tea

Major Horticulture Produce of North East:

- Chillies, potato, turmeric, ginger, jackfruit, papaya, pineapple, banana and citrus

Export Potential of Horticulture Produce from North East:

- Processed food and Jackfruit: Assam and Tripura
- Pickles Processed/frozen cubes for food, medicinal and industrial use papaya: Assam and Manipur

- Processed juices, pulp and slices: Meghalaya; Pineapple: Tripura and Assam Arunachal Pradesh
- Fresh and Processed Banana: Arunachal Pradesh and Assam
- Fresh Fruit, processed juices and Squash: Arunachal Pradesh, Assam, Meghalaya and Tripura

APEDA's Strategy for development of horticulture is through:

- Providing assistance for infrastructure facilities-packhouses, cold storages, refrigerated transport units
- It also gives training to the farmers through:
 - o Pre-and post-harvest training programmes.
 - o Quality awareness programmes.
 - o Preparation of pre-and-post harvest manuals in local languages and distribution among the farmers.
- It provides transport assistance for horticulture products from NER.
- It helps in building external market linkages for food processing units in NER with major players in food sectors like Hindustan Lever, Dabur, ITC and other companies.
- It has established model organic farms for Joha rice and sugarcane in Assam, Passion fruit in Manipur and pineapple in Tripura. There have now been handed over to the respective state government.

APEDA's EFFORTS

- It conducted a workshop on setting up a floriculture park near Guwahati.
- It is sponsoring delegations of exporters from NER every year for visiting Aahaar.
- It Sanctioned a integrated packhouse facility for handling perishable products in Mizoram at Rs. 320 lakh.
- It Assisted NERMAC Ltd., and government of Tripura with four refrigerated vans for export of pineapples.
- It is giving training to progressive beekeepers . The training is being given by a German consultant at Jorhat.
- It sanctioned Rs.315 lakh to AIDC, Guwahati for an integrated packhouse for ginger.
- APEDA is signing an MoU with M/s. CONCOR which will operate and manage all infrastructure projects (CPC, walk-in type container etc) in NER.
- Techno economic feasibility study for CPC at Guwahati airport under preparation.
- Walk in type cold stores at Agartala, Aizwal, Imphal and Dimapur airports are being set up. State government/AAI to identify space.
- Kolkata airport: New CPC is under construction.
- Bagdogra airport:CPC sanctioned.

STATUS OF TRIPURA AEZ

Pineapples

- This AEZ entails a total investment of around Rs. 15.66 crore, out of which Rs. 8.11 crore is from state Government agencies with remaining coming from the private sector.
- MoU signed in February 2002.
- Will benefit to more than 400 farmers in the first phase. Incremental exports are expected to be Rs. 32 crore within the next four years.
- Land has been allotted by the State Government and Ministry of Food Processing Industry has sanctioned Rs. 4 crore for the food park.

STATUS ON SIKKIM AEZ**Ginger**

- The project entails an investment of Rs. 24.61 crore out of which Rs. 6.67 crore will come from the Central Government Agencies, Rs. 10.06 crore from State Government agencies and the private sector will put in around Rs. 7.88 crore
- MoU signed in August 2002.
- Around 5,000 farmers will be benefit along with more than 500 persons in processing and value addition.
- 150 farmers have been identified by the State Government for training and extension staff has been selected.

STATUS OF SIKKIM AEZ**Floriculture orchids and cherry pepper**

- The project envisages an investment of Rs. 32.31 crore of which Rs. 8.09 crore from Central Government agencies; Rs. 2.40 crore from State Government agencies and the remaining Rs. 21.82 crore from the private sector.
- MoU signed in August 2002.
- Export of Rs. 53 crore of orchids and cherry pepper is anticipated in the next five years. Department of horticulture, Sikkim has been sanctioned Rs. 300 lakh for integrated packhouse for floriculture projects at Rangpo in the 1st phase and in the 2nd Phase at Melli along with two cold stores by APEDA.
- Project for orchid cymbidium cut Flower by M/s. Siam Floritech, New Delhi with an investment of Rs. 543 lakh. Rs. 253 lakh sought under ASIDE scheme.
- Government has sanctioned Rs. 75 lakh under EDF to M/s. Sikkim Himalayan Orchid. Additional assistance of Rs. 1.22 crore sought under ASIDE scheme.

STATUS OF ASSAM AEZ**Fresh and processed ginger**

- The project entails an investment of Rs. 17.53 crore with Rs. 2.27 crore coming from central Government agencies, Rs. 4.93 crore from State Government agencies and Rs. 10.33 crore from the private sector. APEDA has approved Rs. 315 lakh for common infrastructure facility a packhouse with four collection centres for processing and export of ginger to AIDC Guwahati. Rs. 157 lakh have been released.
- MoU signed in April 2003.

- This project will benefit farmers and would create direct employment for more than 500 persons in processing and value addition sectors.
- Exports of Rs.2.17 Crore have been noted during 2005-06.

RECENT INITIATIVES

- Food testing laboratory and cold storage facility (along with Guwahati, Bagdogra, Dimapur and Aizwal) will be set by APEDA at Imphal.
- Development of floriculture sector in Manipur.
- Visit of APEDA team to Arunachal Pradesh to undertake detailed study regarding effective use of transport subsidy for NE State.
- Clarification regarding extension of inland transport assistance through helicopter.

ISSUES AND AREAS OF CONCERN

- Lack of awareness and infrastructure in all the states resulting in poor response from exporters/farmers to take up new ventures.
- State Governments not responding to communications sent.
- Perceived lack of clear strategies in promotion of organic products by the states. Multiple departments/agencies in the states on the subject (no single window option for coordination with APEDA).
- No takers for Horticulture Transport Assistance Scheme introduced in 2001, despite modifications in the scheme. Need for an effective coordination channel in all the states. A nodal officer may be identified for timely response and action on all matters.
- Proactive approach by the states, more proposals like SGSY special projects may be prepared for holistic development.

Due to lack of awareness and infrastructure in all NE states there is inadequate response to APEDA initiatives. Cold storage facilities either do not exist or those that do are extremely inadequate. Similar is the position with respect to marketing arrangements. Out of APEDA's total exports of Rs.70,000 crore per annum (including Rs.12,000 crore per annum of Basmati rice), NER's share is only Rs.4.8 crore. It was observed that a large proportion of exports from the NE States is through the informal route to neighbouring Bangladesh. This is not reflected in APEDA's export figures. It was also observed that traders buy and transport produce outside the NER before exporting it. As a consequence, there are no subsidy claims under APEDA's Transport Subsidy Scheme and the producers do not benefit. APEDA's primary responsibility is to set up cold storage facilities at five airports - Guwahati, Aizawl, Imphal, Dimapur and Agartala. The need for cold chain facilities in coordination with cargo companies needs to be emphasized.

APEDA is to operationalize four Agriculture Export Zones (AEZs): One in Tripura for pineapples, two in Sikkim for ginger, orchids and cherry pepper and one in Assam for fresh and processed ginger by December 2007. APEDA to submit a report to the

department of commerce on the status of cold storages at the Guwahati, Aizawl, Imphal, Dimapur, Agartala and Bagdogra Airports with time lines for their completion. APEDA should expedite conclusions of negotiation with cargo companies to provide complete cold chains in NER and coordinate consultations with CONCOR and NERAMAC to work out the logistics for a complete cold chain from the field to the point of export. State Governments to designate nodal departments/officers for interaction with APEDA. State Governments to assist Commodity Boards and APEDA in matters relating to land acquisition, organization of farmers, awareness programmes and identification of clusters, etc.

Flood Control and Irrigation

The topographical and geographical location of NER is unique with the hydro-meteorological situation making it one of the highest rainfall zones in the world.

The Brahmaputra and Barak basins, particularly in Assam, have earned notoriety for the awesome hazards of annual floods and erosion that create mayhem every year, bringing misery to the people and shattering the fragile agro-economic base of the region. Assam represents one of the most acutely hazard-prone regions in the country, having a total flood prone area of 3.15 million ha as against a total flood prone area of 3.58 million ha for all the eight states in NER. The flood prone area of the North Eastern States, as assessed by RBA is given in Tble 4.4.

Table 4.4 flood prone areas in NER

S.No.	State	Geographical area (mha)	Flood Prone area (mha) (As assessed by RBA)
1	Arunachal Pradesh	8.37	-
2	Assam	7.85	3.15
3	Manipur	2.24	0.08
4	Meghalaya	2.24	0.02
5	Mizoram	2.11	-
6	Nagaland	1.66	-
7	Sikkim	0.71	-
8	Tripura	1.05	0.33
	Total	26.23	3.58

Floods in Assam are caused by a combination of natural and anthropogenic factors. The unique geo-environmental setting of the basin vis-à-vis the eastern Himalayas, the highly potent monsoon, weak geological formation, active seismicity, accelerated erosion, rapid channel aggradation, massive deforestation, intense land use pressure and high population growth, especially in the floodplain belt and ad hoc temporary flood control measures are some of the dominant factors that cause and/or intensify floods in Assam.

The Central Water Commission (CWC) is a premier Technical Organization of India in the field of water resources that is presently functioning as an attached office of the Ministry of Water Resources, Government of India. The Commission is entrusted with the general responsibilities of initiating, coordinating and furthering, in consultation with State Governments concerned, schemes for control, conservation and utilization of water resources throughout the country, for purposes of flood control, irrigation, navigation, drinking water supply and water power development. It also undertakes investigations, construction and execution of any schemes as required.

The Brahmaputra Board, a statutory body, was set up by the Government of India under the Ministry of Irrigation (now Ministry of Water Resources) through a Central Act in 1980 and it became operational in 1982. It emerged as a regional institution to monitor, develop and implement flood management strategies in the valleys of North East India.

The functions of the Brahmaputra Board include carrying out survey, investigations and preparation of master plans; preparation of Detailed Project Reports for identified schemes in water resource projects and drainage development schemes; construction of multipurpose dams and other works in the North East as approved by the Central Government.

Since its inception in 1980 the Brahmaputra Board has made several recommendations to deal with floods, but has failed to evolve a workable solution for the problems faced by the marginalized population living along the stretch of the *chars* and *chaporis* (sand bars) so frequently affected by floods.

The Brahmaputra Board should play a more active role in carrying out its mandate in the region and taking up flood control schemes in all North Eastern States. It should not confine its activities to any one state as it appears to have done so far. The projects already taken up by the Brahmaputra Board and presently in various stages like surveying, investigation and preparation of master plan, and DPR, have to be expedited.

As per the directions of the Prime Minister, a task force chaired by the Chairman, Central Water Commission, with representatives of the concerned states, central organizations and eminent experts was set up by the Ministry of Water Resources in August 2004 to look into the problems of recurring floods in Assam and the neighbouring states of Bihar, West Bengal and eastern Uttar Pradesh. This Task Force recommended immediate and short-term measures in different states at a cost of Rs. 1915.00 crore. The recommendations of the Task Force are as given in Table 4.5.

Table 4.5: Recommendations of the CWC Task Force

S.No.	State	Measures (Rs. In crore)			
		Immediate	Short-term I	Short-term II	Total
1	Assam	116.10	382.81	350.00	848.91
2	Tripura	9.53	57.22	25.76	92.51
3	Manipur	11.95	38.50	228.76	279.21
4	Meghalaya	0.79	66.50	12.00	79.29
5	Sikkim	10.00	122.98	64.50	197.48
6	Arunachal Pradesh	9.55	137.97	40.04	187.56
7	Mizoram	5.59	40.05	-	45.64
8	Nagaland	-	4.81	-	4.81
9	Brahmaputra Board	-	80.00	100.00	180.00
	Total	163.51	930.84	821.06	1915.41

The pace of implementation of the recommendations of this task force has been very slow. The recommendations for taking up flood management measures as Short-term-I and Short-term-II have not been operationalized as yet. Besides, the implementation of the recommendations made as Immediate measures has also not been satisfactory. The Brahmaputra Board along with the Ministry of Water Resources has to take up immediate and short-term measures in consultation with the States for flood and erosion control.

It is recognized that absolute flood control and protection is not feasible and that flood management measures are aimed at a reasonable degree of protection from flood losses. A judicious combination of structural and non-structural measures aimed at reducing the vulnerability and risks of the people and places to the hazards of flooding and erosion must be implemented in a phased manner. So far the entire emphasis has been on structural measures such as embankments, spurs, dykes, porcupines, bamboo cribs and permeable screens. Of late multi-purpose storage reservoirs seem to have caught the imagination of the planners as a single window solution to moderate flood peaks as well as generating power. Non-structural measures such as flood plain zoning watershed management, soil conservation, afforestation, real-time flood forecasting, reduction of susceptibility to flood hazards and damage and enhancing the coping capability of the affected people to floods are yet to be encouraged and adopted in reality. Catchment treatment plans that include massive afforestation both in upstream highlands and downstream flood plains are needed to stabilize the channels of the tributaries of the rivers and reduce silt load in the flow.

NER can be broadly divided into three geographical regions: the Surama Valley, North Eastern Hill Basin and the Brahmaputra Valley. The hills and the plain regions differ significantly in terms of the availability of water, population density, habitation patterns, climatic conditions, soil quality and forestry and biodiversity.

The availability of large water bodies in the plains of the Surama Valley and the Brahmaputra Valley of Assam makes them suitable for agriculture and plantation crops as well as for promoting *pisiculture* and fisheries. On the other hand, in the hill areas,

the lack of rivers for irrigation and the difficulties of storing water due to hill slopes have compelled farmers to depend mostly on *jhum* cultivation. Besides, in high altitudes, water run-off is rapid and, therefore, the region lacks water for agriculture during the winter season despite having abundance of rainfall in summer. Thus, lack of irrigation facilities and absence of water retention practices severely limit possibilities of multiple cropping resulting in low land productivity. Herein lies the importance of water retention projects in the hills in order to move away from traditional *jhumming* to modern technology based farming such as horticulture and floriculture.

Besides, the variability of rainfall in the North East region is considerably high in space and time making some parts of the region water deficient and affecting peoples' lives in general and agriculture in particular. Therefore, storage, preservation and sustainable utilization of rain, surface and ground water is a must in these water-scarce regions. There is an urgent need to draw up plans to handle situations of wider disparity in rainfall and water availability for agriculture, irrigation and other purposes in these states. Development of ground water, which is in the nascent stage in NER would have to be accelerated.

The Accelerated Irrigation Benefit Programme (AIBP) is a major central programme for assisting states to take up irrigation schemes/projects. In the North Eastern States, most of the schemes are Minor Irrigation (MI) schemes. The scope of AIBP has been extended since 1999-2000 to include surface MI projects in special category states of the North East. However, there are various bottlenecks in the implementation of AIBP in the North Eastern States including:

- Delay in land acquisition.
- Inadequate and late release of funds by the states to the projects;
- Difficult law and order situation in some of the states. Shortage of construction material due to lack of unrestricted road communication.

Under the AIBP only surface irrigation schemes can be taken up and these do not include tapping of ground water. However, there are certain states like Tripura where there is inadequate surface flow and, therefore, these states are unable to access benefits under this scheme.

As per AIBP scheme guidelines, the Surface Minor Irrigation schemes in NER are eligible for assistance provided that individual schemes are benefiting irrigation potential of at least 20 ha and the development cost of these schemes per ha. is less than Rs.1 lakh.

The absorption of funds, under AIBP, by the State Governments of the North Eastern States has been very poor so far. Further, due to a delay in the release of funds by the Ministry of Water Resources, very limited working period is available to the states for implementation of schemes.

The State Governments have to streamline their systems for accessing and optimizing the use of AIBP funds. The North Eastern Council (NEC) would have to

assist these states by providing funding to the states for engaging consultants for preparation of project reports for micro/minor irrigation projects.

The Central Water Commission has to ensure early release of funds for implementation of ongoing projects. In addition, the Planning Commission should examine the pattern of release of installments to the State Governments so that the loss of working period can be avoided.

In view of the difficult conditions in the NER states, the Ministry of Water Resources would have to examine the possibility of modification in the AIBP scheme, like increasing the limit of project cost per ha and providing for maintenance for MI schemes and reducing the area of irrigation potential to 5 ha per scheme.

MOWR should also examine taking up the ground water irrigation scheme under AIBP including construction of check dams, which would be beneficial for states with inadequate surface flow. However, MOWR with the Central Ground Water Board (CGWB) will have to explore the possibility and desirability of exploitation of ground water in NER in view of the possibility of hazardous elements.

After the announcement by the Prime Minister a North East Water Resources Authority (NEWRA) has been envisaged with the objective of providing effective flood control, generating electricity, providing irrigation facilities and developing infrastructure. MOWR has prepared a proposal for NEWRA in line with TVA and DVC in consultation with the states. However, Government of Arunachal Pradesh has certain reservations with regard to its constitution. A consensus amongst the North Eastern States has to be developed on utilizing the hydropower potential of Arunachal Pradesh and the integrated development of the region through the setting up of NEWRA.

Regional cooperation is essential between “downstream” countries like India and Bangladesh with “headwater” countries like China and Bhutan for developing flood management and irrigation projects and getting sufficient flow in the lean season. The Brahmaputra and the Barak rivers being international rivers of immense size, a huge resource base and high hazard potential, only effective cooperation and coordination among the basin countries (China, Bhutan, India and Bangladesh) can assure successful planning, management and utilization of the water resources in this region.

Chapter 5

Industry

This chapter analyses the prevailing situation and future potential for industrial activities in NER. Industrial activities are discussed as manufacturing and non-farm activities in order to distinguish between (i) urban and rural activities and (ii) organized and unorganized industrial activities. Non-farm activities in rural and unorganized sectors should play an important role in increasing incomes of the rural population, particularly during the transition from primary and agricultural activities to organized manufacturing. It is in this phase that untrained agricultural farmers can find employment opportunities in handicraft and handloom production within the textile sector and various food processing rural activities like bee keeping, fishery, piggeries and poultry farming. These are not merely value added activities; they also provide enormous opportunities for on-the-job training and skill formation and innovation. However, for these activities to take off within the rural set up a number of initiatives are necessary.

5.1 THE MANUFACTURING SECTOR

Economic growth is invariably associated with rapid structural change in the economy. One of the main features of the growth process is structural change to increase the relative importance of the manufacturing sector and a relative decline in primary and agricultural production (Kubo et al, 1998). This is a feature witnessed in a number of countries including India (Barua and Bandyopadhyay, 2005). Besides, as over 80 per cent of the population of the region depends on agriculture for livelihood, transfer of labour from agriculture to manufacturing and tertiary activities is a necessity from the viewpoint of improving the living standards of these people and also for enhancing agricultural productivity. This structural shift along the development path is often termed as the structural transformation of an economy. In short, it means a perpetual rise of the share of manufacturing and non-farm outputs in the gross domestic product over time.

Unfortunately, the share of manufacturing in the GDP of NER was only 4.8 per cent in 1993-94 compared to the national average (18 per cent) (Annexure 5.1, Table 5.1A in Annexure 5.1). Further, the share has decreased over time from 1993-94 to 2002-03. The share, however, varies across the States. It ranged from 3 per cent in Nagaland, Arunachal Pradesh, Meghalaya and Tripura to 8 per cent in Assam 1993-94. Thus, the pattern of industrial development of NER has not been in conformity with the standard historical trend even with respect to India. That is, industrialization has failed to take off in the region. This failure to achieve a significant increase in the share of manufacturing in GDP has reflected in the poor growth rates both in GDP and per capita GDP in NER.

5.2 THE PERFORMANCE OF MANUFACTURING: LARGE AND SMALL INDUSTRIES

The growth performance of the manufacturing sector in the three states of Manipur, Tripura and Meghalaya, has been better than the national average (Table 5.2A in Annexure 5.1). However, the growth performance of the manufacturing sector in the remaining states of the region has been poor. In Arunachal Pradesh manufacturing sector has been virtually stagnant. The poor performance of the manufacturing sector seems to be one of the prime causes of the relatively poor performance of GDP growth of the region.

The manufacturing sector can be divided into registered and unregistered sectors. The unregistered sector generally comprises small-scale industries including handicrafts. Assam is by far the largest industrialized state in the region comprising nearly 88 per cent of the total industrial units in the region (Table 5.3A, Annexure 5.1). Nearly 90 per cent of the industrial output of the registered manufacturing sector originates in Assam while Arunachal Pradesh has no registered manufacturing industry.

Another important observation that could be made is that the unregistered sector is relatively evenly distributed across all the states in NER. This means that the states of the NER have certain distinctive strengths and advantages in handicrafts and other small-scale industries. Assam has the largest share in the unorganized sector followed by Manipur. It is evident therefore that the small-scale industries could not play any significant role in the development of NER.

5.2.1 Large Industries

There is very little large-scale manufacturing activity in the region (Table 5.4A). The total number of large factories in the region is merely 1.56 per cent of the total large scale factories in India. Considering industrial employment and capital formation in the region it can be concluded that the large scale manufacturing sector in NER is virtually non-existent. The industries are mainly mining and quarrying, food processing, spinning and weaving, pulp and paper, wine and malt, bidi, cigars and cigarettes, printing, bleaching and dying, wool spinning, wooden products, foot wears, fertilisers and chemicals, insulated wires and cables and drugs and medicines (Table 5.18A in Annexure 5.1). The manufacturing activities are based on locally available resources for which the optimal plant sizes are not very large. Industries requiring large scale production such as petrochemicals, cement, steel and sugar are completely absent despite the fact that the region has the sources of basic raw materials required for the production of such goods. For example, there is abundance of limestone (in Meghalaya and Assam) but there is not a single cement factory in the region. Assam has the largest oil reserves (non-offshore) but the state has no large manufacturing unit of petrochemical products. On the other hand, we also observe some industries like insulated wires and cables coming up in the region although the region has no known reserves of copper.

Assam is the industrial “hub” of the region. It alone has 88 per cent of the factories in the region which provide 86 per cent of the employment and generate 90 per cent of the output in the region. Next to Assam is Tripura in terms of the number of industrial activities. Interestingly, Tripura does not have a single rubber plant despite being the second largest producer of natural rubber in the country.

The main locational factors determining industrial establishments in Assam and Tripura are their relatively large size and higher population density. However, there are also other equally important factors like greater availability of skilled labour and power supply and also the fact that Assam has relatively better transport connectivity. It is the junction point of major road and railway networks linking the other states of the region with the rest of India.

In responding to the need for rapid industrialization of the North Eastern Region, the Government of India (GoI) had introduced the North East Industrial Policy (NEIP), 1997 which offered a slew of fiscal incentives and subsidies to industry for a period of ten years. While NEIP, 1997 was able to attract large investments in cement (Meghalaya and Assam), ferroalloys and steel (Meghalaya) and coal and coke (Assam), it hardly had any impact in the other states. Even small ticket investments, which were mostly for facilities in the last stages of the value chain like only packaging of finished products mainly to benefit from excise duty refunds, were made in Assam and Meghalaya.

The main factors attracting industry into these two states are the is relatively better industrial infrastructure as compared to the other states of the region. Assam's location at the juncture of NER states enables industries to be connected through the major road and railway networks with the rest of India. Locating industries at the junction minimizes distribution costs to other NER states. Meghalaya's large deposits of limestone and coal and till recently the availability of power also attracted investments.

With a view to bringing industrial investments to the other states as well, GOI announced the North East Industrial and Investment Promotion Policy (NEIIPP), 2007, for a period of another ten years, offering even more attractive fiscal incentives and subsidies and now covering the service sector also. This policy came into effect from April, 2007. The main features of this policy are:

- (i) Sikkim included under NEIIPP, 2007 and the "New Industrial Policy and other concessions for the State of Sikkim" announced earlier in December, 2002 discontinued from 1.4.2007.
- (ii) Under NEIIPP, 2007, all new units as well as existing units which go in for substantial expansion, unless otherwise specified and which commence commercial production within the 10 year period from the date of notification of NEIIPP, 2007 will be eligible for incentives for a period of 10 years from the date of commencement of commercial production.
- (iii) The incentives under NEIIPP, 2007 will be available to all industrial units, new as well as existing on their substantial expansion, located anywhere in the North Eastern Region. Consequently, the distinction between "thrust" and "non thrust" industries made in North East Industrial Policy (NEIP, 1997) will be discontinued from 1.4.2007.

- (iv) Under NEIIPP, 2007 incentives on substantial expansion will be given to units effecting “an increase by not less than 25 per cent in the value of fixed capital investment in plant and machinery for the purpose of expansion of capacity/modernization and diversification” as against an increase by 33 ½ per cent which was prescribed in North East Industrial Policy, 1997.
- (v) Under NEIIPP, 2007, 100 percent excise duty exemption will be continued on finished products made in the North Eastern Region, as was available under NEIP, 1997. However, in cases, where the CENVAT paid on the raw materials and intermediate products going into the production of finished products (other than the products which are otherwise exempt or subject to nil rate of duty) is higher than the excise duties payable on the finished products, ways and means to refund such overflow of CENVAT credit will be separately notified by the Ministry of Finance.
- (vi) 100 per cent income tax exemption will continue under NEIIPP, 2007 as was available under NEIP, 1997.
- (vii) Capital investment subsidy will be enhanced from 15 per cent of the investment in plant and machinery to 30 per cent and the limit for automatic approval of subsidy at this rate will be Rs. 1.5 crore per unit as against Rs. 30 lakh as was available under NEIP, 1997. Such subsidy will be applicable to units in the private sector, joint sector, cooperative sector as well as the units set up by the State Governments of the North Eastern Region. For grant of capital investment subsidy higher than Rs. 1.5 crore but upto a maximum of Rs.30 crore, there will be an Empowered Committee. Proposals which are eligible for a subsidy higher than Rs. 30 crore, will be placed by Department of Industrial Policy & Promotion before the Union Cabinet for its approval.
- (viii) Interest subsidy will be made available @ 3 per cent on working capital loan under NEIIPP, 2007 as was available under NEIP, 1997.
- (ix) Under NEIIPP, 2007, new industrial units as well as the existing units on their substantial expansion will be eligible for reimbursement of 100 per cent insurance premium under the Comprehensive Insurance Scheme.
- (x) The industries which will not be eligible for benefit under NEIIPP, 2007 will include tobacco and tobacco products, paan masala, plastic carry bags of less than 20 microns and goods produced by refineries.
- (xi) To provide incentives to the service sector including hotels and resorts, bio-technology and power plants upto 10 MW capacity.
- (xii) In order to ensure genuine industrial activities in the North Eastern Region, benefits under NEIIPP, 2007 will not be admissible to goods

in respect of which only peripheral activities like preservation during storage, cleaning operations, packing, re-packing, labelling or re-labelling, sorting, alteration of retail sale price etc. take place.

- (xiii) To continue North Eastern Development Finance Corporation Ltd. (NEDFi) as the nodal agency for disbursal of subsidies under NEIIPP, 2007.

The provisions of NEIIPP, 2007 would provide requisite incentives as well as an enabling environment to speed up the industrialization of NER.

However, it would be imperative for the states to improve their industrial infrastructure if any large investments are to be attracted. Notwithstanding all this, the manufacturing sector in the North Eastern region is looking up. A GAIL (India) Ltd. led consortium has started work on the Assam Gas Cracker Project, an integrated Petrochemical Complex. The project is expected to give rise to substantial investments in downstream plastic processing industries. It has been estimated that about 500 plastic processing industries can come up in the North Eastern region when this project becomes operational (scheduled by 2012).

Moreover, with GOI re-dedicating itself to improving NER's infrastructure, business climate and international linkages like the Kaladan Multi Modal Transit Transport Project, connecting NER with Sittwe Port in Myanmar, promises large dividends for economic development of the region in the next few decades.

While international trade would be inevitable for the economic growth of a region, which shares 98 per cent of its boundaries with four other countries, greater integration among the states of the region would have many advantages for industrialization (see box 5.1). A major constraint to this kind of cooperation among states is the absence of a good transport network connecting the states and production centres within a state to a large collection centre, which is necessary to guarantee an adequate and reliable supply of raw materials to industry.

It is often assumed that inducements in the nature of subsidies and incentives alone help industries overcome constraints that are otherwise a hinderance in their setting up. The jury is still out on whether offering unsustainable tax sops and fiscal incentives really promote industrial growth. Market failures and the lack of adequate infrastructure are probably bigger constraints to the vertical integration of industry. Without a proper industrialization strategy for the region and some inter-governmental planning, the market cannot play its role in facilitating integration, which crucially depends on a well-developed transport network, free mobility of goods and services across the state and security of life and property.

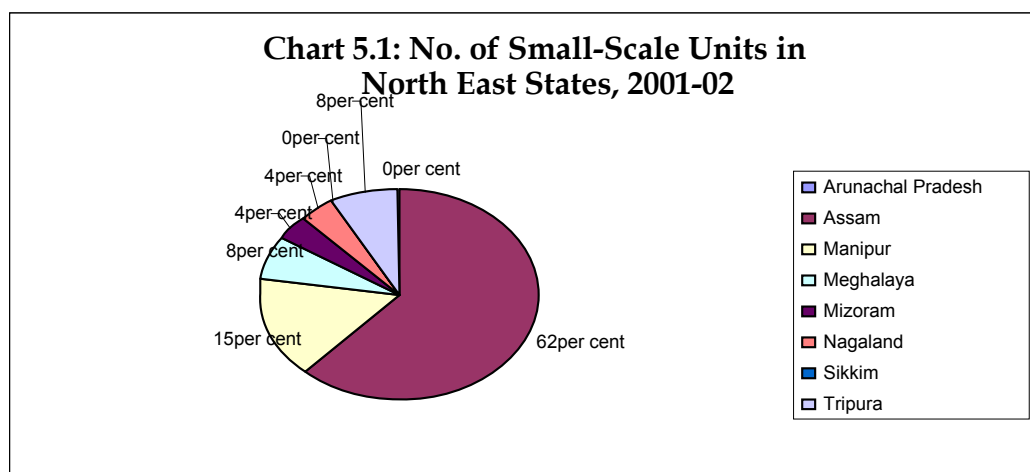
Box 5.1**Constraints in the Hills**

The hill states of the region are not well-integrated with the industrial clusters. They face problems of small markets as well as a lack of adequate supply of labour, even as large quantities of raw material for the agro-processing industry are grown here. Land is also a problem since most land in the hills is under community ownership. Nevertheless, it is possible to link the hill regions within the industrial network through a vertically integrated process. The hill states produce a wide variety of fruits and vegetables and various forest goods which provide scope for vertical specialization. In the fruit-processing industry, activities such as extraction of juice or slicing of the fruit (say, pineapple) can be done close to the fruit-growing areas, and further processing, bottling and packaging can be carried out in an industrial hub, which would significantly reduce transportation costs. Another example in Tripura which is one of the largest producers of natural rubber in the country. It is possible to undertake initial processing in Tripura to reduce transportation costs, while the conversion of rubber into various products could be undertaken at places close to the distribution network. The lack of an efficient transport network to connect the production point to the large collection centre in the markets is the key problem. But more importantly, market failures and lack of sufficient inducement to invest are perhaps bigger stumbling blocks for vertical specialisation to take place. Without a proper industrialization strategy for the region and some inter-governmental planning, the market by itself will not produce the desired result. Given a well-developed transport network, free mobility of goods and services across the state and guarantees for proper security of life and property of the people, the market will be able to create an environment for industrialization.

5.2.2 Small Industries

The relatively high labour-intensity of Small and Medium Enterprises (SMEs) gives it a crucial role in reducing poverty and unemployment. For the Indian economy this sector has contributed significantly to the growth of GDP, export and employment generation. During the last five decades it has acquired a prominent place in the socio-economic development of the country.

However, only 3 per cent of the small-scale units in the country (Table 5.5A in Annexure 5.1) are located in the northeast of which, more than 60 per cent are in Assam (Chart 5.1). Sikkim is the state with the least number of SME units. The growth of SMEs has been by far the highest in Nagaland (28 per cent) followed by Meghalaya (8 per cent), Assam (6 per cent) and Mizoram (6 per cent) (Table 5.6A in Annexure 5.1).



Source: *Third Census*, SME Sector

Distinguishing the SME sector into SMEs, ancillaries and SSSBEs, it can be seen that the ancillary¹ units take the largest share followed by the SMEs and SSSBEs² (Table 5.8A in Annexure 5.1). Nagaland has the highest share of ancillary units while most of the SME units are located in Assam. The presence of SSSBEs is very marginal in NER—less than 3 per cent of the total. The presence of total SME in Arunachal Pradesh and Sikkim is negligible. As far as the gross output is concerned, it is just 1.88 per cent of the total gross output of India from this sector. The contribution of Assam (Table 5.9A in Annexure 5.1) is the highest in NER. The employment in the registered SME factory sector is also very negligible in NER. It is just 3.11 per cent of the total registered SME employment in India. Assam constitutes more than half of the NER's share in the registered SME sector employment. After Assam the per cent of SME employment is more in Manipur, which is 0.55 per cent of the total SME sector employment in India. It can be observed that (Table 5.10A in Annexure 5.1) the investment in the SME sector in NER is also very marginal. As per the Third Census, fixed investment in NER was less than 2 per cent of the national level. As per the Third Census, around 2 per cent of the total sick units in the country existed in the NER. Assam had the highest share of sick units, followed by Manipur and Tripura (Table 5.11A in Annexure 5.1).

5.2.2.1 Small scale sector: Rural and urban division

A sector-wise analysis of SME units shows that the SME sector is, in general (except in the case of Nagaland), dominated by manufacturing based units. Tripura is the only state having a strong presence in services, which is more than 50 per cent of the

¹ An industrial undertaking which is engaged in the manufacture or production of parts, components, sub-assemblies, tooling or intermediates, or the rendering of services and the undertaking supplies or renders or proposes to supply or render not less than 50 per cent of its production or services and whose investment in fixed assets in plant and machinery does not exceed Rs 10 million.

² Service/ business enterprises with investment up to Rs 500,000 in fixed assets, excluding land and building, are called Small Scale Service/ Business Enterprises (SSSBEs).

state's total number of SME units. Repair and maintenance related units are very marginal in NER except for Arunachal Pradesh and Assam. The rural-urban break up (Table 5.8A in Annexure 5.1) reveals that a relatively larger number of the SME manufacturing units are located in the rural areas of Assam, Nagaland, Manipur, Meghalaya and Sikkim. However, it is the opposite in the case of Tripura, Arunachal Pradesh and Mizoram. The general trend for India suggests that SME units are found mostly in the rural areas. However, in case of the repair and maintenance sector it can be observed that most of these activities are located in the urban areas. The same is also the case for the services sector although in case of Mizoram and Assam service activities are mainly located in the rural areas.

5.2.2.2 Exports from the NER: SME Sector

NER has 108 registered and 2,252 un-registered SME exporting units, which is 4.38 per cent of the total exporting units in India (Table 5.12A in Annexure 5.1). Most of the exporting SME units are operating in Assam followed by Nagaland. But the number of registered SME exporting units is more in Sikkim. In value terms, the value of exports in the SME sector from NER is negligible, at less than 1 per cent of the total export value (Table 5.13A in Annexure 5.1). One important point to be noted is that 4.38 per cent of the exporting units contribute only 0.23 per cent in export value in the country. The major export items are tea, bamboo products, silk and fabric products, handicraft and handloom products.

5.3 KHADI AND VILLAGE INDUSTRIES IN NORTH EASTERN REGION

Khadi and Village Industries have the unique capacity to generate large employment opportunities in rural areas at a low capital cost and have therefore occupied an important place in the national economy. These industries have developed local initiatives, cooperation and spirit of self-reliance in the economy and at the same time helped in utilizing the available man-power in rural areas for processing locally available raw materials by adoption of simple techniques.

Khadi and Village Industries are being implemented in NER including Sikkim, especially under the Rural Employment Generation Programme (REGP) for village industries. REGP is the flagship programme of KVIC/Ministry of MSME which was implemented in NER. This scheme was implemented by KVIC through its state offices established in state capitals as well as through the Khadi and Village Industries Boards which are State Government. Agencies located in each state capital.

Since, banks are not spread out in the villages and banks are the sanctioning authority for REGP projects, the scheme could not penetrate in the hilly villages during the early stages. However, the State Khadi & V.I. Boards played a vital role in its implementation and so the progress of REGP has picked up.

As per directives of the Government of India, 10 per cent of the total budget has been earmarked to this region by KVIC out of REGP grant every year. Under

Backward & Forward Linkages, a special package with higher rate of funds has been provided every year to NER.

As per the 2001 Census, the rural population of NER to the country's rural population was 4.41 per cent. The percentage of Scheduled Caste population in NER to the country's total Scheduled Caste population was 1.60 per cent and that of Scheduled Tribes was 11.89 per cent. Similarly, the percentage of population of rural women in NER to the country's total rural women population was 4.41 per cent. In view of this, emphasis was given to the generating of rural employment through REGP scheme NER for SCs/STs and women entrepreneurs in particular.

Progress of Rural Employment Generation Programme (REGP) in NER:

1. Target and Achievement during Tenth Five Year Plan period.

Details	No. of Projects	Margin Maney (Rs. Crores)	Employment (Lakh Persons)
Target	16179	161.72	3.03
Achievement	12879	138.10	2.47
Achievement %	80%	85%	82%

2. Target & Achievement during 2006-07 :

Details	No. of Projects	Margin Money (Rs. Crore)	Employment (Lakh Persons)
Target	3476	40.12	0.65
Achievement	3438	39.11	0.65
Achievement %	99%	97%	100%

3. Comparative statement of performance upto February during 2006-07 and 2007-08.

Details	2006-07	2007-08	Percentage increase
No. of Projects	2285	3348	47%
M.M. (Rs. Crores)	24.87	37.88	52%
Employment (Lakh Persons)	0.40	0.57	43%

4. Target & Achievement 2007-08 (April'07 to February'08)

Details	Target for 2007-08	Achievement (April to Jan.'08)	Achievement %
No. of Projects	4100	3348	82%
M.M. (Rs. Crores)	46.83	37.88	81%

Employment (Lakh Persons)	0.78	0.57	73%
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5. SOCIAL CATEGORY PROJECTS ACHIEVEMENT % DURING 2007-08 (upto February'08).

Category	Target %	Achievement %
Scheduled Caste	15	9.62
Scheduled Tribes	7.5	41.22
Other Backward Classed	27	17.77
Physically Handicapped	3	0.21
Ex-Servicemen	1	0.24
Minorities	5	10.45
General	41.5	20.49
TOTAL	100	100
Women	30% of total target	24.52

Projections for the Eleventh Five Year Plan in N.E. Region :

Year	Employment (in lakh persons)	Margin Money (Rs.in crores)	Backward/Forward Linkage (7.5% of Margin Money) (Rs. in crores)
2007-08	0.63	47.28	3.55
2008-09	0.68	51.00	3.83
2009-10	0.74	55.01	4.13
2010-11	0.80	59.40	4.46
2011-12	0.86	64.16	4.81
TOTAL	3.71	276.85	20.78

Looking at the success of the REGP programme, the Ministry of MSME, Government of India is merging the PMRY scheme with KVICS REGP scheme and forming a new scheme "Prime Minister's Employment Generation Programme" which may be launched during May-June, 2008 in the country including in NER. Under the new PMEGP scheme also special emphasis will be given for to NER.

Initiatives taken:

- KVIC has signed an MoU with Nehru Yuva Kendra Sanghathan (NYKS) for organizing awareness camps involving rural youth for the REGP scheme for generation of self-employment.
- Another MoU was has been signed with Ministry of Women & Child Development for propagating REGP to Self-Help Groups on women in rural areas in the country including in NER.

- Convergence established with State/SC/ST/Minority Finance and Development Corporations to involve SC/ST/minority youths in the REGP scheme.

Areas for Capacity Building :

1. Setting up of Multi-Disciplinary Training Centres (MDTCs).
2. Setting up of Khadi Gramodyog Bhavans/Bhandars to sell KVI products.
3. Capacity building for existing KVI institutions in the region.
4. Mass-publicity support for promoting the KVIC scheme and marketing of KVI products.

5.4 THE WAY FORWARD FOR INDUSTRIES

Industry will play an important role in absorbing surplus labour from land, once farming moves to cash-crop cultivation. For this, the region will develop industry based on the resources available in the region. The focus of the industrial policy in the region needs to shift from supply-related inducements to industry (tax incentives and so on) to creating preconditions that will give rise to market forces, which will automatically encourage industrial activity.

Box 5.2

Tea Industry in NER

The Tea industry plays an important role in the economic activity in NER. The tea industry in NER is the world's largest tea growing region having 16 per cent shares, and is the largest producer and exporter of tea in India (with a share of 55 per cent) (NEC Data Bank). During the last five years the average annual production of tea in NER was around 840 million kg (Table 5.14A in annexure 5.1). The region exports a significant amount of tea though over the years exports have been declining. But there is huge scope for the growth of the tea processing industry in the region. So steps should be taken to encourage tea processing industry in the region.

5.4.1 Synchronization of state industrial policies

Realizing this vision will call for synchronization of state industrial policies, taking into account conditions and systems in other states.³ A common industrial policy framework for the region at this juncture would be premature, for, NER has not yet evolved into a meaningful economic and administrative entity. However, it is important that state policies are formulated so that they are efficient and optimal from the point of view of the region as a whole. For example, it would not be efficient for every state to have a cement industry if the optimal size dictates only one plant in the region. While location of a plant and the promotion of vertical or horizontal specialization within an industry are ideally determined by market forces, in the absence of functioning markets,

³ The current state industrial policies and common industrial policy for NER lack a synchronization in policies among all the states (see Annexure 5.3).

some government intervention will be needed through a synchronization of policies among states.

Further, policy needs to shift its focus from providing incentives (such as easy credit facilities, tax holidays, export promotion parks and capital investment subsidies) to easing infrastructural and fundamental bottlenecks to production and marketing. State-specific policies have failed to have a significant effect on industry because they are oriented towards increasing supply in the region. The real problem is the lack of “effective demand” from the people, which enables industry to produce on a profitable scale. Therefore, incentives have not given rise to an upsurge in entrepreneurial activities or inflows of private capita, as demand for the product within the state is insufficient to reap minimum profits. Moreover, marketing networks are almost non-existent.

5.4.2 A cluster-based approach to industry

Manufacturing enjoys economies of scale, so a large home market is necessary for the growth of manufacturing activities in a region. The clustering effect is crucial for manufacturing as this gives rise to various forms of “externalities”. For example, each processing unit of an industry provides a market for another industry; the cluster formation also encourages the creation of a pool of skilled labour. In fact, the absence of such clusters is a prime cause of high labour costs in the region. Development of existing skills in the traditional craft pockets in rural areas and marketing linkages will provide not only employment opportunities but there will also be socio-economic development. Development of handlooms, handicrafts and sericulture with a cluster approach is appropriate for the region.

However, there is a lot of scope for the development of industries based on local raw materials. This will call for a very well-developed transport network in the region. The poor inter and intra-state connectivity has worked against the formation of such industrial clusters. Other factors that need to be taken care of are ensuring an adequate supply of power, a skilled labour force and risk-bearing loanable funds.

Promoting Vertical Integration of Industrial Production Between the Hills and Plains

Vertically integrating the hill states with the industrial hub in the plains would promote a degree of industrialization in these states. The wide variety of fruits, vegetables and forest goods produced by the hill states offers excellent potential for vertical integration with processing units located in the plains. For example, fruit processing industry could be set up based on fruit (say, pineapples) produced in large quantities in Nagaland and Meghalaya. The initial raw material processing, such as juice extraction or slicing would be more economically located near the source, since initial processing reduces bulk and consequently transport costs. The next stages of processing such as bottling, packaging and marketing, which are highly labour-intensive could be located in the industrial ‘hub.’

Similarly, the initial stages of rubber processing could be done in Tripura (the second largest producer of rubber in the country), while the manufacture of various rubber products could be located near the distribution network.

5.4.3 Creating an investment climate

Market development will require Government intervention. Ensuring free mobility of goods and services in the region requires speedy connectivity (by road, train, air and inland waterways) within as well as between states and efficient modes of communication including internet and broadband connectivity and an efficient mobile network.

An important issue in the northeast relates to the security of life and property. Lack of proper law-enforcing mechanisms within a state may cause market failures or in other words prevent the emergence of markets. This calls for a joint-security management approach developed by all the states together, rather than the present disjointed-security systems.

Box 5.3

Land as a Constraining Factor for Industrialization

The large-scale community ownership of land in many hill states has hampered the emergence of a market-based economy in these areas. In Meghalaya, for example, the government owns a miniscule 4 per cent of the land (Sreerajan, 2001); in Manipur, private lands are better developed than those owned by the government (Sachdeva, 2005). Thus, while industrial policy resolutions in these states propose leasing lands for setting up industry, the non-availability of individually owned land remains a major hurdle to industrialization. The draft report of the steering committee on the North Eastern Region for the Eleventh Five Year Plan (2008-12) also recognizes the need for the simplification of land laws. The Eleventh plan document also recognizes that, due to absence of well defined land ownership in the region the banks are not able to provide industrial loans⁴.

The states have followed different paths in dealing with this issue depending on the constitutional rights accorded to their respective communities: In Meghalaya, for example, the state can take over land for developmental purposes if it is “tribal interest.” State governments have to clearly spell out the different ways in which entrepreneurs and enterprises can safely and legally acquire land for industrial activity.

⁴ Institutional finance, especially bank loans play a crucial role in the development of industry. The role of institutional finance becomes more prominent as the amount of fund that is being sanctioned by the NEC is very low (see 2006-08 Plan outlay for NER, Eleventh Plan Document).

The development of markets in the region will also call for greater transparencies in resource-sharing policies including land. Restrictive land laws and common property rights in many states in the region have deterred investors from the region (See Box 5.3).⁵ Other pre-requisites for the emergence of markets are enhancement of banking and other financial intermediaries in the states, and the provision of adequate good quality power to industries.

5.4.4 Industry based on local resources: adding value within the region

As mentioned earlier, the geo-political structure of the region suggests that industrial development be based on locally available resources such as natural gas and petrochemicals, bamboo, natural rubber, tea and horticultural products. A people-centric strategy for development would be to add as much value to these resources within the region, rather than marketing the raw material to the rest of the country. This would create more jobs and enhance income-generation, in addition to promoting industrialization within the region.



A planned exploitation of agriculture and allied sectors such as tea, bamboo, sericulture, jute diversified products, floriculture and herbal and medicinal plants could provide the necessary boost to manufacturing and self-employment (see Boxe 5.2 and 5.4). For example, the tea industry plays an important role in the economic activities NER. NER is the world's largest tea-growing region (with a 16 per cent share), and the largest producer and exporter of tea in India (with a share of 55 per cent) (NEC Databank). Over the years, the value of tea exports has been declining; the focus could be to process tea within the region.

⁵ The state industrial policy resolutions of various states are silent on the issues of land.

Natural gas is one of the main resources available in the NER. For rapid industrialization and generation of employment, it is necessary to step up exploration by the Oil and Natural Gas Corporation (ONGC) and GAIL (India) Ltd. At the same time, a long-term policy is required for ensuring supply of an assured quantity of gas at a concessional rate so that available gas can be used in meaningful manner.

It would be prudent to focus on those products that would reduce dependence on imports from outside NER and provide competitive advantage in exports out of NER. It would be very helpful for the small manufacturers to grow with the help of captive markets. Steps should be taken to provide necessary supplies to large captive markets like the Army. Small manufacturers can supply necessary manufacturing, food and beverage products to the huge demand due to the presence of a strong army base in the region.

5.4.5 Tapping the employment potential of small-scale industry

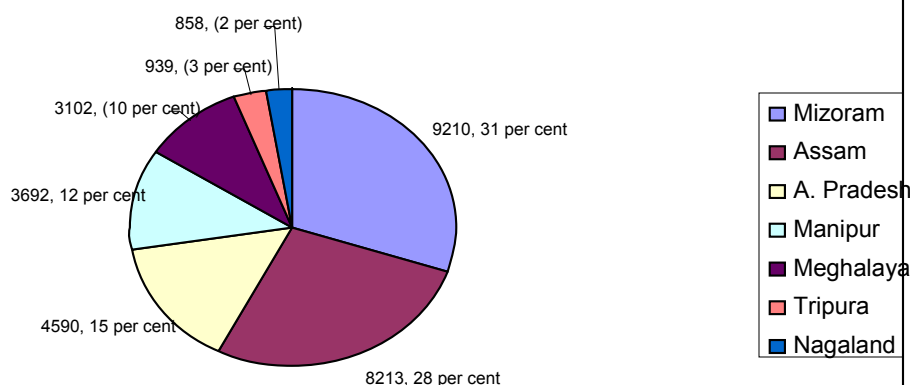
Small industries dominate the industrial scenario in NER and special efforts need to be made for their expansion and growth. In the short run, the productivity of existing small industries can be raised by improving physical infrastructure and efficiency of the units. The distinctive advantages that the region has in handloom, handicraft and sericulture should be exploited and these areas promoted as they provide jobs for a sizeable proportion of the labour force and have tremendous export potential (see Box 5.4).

Box 5.4

Bamboo-Based Industrial Activity

Bamboo is an integral part of the socio-cultural and economic traditions of the region. It play an important role in shaping the economies of the NE by providing huge employment opportunities. Around 50 per cent of the country's bamboo resources are in the NE states, 14 per cent of which are in Mizoram where bamboo forests cover almost half the geographical area of the state (Chart 5.2; Table 5.18A in Annexure 5.1). Assam has the most bamboo stock followed by Manipur, Mizoram and Arunachal Pradesh.

Chart 5.2: Bamboo Growing Area (sq. km.)



There is plenty of scope for bamboo production, as the current level of output is far less than national demand, estimated at 28 million tons.

The productivity of bamboo could profitably be increased, In addition to its traditional applications in building and reconstruction material, cottage and tiny industries, as food and medicinal products, and handicrafts the demand for bamboo has increased in new-generation products like wood substitutes, for activated carbon and charcoal, and in the production of energy through gasifiers. At the moment production is hampered by the absence of scientific methods for propagation and cultivation, lack of post-harvest treatment and technology for product development, the lack of trained manpower and infrastructure for large-scale harvesting in the event of gregarious flowering.

Some of these drawbacks will be addressed through the National Mission on Bamboo Application (NMBA) which has started work on developing appropriate tools for primary and secondary processing, converting bamboo and bamboo waste into activated carbon, and other measures including setting up finance for bamboo development.

Sources: Jayant Madhab (2003); National Bamboo Mission, Ministry of Agriculture, Government of India; *the Bamboo Policy of Mizoram, 2002*.

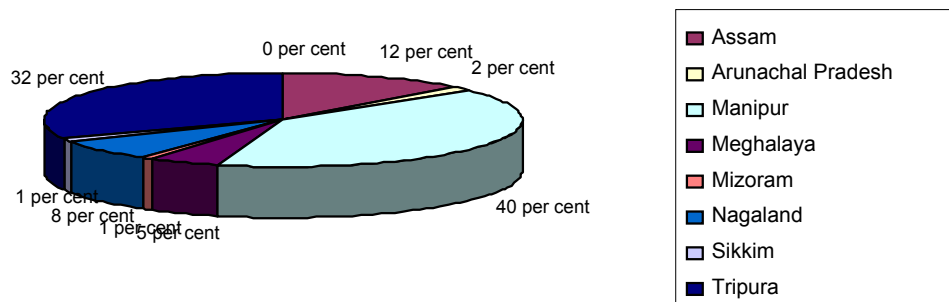
Efforts should be made to improve the export competitiveness of the exporting units in NER through technology upgradation and the use of skilled labour. This will raise the value of SME exports from the region (currently only 0.23 per cent, even though the number of exporting units constitutes around 4.38 per cent of the total in the country).

Box 5.5

Handicrafts and Handlooms

Handicrafts is the most important industrial sector in NER; the region has approximately 20 per cent of the total number of handicraft units in the country and in value terms, it accounts for around 80 per cent of the total value of handicrafts being produced in India and provides employment to 22 per cent of the total number of artisans in the country (see Table 5.15A, Annexure 5.1). Manipur has the most craft units followed by Tripura (Chart 5.3) but in terms of value, Nagaland ranks the highest, followed by Assam.

Chart 5.3: Handicrafts in the NER as Per Handloom Census, 1995-96



Source: NEC Data Bank, according to the Census of Handicrafts conducted by NCAER during 1995-96.

5.5 THE WAY FORWARD

It must be realized that it is not an easy task but a very difficult one to be able to draw up a “common industrialization strategy” for NER since all the states function in complete isolation. But there is no need for a “common industrialization policy” since well-functioning markets shall do this job. But for well-functioning markets certain minimum preconditions need to be satisfied for which governmental intervention is absolutely necessary. It is not the job of a modern government to dictate where to locate an industry; this should be left to the markets. The governments must ensure the preconditions mentioned below for well-developed market forces to operate which will eventually give rise to the evolution of industries.

- Connectivity is the key. A special focus on robust telecom and IT infrastructure bandwidth via broadband in towns and wireless is necessary. Community Information Centres and support structure for their sustenance are also central in developing a mission mode approach to producing more local content and applications. Policy initiatives can drive hubs for back office and call centre applications in the region.
- Ensuring safety and security in all the states for which “joint security management” rather than the present “disjointed security systems” in NER is

of utmost necessity. All the states must work together to work out such a joint security arrangement.

- Fast and speedy connectivity (by road, train or by other possible means) within as well as between the states and efficient modes of communication are necessary before chalking out any industrialization strategy for the region.
- The policies and procedures of different states in the region need to be streamlined and harmonized to enable manufacturing units to access raw materials from all the *starts* in the region to allow them economies of scale.
- The above two conditions would satisfy free mobility of goods and services between the states which is necessary for deciding any industrial activity by an entrepreneur.
- Enhancement of banking and other financial intermediaries in the states.
- Transparencies in resource sharing policies including land.
- Adequate supply of power for industries.
- Exemption of import duty for bamboo related technology.

5.6 THE LONG-TERM VISION

In the long term, the strategy for industrial development will address issues related to labour shortages, skill development and the development of physical infrastructure⁶ (to increase connectivity and promote communication) which are major impediments to industrial growth. Drawing a “common industrialization strategy” for NER will be a challenging task, but it is important that governments, both central and state, evolve a blueprint for a common market and common administrative and economic unit for the region.

⁶ The Eleventh Plan Approach Paper also recognizes the crucial role of physical infrastructure in industrial development in India. This is especially true for NER, which lags behind the rest of the country in terms of physical infrastructure.

Chapter 6

Services: Banking, Tourism and ITES

The emergence of a strong services sector is essential for a region's economic progress and prosperity. Expansion of a services sector along with growth in manufacturing will have to provide opportunities for the surplus labour in agriculture. The concomitant development of services is important to expand employment opportunities available to people displaced from land-based activities. The low land-intensity of services makes them ideal thrust areas for growth, especially in the hill states of the northeast region where land is at a premium. Already some of the hill states have very successfully expanded their tourism activities, and in the process generated employment and income both directly and indirectly. Finally, the modernization of agriculture proposed for NER depends on the emergence of a number of related services.

The services sector has doubled in real terms in its contribution to GDP in almost every state (Tables 6.1A and 6.2A in Annexure 6.1), the main areas of growth being trade, hotels and restaurants, and public administration, with real estate gaining importance in Assam, Nagaland and Meghalaya in recent years.¹ The growth in trade, hotels and restaurants and real estate indicates growing private sector activity.

The fastest growing sector has been public administration (except for Nagaland and Meghalaya), reflecting the common malaise that, outside agriculture, the government has become the main employer in these states. Central grants maintained public expenditure in the states have had to expand to absorb a large number of that have the educated population. Over the years, poor infrastructure facilities coupled with insurgency have restricted the growth of other service sectors. Security considerations have also limited the extent to which expenditure on public administration can be reduced. The banking sector is virtually non-existent in most of these states, although some activity has emerged in Arunachal Pradesh, Assam, Meghalaya and Sikkim.

6.1 BANKING

It is fairly well known that NER has been deficient in the use of banking capital. One indicator of this is the credit-deposit ratio (CD) i.e., the ratio of credit extended by the banks to the deposits generated in any region. A low ratio indicates the lack of offtake of credit either because of lack of demand (due to low level of commercial activity) or low credit worthiness of borrowers (see Table 6.4A in Annexure 6.1A).

As is clear from table 6.4A, CD has been consistently low in all NER states as compared to the all-India average. Furthermore, two states Assam and Tripura do not show any improvement in this ratio since the mid-1990s. Thus, while for Assam the CD

¹ 'Other services' have also emerged as important, but no breakdown for this category is available. This sector actually includes a number of services like education, (covered in another chapter), but it would be instructive to see the change in the relative importance of these components over time.

ratio had been stagnant at about 33 per cent since 1996-98, Tripura witnessed a decline from 34 per cent in 1998-99 to 29 per cent in 2004-05. Second, the impact of insurgency in Manipur is obvious. In 1996-98 it had the highest CD ratio of all the NE states at around 59 per cent but this declined to 41 per cent in 2004-05. Third, Meghalaya, Sikkim and Mizoram show significant increases between 1999-2000 and 2004-05 with the ratio almost tripling for Meghalaya and doubling for Sikkim and Mizoram. For Sikkim, in particular, the increased banking activity is quite visible.²

It would be instructive to look at the types of economic activities that generate demand for bank credit and other services. We have already seen in the chapter on agriculture that the agricultural sector is largely based on subsistence farming and little cash farming. This must have contributed to the low spread of credit and other banking activities among the farmers. This is also seen in Table 6.5A (Annexure 6.1) which provides data on outstanding loans to farmers on a per capita basis. It can be seen from this table that outstanding advances to farmers (direct finance and total finance) is very small compared to the all-India average.³

The chapter on industrial sector also shows the lack of serious industrial activity in NE states. This is reflected in Table 6.6A (Annexure 6.1) which shows the loans outstanding to small scale industries, industrial estates and transport operators on a per capita basis.

In conclusion, it is clear that the low spread of banking services is directly related to the subsistence nature of the agricultural economy and the lack of other industrial economic activity. There is a need for more micro-finance organizations disbursing small loans.⁴ Some beginning in this area seems to have been made with loans given by NEDFI to some NGOs which operate in the remote hill areas. The hill areas are also too far from the NEDFI office in Guwahati and the cost of servicing these loans is high both for NEDFI and for the loanee. Hence, particularly in the remote hill areas, the role of intermediaries like Non-Banking Financial Institutions (NBFI) or NGOs in getting small loans to farmers and small-scale industries is crucial.⁵

² While in 2000-01 there were just a few public sector banks, recent field trips showed that almost all private banks have increased their presence significantly. In both Meghalaya and Sikkim field trips by the research team show significant tourist activity which usually drives banking networks.

³ The chapter on NE in the Eleventh Plan document recommends that the problem of agricultural credit be overcome by revitalizing the cooperative credit structure and availing of NABARD credit.

⁴ Field trips by the research team to NE also indicated that most farmers seem to need small loans (of Rs. 50,000 to 60,000) which scheduled banks are not able to administer given the cost of administering such loans. Discussion with the refinance bank for the region, NEDFI, also confirmed this as the officials indicated that small loans (for industrial or horticultural purposes) were too expensive for NEDFI to administer

⁵ The land tenure system prevalent in most of the states in the region (except non-scheduled areas) restricting alienation of land from a tribal to non-tribal together with absence of personal ownership rights and commensurate land records makes it difficult for the banks to lend in the region. Important suggestions have been given by committees set up to analyse issues related to credit supply in NE. Suggestions include using social capital as alternative collateral and devising alternatives to land documents for extending small credits.

Box 6.1**Emerging Areas: A Case Study of the Music Industry in Nagaland**

The Government of Nagaland declared 2004-05 the Year of Youth Empowerment, and constituted a special task force for music in August, 2004. This team drew on the experiences of members, drawn from diverse professional backgrounds sharing a common passion for music, to suggest and formulate policies conducive for the promotion of music as an industry by the state government. A special cell was set up in the Department of Youth Resources and Sports, Nagaland in August 2006, to carry forward the agenda to integrate and promote activities that would spur the growth of interdependent professional skills that operate within, and on the fringes of the music industry.

A Centre of Excellence for Music and Performing Arts will be set up within the Science College Campus, *Jotsoma*, with impressive infrastructure including seminar halls for multi-disciplinary activities; a recording studio for audio-visual productions; an auditorium, library, archives and data bank so scholars can access information.

Capacity-building of Naga musicians has taken the form of exposure to performances in Delhi and other parts of the country, and training in vocal and instrumental music for the academic session 2008-08 at various institutes in Delhi, Bangalore and Kolkata (with the help of private individuals). The annual Hornbill Festival in Kohima has become an important event for local and foreign talent-spotting. The Roots Festival was held across NER in May 2008 which promoted intra-state interactions.

This has spurred the emergence of professional support activities, with recording houses such as the Aries Music and Sound Foundation, Dimapur; Studio 29, Dimapur; Clef Ensemble, Kohima and Highland Dawn Media, Kohima for audio visual productions, becoming very active in the state. The Dream Café, Kohima has become a hub for young people and promotes interactions with musicians and professionals from all walks of life. Music is poised to become a major industry in the state, growing from its current annual generation of Rs. 3.5 crore to Rs. 300 crore by 2020.

Source: From the Music Task Force for Nagaland

The Approach to the Eleventh Plan recommends that to stimulate private investment we must remove from its path policy-induced constraints and excessive transaction costs. Increasing the number of successful entrepreneurs requires the creation of a competitive environment which encourages new entrants and provides enough finance for efficient enterprises to expand. Competition also requires policies to curb restrictive practices, particularly those that deter entry, e.g., pre-emptive acquisition of property. To achieve such an environment it is imperative that the reforms agenda be pursued with vigour. Licensing controls and discretionary approvals have been greatly reduced but there are many remnants of the control regime that need drastic overhaul. Quantitative controls, where they exist, should give way to fiscal measures and increased reliance on competitive markets subject to appropriate, transparent and effective regulations. The burden of multiple inspections by government agencies must be removed and tax regimes rationalized. A major component of the Eleventh Plan must be to design policies that spur private sector investment while encouraging competition by guarding against monopolistic practices. Continued commitment to the developmental and social roles of banking is important to ensure that the benefits are widespread.

One of India's strengths is that it has a financial system comprising commercial and cooperative banks, various types of non-bank financing organizations, capital market institutions and insurance and pension funds. Indian skills are evident in financial markets and institutions all over the world and the Indian financial system has evolved to meet many specific needs, improving considerably over the years with an expansion in depth and variety. The approach that has been followed thus far has included an increased role for private sector banks and foreign financial institutions in the domestic market, and a carefully calibrated opening of the economy to international capital markets. This has generally succeeded in ensuring systemic stability while also allowing financial development. As we gain confidence in systemic stability and as matters become clearer on oil prices, and the effect of these on the international economy, we can be more ambitious in encouraging new developments. It should be noted, however, that the degree of fiscal consolidation that is usually considered safe for capital account convertibility would, on current projections of revenues and non-plan expenditures, place constraints on providing budgetary support required for faster and more inclusive growth in the Eleventh Plan (Chapter 6).

Access to financial resources enables the poor to exploit investment opportunities, reduces their vulnerability to shocks and promotes economic growth. But lack of credit at reasonable rates is a persistent problem, in large part reflecting the collapse of the cooperative credit system. The failure of the organized credit system in extending credit has led to excessive dependence on informal sources usually at exorbitant interest rates. This is at the root of farmer distress reflected in excessive indebtedness. There are of course some positive recent developments, for example, the acceptance of the Vaidyanathan Committee report on cooperatives by the Government and the (by the Government success of commercial banks to almost double the flow of agricultural credit after 2003. Nonetheless, problems still loom large. Implementation of the Vaidyanathan Committee report has been slow because of the reluctance of states to cede control over cooperatives. Problems of the long-term credit structure have hardly been addressed and the large increase in commercial bank credit does not appear to have significantly

improved access in either poorly banked regions or for small/marginal farmers and tenants. One of the important tasks of the Eleventh Plan would be to review the position regarding the availability of timely and adequate credit (both term loan and working capital) to small and medium enterprises from commercial banks and other financial institutions and suggesting measures to eliminate the shortcomings that are noticed.

6.2 RECOMMENDATIONS OF THE REPORT OF THE COMMITTEE ON FINANCIAL SECTOR PLAN FOR NER⁶

The Committee stressed the need to improve infrastructure, create a favourable investment climate, focus on a few sectors of strategic advantage for development and encourage a favourable credit culture. It recommended that banks could draw up plans to provide at least 50 new households per branch each month for the next four years with a deposit account (with an option to the household of opening a “no frills” account). Taking into account the balances maintained in such accounts over a period of time, the bank may offer small overdrafts or General Credit Cards (GCC) against such accounts and other products in terms of the extant Reserve Bank guidelines so that a banking habit is actively promoted in the region. If the branch has opened an account for a Self-Help Group (SHG), then the number of members of the SHG will be the number of households covered. Banks could introduce a pilot project in the rural and semi-urban areas closest to the bank branches by customizing simple deposit and credit products to suit the needs of households in these villages and then improve upon the product and extend it to other areas. A model application form including a form for attesting Know Your Customer (KYC) through simplified procedures has been suggested by the Committee. It had stressed the importance of adequate groundwork and creation of awareness amongst the clientele as also the bank staff and intermediaries before embarking on a large-scale financial inclusion programme. Currently, 50 per cent of the credit outstanding under GCC upto Rs. 25,000 will be eligible to be treated as indirect agriculture financing. In order to encourage the flow of credit through GCC, the Committee recommended that 100 per cent of advance under GCC at rural and semi-urban branches in the NER may be treated as a priority sector. The Committee drew attention to RBI guidelines for offering a one-time settlement up to Rs. 25,000 to existing borrowers with overdue loans, to enable them to get a fresh chance to access bank credit and maintain a good credit record in the future.

The Committee suggested an approach based on enhancing the capacities of the existing branches of commercial banks, Regional Rural Banks (RRBs) and cooperative banks having more recourse to bank-SHG linkage programmes, a business correspondent/business facilitator model as also extensive use of IT-based solutions which facilitate offsite banking. Taking the minimum branch needs into account, it identified 19 centres for specified banks to open branches by March 2008. The position may be reviewed in the State-Level Bankers’ Committee (SLBC) to be held in the first quarter of 2008-08 to decide on further centres for branch expansion. The Reserve Bank’s current branch licensing policy encourages banks to open branches in under-banked rural

⁶ Report of the Committee on Financial Sector Plan for North Eastern Region, RBI, July 2006.

and semi-urban areas especially in under-banked districts. Taking into account the large number of such areas in the region, the Committee recommended that, for NER, RBI may consider an automatic approval scheme for any bank desirous of opening branches in such areas in the region. For other areas in NER also, applications may be considered favourably. New branch proposals from RRBs can be cleared expeditiously by the Empowered Committee (EC) in terms of the instructions issued by the Reserve Bank on June 13, 2006. The RBI issued guidelines in January 2006 enabling banks to use registered societies, cooperatives, section 25 companies, trusts or post offices as business correspondents. In NER, considering the time, distance and cost for a customer to reach a bank branch, especially in remote areas, the Committee believed that banks can use this model effectively for increasing their outreach. Ideally, for NER, local community-based organizations (CBOs) like Village Development Boards (VDBs), Anchal Samitis, may be used as business correspondents. The state-level task forces have identified some organizations that could be used as business correspondents. Banks could also identify well-respected local persons like a schoolteacher, postman, primary health worker or retired official to act as business facilitators or relationship managers. These facilitators can handle all aspects of sourcing clients, marketing the bank's products and helping recovery but cannot undertake any cash transactions. While banks may pursue the well-proven intelligent interpretation of traditional concepts of credit assessment, credit utilization, asset verification, inspection, security etc., there is a need to upscale operations through SHGs, especially for providing working capital and investment credit. NABARD may review its guidelines for this purpose if required and also allow refinance for banks financing micro-finance institutions (MFIs) in NER. A part of the micro-finance equity fund of NABARD may be specifically earmarked and utilized for NER. The Committee suggested a performance measurement matrix based on parameters reflecting the efforts for promoting financial inclusion. This matrix may be used for performance budgeting, performance appraisal and performance based incentives as suggested.

Given the improving mobile connectivity in the region, the Committee strongly recommended the use of IT-based solutions for increasing outreach. Apart from greater use of Automated Teller Machines (ATMs) including mobile ATMs, debit and credit cards, there are various models using smart cards and mobile payments for carrying out banking transactions from non-branch locations. The Committee recommended that the Development and Research in Banking Technology (DRBT) may prepare a pilot project for testing in a select area in NER by December 2006 and based on experience, this project can be rolled out in other places. Individual banks operating in the region may prepare an IT plan, branch-wise for each state with an emphasis on the actual IT-based services that the bank will provide. The number of customers who will be assisted should be estimated to measure the effort that the bank will invest on customer interfaces, staff and consumer education and incentives for the customer and the branch staff for promoting the use of IT in banking. Action in this regard may be initiated by all the banks in NER immediately and completed within six months. For RRBs, assistance may be provided by DRBT. Reserve Bank, Guwahati may allocate specific responsibility to different branches (including RRB branches) for providing need based foreign exchange facilities at these centres and arrange for special training for the branch staff.

Banks may link up with insurance companies for providing insurance products suitable to NER. Banks would also be able to market insurance linked deposit and credit products as part of their efforts for financial inclusion. The Committee recommended that the Insurance Regulatory and Development Authority (IRDA) may advise insurers to customize products that could be publicised as a part of the campaign for financial inclusion. Similarly, the Securities and Exchange Board of India (SEBI) should enable increasing reach of depository participants and mutual funds in the region. Increasing access to capital markets would also gradually result in equity funding for projects in the region.

NER typically relies on cash as the predominant means of payment. The topography of the region and other logistics pose unique challenges to currency management. Of the 169 currency chests in the region, 89 are small with limited storage capacities. The existing network of chests in the region may be strengthened and upgraded, where required. The Reserve Bank may consider and allow RRBs to have currency chests on a special footing having regard to the fact that in many areas they are the only banks. Many of the RRBs may not be able to defray the security cost fully. The State Governments could meet such cost as in most cases the currency chests are used predominantly for government transactions. RBI may also consider defraying a part of the cost of installation of chests for RRBs. Central security forces may be deployed to facilitate smoother inter-state movement of treasure. SLBC convenor banks may take necessary steps to provide adequate staff at branches in the region so that the mechanism for handling cash transactions can be strengthened. Where some subvention is felt necessary, proposals may be sent by SLBC convenor banks to the Reserve Bank. The Reserve Bank may encourage banks to forward innovative proposals for more efficient cash management in the region.

The Committee noted that transfer of funds within the region and from/to the region takes an inordinately long time. The payment system's dependence on currency is partly due to the delay and cost involved in transfer of funds through the banking system in the region. The following recommendations were, therefore, made for enhancing the efficiency of the payment system in the region:

- SBI may initiate steps for computerization of the remaining eight non-computerised clearing houses in the North East to be completed within six months.
- Opening of clearing houses in the five districts without such a facility and having five or more banks.
- Bharat Sanchar Nigam Limited (BSNL), the largest service provider of connectivity in the region, may take steps for improving of connectivity for leapfrogging to e-banking.
- The Reserve Bank should follow up with SBI and other banks in the region for introduction of Automated Clearing House (ACH) before end of March 2008 with the settlement at Guwahati.
- The Reserve Bank to pursue with SBI the introduction of Electronic Clearing

Service (ECS) facility within six months in all the clearing houses in state capitals to enable government payments and receipts through ECS.

- All bank branches in NER with commercial transactions should be Real Time Gross Settlement System (RTGS) enabled within six months.
- A plan for implementing smart card/mobile based solutions on an open standard platform to be accessed by all banks may be prepared by DRBT and a pilot project in a suitable area tested within six months.
- Major banks operating in the region may identify a dedicated branch for encouraging entrepreneurs who want to make investments in agro-processing, agro-based industries and the SME sector. Such branches may be equipped with staff and systems for helping the entrepreneurs in preparation of project reports and identifying their capacity building needs.
- The Small Industries Development Bank of India (SIDBI) in association with major banks in the region may set up a dedicated SME debt fund to provide co-finance of up to 25 per cent of project cost to first time entrepreneurs, where a bank is willing to provide the required funds. The fund may have experts from the region and outside as members.
- SIDBI and North Eastern Development Financial Institution (NEDFi) may prepare bankable projects in the SME sector and disseminate the same as these could be used by potential entrepreneurs. Such schemes should also cover the handloom and handicraft sectors.
- SIDBI, NEDFi and NABARD, as also major banks may sponsor Rural Development and Self-Employment Training Institutes (RUDSETIs) for training entrepreneurs in SME including industry related small business services sector.
- SIDBI and NEDFi may identify marketing outlets for various industries in the region and provide assistance for display and marketing of products.
- SIDBI/NEDFi/NABARD may sponsor Rural Industries Programmes (RIPs) in areas having identified clusters and in areas having concentration of other on-farm economic activities for training of weavers, artisans, small entrepreneurs etc.
- Credit Information Bureau of India Limited (CIBIL) may disseminate credit record of borrowers in NER among financial institutions in the region to enable the banks to have ready access to the credit history of borrowers in the region. Banks/financial institutions may supply new borrowers' records expeditiously to CIBIL so that the data base may be kept updated.
- NABARD may identify and support strategic investments in horticulture, bamboo processing/products, fisheries, poultry, animal husbandry, honey production/marketing and organic farming.
- SIDBI may open counselling wings in all state capitals for first time entrepreneurs.

- Role of NEDFi may be reviewed with a view to repositioning it as a development financial institution for long-term finance and equity support for industry and the services sector.

6.3 TOURISM

For newly emerging states, and hill states in particular, the inflow of expenditure from an expansion in tourism services is an important driver of economic development. Tourism has tremendous income and employment ripple effects that spread far beyond the actual tourism activity itself, so that benefits disburse quite naturally to owners of small shops, peripheral services, and even to construction, banking and handicrafts. In other words, tourism-related services are naturally employment-intensive. If tourism's contribution is increased to 10 per cent of GDP in India, it can create 26 million new jobs. According to World Travel and Tourism Council (WTTC), an investment of Rs.10 lakh can generate 47.5 jobs as against 12.6 in manufacturing.

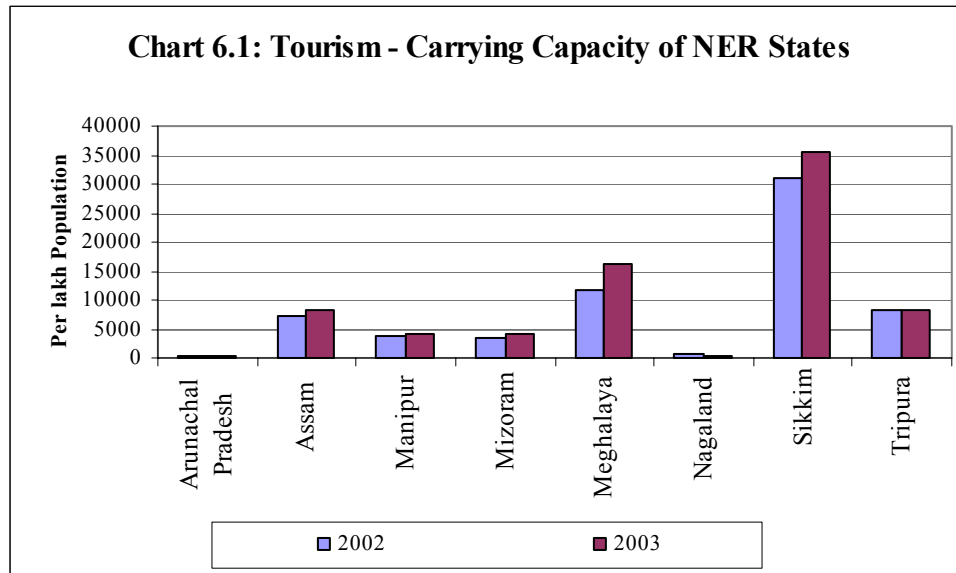
The employment effects of tourism can be quite extensive (Table 6.7A in Annexure 6.1 lists the likely direct employment effects as hotels and restaurants expand their operations). The impact on local employment and involvement of local communities with growth of ancilliary livelihoods should make tourism a prime and over-arching activity for NER states.



Tourism depends on several factors: marketing of the state as a tourist destination particularly to national and international operators who largely determine a tourist circuit; the availability of hotel rooms to attract tourists of all income classes; well-organized tourism circuits and good transport infrastructure, peaceful law and order situation and administrative restrictions.

The region received only 35 lakh domestic tourists and 37,000 foreign tourists in 2005 displaying very poor footfall. Assam, Meghalaya, Sikkim and Tripura received the most tourist arrivals, with the number of tourists to Assam being greater than all the

other states taken together. However, in terms of the number of tourist arrivals in relation to the population of the state, Sikkim is far ahead of the others (see Table 6.9A, Annexure 6.1). The number of tourists per capita is a good measure of the carrying capacity of a state in that any state can only accommodate a limited number of tourists (see Chart 6.1).⁷



Source: *Tourism Statistics*, Department of Tourism, Government of India, 2002-

03

However, what is even more important is the type of tourism envisaged by the states themselves. Field visits by the research team indicated that most of the states are not looking at conventional tourists.⁸ Sikkim, given the low carrying capacity of the state with a population today of just over 6.5 lakh (assuming population growth rate of 3.5 per cent since 2001) is emphasizing adventure tourism on its rivers. Mizoram recognizes the importance of outside tour operators in bringing in tourists and is trying to work out joint ventures between its local tour operators and bigger agencies outside NER. Hence, any attempt to develop tourism must carefully identify the kind of tourist activity a state wants to encourage.

The potential of the region has been repeated often, especially its great variety. The niches that the North East can offer range from attractions in tribal lifestyle, heritage, tea garden, golf, monasteries at the one end and the more commonly offered eco-tourism, adventure and wild life on the other. It is also being increasingly recognized that the

⁷ Field visits by the research team also indicated that Sikkim is far ahead of the other states in terms of the infrastructure and preparedness for tourists. This is probably due to the lack of any history of insurgency in the state.

⁸ In Nagaland, for example, there seems to be an interest in eco-tourism and model villages are being developed which are also horticultural centres. In addition, the infrastructure provision is to a certain extent decentralized as tourism is also being put under the Communitization programme of the state.

people from the North East are exceptionally well-endowed in terms of personal and social characteristics for being employed in the hospitality sector. The range of opportunities that the region possesses, point to a need for specialization and development of core competencies to attract small niche tourist groups. One size fits all solutions are not desirable.

One would do well to remember that there is an information and image deficit of the region. This inhibiting factor is often at variance with ground realities over huge areas of the region which are peaceful. For example, the Ministry of DONER had undertaken a media campaigns. Such campaigns should have a high quality of message content and need to be sustained over a long period, especially when they are trying to negate the misconceptions of many years. There is need for a more nuanced presentation of the destinations. Policy shifts and investment in infrastructure have flowing in the region since the early 1990s. The overall results will be visible after a few years. Hence, in the near future, niche areas for attracting committed groups should be the strategy. The fragile eco-system of the region, carrying capacity and sensitivities of the local populations are critical factors that do not sit well with a mass low-end tourist invasion. Examples of Goa, Manali and Pushkar come in mind as does Andaman Islands. While efforts to relax the Restricted and Protected Area Permits for foreign tourists are on and State Governments have been articulating these demands as well, a practical approach would be to work around these restrictions. It may still be some time till the restrictions are fully removed. ILP is likely to continue in Arunachal Pradesh, Nagaland and Mizoram.

Investment in transport infrastructure has received a boost since the turn of the new millennium. Its impact on footfall of tourists will certainly follow. Investments in road, railways and airports are being made in the public sector. Airline are a services critical input for attracting tourists from other states of India as well as from neighbouring countries. Rail links are inadequate except in Assam and road journeys in the absence of a link through Bangladesh can be extremely tenuous. Even though the rail links are presently very inadequate in the region, Indian Railway Catering and Tourism Corporation Ltd. (IRCTC) is operating rail tourism packages in several circuits in Assam. More innovative circuits can be developed for rail tourism based on the expansion plan of the Railways especially in southern NER such as in Tripura and Barak valley in Assam. To wait for demand to pick up or to enhance the supply of air services in anticipation of demand is a perennial debate. Hence, the Government will have to continue with the policy regime that will offer incentives and enforce directives so that adequate levels of air services are maintained. A combination of short haul aircrafts, helicopter services and chartered services can be promoted. Development of airports will have to be time bound. A programme for development of airports on the lines of the Special Accelerated Road Development Programme for the North East can be considered.

While marketing of the states is crucial, what is even more critical is marketing of the region as tour operators normally operate on tourist sectors which do not necessarily correspond to geographical state boundaries. Thus, it is important to look at the region as a whole, offering tourist packages that cut across state boundaries. For this,

coordination would be needed among states in terms of inter-state movements, hotel linkages and so on, which could be facilitated by a federated body of state representatives which would work in conjunction with tour operators.



Kyllang Rock (Meghalaya)



Ujjayanta Place (Tripura)



Sagol Kangjei (Polo, Manipur)



Ani-Lhamu dance (Losar festival) AP

Investment in the tourism sector is being promoted through the North East Industrial and Investment Promotion Policy (NEIIPP), 2007 which offers an extensive bouquet of incentives and exemptions to hotels (2 star and above) and manpower development. It is an extremely welcome step that manpower development in the sector is also covered under the incentives. The incentives on investment are, however, on plant and machinery only which does not make the NEIIPP, 2007 particularly attractive to investors in budget category hotels. However, these are early days of the policy which may need some tweaking later on to make it appropriate for the hospitality sector.

Novel methods for creating accretions in accommodation have been started by IL&FS (a private company) in collaboration with State Governments and private investors. Their strategies have shown positive outcomes in most areas with the Taj Group entering in Agartala and Guwahati. To get over the hesitations of private investors owing to a poor image of the region, mid-sized hospitality chains can be encouraged to run properties owned by State Tourism Corporations through well-structured long-term management contracts. The ideal model would be a public partnership with private

operators who would run the hotels on a long-lease basis.⁹ This would also get around the restrictions on land use and sale in most hill states. Since land in good locations is a critical input, the states will have to play a major role, especially where the ownership of land is with a community or with families. This is a common inhibiting factor in the region for any physical development initiative. Apart from shortage of budget hotels, unintelligent taxation regimes in different states with differing magnitude, multiplicity, complexity of transport and luxury taxes render private investments difficult in the tourism sector. The states have limited capacity for project development preparation of quality project reports which hinder their capacity to obtain funds from the Central Ministry. There is also poor maintenance of tourism assets and lack of community mobilization. In NER the exotic and colourful lifestyles of the various tribal groups are an important tourist attraction in itself. Mobilization of the community to welcome tourists for rural tourism is yet to pick up in the region.

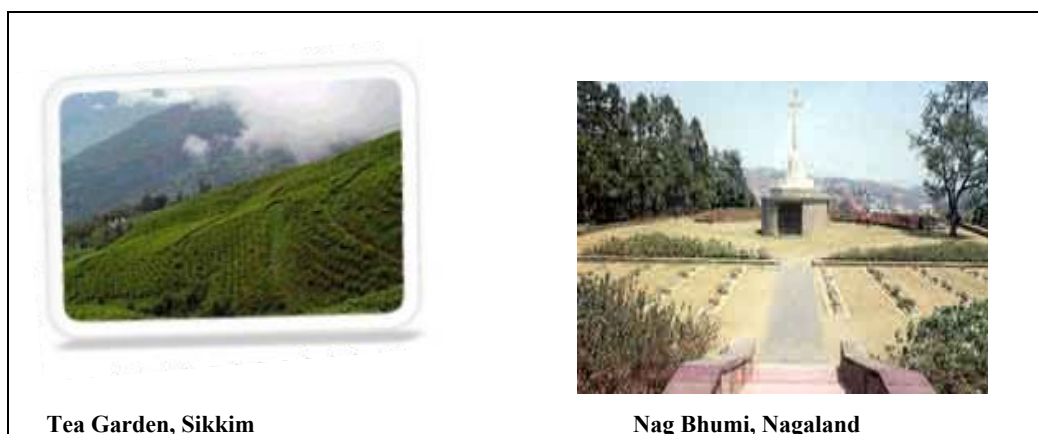
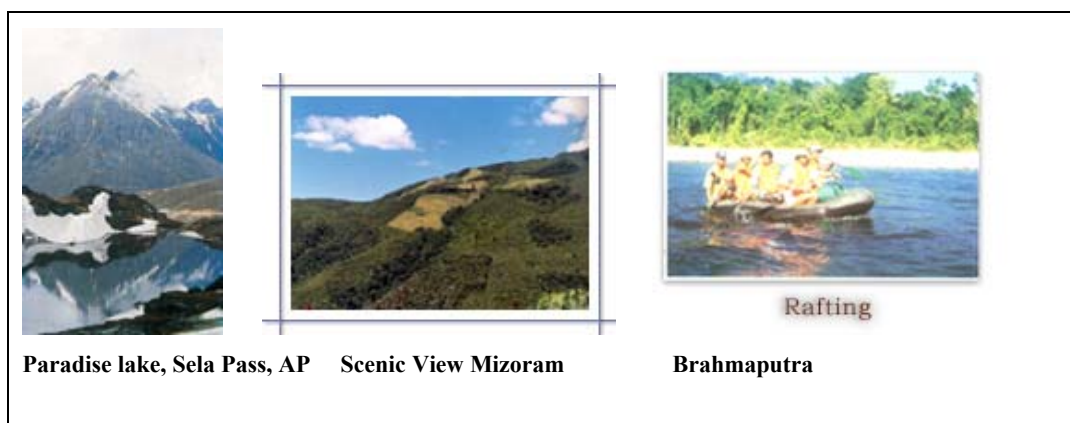
Most of the states (with the possible exception of Sikkim, Meghalaya and Assam) are not geared for conventional tourism in terms of available infrastructure of hotels and guest houses (Tables 6.11A and 6.12A in Annexure 6.1 which show that tourist accommodation in most NER states is far lower than the national level).¹⁰ This was also evident from field trips to these states.¹¹ In many states (with the possible exceptions of Sikkim and Assam) the state may have to take the lead in setting up hotels, as high fixed costs deter private investors.

Tourism in NER will also depend on the available transport infrastructure. While this is considered in detail in the chapter on infrastructure, tourism development would call for a strong emphasis on intra-state linkages. The states of NER are linked to each other, both by air and rail, almost exclusively through Guwahati, and this constraint to tourist circuit and planning of transport infrastructure will need to be addressed in the tourism strategy. Making Guwahati the airport hub is a pre-eminent requirement for promoting intra-region connectivity.

⁹ This method was followed in the setting up of Kohima's main hotel, Hotel Japfu, around 15 years ago. It provides the best accommodation in Kohima even today.

¹⁰ The Fourth Sectoral Summit at Gangtok on 27-28 April 2007 suggested that the shortage of rooms be addressed through the development of *dharamshalas*, one-room accommodation, low-cost, budget hotels and youth hostels along rivers and near cemeteries.

¹¹ Thus, for example, even Kohima, the capital of Nagaland has only 300 rooms across all levels, the quality of most being unacceptable for tourists. This has hampered the location of major international or national industrial fairs and seminars in the state.



The ILP system is still in operation in practice in states like Nagaland, Mizoram, Manipur and Arunachal Pradesh. While it is not strictly enforced in Mizoram and Nagaland, formal relaxation is even more important. ILP is strictly administered in Arunachal Pradesh, but the procedure for acquiring a permit in Guwahati is cumbersome even for domestic tourists. In addition, some states are still subject to RAP and PAP clearances on security grounds. The restrictive nature of these permits makes it difficult to attract foreign tourists. If security restrictions are necessary, the process of acquisition of these permits will have to be eased.

Governments will have a continuing engagement with policy formulation, creation of physical infrastructure in connectivity and possibly in accommodation (till the private sector feels confident of investing on a large scale), creation of manpower (tour operators, interpreters, transporters, guides, hospitality sector manpower). Presently, the Ministry of Tourism can offer 100 per cent funding to candidates sponsored by the NE States for tourism and hospitality related training programmes. The Ministry of DONER is also engaged in similar training activity which has elicited a very encouraging response from the youth. The Ministry of DONER and NEC are also actively engaged with State Governments at the highest levels for developing the tourism sector in the region.

The region needs to brand itself. The by-line “Paradise Unexplored” is being promoted as a NE Tourism brand. It already has an instant recall in the public mind. The focus of the Ministry of Tourism has been on the, “Alert Independent Traveller”.

This is an appropriate strategy for promoting niche tourism in the region. The states will have to come on to a common platform to see the benefits of a high quality common brand for the region with inter-state circuits. Under the North Eastern Council, the North East Tourism Forum has been created with a challenging objective of preparing the Tourism Master Plan for the region.

The Approach to the Eleventh Plan says that tourism has been an important source of dynamism in recent years and is poised for even more rapid growth. It is difficult to estimate the full contribution of tourism to the economy since much of it shows up indirectly in sectors such as hotels and restaurants, transport and handicrafts but there is general agreement that the sector has great potential and needs to be encouraged.¹²

A suggested starting point for tourism to take off in the region could be to identify a few core circuits, nurture them for few years and gradually branch into more exotic products and destinations. The profile of the tourists who are presently visiting the region (howsoever inconsequential in a number) needs to be charted. A robust data base of offerings is also not available presently though there are many scattered initiatives. Tourism is serious business which needs a strong backbone of data base management and feedback system.

Some important tourist circuits in North East India

- | | |
|-------|--|
| (i) | Guwahati-Tezpur-Bhalukpong-Bomdilla-Tawang-Tezpur-Guwahati |
| (ii) | Guwahati-Shillong-Cherrapunji-Guwahati |
| (iii) | Imphal-Thoubal-Chandel-Tengnoupal-Moreh-Imphal |
| (iv) | Guwahati-Manas-Pasighat-Miao-Mokokchung-Kohima-Kaziranga-Guwahati |
| (v) | Guwahati-Namdafa-Dibrugarh-Mon-Mokokchung-Touphema-Kohima-Guwahati |
| (vi) | Bagdogra-Titam-Telling-Yuksom-Tashiling-Ravongla-Gangtok-Rumtek-Bagdogra |

North East India is the starting point of South East Asia. There are natural and cultural affinities between the region and South East Asia, China, Bangladesh and Myanmar. 96 per cent of the region is bound by international borders. India's "Look East Policy" holds potential for the region to break out of its landlocked borders and engage in cultural, economic and tourism related interactions with its international neighbours. Despite India's uneven bilateral dynamics with its eastern neighbours, travel restrictions need to be eased gradually whether by land or air. Sikkim can be developed as a hub linking other Buddhist destinations in Nepal, Bhutan, the Tibet Autonomous Region and Tawang area of Arunachal Pradesh to a pan-regional Buddhist circuit. The existing Indo-Myanmar link through Moreh already draws a fair number of domestic tourists. Improved

¹² The study group of the parliamentary standing committee on transport and tourism in its 47th report recommended taking the step to beautify lighthouses for attracting tourists. It has, therefore, been planned to develop a few lighthouses as heritage lighthouses for attracting tourists. A token provision of Rs.1 crore has been made for the project (shipping and inland water transport for the Eleventh Five Year Plan)

infrastructure and promotion could make it a thriving tourist destination with possibility of Indian tourists being permitted to travel upto Mandalay in Myanmar. A request by the Government of Manipur for a bus service between Imphal and Mandalay is under discussion between India and Myanmar. This needs to be followed up. Travel between Tripura, Bangladesh and Barak valley can also open up hitherto unexplored circuits.

The frequency of flights between Guwahati and Bangkok needs to be increased and flights between Guwahati and Dhaka, Bhutan, Nepal and Kunming need to be introduced. At least one more airport in NER, perhaps at Agartala to cover the southern part of NER has to be developed as an international airport.

To fully benefit from natural, cultural, business, leisure, spiritual, religious, ecological, adventure and medical tourism, the Eleventh Plan should focus on the creation of adequate tourism infrastructure like modernization and expansion of airports, increase in accommodation facilities under star and budget category hotels and improved road connectivity to tourist destinations. At the same time it is important to ensure the upkeep and preservation of historical sites, lakes and rivers all of which attract tourists. Measures need to be devised to enhance India's competitiveness as a tourist destination by *inter alia* reducing luxury tax and sales tax on ATF and by providing hassle-free inter-state movement of passenger vehicles. Hotel management and catering education programmes need to be widened and hitherto undeveloped archaeological sites opened up for development and maintenance through public-private partnerships. It is also vital to ensure that tourists, particularly women, feel safe in the country.

Attracting tourists is an intensely competitive task and has to be looked at in a very businesslike manner. Merely repeating that NER has a plethora of attractions can only generate complacency. Attractions have to be converted into footfalls and footfalls should give equitable and sustainable returns to the community and the environment. It is necessary that the states in the region recognize that their engagement with the sector has to be at a much higher level of priority and involvement than it is at the present.

6.4 RECOMMENDATIONS OF SHUKLA COMMISSION ON BANKING AND TOURISM¹³

Various committees on NER development have recommended the development of the tourism and banking sectors in these states. The Shukla Committee, which was constituted in 1998, came out with its recommendations for the promotion of the tourism and banking sectors in NER.

Regarding the development of tourism, the committee recommended the establishment of the Northeast Tourist Development Corporation (NDTC). It also further recommended that the new NTDC with NEC and the tourist department of the respective states should work out plans for the development of tourist sites and related infrastructure in the region. The committee emphasized the need for an international airport in Guwahati. It also suggested that steps should be taken to attract foreign tourism through

¹³ The Shukla committee Report, 1998.

special international packages in consultation with neighbouring countries like Bangladesh, Bhutan, Nepal, Myanmar and Thailand.

In order to attract more tourists, there is a need to simplify and relax the Restricted Area Permit (RAP) regime for some special areas. Provisions should be made to issue inner line permits at all major tourist offices, railheads, airports and state entry gates along with national highways. Low budget tours should be promoted for trekkers, campers and young people. The Committee recommended special holiday railway concession during festival seasons. Permission should be given to use chartered flights for NE package tours. Special steps should be taken to attract tourists through advertisements by tourist offices, travel agencies and airlines.

Regarding banking sector development in the north east, the committee recommended improving the credit-deposit (CD) ratio and to considering industrial finance as a part of priority sector lending. The Committee suggested cross subsidization of the interest rates and reintroduction of capital investment subsidy in the region. The government, RBI and all all-India financial institutes should provide adequate funds to enable the newly established North Eastern Development Financial Corporation to perform its role effectively in the region. The State Governments should put maximum effort to create an investor friendly environment to attract more private capital.

6.5 RECOMMENDATIONS OF THE STATE DEVELOPMENT REPORTS OF NER ON TOURISM AND BANKING¹⁴

Most of the state development reports of NE states (Assam, Tripura, Sikkim and Manipur) recognize tourism as an important sector of the NER economy, and the need to develop it for greater income generation. More emphasis on sustainable eco-tourism, adventure tourism, village tourism and rural tourism would bring in high-value tourism. All the states understand the importance of government and private sector participation in the development of the sector in their respective states. Assam gives importance to the involvement of local people in the development of tourism and rural tourism in particular. The role of NGOs in the development of rural tourism has been highlighted in Sikkim. The *Assam Development Report* recommended providing fiscal incentives to private entrepreneurs for marketing of potential tourist places. All NE states lay emphasis on the improvement of tourism-related infrastructure and relaxation of the permit system in the region. The *Sikkim State Development Report* recommends opening up the Nathu La pass to boost tourism in the region. Assam and Tripura give importance to improving the security scenario of the region to attract more tourists. Most of the states lay emphasis on the formulation of policies for the promotion of environmentally sustainable tourism in the region.

Regarding development of the banking sector, almost all states consider the low CD ratio a matter of concern. So steps should be taken to attract more deposits: low-interest rate credit should be provided for the priority sector to improve the CD ratio of the region. In order to attract more deposits, the *Tripura State Development Report*

¹⁴ Based on Assam, Tripura, Sikkim and Manipur State Development Reports.

recommends initiating lucrative schemes in the state. The state development reports also recommend introducing e-banking and tele-banking in the region.

6.6 THE WAY FORWARD

The vision for this sector will take off from the recommendations of earlier committees that have worked on development strategies for NER (see Annexures 6.2 and 6.3). There is no doubt that easing Restricted Area Permits and Inner Line Permits will greatly improve tourist flows to the region. Domestic tourism is a function not just of air connectivity but also road and rail links, and the development of the latter two are particularly important due to cost factors and their larger carrying capacity. In contrast, the plan to develop Guwahati as an international airport has failed to take off because it was based on a supply-side approach (the assumption that the supply of a facility will create demand for it) rather than an analysis of the demand for various tourism services.

The various indicators for NER, which are commonly used for looking at banking development, show that despite improvement in the last five years, the level of financial outreach is low. The main factors that impede banking and financial development are the topography of the region, sparse settlements of population, infrastructural bottlenecks such as transport, communication and power, low level of commercialization, lack of entrepreneurship, law and order conditions in some parts land tenure system especially in hilly areas, a development strategy based on grants rather than loans, low network of branches, lack of simple customized and flexible financial products to suit the needs of the local population, poor loan recovery experience, lack of awareness of banking services and inadequate payment systems.

It is evident that a financial market exists in NER, although most of the financial requirements are small. Banks have hardly been able to penetrate this market given their thin spread of branches and inappropriate products. The region is rich in traditional institutions, some of which are involved in financing. Thus in order to access these markets, the formal banking industry has to undergo a radical overhaul of its systems. Primarily they need to change the character, structure and products designed for this region. Given the large scale diversity of the region it is imperative to build linkages with institutions which are more locally based and embedded within the community which not only includes micro-financing institutions but also traditional institutions.

The recommendations for banking are based on the low spread of banking and NEDFi's inability to service small loans, which are particularly important for small agricultural producers. The extension of NEDFi activities to remote areas via non-banking financial intermediaries or well-established NGOs in these areas would greatly ease credit availability to these groups. In banking, the immediate need is to expand the availability of credit to farmers and entrepreneurs. Given the remoteness of hill areas this will require taking banking to the people. NEDFi can work with non-banking financial intermediaries (NBFIs) and NGOs to access people located in smaller villages and hamlets. NEDFi can provide refinance to these agencies.

6.7 RECOMMENDATIONS

- Banks should be induced to open branches in blocks where there are no branches. Where security is an issue, branches could be located near police establishments.
- Young staff be posted with a fixed tenure to ensure continuity. There should be enough incentives for postings in NER.
- For skill development, instead of following the traditional training modules, it is imperative that market driven skill requirements be identified and necessary courses and infrastructure created.
- Self-employment schemes should be worked out in consultation with banks to provide larger amounts of funds to the educated unemployed.
- Lending through SHGs should be increased where past experience has generally been satisfactory. Lenders should consider raising the quantum of loans through the SHG medium, for example with respect to groups of educated youth undertaking a cluster of entrepreneurial initiatives in the area of information technology. NABARD and NEDFi should be actively involved in formulating such proposals.
- The banks will have to shed traditional approaches and adopt an aggressive business model for increasing the number of deposit and loan accounts and volume of business. This will call for a “mission mode” to be adopted with wide publicity among all stakeholders especially the state administration local community based organizations and local leaders who can act as facilitators.
- Although the loan policy for a bank is uniform for the entire country, banks operating in NER may review their loan policies and make necessary changes due to the peculiar conditions in the North East.
- In the North East lack of a proper land tenure system and issues of land ownership rights result in Banks facing problems of collaterals for granting loans. It is, therefore, necessary to explore ways of addressing the problem of collateral. Land Possession Certificate (LPC), where available, may be taken for establishing proof of right to cultivate the land. Where LPC is not available, a letter of comfort or certificate from the group/local tribal bodies/farmers’ clubs/VDBs regarding the borrowers’ right to cultivate land may be taken. In those parts of the hills where there is no practice of issuing documents conferring transferable rights or where the procedure is cumbersome, the respective governments (or autonomous councils) should expeditiously put in place a system of issuing land ownership or possession certificates based on a cadastral survey.

- SIDBI and NEDFi may prepare typical bankable projects in a variety of industries in the SME sector and disseminate the same as these could be used by potential entrepreneurs. Such schemes should cover the handloom and handicraft sectors.
- Regional Rural Banks and State Cooperative Banks need to be strengthened in terms of manpower, capacity building and use of IT. RRBs may appoint staff on a contract basis with remuneration linked to achievement of certain targets. With the help of IT based systems, RRBs will be able to provide all services that a commercial bank does. State Cooperative Banks may also be similarly strengthened by the State Governments.
- A federated body of the NER states should identify sites that will form part of a tourist circuit which will be developed in coordination with tourist agencies.
- Infrastructure (accommodation, connectivity) related to tourist circuits and to other forms of tourism in NER will be developed appropriately.
- In the short run, states that have the natural resources could concentrate on developing their adventure and eco-tourism potential given the deficiency of infrastructure.

Chapter 7

Infrastructure

Infrastructure development is a fundamental prerequisite for realizing the vision of progress towards peace and prosperity and for creating an investment climate and market development in the North East. In fact, this is a basic prerequisite for development and has a strong complementarity with measures to improve health and education as well as industry and services. Expansion in the supply of basic infrastructure such as an efficient transportation network, telecommunications and power and broadband connectivity, is extremely important for the development of the region. Apart from delivering essential services that improve the quality of life and livelihoods, these elements of the infrastructure are crucial for establishing a stable and peaceful society and hence for the progress and prosperity of the region.

The physical infrastructure essential for the development of the region may be classified into the following broad categories:

- Transport and communication infrastructure: roads, railways, ports, post offices, telephone exchanges and networks;
- Power infrastructure: power generation station, transmission networks;
- Agronomic and agro-marketing infrastructure: canals, tube wells, irrigation facilities, fertiliser distribution points, HYV seed distribution shops, warehouses and cold storage facilities;
- Industry-related infrastructure: factories; and
- Infrastructure relating to provision of public amenities: education, health and sanitation.

This chapter looks at infrastructure related to transport, communications and power. Clearly, infrastructure plays a very important role for all the North Eastern states as its share in Net State Domestic Product (NSDP) ranged from 8 per cent to 28 per cent for the region (Table 10.1A, Annexure 10.1) between 1993-94 and 2002-03. The share of infrastructure has been continuously rising for all the NER states over time (except for Mizoram where the share of infrastructure declined from 18 per cent in 1993-94 to 12 per cent in 2002-03). The share of infrastructure for Nagaland was the highest at 28 per cent in 2002-03. Infrastructure in the North East as a whole (except for Arunachal Pradesh and Assam) was growing at a significantly higher rate than the national average (Table 10.2A, Annexure 10.1). The only exceptions were Arunachal Pradesh and Assam.

7.1 TRANSPORT

Transport infrastructure is of great importance in the region to strengthen its integration within itself, with the rest of the country and its neighbours, as well as to transport people and goods more effectively within and out of the region. It is a vital input for the proposed shift from subsistence agriculture to cash crop based farming, as well as the planned development of industry and the service sector. Most of the area in the region is hilly and undulating with low population densities, accompanied by low per area production of goods. In the hilly terrain, what it is in the NER (except in Assam and some parts of other states) development of inland waterways is the most expensive. Similarly, rail connectivity in such a terrain is not only time consuming but would need prohibitive investments, probably beyond the means of the nation. It is road connectivity which would play a dominant role in fulfilling the transportation needs of the public. Air connectivity would certainly play a role for a limited segment of people and goods.

7.1.1 *Highways, Roads and Bridges*

A comparison of the road network of the region with the network in the rest of the country indicates that the road network per capita is significantly higher in NER relative to the rest of the country (columns 2, 4 and 6 in Table 10.3A, Annexure 10.1). This is an expected outcome given the hilly terrain and the low density of population. However, road length per unit area is higher only in Assam, Nagaland and Tripura and not in the other hill states. Since this would have been a more accurate indicator of the ease of movement of passenger and freight traffic one can conclude that road infrastructure is relatively deficient in the NER states. This is particularly true for the hill states as other modes of travel are either too expensive or difficult to provide.

It would also be useful to look at the classification of roads as this has implications for funding of road development schemes (Table 10.4A; Annexure 10.1). Most previous studies have, by and large, looked at development of either state roads or national highways.¹ In most states, village and district roads are the dominant category. These are particularly important for facilitating intra-state movement of people and freight.² The low level of inter-state trading of foodgrains and other commodities makes it important to focus on developing these roads within the broad category of state roads.³

State Governments have also been asking repeatedly for converting state highways into national highways⁴ (See Table 10.5A, Annexure 10.1 for a list of national highways in the NER states). Some of these demands are justified. For, example, the East-West highway demanded by Arunachal is crucial, as at present one cannot travel

¹ See, for example, the Shukla Commission Report (1998) for an excellent compilation of planned development of road network as per the requests of the State Government.

² This point was also stressed in a meeting between the study team and officials in Meghalaya, who pointed out that central work on roads was very slow. The officials also pointed to the need for road connectivity between the Garo, Jainti and Khasi hills under the National Highways programme; a Shillong Bypass has also become crucial, as traffic has begun choking the capital of Meghalaya.

³ Officials of Arunachal in a meeting with the study team detailed the severe problem of road connectivity within the state, in which 86 per cent of the villages are not connected by roads. NER states have been asking for a revision of the criteria for fund allocation under the Prime Minister Grameen Sadak Yojna (PMGSY).

⁴ See, for example, the Shukla Commission Report.

from one district to another in the state without exiting into Assam.⁵ The Trans-Arunachal Highway will now be constructed in the Eleventh Plan. Without the development of an internal highway, activities like tourism and private transport cannot take off. Tourists (or freight traffic) would have to repeatedly pay entry/exit taxes as they move from one district of Arunachal to another. A major issue in road infrastructure, especially in the hill states is one of maintenance; with no internal resources and small state plans (especially in the hill areas), the expansion in the road network will mean that maintenance will take up a larger share of states' resources. Internal roads are already falling into disrepair in most places.⁶ The importance of the East West highway in Arunachal has also been emphasised by The Task Force on Connectivity of the Planning Commission (Planning Commission, 2006).

Construction of roads is of the highest priority for both Central and State Governments in the region. In the Eleventh Plan, under the various interventions of the Department of Road Transport and Highways, a very massive road construction initiative has started. The completion of this initiative has the potential to change the connectivity quality in the North Eastern Region. A snapshot of approved road programmes under the Department of Road Transport is under the Department of Road Transport is Table 7.1.

Table 7.1: Approved Road Programmes – under the Department Road Transport
(Length in Km.)

State	NHDP-II	NHDP-III	SARDP Phase A	SARDP Phase B	Total
Arunachal Pradesh	Nil	22	244	2707	2973
Assam	678	613	1049	471	2811
Manipur	Nil	112	147	150	409
Meghalaya	Nil	136	176	402	714
Mizoram	Nil	140	102	807	1049
Nagaland	Nil	28	89	1217	1334
Sikkim	Nil	0	167	233	400
Tripura	Nil	0	330	446	776
Total	678	1051	2304	6433	10466

National Highway Development Programme-II - The East-West Corridor beginning at Porbandar, Gujarat to be linked to the NE through a 678 km. four-lane highway entirely in Assam from Srirampur to Silchar. It is targeted to be completed in December 2009 at a project cost of Rs.6,000 crore.

⁵ This point was also strongly emphasized by the Arunachal authorities in meetings with field trip teams.

⁶ For example, NH52 from Guwahati to Itanagar showed signs of extreme wear and tear due to erosion. This is probably an annual event, occurring when the Brahmaputra overflows its banks; yet, no attempt appears to have been made to improve the technology used to deal with the erosion.

National Highway Development Programme-III - NHDP-III proposes to widen 1,051 km. stretches of various National Highways to improve connectivity of state capital towns (Table 7.2).

Table 7.2: National Highway Development Programme-III

NH NO.	State	Stretch	Length
36/39	Assam/Nagaland	Daboka-Dimapur	124
39	Nagaland/Manipur	Kohima-Imphal	140
44	Meghalaya/Assam	Shillong-Churaibari	252
54	Assam & Mizoram	Silchar-Aizawl	190
		Total	706

NHDP-II and Special Accelerated Road Development Programme for North East (SARDP-NE) will provide four-lane connectivity to all state capitals except Gangtok.

Arunachal Package

Under the PM's package, connectivity to Arunachal will be improved dramatically. The package incorporates:

- Four-Lane connectivity to Itanagar.
- Trans-Arunachal Highway.
- Construction of public roads to link the hydel power project in Arunachal Pradesh.
- Two-lane connectivity of district headquarters.

The total length of the Arunachal Package is 3,360 km. The Trans-Arunachal Highway covering a distance of 1,850 km. will link the eastern and western sides of the state. It will ease travel within the state and satisfy the long pending demand of the people of that area.

Special Accelerated Road Development Programme for North East (SARDP-NE)

Phase "A" and Phase "B" cover construction and improvement of 8,737 km. The objectives of SARDP-NE Phase 'A' and 'B' are:

Phase 'A'

- To provide at least 2-lane NH connectivity to all state capitals with East-West Corridor;
- To provide improved connectivity to Dibrugarh to properly connect it with the rest of the country, Arunachal Pradesh and Myanmar;
- To provide a 2-lane road of NH standards to Nathu La (the trade route with China) and to improve 328 km. state roads in Arunachal Pradesh, Manipur and Nagaland;
- All National Highways in Assam will be at least 2-lane wide;

- Direct inter-connectivity by at least a 2-lane NH to all state capitals, except Agartala and Aizawl; and
- To improve road connectivity to Bhutan and Myanmar.

Phase 'B'

- To provide connectivity to all district headquarter of NER by at least a 2-lane road;
- To provide inter-connectivity to all the state capitals by at least a 2-lane NH;
- To improve certain roads of strategic importance;
- To provide improved connectivity to remote and backward area; and
- To improve road connectivity to border areas, land custom stations and neighbouring countries.

Phase 'A' of SARDP-NE covers 2,304 km. with a Gross Budgetary Support of Rs.4,673 crore (total expenditure Rs.12,793 crore) and targeted to be completed by 2013.

Under Phase 'B' of SARDP-NE, the length to be covered is 4,570 km. The modalities of the investment decision have not yet been finalized. Status and prospects of connectivity of the district headquarters to the nearest National Highway are given in Table 7.3.

Table 7.3 Status and Propets of connectivity of district headquarters to nearest NH

State	Total DHQs	Status of connectivity by 2-lane road		
		Already connected	Under Phase 'A' of SARDP-NE	Under Phase 'B' of SARDP-NE
Arunachal Pradesh	16	0	0	16
Assam	26	12	4	10
Manipur	9	6	0	3
Meghalaya	7	3	0	4
Mizoram	8	0	2	6
Nagaland	11	2	1	8
Sikkim	4	0	1	3
Tripura	4	0	3	1
Total	85	23	11	51

Two other very critical roads for the North East are (a) an alternate highway for Sikkim and improvement of NH 31A linking Sevoke (West Bengal) to Gangtok (b) Kaladan road in Mizoram.

Sikkim is now connected with the rest of the country with NH 31A between Sevoke and Gangtok. Due to the uncertain topographical nature of that road, land slides and other blockages frequently hamper the supply of essential goods and travel between Sikkim and the rest of India. It is, therefore, important for Sikkim to have an alternate highway between Sevoke and Ranipur which has been estimated at only a slightly higher cost than improving the existing highway. The process of improving the existing highway will involve stoppages which may not be desirable from the view point of the state with the Gangtok bypass and 22 km. long Gangtok-Nathu La road, it will be able to form a continuous new highway from Sevoke (West Bengal) to Nathu La via Gangtok.

Thereafter, both roads can be kept operational so that the state is not held hostage to any natural calamity on any one of these critical link roads.

The link road to Kaladan project, a highway of about 117 km. from near Tuithumhanar on the Indo Myanmar border to Nlakawn on NH 54 in Mizoram is required to be constructed to facilitate the Kaladan Multi-Modal Transit Transport Project in Myanmar. Though the present proposal is for a single lane/intermediate link standard, it is desirable that a 2-lane highway be constructed. The tentative cost of the 2-lane highway is estimated to be Rs.500 crore. However, the present objective should be to complete the single-lane road by 2012 in sync with the completion of the Kaladan Multi-Modal Project in Myanmar. This project is critical because it offers an alternate link between the ports of India on its East Coast to the North East by passing Bangladesh and the Siliguri Corridor.

For Meghalaya as well as the state of Tripura, it is essential that the four-laning of NH-40 from Jorabat to Silchar is completed. To reduce traffic congestion in Shillong, construction of Shillong and Jowai bye-pass is essential. Completion of double-laning of NH-40 (Jorabat-Shillong-Indo/Bangladesh near Dawki-Amalren-Jowai), NH-51 (Paikan-Tura-Dalu), NH-62 (Damra-Baghmara-Dalu-Shillong-Nongstoin) and NH-44 (Shillong-Jowai-Badarpur-Agartala-Sabroom) is critical for smooth movement of cargo especially as these roads lead to the Bangladesh border.

Despite the heavy investment in the road sector by the Central Government, there are issues of capacity and absorption which need to be tackled before the investments can fructify. The BOT (Toll) model of financing is unsuitable for the region due to the low volume of traffic. Annuity models can be checked and in case they are not successful, Government funding through EPC should be expedited. There is also an imperative to improve the capacity of local contractors, both technically and equipment wise. An interesting innovation of setting up equipment banks by the North East Development Finance Corporation Ltd. (NEDFi) offers a solution for better availability of advanced equipment. Large contractors can be offered bigger packages so that they find it commercially viable to invest. Land being held by community/families in many cases poses a peculiar problem for acquisitions for public projects. Land records are also not well maintained with cadastral surveys absent in most of the states. Surveys are available only in Assam, Tripura and Sikkim. The states, therefore, have to make special efforts to expedite the availability of land to the implementing agency for roads.

Due to topographical reasons, availability of aggregates for construction is a very critical issue. The cost of transportation of other material like cement and bitumen is also high. Since construction material has to be carried from long distances raising the unit cost, importing building material from Bangladesh through a zero duty import regime, using water transport facility from Halida-Borishal-Dhubri can be an alternate solution. States should rationalize their royalty rates imposed on construction material. Local quarries need to be demarcated and allowed to be exploited for sourcing material by road construction agencies. Forest clearances are another major constrain involving long procedures and consultation.

While individual state-level road building plans are many, there is need for an integrated plan for NER as a whole which includes both inter- and intra-state linkages.⁷ In this context, it is imperative to look at the NEC's 20 years Transport Perspective Plan for NER.

A Master Plan encompassing all categories of roads to be developed by the Ministry of DONER, in consultation with the Ministries of Shipping, Road Transport & Highways, Rural Development, Planning Commission, NEC and State Governments. The multiplier benefits of road sector programmes in promoting socio-economic growth should be factored in the proposed Master Plan. Priority should be accorded to roads providing connectivity to hydro-project sites, important LCS and other economic and commercial growth centres.

A spatial database on road information system should be created by using GIS and remote sensing facilities.

A database on roads should also be considered. Roads are constructed by multiple agencies, state, Central Government, BRO, NEC under NLCPR, PMGSY, externally funded schemes etc. Transparency in the expenditure is critical so that these huge funds are spent well.

The Pradhan Mantri Gram Sadak Yojana provides a critical link to rural habitations. Overall performance of the region has been rather disappointing.

At present bridges of only 25 mt. are allowed to be constructed under the guidelines. Heavy rains in the hilly terrain turn smaller streams into raging torrents rendering 25 mt. bridges inadequate. The guidelines should allow for bridges up to 40 mt. under PMGSY. As in the case of bigger roads, the capacity of states to take up larger amount of construction and better technical capacity for preparation of detailed project reports and overall supervision and maintenance of quality need to be improved by associating with centres of excellence in engineering like IIT, CRRI, and Regional Engineering Colleges. The road width norm needs to be changed from single width to intermediate width. At present PMGSY guidelines provide for a minimum of 250 habitations. In view of special topographical condition of the region and scattered small habitations, in blocks bordering the international boundary in the hill States, habitations within a path distance of 10 km. are now being treated as a cluster of roads under PMGSY. This is an extremely welcome change as it will provide connectivity to a larger number of habitations in mountain areas. Presently, it is restricted to border blocks but should be extended to other blocks.

Maintenance of roads is expensive in the region because of high rainfall and topographical conditions. The states being largely dependent on central sources with meagre resource generation of their own do not have adequate funds for road

⁷ It has been pointed out by the Chief Engineer, Department. Of Road Transport and Highways (NER), Govt. of India that one of the principal constraints to development of highways is delays in land acquisition and clearance for Forest departments.

maintenance. Innovative long-term financial solutions to create a fund dedicated to maintenance of roads for the North East is called for.

The NEC's 20 years Transport Perspective Plan for NER study recommends a four-phased programme for the development of a road network measuring 20,440 km. The detailed network that needs to be developed by 20,20 is given in Table 7.4. Some planning in this direction is already evident from the fact that 8,737 km. of road network as intra and inter-state network under the Special Accelerated Road Development Programme has been approved in principle for implementation in two phases. Phase 'A' covering a length of 2,304 km. has already been approved for implementation while Phase 'B' covering a length of 6,433 km. has been approved for preparation of DPR. While the implementation of Phase 'A' has been targeted by 2013, there is immediate need to target the completion of Phase 'B' for implementation before 2015. The balance 11,703 km. also needs to be planned immediately for completion before 2020. In order to complete the entire road network as per this perspective, all the four phases may have to work simultaneously. The implementation of this road network would need an investment of more than Rs.70, 000 crore. The funds would need to be located for such an investment.

Table 7.4
Prioritization and Phasing of Links for Development
(Rebuilding of Roads) A

	Road Name				
Sl. No	From	To	Length	Road Condition	Modified Phase
1	Mengram	Goalpara	147.00	Fair	I
2	Dumporijo	Bordoloni	146.00	Fair	I
3	Chinglang	Margherita	33.00	Poor	I
4	Byrnihat	Guwahati	17.00	Poor	I
5	Bhavanipur	Patacharkuchi	10.00	Fair	I
6	Barjhor	Nalbari	13.00	Fair	I
7	Raha	Bhavanipur	26.00	Fair	I
8	Raha	Simalguri	7.00	Fair	I
9	Guwahati	Changsari	8.00	Fair	I
10	Rangia	Baihata	26.00	Fair	I
11	Parbung	Neihbawi	180.00	Poor	I
12	Sagali	Gohpur	30.00	Fair	I
13	Golokganj	Bilasipara	46.00	Fair	I
14	Changsari	Baihata	20.00	Fair	I
15	Neelambazar	Karimganj	20.00	Fair	I
16	Neelambazar	Kanaibazar	11.00	Fair	I
17	Dharmanagar	Kanaibazar	26.00	Fair	I

18	Oinamlong	Pailapool	31.00	Fair	I
19	Khonsa	Naharkatia	57.00	Poor	I
20	Daboka	Lankapati	13.00	Fair	I
21	Lankapatti	Lumding	26.00	Fair	I
22	Sagali	Nijlaluk	32.00	Fair	I
23	Champaknagar	Agartala	22.00	Fair	I
24	Nichuguard	Dimapur	15.00	Good	I
25	Jesami	Ukhrul	58.00	Poor	I
26	Sutnga	Kalain	62.00	V.good	I
27	Mengram	Tura	22.00	Fair	I
28	Passighat	Dhemaji	134.00	Poor	I
29	Roing	Karimganj	19.00	Poor	I
30	Chonghyimeri	Moiriani	22.00	Poor	I
31	Kherapara	Baghmara	88.00	Fair	I
32	Umsning	Jagiroad	61.00	Poor	I
33	Champai	Tuisen	34.00	Poor	I
34	Shillong	Nongpiur	8.00	Poor	I
35	Bishnupur	Nongthawkhong	16.00	Poor	I
36	Seppa	Itanagar	150.00	Poor	I
37	Nongthawkhong	Churchandpur	24.00	Poor	I
38	Patacharkuchi	Barjhor	16.00	Fair	I
39	Srirampur	Gossaigaon	14.00	Fair	I
40	Bongaigaon	Gerukabari	15.00	Fair	I
41	Gossaigaon	Sherfanguri	24.00	Fair	I
42	Gerukabari	Simalguri	26.00	Fair	I
43	Siju	Srirampur	100.00	Fair	I
44	Baghmara	Siju	32.00	Poor	I
45	Yazali	Itanagar	37.00	Poor	I
46	Pecharthal	Kumarghat	14.00	Poor	I
47	Kumarghat	Manubazar	30.00	Poor	I
48	Nalbari	Rangia	12.00	Fair	I
49	Boxirhat	Golaganj	9.00	Fair	I
50	Manja	Dimapur	29.00	Fair	I
51	Tumpung	Manja	55.00	Fair	I
52	Siju	Boxirhat	100.00	Fair	I
53	Daboka	Kothiatrli	14.00	Fair	I
54	Wangla	Bhalighat	35.00	Fair	I
55	Norhima	Bokajan	50.00	Fair	I
56	Thingkew	Parbung	22.00	Poor	I
57	Thingkew	Churchrandpur	42.00	Poor	I
58	Passighat	Roing	84.00	Poor	I

59	Lunglei	Paikhal	124.00	Poor	I
60	Bomdila	Dhekjaluli	135.00	Poor	I
61	Oinamlong	Nungba	19.00	Poor	I
62	Imphal	Nungba	40.00	Poor	I
63	Itanagar	Sagali	40.00	Poor	I
64	Udarband	Silchar	11.00	Fair	I
65	Sutnga	Jowai	40.00	Fair	I
66	Hatikuli	Lumding	49.00	Fair	I
67	Chizimi	Jesami	17.00	Poor	II
68	Imphal	Bishnupur	26.00	Poor	II
69	Ziro	Yazali	37.00	Poor	II
70	Neihbawi	Aizawl	9.00	Fair	II
71	Neihbawi	Kolasib	47.00	Fair	II
72	Kolasib	Kashipur	47.00	Fair	II
73	Golaghat	Bokajan	60.00	Fair	II
74	Byrnihat	Borkhat	16.00	Fair	I
75	Taliamura	Champaknagar	22.00	Fair	II
76	Manu bazar	Ambassa	26.00	Fair	II
77	Kalain	Karimganj	27.00	Fair	II
78	Manja	Diohu	16.00	Good	II
79	Kohima	Maopundong	31.00	Good	II
80	Lunglei	Hrangchawkawn	9.00	Poor	II
81	Roing	Tezu	100.00	Poor	II
82	Bame	Dhemaji	121.00	Poor	II
83	Mamit	Tukkalh	19.00	Poor	II
84	Aizawl	Paikhal	13.00	Fair	II
85	Pailapool	Rajabazar	11.00	Fair	II
86	Damra	Krishnai	37.00	Fair	II
87	Silchar	Pailapool	21.00	Fair	II
88	Tezpur	Jakhalabandha	24.00	Fair	II
89	Dibrugarh	Moranhat	40.00	Fair	II
90	Silchar	Saichapa	18.00	Fair	II
91	Salchapa	Kalain	24.00	Fair	II
92	Palazi	Seppa	105.00	Poor	II
93	Jameri	Palazi	110.00	Poor	II
94	Balirding	Lakhimpur	9.00	Fair	II
95	Leite	Hrangchawkawn	38.00	Fair	II
96	Nijlaluk	Balirding	17.00	Fair	II
97	Keitnnikawn	Leite	56.00	Fair	II
98	Tuli	Chonghyimeri	50.00	V.poor	II
99	Shillong	Umsning	39.00	V.good	II

100	Lakhimpur	Bordoloni	8.00	Fair	II
101	Bordoloni	Dhemaji	8.00	Fair	II
102	Tinsukia	Makum	9.00	Fair	II
103	Orang	Dhekjaluli	10.00	Fair	II
104	Zobawk	Seling	34.00	Fair	II
105	Zobawk	Keitnnikwan	41.00	Fair	II
106	Aizawl	Seiling	13.00	Fair	II
107	Tukkalh	Manpoi	17.00	Fair	II
108	Dhekjaluli	Tezpur	50.00	Fair	II
109	Dimapur	Diphu	35.00	Fair	II
110	Aizawl	Mamit	34.00	Fair	II
111	Wakro	Manthi	85.00	V.poor	II
112	Nongpiur	Mawphlang	10.00	Poor	II
113	Golokganj	Gossaigaon	49.00	Poor	II
114	Niaunu	Lu	15.00	Poor	II
115	Bimpuria	Nijlaluk	11.00	V.good	II
116	Gohpur	Bimpuria	20.00	V.good	II
117	Hatikuli	Dihangi	20.00	V.poor	II
118	Hajo	Barpeta	46.00	V.poor	II
119	Tezu	Santipur	83.00	Poor	II
120	Songsar	Mengram	90.00	Fair	II
121	Kohima	Chizame	52.00	Good	II
122	Diphu	Lumding	32.00	Poor	II
123	Maha	Haflong	40.00	Poor	II
124	Mankachar	Mahendraganj	37.00	Poor	II
125	Tribangcherra	Ramchandraghat	50.00	Poor	II
126	Sanis	Telelitol	42.00	Poor	II
127	Ramchandraghat	Agartala	62.00	Poor	II
128	Bagafa	Sabrum	67.00	Poor	II
129	Saipung	Haflong	125.00	Poor	II
130	Kumarghat	Tribangcherra	46.00	Poor	II
131	Tato	Machuka	50.00	Poor	II
132	Diban	Bijoynagar	100.00	Poor	II
133	Konkarajhar	Garobhasa	8.00	Fair	II
134	Tainulpur	Rangia	26.00	Fair	II
135	Ukhrul	Humpun	19.00	Fair	II
136	Bilasipara	Konkarajhar	34.00	Fair	II
137	Garampani	Dehengi	16.00	Poor	II
138	Kawlkulh	Tuisen	26.00	Poor	II
139	Garubhasa (Haltugaon)	Sarbhong	42.00	Poor	II

140	Bame	Along	41.00	Poor	II
141	Chekawn	Leite	45.00	Poor	II
142	Along	Pangin	50.00	Poor	II
143	Jowai	Garampani	54.00	Poor	II
144	Nongpiur	Laitlyngkot	9.00	Poor	II
145	Imphal	Wathamleirak	19.00	Poor	II
146	Henima	Thousem	44.00	Poor	II
147	Garubhasa	Bongaigaon	23.00	Fair	I
148	Sherfanguri	Garubhasa (Haltugaon)	24.00	Fair	I
149	Longching	Laruri	80.00	Fair	II
150	Leike	Laisong	8.00	Poor	II
151	Hailakandi	Neelambazar	16.00	Poor	II
152	Henima	Laike	19.00	Poor	II
153	Nengkhra	Sihu	32.00	Poor	II
154	Tumpung	Dengaon	11.00	Fair	II
155	Dengaon	Daboka	20.00	Fair	II
156	North Salmara	Goalpara	43.00	Fair	II
157	Bilasipara	North Salmara	49.00	Fair	II
158	Kothiatrli	Nagaon	20.00	Fair	II
159	Merangkong	Tuli	20.00	V.poor	II
160	Melaghar	Sonamura	10.00	Fair	II
161	Norhima	Kohima	22.00	Fair	II
162	Udarband	Amarpur	23.00	Fair	II
163	Makum	Margherita	71.00	Fair	II
164	Ambassa	Gandacherra	57.00	Fair	II
165	Charilam	Udaipur	20.00	Fair	II
166	Lekhapani	Margherita	84.00	Fair	II
167	Agartala	Charilam	22.00	Fair	II
168	Zamithang	Tawang	89.00	Fair	II
169	Wokha	Norhima	100.00	Fair	II
170	Shella	Cherrapunji	131.00	Fair	II
171	Wangla	Sonari	39.00	Fair	II
172	Udaipur	Bagafa	55.00	Fair	II
173	Sohrarim	Cherrapunji	79.00	Fair	II
174	Laisong	Rajabazar	18.00	Poor	II
175	Rongjeng	Nengkhra	42.00	Poor	II
176	Tawamg	Bomdila	178.00	Poor	II
177	Nungba	Bishnupur	37.00	Poor	II
178	Pecharthal	Dharmanagar	26.00	Poor	II
179	Myllat	Pynursla	6.00	Fair	II

180	Jowai	Myllat	42.00	Fair	II
181	Khulurbond	Maha	20.00	Fair	II
182	Laitlyngkot	Pynursla	22.00	Fair	II
183	Dawki	Myllat	22.00	Fair	II
184	Moreh	Tengnoupal	28.00	Fair	II
185	Wathamleirak	Khurkhul	53.00	Fair	II
186	Hatikuli	Khulurbond	25.00	Fair	II
187	Maopundung	Khurkhul	65.00	Fair	II
188	Nengkhra	Songsar	22.00	Poor	II
189	Dumporijo	Bame	42.00	Poor	II
190	Ranigodown	Uparhali	15.00	Good	II
191	Ranikunda	Shella	102.00	Good	II
192	Garobadha	Tura	117.00	Good	II
193	Ranikunda	Baghmara	102.00	Good	II
194	Hrangachalkawn	Bungtlang	65.00	Poor	II
195	Silchar	Kachipur	10.00	Fair	II
196	Bokajan	Dimapur	19.00	Fair	II
197	Uparhali	Guwahati	23.00	Fair	II
198	Tezpur	Mansir	24.00	Fair	II
199	Udalguri	Orang	9.00	Fair	II
200	Jorhat	Kanarbandha	26.00	Fair	II
201	Goalpara	Krishnai	30.00	Fair	II
202	Mansir	Sootea	33.00	Fair	II
203	Jorhat	Numalighat	53.00	Fair	II
204	Barpeta	Raha	26.00	Fair	II
205	Krishnai	Uparhali	88.00	Fair	II
206	Sootea	Gohpur	94.00	Fair	II
207	Jagiroad	Borkhat	22.00	Fair	II
208	Ambassa	Taliamura	40.00	Fair	II
209	Sonali	Jagiroad	62.00	Fair	II
210	Mahar	Udharband	31.00	Good	II
211	Kohima	Nichuguard	65.00	Good	II
212	Jowai	Shillong	66.00	V.good	II
213	Laisong	Mahar	23.00	Poor	II
214	Sunpura	Kundilbazar	23.00	Poor	II
215	Bomdila	Jamiri	23.00	Poor	II
216	Roing	Anini	32.00	Poor	II
217	Tezu	Wakro	34.00	Poor	II
218	Sangram	Palin	40.00	Poor	II
219	Chyangtajo	Sangram	60.00	Poor	II
220	Mokokchung	Zuhenboto	9.00	Poor	II

221	Tinsukia	Deohale	22.00	V.good	II
222	Sohrarim	Mawphlang	31.00	V.good	II
223	Mon	Longshing	65.00	V.poor	II
224	Tangza	Paneri	15.00	Fair	II
225	Rongjeng	Damra	44.00	Fair	II
226	Kanarbandha	Golaghat	28.00	Fair	II
227	Bokakhat	Amguri	26.00	Fair	II
228	Amguri	Jakhalabandha	33.00	Fair	II
229	Sibsagar	Jhanzi	33.00	Fair	II
230	Numalighat	Bokakhat	33.00	Fair	II
231	Jhanzi	Jorhat	35.00	Fair	II
232	Moranhat	Sibsagar	38.00	Fair	II
233	Paneri	Udalguri	26.00	Fair	II
234	Nagaon	Jakhalabandha	20.00	Fair	II
235	Nagaon	Sonai	1.00	Good	II
236	Humpun	New Heaven	28.00	Poor	II
237	Tainulpur	Paneri	44.00	Poor	II
238	Seling	Kawlkulh	45.00	Poor	II
239	Chowkham	Sunpura	31.00	Poor	II
240	Jameri	Manzir	61.00	Poor	II

Besides the overall network development of the region, there is definite need for widening of important roads in the region to 2-lane, 4-lane and 6-lane widths. Phase-wise widening of different highways is given in Table 7.5.

Table 7.5
PERSPECTIVE PLAN FOR ROADS IN THE NER
(Widening of roads into 2-4 lanes)

Sl. No	Road Name		Length (Km.)	Category of road		No. of lanes	
	From	To		Existing	Proposed	Existing	Proposed
1	Shillong	Umsning	39.00	NH	NH	Two Lane	Four Lane
2	Umsning	Byrnihat	45.00	NH	NH	Two Lane	Four Lane
3	Byrnihat	Guwahati	16.50	NH	NH	Two Lane	Four Lane
4	Byrnihat	Borkhat	15.50	NH	NH	Two Lane	Four Lane
5	Mengram	Tura	22.00	NH	NH	Single Lane	Two Lane
6	Mengram	Goalpara	147.00	NH	NH	Single Lane	Two Lane
7	Siju	Srirampur	100.00	NH	NH	Two Lane	Four Lane
8	Srirampur	Gossaigaon	14.30	NH	NH	Two Lane	Four Lane
9	Gossaigaon	Sherfanguri	23.50	NH	NH	Two Lane	Four Lane
10	Sherfanguri	Garubhasa (Haltugaon)	23.50	NH	NH	Two Lane	Four Lane
11	Garubhasa	Bongaigaon	22.80	NH	NH	Two Lane	Four Lane
12	Bongaigaon	Gerukabari	15.00	NH	NH	Two Lane	Four Lane
13	Gerukabari	Simalguri	26.00	NH	NH	Two Lane	Four Lane
14	Guwahati	Changsari	8.00	NH	NH	Two Lane	Four Lane
15	Changsari	Baihata	19.50	NH	NH	Two Lane	Four Lane
16	Raha	Simalguri	7.20	NH	NH	Two Lane	Four Lane
17	Nalbari	Rangia	12.00	NH	NH	Two Lane	Four Lane
18	Rangia	Baihata	26.00	NH	NH	Two Lane	Four Lane
Total Length			582.80				
19	Oinamlong	Pailapool	31.00	NH	NH	Intermediate	Four Lane
1	Byrnihat	Guwahati	16.50	NH	NH	Four Lane	Six Lane
2	Guwahati	Changsari	8.00	NH	NH	Four Lane	Six Lane
3	Jowai	Shillong	66.00	NH	NH	Two Lane	Four Lane
4	Mengram	Tura	22.00	NH	NH	Two Lane	Four Lane
5	Changsari	Goalpara	147.00	NH	NH	Two Lane	Four Lane
6	Nagaon	Sonai	0.90	NH	NH	Two Lane	Four Lane
7	Sonai	Jagiroad	62.30	NH	NH	Two Lane	Four Lane
8	Jagiroad	Borkhat	21.50	NH	NH	Tow Lane	Four Lane
9	Oinamlong	Nungba	19.00	NH	NH	Two Lane	Four Lane
10	Pecharthal	Kumarghat	14.00	NH	NH	Two Lane	Four Lane
11	Pecharthal	Dharmanagar	26.00	NH	NH	Two Lane	Four Lane
12	Kumarghat	Manu Bazar	30.00	NH	NH	Two Lane	Four Lane

13	Dharmanagar	Kanai Bazar	26.00	NH	NH	Two Lane	Four Lane
14	Manu Bazar	Ambassa	26.00	NH	NH	Two Lane	Four Lane
15	Ambassa	Teliamura	40.00	NH	NH	Two Lane	Four Lane
16	Teliamura	Champaknagar	22.00	NH	NH	Two Lane	Four Lane
17	Champaknagar	Agartala	22.00	NH	NH	Two Lane	Four Lane
18	Sutnga	Jowai	40.00	NH	NH	Two Lane	Four Lane
19	Sutnga	Kalain	62.00	NH	NH	Two Lane	Four Lane
20	Chagsari	Hajo	20.00	SH	SH	Two Lane	Four Lane
21	Hajo	Barpeta	45.50	SH	SH	Two Lane	Four Lane
22	Barpeta	Raha	26.00	SH	SH	Intermediate Lane	Four Lane
23	Baihata	Dumnichauki	30.00	NH	NH	Two Lane	Four Lane
24	Sibsagar	Jhansi	33.20	NH	NH	Two Lane	Four Lane
25	Jhansi	Jorhat	34.50	NH	NH	Two Lane	Four Lane
26	Daboka	Kothiatrli	13.50	NH	NH	Two Lane	Four Lane
27	Kothiatrli	Nagaon	20.00	NH	NH	Two Lane	Four Lane
28	Nagaon	Jakhalabandha	19.50	NH	NH	Two Lane	Four Lane
29	Mahar	Udarbond	31.20	NH	NH	Intermediate Lane	Four Lane
30	Silchar	Salchapa	17.60	NH	NH	Two Lane	Four Lane
31	Salchapa	Kalain	24.10	NH	NH	Two Lane	Four Lane
32	Kalain	Karimganj	37.00	NH	NH	Two Lane	Four Lane
33	Neelam Bazar	Kanai Bazar	11.00	NH	NH	Two Lane	Four Lane
34	Neelam Bazar	Karimganj	19.50	NH	NH	Two Lane	Four Lane
35	Yairpok	Imphal	16.50	SH	SH	Intermediate Lane	Four Lane
36	Imphal	Nungba	40.00	NH	NH	Two Lane	Four Lane
37	Fgolokganj	Bilasipara	45.50	NH	NH	Two Lane	Four Lane
38	Tangza	Paneri	15.00	MDR	MDR	Intermediate Lane	Four Lane
39	Orang	Dhekjaluli	10.00	NH	NH	Two Lane	Four Lane
40	Dhekjaluli	Tezpur	50.00	NH	NH	Two Lane	Four Lane
41	Tezpur	Jakhalabandha	24.00	NH	NH	Two Lane	Four Lane
42	Tinsukia	Chabua	13.00	NH	NH	Two Lane	Four Lane
43	Chabua	Lohamal	29.30	NH	NH	Two Lane	Four Lane
44	Lohamal	Dibrugarh	11.00	NH	NH	Two Lane	Four Lane
45	Dibrugarh	Moranhat	40.30	NH	NH	Two Lane	Four Lane
46	Moranhat	Sibsagar	38.00	NH	NH	Two Lane	Four Lane
47	Kanarbandha	Golaghat	28.00	SH	SH	Intermediate Lane	Four Lane

48	Numalighat	Bokakhat	33.20	NH	NH	Two Lane	Four Lane
49	Bokakhat	Amguri	26.00	NH	NH	Two Lane	Four Lane
50	Amguri	Jakhalabandha	32.50	NH	NH	Two Lane	Four Lane
51	Daboka	Lankapatti	13.00	NH	NH	Two Lane	Four Lane
52	Lankapatti	Lumding	26.00	NH	NH	Two Lane	Four Lane
53	Hatikuli	Khulurbond	24.70	NH	NH	Two Lane	Four Lane
54	Hatikuli	Lumding	49.00	NH	NH	Two Lane	Four Lane
55	Khulurbond	Mahar	19.50	NH	NH	Two Lane	Four Lane
56	Udarbond	Silchar	11.00	NH	NH	Two Lane	Four Lane
57	Silchar	Pailapool	21.00	NH	NH	Two Lane	Four Lane
58	Sevok	Gangtok	110.00	NH	NH	Four Lane	Four Lane
59	Changsari	Hajo	20.00	MDR	SH	Single Lane	Two Lane
60	Hajo	Barpeta	45.50	MDR	SH	Single Lane	Two Lane
61	Lakhimpur	Jorhat	71.50	SH	SH	Single Lane	Two Lane
62	Diphu	Lumding	32.00	SH	SH	Single Lane	Two Lane
63	Mokokchung	Chonghyimeri	16.50	SH	SH	Single Lane	Two Lane
64	Yairpok	Yangangpopki	10.00	MDR	MDR	Single Lane	Two Lane
65	Aizawl	Mamit	34.00	NH	NH	Single Lane	Two Lane
66	Mamit	Tukkalh	18.75	NH	NH	Single Lane	Two Lane
67	Tukkalh	Manpoi	17.00	NH	NH	Single Lane	Two Lane
68	Paneri	Udalguri	26.00	SH	SH	Single Lane	Two Lane
69	Itanagar	Sagalee	40.00	NH	NH	Single Lane	Two Lane
70	Wangla	Mon	10.00	NH	NH	Single Lane	Two Lane
71	Wangla	Bhalighat	35.00	NH	NH	Single Lane	Two Lane
72	Mokokchung	Zuhenboto	9.00	NH	NH	Single Lane	Two Lane
73	Chonghyimeri	Moriani	22.10	SH	SH	Single Lane	Two Lane
74	Pumi	Yangangpopki	22.00	MDR	MDR	Single Lane	Two Lane
75	Tarong	Yairpok	38.50	SH	SH	Single Lane	Two Lane
76	Nungba	Bishnupur	36.50	NH	NH	Single Lane	Two Lane
77	Bishnupur	Nongthoukhong	16.00	NH	NH	Single Lane	Two Lane
78	Nongthoukhong	Churchandpur	24.00	NH	NH	Single Lane	Two Lane
79	Zobawk	Seling	33.75	NH	NH	Single Lane	Two Lane
80	Zobawk	Keitnnikawn	41.25	NH	NH	Single Lane	Two Lane
81	Rongjeng	Nengkhra	42.00	NH	NH	Single Lane	Two Lane
82	Rongjeng	Damra	44.00	NH	NH	Single Lane	Two Lane
83	Damra	Krishnai	37.00	NH	NH	Single Lane	Two Lane
84	Dimapur	Diphu	34.50	SH	SH	Single Lane	Two Lane
	Grand Total		2557.15				

The Asian Highways project covering a road network of about 65,000 km. and passing through 15 countries is lying dormant for more than 40 years. The objective of this project is to promote and coordinate development of international road transport for connecting all the capital and industrial cities, sea routes and places of tourist and commercial interests in the Asian region. The proposed roads in the Asian Highways project would connect the NER not only with Bangladesh but also with other East Asian countries. This will give a big boost to the development of this region. This project, therefore, needs to be pushed through for implementation.

Keeping in view the geographical location of NER, its difficult terrain conditions, exploitation of untapped resource potential and overall economic development of the region, provision of an access corridor through neighbouring countries is essential. This access corridor will be possible with the cooperation of the Governments of Bhutan, Bangladesh and Myanmar.

The potential corridors identified through adjacent countries are :

(a) Through Bhutan

By connecting Jashingang Dzong (in Bhutan) with Arunachal Pradesh and Assam three alternate routes will be developed. These routes are :

- (i) Tawang (in Arunachal Pradesh) - Jashingang Dzong (in Bhutan) - Darranga (in Assam).

This will provide an alternate route between Arunachal Pradesh and Assam.

- (ii) Tawang (in Arunachal Pradesh) - Jashingang Dzong-Mongar-Dzong-Kogkha-Tongsa Dzong-Shemgang Dzong-Gelekphu (all in Bhutan - Rani Khata (Assam). This provides another alternate route between Assam and Arunachal Pradesh.

- (iii) Tawang (in Arunachal Pradesh) - Jashingang Dzong-Mongar-Dzong-Kogkha - Jongsang Dzong - Punakha - Gasa - Dotanang - Pokangnag - Thimphu - Kyapcha - Chanakha (all in Bhutan) - Jaigaon (West Bengal).

(b) Through Bangladesh

Connecting Meghalaya with Bangladesh at Dauki, Shella, Baghmara, Burengapara and Mahendraganj and similarly Tripura at Kalkalighat, Kamalpur, Khowai, Ranir Bazar and Sabrum will develop international linkages with Bangladesh. This will facilitate alternate routes between these two states, with rest of the country, access to the Asian Highway network and connectivity of major cities in Bangladesh. Potential routes between Meghalaya, Bangladesh, Assam and Tripura are:

- (i) Dauki (Meghalaya)-Jaintipur-Sylhet-Fenchuganj-Silua (all in Bangladesh) and Kalkaliganj (Assam)
- (ii) Shella (Meghalaya)-Sylhet-Fenchuganj-Silua (all in Bangladesh) and Kalkaliganj (Assam)
- (iii) Dauki (Meghalaya) - Jaintipur-Sylhet-Fenchuganj-Kamaliganj (all in Bangladesh) and Kamalpur (in Tripura)

- (iv) Shella (Meghalaya) - Sylhet-Fenchuganj-Kamalganj (all in Bangladesh) and Kamalpur (in Tripura)
- (v) Dauki (Meghalaya) - Jaintipur-Sylhet-Fenchuganj-Kamalganj-Shahistaganj (in Bangladesh) and Khowai (Tripura)
- (vi) Shella (Meghalaya) Sylhet-Fenchuganj-Kamalganj-Shahistaganj (in Bangladesh)- and Khowai (Tripura)
- (vii) Dauki (Meghalaya)-Sylhet-Habiganj-Shahistaganj (in Bangladesh) and Khowai (Tripura)
- (viii) Shella (Meghalaya)-Sylhet-Habiganj-Shahistaganj (Bangladesh) and Khowai (Tripura)
- (ix) Bagmara (Meghalaya)-Durgapur-Jari Jhanjali-Shamganj-Bhairb Bazar-Camila, Ramgarh (Bangladesh) and Sabrum (in Tripura)
- (x) Burengapura (Meghalaya) - Piarpur-Begunbari-Dhaka-Camila-Ramgar (all in Bangladesh) and Sabrum (Tripura)
- (xi) Mahendraganj (Meghalaya)-Nandia-Piarpur-Begunbari-Dhaka-Camila-Ramgarh (all in Bangladesh) and Sebrum (Tripura)

By linking Mizoram at Tiabung with Bangladesh, a much shorter route between Mizoram and Tripura (at Sebrum) could be developed. Apart from this, alternate routes between Mizoram and Meghalaya can be developed through Bangladesh (via Chittagong and Dhaka)

(c) Through Myanmar

International connection of Arunachal Pradesh (at Pangsu pass), Nagaland (at Lungwa), Manipur (at Tamu) and Mizoram (at Champhai) with Myanmar will help in developing the international border trade.

7.1.2 Railways

In general, rail is the best method of mass transportation in the country, but rail networks are generally difficult and expensive to set up in hill areas, which accounts for the absence of railway lines in Arunachal Pradesh, Manipur, Meghalaya, and Mizoram. Tripura and Nagaland have railway routes in their plain areas, while Assam has a large railway network. Even so, the track density in terms of both population and area even in the plain areas of the North East is much lower than the national average (Table 10.6A, Annexure 10.1).

There has been only a marginal or no increase in the density of tracks per lakh of population in most of the states in the region as compared to an almost five-fold increase at the national level. Even the increase witnessed in the plains of Assam is much lower than the national average. It may also be noted that most of the states in the region do not

have a rail line connecting them to any major rail junction⁸. Finally, while there has been some conversion of metre gauge to broad-gauge, Assam still has a large number of single-track routes which cannot accommodate any increase in rail frequencies.

There are some obvious short-run projects which need completion at the earliest. For example, the Bogibeel rail bridge across the Brahmaputra was commissioned in 1996 as a ten-year project but the work started only in 2002. This rail-cum-road bridge has implications for connectivity not only for Assam but also for Arunachal and Meghalaya. (Shukla Commission Report, 1998) Similarly, there is an urgent need for a rail link into Sikkim. The more important issue from the long-term point of view is strategic planning that will develop the rail network with the aim of increasing inter-state connectivity. In addition, rail connectivity has to be integrated with developments in the other avenues of transport being proposed for the NER as a whole (World Bank 2006). Some useful rail links are already under planning and a few of them have almost been completed and are likely to be broadgaged. These are Jiribum to (near) Imphal and Dimapur to (near) Kohima. Another line from Azara (near) Guwahati airport to Bunnia in Meghalaya is in progress. Another line which is an extension from Kumarghat to Agartala in Tripura is near completion.

For Meghalaya, it is desirable to open a broad gauge railway line from Lumding in North Cachar Hills in Assam to Jowai in the Jaintia Hills. A broad gauge railway line along the Indo-Bangladesh international border in Meghalaya linking the western and southern parts of Assam can also be considered. This will open the mineral resources of Meghalaya for development.

In high level consultations with the Ministry of Railways, State Governments, the North Eastern Council and Ministry of DONER in 2007, the Ministry of Railways had reported the status of various important projects going on in the North Eastern Region. Nine of them are new lines – (i) Kumarghat to Agartala, (ii) Jiribam to Tupul, (iii) Dimapur to Zubza, (iv) Azra to Byrnihat, (v) Dudhnoi to Depa, (vi) Harmuti to Itanagar, (vii) Mahilaguri to Jogighopa, and (viii) Bogibeel Rail-cum-Road Bridge; four are for gauge conversion - Lumding - Silchar, Rangiya -Murkongselek, Kathakal - Bairabi, Haibargaon - Mairabari and Senchoa Junction - Silghat Town and one is for doubling the line – New Guwahati – Digaru. A very legitimate demand of the region and the expectation of the citizens is also that all the state capitals of NER should be connected by rail lines. As indicated in Table 7.6, on completion of all the ongoing/sanctioned works, railway lines will the state capitals of Arunachal Pradesh, Nagaland, Manipur and Tripura. However, projects for connecting Aizawl (Mizoram), Shillong (Meghalaya) and Gangtok (Sikkim) are yet to be sanctioned. For Aizawl, a project for a rail line from Bairabi to Sairang has been included in the railway budget of the Railway Ministry. For

⁸ In the field trips, states like Sikkim and Arunachal, which have no alternate access to the rest of the country, noted that movement outside their state is crucially dependent on the law and order situation in adjoining states. Local disturbances in neighbouring states can severely disrupt bulk supplies carried by rail. As noted in the Sixth Sectoral Summit of the NEC, while the railways have drawn up a plan to bring the rail lines to each state, the funding pattern and time deadlines need to be clearly specified.

Shillong, work on Azra-Byrnihat has been taken up and from Byrnihat to Shillong, work on a survey has been sanctioned. For connecting Gangtok, a survey has been completed from Sivok-Rangpo whereas work on a survey from Rangpo to Gangtok has been sanctioned. Information about status of connection of state capitals in NER by railway line are given in Table 7.7:

Table 7.6

State-wise status of Projects (in June, 2007)

STATUS OF PROJECTS IN ASSAM

Project	Year of sanction	Length (in km.)	Cost (in Rs. Crore)	Target
Bogibeel Rail-cum Bridge (New Line)	1997-98	73.00	1767.37	2011-12
Lumding-silchar-Kumarghat (Gauge conversion)	1996-97	367.79	1676.31	March 2010
Rangia-Murkongselek (Gauge Conversion)	2003-04	510.33	912.70	2011-12
Zara to Byrnihat (New Line)	2006-07	30.00	200.00	2011-12
Other Projects				
New Mainaguri-Jogighopa (New Line)	2001-02	257	1022	2011-12
Dhudhnoi to Depa (New Line)	1992-93	15.5	22.33	2010-11
Harmuti to Itanagar (New line)	1996-97	33	156	2011-12
Lumding-Dibrugarh-Siliguri-New Bongaigaon	1993-94	628	882.11	Sanchoa-Silghat Sept. 07
New Jalpaiguri-siliguri-New Bongaigaon including Branch lines (Gauge conversion)	1997-98	417	890	Alipurduar_Bamanhat August, 2007 balance 09-09
Katakhal to Bhairabi (Gauge conversion)	1997-98	84	88.7	March, 2010
Guwahati-Digarua Patch Doubling	2007-08	30	99	March, 2010

STATUS OF PROJECTS IN MEGHALAYA

Project	Length (in km.)	Cost (in Rs. Crore)	Target
Azara-Byrnihat National Project)	30	200	2011-12
Dhudhnoi-Depa	15.50	22.33	2010-11

Feasibility study for extending rail line upto Shillong is under process

Project	Length (in km.)	Cost (in Rs. Crore)	Target
Kumarghat to Agartala (New Line *)	109	879.99	December, 2007
Lumding-Baraigra-Kumarghat (Meter Gauge conversion)	367.79	1676.3	March 2010

Note: *Kumarghat-Manu (21 km.) commissioned in 2002

Name of Survey	Length (in km.)	Cost (in Rs. Crore)	Target
Agartala—Akhaura	5.4	27.27	Completed in July 2000
Agartala-Sabroom	110	556.88	Completed in March 2005

STATUS OF PROJECTS/SURVEYS IN MIZORAM

Name of Survey	Length (in km.)	Cost (in Rs. Crore)	Target
Katakhal to Bhairabi	84	887	March 2010
Bhairabi-Sairang	51.38	519.34	Completed

STATUS OF PROJECTS IN MANIPUR (NATIONAL PROJECT)

Name of survey	Length (in km.)	Cost (in Rs. Crore)	Target
Jiribm-Tupul (National Project) @	98	1850	2011

Note: @ The cost of the project has increased from Rs. 728 Crore to Rs. 1,850 Crore due to raising of alignment needed to negotiate the submergence zone of proposed Tapaimukh dam and to finally connect Imphal. During FLS it was found feasible to extend the line from Tupul to Imphal at a further additional cost of about Rs. 500 Crore involving a tunnel of 8 km.

STATUS OF RAILWAY PROJECTS IN ARUNACHAL PRADESH

PROJECT	Length (in km.)	Cost (in Rs. Crore)	Target
Harmuti to Itanagar (New line)	33	156.00	2011-12
Rangia-Murkongselek (Gauge Conversion)	510	913.00	2011-12

NAME OF SURVEY			
Murkongselek to Passighat	30	Rs. 122.93 Cr. (-) 1.99 per cent	2011-12
Rupai to Parashuramkund	50	913.00	Completed
STATUS OF ONGOING RAILWAY PROJECTS IN NAGALAND			
Project	Length (in km.)	Cost (in Rs. Crore)	Target
Dimapur to Zubza @ (Kohima) New Line (National Project)	88	850	2014-15
Lumding-Baraigram-Kumarghat (Gauge conversion)	367.79	1676.3	March, 2010
Note:@ There is a demand to extend the line upto Kohima			
STATUS OF SURVEYS IN SIKKIM			
NAME OF SURVEY	Length (in km.)	Cost (in Rs. Crore)	Target
Sivok (Gulmakhola)-Singtam	59.65	1099.79(-) 33.954	Completed
Sivok to Rangpo	55	1676.3	July 07
There is persistent demand to connect Gangtok with rail network			
National Projects in North East Region			
Sl. No.	PROJECT	Cost (in Rs. Crore)	Target
1.	Jiribam-Imphal Road (Tupul)	728.0	2010-11
2.	Kumarghat-Agartala	880.0	2007-08
3.	Lumding-silchar-Kumarghat	1676.0	2009-10
4.	Azra-Byrnihat	200.0	2011-12
5.	Dimapur-Zubza (Kohima)	850.0	2014-15
6.	Bogibeel railway cum road bridge	1767.0	2011-12
7.	Rangia-Murkongselek	915.7	2011-12
	Total	7016.7	

Table 7.7

STATUS OF RAIL CONNECTIVITY TO STATE CAPITALS AS ON 20.3.2008

Sl. No.	Name of State	Capital City	Name of project	Remarks	
1.	Assam	Guwahati		Already connected	
2.	Tripura	Agartala	Kumarghat-Agartala new line (109 km.)	Sanctioned and in progress. Expected to be completed in March, 2008	National Project
3.	Manipur	Imphal	Jiribam-Imphal road (98 km.)	Sanctioned and in progress. Expected to be completed by March 2012 upto Imphal. Proposal for extension of line upto Imphal is to be processed.	National Project
4.	Arunachal Pradesh	Itanagar	Harmuti-Itanagar (33 km.)	Final location survey has been completed from Harmuti to Naharigun and land acquisition taken up.	
5.	Nagaland	Kohima	Dimapur-Kohima (Zubza) (88 km.)	Final location survey taken up.	National Project
6.	Mizoram	Aizwal	Bhairabhi-Sairang (52 km.)	New work included in budget 2008-09.	National Project
7.	Meghalaya	Shillong	Guwahati-Shillong	Work in Guwahati (Azra-Byrnihat (30 km.) taken up. Survey sanctioned for Byrnihat-Shillong (60 km.).	Azra Byrnihat declared a National Project
8.	Sikkim	Gangtok	Sivok-Rangpo (53 km.)	Sent to Planning Commission for in principle approval. Survey sanctioned for Rangpo Gangtok	

				(60 km.).	
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There are 14 ongoing projects and two new projects (Bhairabi-Sairang and Agartala-Sabroom) have been included in 2008-09 (Table 7.8). Further nine projects, including the earlier seven, in NER have been declared as “National Projects”. There is a move to set up a non-lapsable dedicated fund called the North East Rail Development Fund for smooth flow of funds to complete these projects in a time bound manner. Funding will be 25 per cent from the Railways GBS and the balance 75 per cent as additionality from the Ministry of Finance.

Table 7.8

CURRENT STATUS (AS ON 20.3.2008) and TIME LINES OF ONGOING PROJECTS

Name of the project	Year of inclusion in budget	Km .	Latest anticipated cost (Rs.Crore.)	Exp. Upto March, 2008 (Rs.Cr.)	Outlay 09-09 (Rs.Cr.)	Time Line	Status
NEW LINES							
Kumarghat - Agartala (Tripura)	1996-97	109	880	756. 15	10	June, 2008	Declared National Project. Line being extended to Sabroom.
Jiribam-Imphal (Manipur) National Project	2003-04	97.9	727 (upto Tupul) revised cost for alignment upto Imphal is Rs. 2,300 Cr.	14.91	25	Jiribam Tupul March 2012) upto Imphal March, 2014	Declared National Project. Work started on first 10 km.
Dimapur-Zuzba (Kohima)	2006-07	88	850	0	10	2014-15	Declared National Project. Final location survey started.
Harmuti-Itanagar (Assam, Arunachal Pradesh)	1996-97	33	160.48	0	29.98	March, 2011	FLS in progress. Part estimate upto Naharigun sanctioned. Land

							acquisition in progress.
Boghbeel bridge (Assam)	1997-98	73	1767	929.33	75	March, 2012	Approaching completion. Tender for sub-structure under finalization.
Dudhnoi-Depa (Assam and Meghalaya)	1992-93	16	89.04	0.5	0.02	Not fixed	The survey for alternative alignment from Dudhnoi to Mendhipathar as suggested by State Government has been completed.
Azra-Byrnihat (Assam, Meghalaya)	2006-07	30	200	0	0	2014-15	Declared National project. FLS in progress.
New Moinaguri-Jogighopa (West Bengal, Assam)	2000-01	257	894	135.73	55	Not fixed	Land acquisition, earthwork, and bridges taken up.
Bhairabhi Sairang (Aizawl) (Assam-Mizoram)	2008-09	51.38	619.34	0	0.01	Not fixed	Declared National Project.
Agartala-Sabroom (Tripura)	2008-09	110	813.34	0.01	0.01	Not fixed	Declared National Project.

CURRENT STATUS (AS ON 20.3.2008) and TIME LINES OF ONGOING PROJECTS

Name of the project	Year of inclusion in budget	Km.	Latest anticipated cost (Rs.Cr.)	Exp. Upto March, 2008 (Rs.Cr.)	Outlay 08-09 (Rs.Cr.)	Time Line	Status
Gauge Conversion							
Lumding Silchar Jiribam & Badarpur to Kumarghat (Assam and Tripura)	1996-97	368	1676	832.51	138	March, 2010	National Project. Work started at 68 sites – affected due to terrorist activities. Security cover being pursued
Rangia-Murkongselek with linked fingers (Assam and Arunachal Pradesh)	2003-04	510	915.7	9.2	50	March, 2012	National Project. Work in progress.
Kathakal-Bhairabi (Assam, Mizoram)	1997-98	84	88.70	16.95	15	March, 2010	Earthwork, bridge work. etc. taken up. The conversion will be done along with Lumding-Silchar project.
Lumding-Dibrugarh with linked fingers,	1993-94	734	949	804	30	Main line completed. Senchoa-Silghat	Balance work in progress.

Haibargaon-Mirabari and Senchoa Silghat Town Assam)						March, 2008 balance March, 2009	
New Jalpaiguri-New Bongigaon wih branch lines (West Bengal, Assam)	1997-98	419	960.48	853	30	Main line and alipurduar-Bamanhat completed. Fakiragram-Dhubri December, 2009	Work nearing completion.
CURRENT STATUS and TIME LINES OF ONGOING PROJECTS (AS ON 20.3.2008)							
Name of the project	Year of inclusion in budget	Km.	Latest anticipated cost (Rs.Cr..)	Exp. Upto March 2008 (Cr. Rs.)	Outlay 08-09 (Rs.Cr.)	Time Line	Status
Doubling of line							
New Guwahati-Digarua (Assam)	2007-08	30	99.84	0.94	50	March, 2010	Work in progress.

Some details of the planned rail network in NER and the expected costs are given in Annexure 11.2.

Bridges - There has been consistent demand to provide increased connectivity between the North and South of Assam by constructing bridges on river Brahmaputra at various locations such as between;

- (a) North and South Guwahati;
- (b) Dholai and Sadiya;
- (c) Jorhat and North Lakhimpur via Majuli; and
- (d) Dhubri to Phulbari in Meghalaya.

Construction of bridges across river Brahmaputra requires huge investment. Moreover, (b) and (d) are not on the NH and need to be taken up outside NH programme.

To provide increased connectivity between North and South Guwahati, NHAI has already prepared DPR for construction of an additional 3-lane road bridge at about 40m downstream of the existing rail-cum-bridge at Saraighat (Guwahati) on NH31 as part of the East-West corridor. The corridor is to be completed by 2008.

Besides these major projects for bridges 4,917 bridges have been identified by the states. A number of roads are sub-optimally utilized for want of bridges. The length of these bridges roughly works out to 1,17,535 m. The construction of these bridges would need funds to the extent of Rs.6,486 crore. There is immediate need to locate the funds for implementation of these projects to make the roads fit for effective communication. The state-wise requirements of bridges and fund requirement for their construction is given at Table 7.9.

Table 7.9
SUMMARY OF BRIDGES TO BE CONSTRUCTED

S.No.	State	Total Number of Bridges	Length/ Span in mtrs.	Approximate cost (Rs. in lakh)
1	Arunachal Pradesh	41	1328.35	6598.58
2	Meghalaya	390	7267.19	42753.91
3	Assam	4359	102844.49	565916.00
4	Manipur	7	175.50	1614.60
5	Mizoram	57	2984.30	15429.15
6	Nagaland	15	380.00	2914.02
7	Sikkim	23	1170.00	6610.00
8	Tripura	25	1386.00	6770.00
	Total	4917	117535.83	648606.26

7.1.4 Air

The terrain of the region and very tenuous land link with the rest of the country makes air connectivity a *sine qua non* for trade and commerce, tourism, realization of the potential for horticulture and floriculture in the region, promotion of higher and technical education and even for reducing the image deficit that the region suffers from. Air connectivity is generally useful for high-end passenger traffic and high-value freight (such as plants, flowers and valuable documents). In general, air connectivity is also expensive in the hilly areas because of the terrain, which is the reason for the paucity of airports in other hill areas in the country: (most have versions of a helipad). In NER, air travel has been made possible by central subsidies for air travel to and from NER (excluding Assam). Despite this, air connectivity was extremely unreliable prior to 2002 as the limited traffic made the use of Boeing jets uneconomical and led to irregular flight schedules. However, since 2002 the introduction of smaller ATR planes has made flights within NER somewhat more reliable though Kolkata still seems to be the hub rather than Guwahati. On the other hand, Guwahati seems to be more the natural hub for air traffic within NER. At present only Meghalaya and Sikkim have no full-fledged airports.

Air connectivity needs substantial investments and participation from both the Government and private investors. The Sixth Sectoral Summit of NEC on Air Connectivity in Aizawl declared inter-alia the objective of “operationalizing upto 50 airports/airstrips in the North Eastern Region by the end of the Eleventh Five Year Plan, and providing upto 600 flights per week within the region, by using the appropriate type

of aircraft, making the required improvements in existing airports/airstrips in a time-bound manner”.

Since the opening of the skies to private airlines in India, the North East has witnessed a quantum increase in the number of flights and passengers (Table 7.10).

Table 7.10
GROWTH OF FLIGHTS IN N-E

Airline	Freq/week (Departures/week)		
	WS 06	SS 07	WS07
Indian Airlines	27 (71)	39 (94)	41 (98)
Alliance Air	83 (170)	72 (148)	73 (155)
Jet Airways	38 (105)	38 (105)	38 (105)
JetLite	21 (58)	14 (42)	14 (42)
Air Deccan	56 (133)	68 (207)	61 (193)
Kingfisher Airlines	13 (26)	27 (54)	27 (48)
Spicejet	7 (28)	7 (14)	7 (14)
IndiGo	14 (42)	25 (64)	27 (74)
TOTAL	259 (633)	290 (728)	285 (729)

PASSENGER TRAFFIC **NORTH EAST REGION**

YEAR	In Nos.	Per cent change
2004-05	1447453	10.8per cent
2005-06	1620880	11.9per cent
2006-07	2272193	40.2per cent

State Governments are providing helicopter services at subsidised rates in Arunachal Pradesh, Sikkim, Tripura, Nagaland and Meghalaya. Flights on some commercially unviable sectors are being provided with viability gap funding by NEC to operators. Despite an increase in the number of flights and passengers, for equitable dispersal of connectivity, gap funding by Governments on commercially unviable routes and strict enforcement of DGCA's Route Dispersal Guidelines, 1994 will need to be

strictly enforced in the foreseeable future. An indication of the increasing commercial interests in the region by private operators is the fact that the Government granted NOC to three operators to run scheduled/non-scheduled air services in the North East in 2007.

The development of existing airports, operationalization of non-operational airports and construction of greenfield airports assume great importance. There are 11 operational airports, 11 non-operational and three proposed greenfield airports - Itanagar, Tawang and Pakiyong (Gangtok) - Amongst the operational airports, only Agartala and Guwahati have night landing facility. In the region today there are no operational airports in Sikkim and Arunachal Pradesh. Instrument Landing Systems are only available in Agartala, Dibrugarh, Dimapur, Guwahati and Imphal. Clearly, all major operational airport need upgradation, inter-alia, in better navigational systems, expansion of terminals, extension and strengthening of runways and control towers. For Meghalaya, Umroi Airport at Shillong needs to be upgraded to enable large aircraft landing and operationalised. Since Shillong is home to premier educational, research and health institutions in the NER, its air connectivity to the rest of India needs to be improved. For Meghalaya, the Baljek Airport also should be operationalised. NEC and the Airport Authority need to work in a time bound manner to complete all the pending upgradation proposals as per their MoU in the Tenth Plan. Enhanced budgetary support, quicker land acquisition and negotiations where land is not privately owned and in some cases, coordination and cooperation from defence authorities are required for comprehensive airport development.

Status of the three greenfield airports is:

a) PAKYONG AIRPORT – Gangtok, Sikkim for ATR 72 Aircraft

- Planning Commission, Government of India has concurred the funding of the project on 90:10 basis.
- Estimated cost of project – 358.36 crore.
- Project likely to be completed in 36 months from the date of commencement of work after all approvals, PDC 2011.

b) ITANAGAR – for ATR 72 Aircraft

Consultant appointed by the Airport Authority of India (AAI) has submitted DPR for greenfield airport at Itanagar. The estimated cost of the project is approximately Rs. 515.17 crore. The report is being reviewed.

c) TAWANG (ARUNACHAL PRADESH)

Pre-Feasibility Study for construction of new greenfield airport at Tawang has been conducted by AAI and report submitted to the government. Approval of the Government of India is awaited.

Cheithu Airport (Kohima) has been found commercially unviable and the proposed site for Kokrajhar Airport is also unsuitable. A new site needs to be identified.

The non-operational airports are mostly airstrips of World War-II vintage. They are hampered by the small length of the runway and difficulties in expanding due to a hilly terrain. These difficulties are apart from their commercial viability. However, the imperative of developing the region necessitates public funding of infrastructure.

Smaller aircrafts, charters and helicopter services (especially for lifting patients) and combo aircrafts (can be used both for passengers and cargo) need to be promoted. Intra-regional linkages are extremely poor, (especially linkages between the State capitals, connections to upper Assam and beyond and connection between the southern part of the North East and the northern part of Assam and Arunachal). A dedicated regional airline can provide a solution with smaller aircraft operating from smaller airstrips. Steps are already underway though results are uncertain. The Government needs to continue to display firmness in making Guwahati an airport hub. Cargo transport facilities from Guwahati need further improvement.

Improved links to international neighbours is a priority area under the Look East initiative. Guwahati presently has a sole link to Bangkok. Bangladesh, Bhutan, Myanmar and TAR should be connected to Guwahati. Another international airport for the southern part of NER in Agartala can be prioritized. Roads and railways are more capital intensive and cause far more environmental disruption than air connectivity. For the special situation of the North East, there is no alternative but to make air connectivity a very high priority.

Air traffic in NER accounts for less than 1 per cent of all traffic in the top 46 airports in India (Table 10.8A in Annexure 10.1). In fact, barring airports in Assam (Bagdogra and Guwahati), only Agartala (Tripura) and Imphal (Manipur) are in the top 46 airports list, and that due to limited alternative access to the latter states. On the other hand, Sikkim has no airport and the heavy tourist traffic for Gangtok comes via the rail head at Siliguri or the airport at Bagdogra. Bagdogra Airport can be declared as an international airport. It can then connect Bhutan, Bangladesh and Nepal thereby facilitating tourist inflow from SAARC countries. What is even more problematic in NER is that there is no direct connectivity between state capitals and all movements have to be via Guwahati. In fact, in some cases one may actually have to fly from one state to the other via Kolkata. Any attempts to build airports in the NER states must grapple with the twin issues of cost of travel and rationalization of air routes (World Bank, 2006).

7.1.5 Inland water transport

Until the construction of roads, inland waterways in the Brahmaputra and the rivers in the Barak Plains were the commonly used medium of transport. During British rule, as the tea industry grew, these rivers became important carriers of trade. NER has

about 3,839 km. of navigable river routes, with the Brahmaputra having the longest navigable stretch in the region (Table 10.8A, Annexure 10.1). Other important rivers are Buridhing, Katakhal, Subansiri, Disang and Gangagdar. Most of the waterways in NER are in Assam, and are used for ferry, commercial and rescue services and as crew-training centres. Most of the cargo is transported on the Brahmaputra and consists mainly of tea, coal, bamboo, rice, jute, sugar and urea (Table 10.9A, Annexure 10.1). The movement of cargo on the Brahmaputra grew from 29,414 tons in 1996-98 to 8,91,522 tons in 2003-04 (Table 10.10A, Annexure 10.1). Most of the ferry services are in Assam.

Inland water transport (IWT) offers a shorter and cheaper route for transport of bulk commodities and project cargo (Table 7.11). It is operational even during the flood season and offers large employment potential. The development of IWT in NER is a strategic and economic imperative. The Brahmaputra river from Dhubri to Sadiya (891 km.) was declared as National Waterway-II in 1988. Declaration of Barak River from Lakhimpur to Bhanga (121 km.) as National Waterway-VI is under process. On NW-II, which will become fully functional by March 2009, IWAI has taken up river conservancy works (Rs.12.30 crore) targeted for completion by March, 2008, maintenance of floating terminals (Rs.1.96 crore) at Dhubri, Jogighopa, Pandu, Tezpur, Silghat, Jamguri, Neamati, Bogibeel, Saikhowa and Sadiya, coal handling terminal (Rs.5.30 crore) at Jogighopa, night navigational aids (Rs.1.28 crore) from Dhubri to Pandu, 24 hours navigation facilities including setting up of DGPS stations (Rs.18.77 crore) at Jogighopa, Tezpur and Dibrugarh and construction of a permanent terminal (Rs.67.74 crore) at Pandu. Upstream cargo from Kolkata to Pandu mainly includes bitumen, steel, pipes, cement, detergent and batteries. Downstream cargo on NW-II includes gypsum, tea, jute, coal and diesel (Numaligarh Refinery). The potential is much more. Cargo movement on NW-II is projected to increase from 0.75 btkm. to 4.87 btkm. by 2024-25.

Table 7.11: Water Routes on which Assam IWTD Operates Ferries

Sadia-Saikhowa	Connected with Arunachal Pradesh directly
Neamati-Kamalabari	Connected with Nagaland by the shortest route
Jaleswar-Dhubri Dhubri-Fakirgang	Connected with Meghalaya by the shortest route

Source: *World Bank* (2006).

In recent years there has been an attempt by IWTD, Assam to provide passenger ferry services. It has introduced 32 cargo cum passenger ferry services on the Brahmaputra and its tributaries where no other mode of transport is available (Table 7.12). A project to open 88 additional such ferries is under implementation. Other projects under NEC are working to improve river channels (World Bank, 2006).

The major strength of inland water transport in the plain areas of NER is the presence of several, perennial rivers, which present the cheapest mode of transportation

generating the least amount of pollution⁹. Given the costs of expanding the other modes of transportation in the region, inland water transport could present a viable, cost-effective alternative in the plain areas. Improved inland water connectivity in the North East would increase employment opportunities and tourism-related activity in the region. Improved connectivity would also lead to the opening of inter-country routes for trade and commerce. The lack of facilities for night navigation and mechanical handling and insufficient cargo vessels and terminals will need to be addressed.

Table 7.12: Inland Water Transportation Vessels with Valid Certificate of Survey in NER: 1998 to 2004 on March, 31
(Number)

<i>State</i>	<i>Year</i>	<i>Self-Propelled</i>				
		<i>Cargo</i>	<i>Passenger</i>	<i>Cargo-cum-Passenger</i>	<i>Tugs Pushers</i>	<i>Total</i>
Assam	2001	8	-	32	-	39
	2002	8	-	32	-	39

Source: *indiastat.com*

One of the problems of NER is the difficult access from the rest of the country. Consequently, commodities transported by land tend to be fairly high in cost. It is here that the river network can be used to transport commodities into NER. The list of goods for which river transportation could be effectively used includes coal, petro-chemicals, fertilizers, cement, tea, forest products and other bulky items (for more details see Table 10.11A in the Annexure 10.1). In this context it will be useful to look at the Working Group on Shipping and Inland water Transport (2006) Report of the Eleventh Five Year Plan.

The details of expenditure incurred by IWAI for the first four years of the Tenth Plan under these heads is given in Table 7.13.

Table 7.13: Budgetary Support and Funds for NER Areas
(Rs crore)

	<i>Schemes/budget head</i>	<i>Approved outlay</i>	<i>Approved yearly</i>	<i>Amount spent (2002-03 to 2005-06)</i>
1	Grant to IWAI (NW-1, NW-3 and other projects)	319.83	165.65	125.69
2	North Eastern Areas (NE Pool) (NW-2, Indo-Bangladesh Protocol Route, Barak)	235.00	129.20	96.45

⁹ This section is based on World Bank (2006) Chapter 10.

3	Subsidy (IVBSS + LISS)	45.00	48.00	8.95
4	Technical Studies and R&D	8.00	4.00	4.24
5	Centrally Sponsored Scheme	20.00	16.00	41.34
	Total	626.83	362.85	285.68

Source: Planning Commission (2006).

From Table 7.13, we infer that the investment of Rs. 235 crore. for development of IWT sector in four years is not a very satisfactory figure. Also, the budget allocated to IWAI at the yearly level could not be utilized fully. Hence, it is necessary that suitable measures be taken up for increasing the absorption capacity of IWAI on a priority basis. In other words, major organizational strengthening of IWAI is required.

Major transport initiatives taken by the Planning Commission listed in the Approach Paper to the Eleventh Five Year Plan are given in the Box 7.1.

Box 7.1

Transport Initiatives in the North East

Infrastructure, particularly transport infrastructure, is crucial for the socio economic development of the North Eastern States. Improvement of transport infrastructure would necessitate concerted and multipronged action covering all modes of transport in the region - roads, railways, civil aviation and inland water transportation.

Recognizing the criticality of developing the vast road network in NER, various road development programmes, including SARDPNE would be taken up at an accelerated pace. These schemes/programmes, apart from augmenting the capacity of high-density corridors, will result in provision of improved 4-lane or 2-lane (with paved shoulders) National Highway link to all state capitals. In addition, all district headquarters will be connected through National Highways either directly through 2-lane National Highway or 2-lane state road facility.

High priority is being accorded to converting the arterial network of Railways to Broad Gauge (BG) and almost the entire Metre Gauge (MG) network in the North East region will be converted to BG in the region during the Eleventh Five Year Plan period. Action will be taken to provide rail link to Meghalaya and Sikkim. With this, all the North Eastern States will be linked with a BG line. Efforts will also be made to provide rail link to all state capitals in NER.

Construction of three greenfield airports at Pakyong in Sikkim, Itanagar in Arunachal Pradesh and Cheithu in Kohima should be completed expeditiously. All state capitals in NER would have air connectivity. As a part of the modernization of airports in the country, four airports in the North East (Guwahati, Dimapur, Agartala and Imphal) are proposed to be modernized. With a view to improving intra-regional

connectivity, infrastructure facilities at various airports will be strengthened and air services augmented.

In order to harness the maximum potential of inland water as an ideal mode of transport for low value, high volume commodities, river Brahmaputra National Waterway II, which provides trunk route connectivity to the region, will be made fully functional.

Source: An Approach to the 11th Five Year Plan, '*Towards Faster and More Inclusive Growth*', Planning Commission, Government of India, November, 2006.

7.1.6 The Way Forward

- Developing a fairway to Pandu and the necessary infrastructure for full-time navigation.
- Developing the Aricha-Dhulian-Rajsahi-Dacca route for navigation to reduce the distance and time between Kolkata and the North East.
- Declaring the Barak river between Karimganj and Lakhimpur a national waterway, so that it can be developed on a priority basis.
- Developing river routes through Gomti-Meghana to explore the trade opportunity between Tripura and Bangladesh.
- Developing Tizu-Chindwini-Irrawady to promote trade between Nagaland and Myanmar.
- Following transit routes are to be activated as specified in the IWT Transit and Trade Protocol between India and Bangladesh.
 - Kolkata - Haldia - Raimongal - Chalna - Khulna - Mongla - Kaukhali - Barisal - Hizla - Chandpur - Narayanganj - Aricha - Sirajganj - Bahadurabad - Chilmari - Dhubri - Pandu and vice-versa.
 - Kolkata - Haldia - Raimongal - Mongla - Kaukhali - Barisal - Hizla - Chandpur - Narayanganj - BhairabBazar - Ajmiriganj - Markuli - Sherpur - Fenchuganj - Zakiganj - Karimganj and vice-versa.
 - Rajshahi - Godagari - Dhulian and vice-versa.
 - Karimganj - Zakiganj - Fenchuganj - Sherpur - Markuli - Ajmiriganj - Bhairab Bazar - Narayanganj - Chandpur - Aricha - Sirajganj - Bahadurabad - Chilmari - Dhubri - Pandu and vice-versa.
- Cargo transportation to the North East through the Sunderbans and Bangladesh via NW-II and via the Meghna-Barak waterway system often follows a shorter route than that by the rail or road network.
- During the flood season, other modes of transport are often not in operation, and inland waterways are the only viable option for transportation of goods

between the North East and the rest of India. Basic commodities such as foodgrains need to be transported to the North East during the flood season - inland waterways are highly suited for such bulk transport.

- Bulk commodities and large cargo used for industrial production and large scale construction projects can be transported through inland waterways from Kolkata/ Haldia. With access through the waterways in Bangladesh, transit route from Haldia port through Bangladesh to Assam and Tripura, linking to Chittagong sea port with southern tip of Tripura can then be feasible. This will provide tremendous gains in terms of reduced transportation, time and cost as well as for an alternative link for the NER with the rest of the country as well as other destinations in south-east Asia.
- Passengers and cargo are moved via inland water transport in both the organized and unorganized sectors. This mode of transport is essential for small or remote locations for the transport of agricultural and commercial products to and from regional markets and growth centres, especially during the monsoon and flood season.
- The increase in economic activity as a result of the development of inland water transport would create substantial employment opportunities.
- Opening of the Farakka-Dhulian-Rajshahi-Aricha route will further provide a direct link to the mainland through NWI.
- Development of the tributaries of the Brahmaputra like Dhansiri, Subansiri and Lohit is essential.
- Public-private partnerships for the development of fairways and infrastructure in IWT should be stressed.
- The Ministry of External Affairs should initiate the process for renewal of Indo-Bangladesh IWT protocol on a long-term basis and expeditious implementation of the Kaladan River multi-modal transport route from Mizoram to Sittwe port.
- IWAI to ensure that NWII is made fully operational within March, 2009 and expedite necessary approvals for declaration of Barak river (Lakhipur to Bhanga) as NWVI and take up development of the waterway on priority.
- IWAI to develop credible night navigation facilities on NWII to reduce travel time. Ministry of Shipping/IWAI to consider deputing a delegation abroad for studying effective methodology for providing night navigation facilities. To reduce manual handling of cargo, IWAI to consider providing mechanical handling of cargo.
- IWAI to consider proposal from the Government of Mizoram to link the Tlawng and Barak rivers to enable transport of cargo from Mizoram into the Barak Valley and further through the proposed NWVI.
- Ministry of Shipping/IWAI to take up the Tripura Government proposal for declaring Ashuganj as port-of-call during the next meeting with Bangladesh.

The development of IWT has been limited both by the lack of funds and the insurmountable nature of the Brahmaputra (World Bank, 2006). However, the newly constituted Brahmaputra Board should make an attempt to integrate IWT in the general framework of connectivity in NER, as IWT has implications not only for Assam but for other land-locked states like Arunachal.

7.2 POWER

Almost every North Eastern state is deficit in power, which is important given the nascent state of industrial and other economic activities based on power in the region (Table 10.13A, Annexure 10.1). Further, while Arunachal is supposed to be self-sufficient in power it actually imports power from Assam, also a deficit state.¹⁰ All the states need to develop their internal transmission grids to avoid incurring wasteful expenditure on wheeling power from the central grid. Basically, the NER states need to determine how they will transmit power within their states before estimating the amount of power they would sell to the national grid. Power consumption has remained virtually stagnant in most of the states over a period of about ten years (Table 10.14A, Annexure 10.1), with the exception of Meghalaya and Sikkim (which had an almost 200 per cent increase). In Manipur power consumption has actually declined and is stagnant in Assam. This obviously reflects the differential growth in economic activity in the NER states.

At present the states are not in a position to generate enough power even for their own requirements, even though power generation has increased substantially in every state after 1996-98. However, generation seems to be stagnant after 1999-2000 (Table 10.15A, Annexure 10.1). States like Meghalaya are in fact identifying less power-intensive areas like high-level tourism, IT sector, horticulture and so on as thrust areas in their industrial policy rather than large industrial projects.¹¹

For the future, ambitious plans have been drawn up for making NER not only self-sufficient in power but also the 'power house' for the rest of the country. As can be expected the main source of power is likely to be hydel and the focus state would be Arunachal¹², even though in Assam, the power supply source has changed dramatically in 2006 from thermal to hydel¹³. Arunachal Pradesh's potential for power through small hydel projects should be fully optimised.

In addition, since power projects are capital intensive, most of the commissioned projects are (or would be) in the central sector or under public-private partnership (PPP) mode. Table 10.18A (see Annexure 10.1) shows the increasing role of the centre in

¹⁰ In discussion with the study team, officials indicated that the lack of an internal grid in Arunachal prevents the evacuation of surplus power from one part of the state to another. Plans for a state transmission grid have been submitted to DONER and approval is awaited.

¹¹ Officials of the Meghalaya Government admitted that large-scale industrial plans for the state (cement, steel, minerals etc.) are not presently considered given the severe power constraint. In fact, captive power has to be shown before approval of private projects in mineral exploration.

¹² Discussion with officials on field trips indicated that there is some move to go back to thermal power because of the unreliability of hydel sources.

¹³ See, for example, the Pasighat declaration, January 2008.

power generation in the NER states mainly implemented through NEEPCO. In Assam, for example, the big jump in 2006 relative to 2005 is entirely due to capacity created in central power projects.

As noted in the Pasighat Declaration, the total power potential in NER is about 50,000 MW. According to *NEC Vision 2020* the estimated hydro-power potential of Arunachal is around 50,000 MW. The state is expected to generate an additional 22,584 MW hydel power by 2020 in 166 hydel projects, of which only 88 MW is to be created under state projects, the rest will be under central and private projects. In the Twelfth Plan alone 15,251 MW of additional power is to be generated. Finally, about 42 per cent of the additional power is to be generated by private hydel projects.

The ambitious power generation plan may satisfy the requirements of the NER states, as they are entitled to free 12 per cent of power generated from central projects. However, from the long-run point of view, four problems need to be addressed. First, the large number of hydel projects envisaged for Arunachal will require compensatory afforestation under the Forest Conservation Act, 1980.¹⁴ Given the large forest cover of the state, compensatory afforestation will have to be done elsewhere, and this issue has to be addressed now and not at the project stage.¹⁵ Second, while the state prefers 'run-of-the-river' projects, Assam has been asking for dams which also mitigate its flood problem (World Bank, 2006). Third, hydel power (particularly in the hills of NER) is crucially dependent on rainfall, which has been erratic in recent years. Finally, the low population density of hill states, and their far-flung villages mean high transmission losses. Yet, barring Nagaland none of the states has seriously investigated the use of relatively low-cost micro-hydel power for loads of up to 5 KW for domestic users (see Box. 7.2) (Pant, 2004).

Box 7.2

Appropriate Technology in Power: A Case Study from the North East

Nagaland recently experimented with small hydel generation units under the initiative of NEPED. The success of the experiment led to the extension of the scheme to other parts of the state through a grant from the Ministry of Non-Conventional Energy Sources.

The starting point of the experiment was the fact that most small entrepreneurs (small farmers, shop keepers, restaurants etc required only about 5 KW of power. (This is approximately the sanctioned power of middle-class homes in major metros and is sufficient to run heaters, lights, geysers etc.). The next step is to identify the power-generating turbine which would make economic sense. Small hydel power turbines are generally classified by their 'head' which defines how high the water supply reservoir must be in relation to the turbine to

¹⁴ The lower Subansiri dam has already encountered some objections from wildlife authorities.

¹⁵ Other projects like the Gomti dam in Tripura should now be decommissioned.

make it functional. Two types of turbines were identified, either requiring a 20-foot or a 6-foot 'head' of water.

The cheaper turbine with a 20-foot head would require a perennial mountain stream with an ordinary reservoir of water at its mouth. By placing the turbine 20 feet below, power would be available for any unit located on the roadside 10 or 15 feet away. The basic cost of installing such a unit is about Rs. 30,000 including the cost of the turbine. The opportunity cost of this at even an 8 per cent commercial rate works out to about Rs. 200 per month. Who would not want guaranteed power at that cost without all the attendant problems (breakdowns, power cuts etc.) of a conventional centralized power system? The added advantage is that there is no maintenance cost for the system (as the study team found from someone running a roadside restaurant with such a unit). More importantly, the system was simple enough so its functioning could be handled by the owner or a roadside truck mechanic.

The state has, over the last few years, extended the experiment to a large number of small users.

As indicated earlier, NER has vast hydro power potential which is estimated at about 60,000 MW. Most of this potential lies in Arunachal Pradesh with only about 2 per cent of the potential being tapped so far. There has been very little addition in generation with shortfall in targets set for the Tenth Plan period (2002-07). There is also an imbalance between hydel and thermal power, both in terms of generation and availability in the region. However, a number of projects are ongoing in the region and are expected to improve the overall power availability in the region. The installed capacity is proposed to be doubled by the end of the Eleventh Plan. NHPC's Teesta Hydro- V (510 MW) power project in Sikkim has recently started generating power. The state is still included in the Eastern Power Grid and needs to supply power to the North Eastern region. The current installed capacity in the region as on 31-12-2006 was 2,520.30MW (effective output about 1,800 MW). The peak demand forecast by 2011-12 is estimated at 2,620MW and energy requirements at 13,649MU.

There have been inadequate investments in transmission and distribution grids in the North Eastern region. Four states, namely, Meghalaya, Manipur, Mizoram and Sikkim are connected by only 132KV lines. PGCIL activities are at present restricted to inter-state transmission systems only. The states in the region have expressed concern at the levying of high wheeling charges @ 35 paise per unit by PGCIL. Sub-transmission and distribution have been taken-up mainly in the state sector with financial assistance from Ministry of DONER and NEC. The Ministry of Power provides assistance to the states for improving distribution systems under the Accelerated Power Development and Reforms Programme (APDRP). There is an overwhelming demand for the continuation of the APDRP during the Eleventh Plan under existing guidelines and norms.

Very high transmission and distribution losses occur in the region ranging between 28.35 per cent (Meghalaya) to 70.61 per cent (Manipur) as is indicated by figures of (2004 - 05) and is an area of concern. Of the total 40,377 inhabited villages (2001-census), 25,248 (62 per cent) had been electrified by October 2006.

A two-pronged strategy needs to be adopted for power generation with focus on small/localized hydel and Thermal and NRE projects for catering to local needs. There is also a need to install high capacity hydel and thermal power projects with associated transmission lines for first meeting the demand for power of NER and thereafter that of the rest of the country. A clear and coherent policy is required to be evolved for NER which takes into account the special characteristics and needs of the region, so that the benefits of power availability reach the people of the region. The second priority with respect to the development of the power sector in NER is to ensure that the growing and diversified demands for power for the economic development of NER are met in full. The third priority should be the export of power from the region to elsewhere in the country so that NER does in fact become the “power house” of the country. ONGC and ILFS are in the process of setting up the 750 MW Palatana Gas Power Project in Tripura. Only Tripura and Assam have entered into a MoU with ONGC/ILFS for purchase of power. Other power deficient states should also approach ONGC/ILFS for accessing power from the Palatana project. PGCIL must invest more in trunk transmission lines for improving inter- and intra-region connectivity. Adequate transmission systems should be in place for evacuating power generated by public and private sector hydro projects in Sikkim to be developed. Priority has to be accorded for creating a grid to meet power shortages in the North Eastern States. Improvement, transmission, sub-transmission and distribution systems is to be one of the thrust areas for NEC during the Eleventh plan. In order to build up a shelf of priority projects, NEC is expected to support intensive survey and investigation work relating to such projects by State Governments. The issue of gas availability and pricing is a matter of concern and needs to be appropriately addressed for exploiting the substantial gas reserves in the region for power generation.

To achieve these objectives, top priority attention needs to be paid to the Small Hydro Power Programme (SHP) for NER, to be supplemented by other sources of new and renewable energy such as biomass and solar energy. It is evident that the existing structure of SHP is proving inadequate for accelerated implementation in NER, as evidenced, for instance, by the fact that out of 492 projects identified in Arunachal Pradesh, the NER state with the highest SHP potential, only 64 have been implemented, 48 are under construction, and thus as many as 380 out of 492 projects are still far from being implementable. At the same time, it is evident that households around the North East, public thoroughfares including highways and trunk roads and other public places need to be lit up at night both for the people’s comfort and as a security measure. Yet, although 62 per cent of the villages are electrified, only 24 per cent of the households receive electricity. Therefore, the following inter-related policy measures appear to be required: a) Restructuring SHP for NER so that the level of subsidies ensures accelerated implementation of all identified SHP projects in NER which have been designed to generate over 2000 MW without complicated problems of transmission and distribution. Prioritizing NEC/ NLCPR lending to furnish viability gap funding for SHP projects. Ensuring sustainability of SHP projects through the involvement of elected representatives of the local community through Panchayati Raj Institutions/Village Development Councils/ traditional bodies, as the case may be, in the management, repair and maintenance of SHP projects. It would appear that similar measures are required to popularize other MNRES programmes such as those relating to biomass and solar energy. With a view to ensuring the utilization of the power generated in NER for accelerated

industrial and economic development of the region itself, the following critical areas of attention have been identified:

- a) Prioritizing inter-state transmission within the region in the funding patterns of both the NLCPR administered by the Ministry of DONER and the funds allocated to NEC.
- b) Concerted attention by states, DONER and NEC to funding sub-transmission systems so that NER power is amply available for consumption within NER in all sections of the population and for all economic activities.
- c) Similarly, for distribution, besides prioritization in funding by states, DONER and NEC, the Union Government's Accelerated Power Development and Reforms Programme (APDRP) also needs to be oriented towards implementation in NER.
- d) Consideration by the Union Government of a centrally sponsored scheme to support inter-state and intra-state transmission and sub-transmission projects.
- e) In view of the immense losses in transmission and distribution in NER, which are well above the national average, compounded by theft and other criminal activity which reduces availability to the consumers, special attention is required to be paid to managing the T&D system so that, through this most economical route, power availability to the consumer is expanded exponentially.
- f) To convert NER into the 'power house' of the country, the critical requirement is to immediately do all that is required to ensure evacuation through the narrow window available in the Siliguri corridor ('Chickens Neck').
- g) Against an expected capacity addition of about 30,000 MW in the Tenth Plan, only about 225 MW is expected to come in the North East. Upto now, only about 125 MW has been added (i.e, 25 MW hydro (Kopili) and the rest thermal). Another hydroelectric project (Karbi Langpi, Assam) of capacity of 100 MW is expected in the next couple of months. A massive stepping up of public sector investment in power in the North East in the Eleventh Plan is envisaged. But it is imperative that the Union Government, in consultation with the State Governments of Arunachal Pradesh and Assam, sort out outstanding issues relating to the 2,000 MW Lower Subansiri project immediately.
- h) All development projects in NER, but most particularly projects in the power sector, require massive infrastructure backing, especially roads to transport heavy equipment and helicopters to transport smaller sized equipment, particularly for SHP. In the prioritization of roads and highway development in NER, and in the deployment of helicopters, power sector requirements need further prioritization.
- i) While, on an annual basis, NER has been a net exporter of power for the past several years, the fact that much of this exportable surplus comes from hydel sources means that there are times of the year in the lean season when NER needs to import power from the Eastern Grid. Therefore, in recognition of the contribution which NER is making to the Eastern Grid, particularly from Sikkim, reciprocal arrangements need to be put in place for the Eastern Grid to feed NER as and when required.
- j) While NER would be the primary source of hydel power for NER itself and the country as a whole, due recognition needs to be accorded to the availability of thermal sources of energy, including coal, shale and natural gas, in NER, the exploitation of all of which falls at present far below the potential. A coherent policy of exploiting the thermal energy sources of the North East needs to be put in place through coordination between the ministries concerned in the Union Government and the State Governments.
- h) There can be little doubt that the future of the North-East rests upon its coming into its own through the power sector. It also needs to be recognized that NER can make an

invaluable contribution indefinitely to the country's energy security through clean hydel energy. But this immense potential for the development of NER and the country cannot be realized until and unless special treatment is meted out to NER in the short term in the expectation and confidence that NER would reach the take-off stage in the medium term and NER would then become the front-rank region for the development of the country as a whole in the long term. An enlightened, overall and long-term vision, therefore, needs to inform a clear, coherent and consistent power policy for the North East.

7.3 TELECOMMUNICATIONS AND INFORMATION TECHNOLOGY

Telecommunication plays a vital role in connecting people with the rest of the world and improving their economic well-being as does physical communication. Since physical infrastructure in NER is either limited or is expensive, telecommunication becomes an even more important mode of communication. The teledensity of the North East is low in comparison to the rest of India as shown in Table 7.14 and only Mizoram has a teledensity higher than the national average (Table 10.18A, Annexure 10.1). Further, the rate of increase in teledensity in the region is slower than the national average, which could be due to the limited expansion of exchange capacity (Table 11.18, Annexure 11.1).

Cellular mobile services were introduced in the region only in 2003 after a delay of eight years than the rest of the country on security considerations. There are still some restrictions in border areas and no signals are allowed within 500 metres of the international border. This restriction is particularly harsh to the North East states where a significant population lives in border areas and, therefore, should be removed as early as possible.

To address the situation, BSNL declared the year 2007 as the "Year of Development of Telecom Network in NE Region". The budgetary allocation of BSNL for 2007-08 was increased to more than 1.5 times of the total expenditure made during the previous three years in the region. This is expected to add 1.30 lakh fixed line connections and 11.19 lakh cellular connections as against the existing total of 2.55 lakh fixed line and 11.24 cellular connections. Similarly, there would be an addition of 1.35 lakh broadband connections as against a total of about 19,000 connections at present. A total of 89 new towns will be brought on the broadband map as against a mere 20 towns/cities at present. Even though the initiatives of BSNL, as well as of private service providers, are expected to improve the situation considerably, a lot will have to be done further.

Table 7.14: Mobile Phone Users in the North East as on March 31 of the Year

<i>State</i>	<i>2002</i>		<i>2003</i>		<i>2006</i>	
	<i>No.</i>	<i>Per Lakh Population</i>	<i>No.</i>	<i>Per Lakh Population</i>	<i>No.</i>	<i>Per Lakh Population</i>
Assam	28,811	105.8	48,331	181.01	10,81,136	3,861.88

North East*	4,512	35.48	8,692	66.21	4,69,660	3,255.88
India	64,31,520	612.03	1,26,88,638	1,181.95	9,25,18,319	8,085.88

Source: *indiastat.com*.

Note: * North East includes the states of Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. Population figures for the years have been projected from the 2001 Census figures.

The most important infrastructure required for the development of telecommunication including mobile technology is optical fibre networking and broadbanding. It would be difficult to get the services of a dedicated communication satellite for the region and therefore, erection of towers and spreading optical fibres presents the viable option for the region. Alternatives like utilizing the power transmission and distribution network etc. should be explored for optimizing costs.

The telecommunication revolution in the country has led to a dramatic increase in Internet connectivity in the country, which has made possible the revolution in Information technology. That Internet usage is low in the North East is clear from the insignificant number of connections in NER, being a low 15,303 in 2002, just 0.48 per cent of the total number in the country. This increased in 2003 but was still less than 1 per cent (0.88 per cent) of the total (Table 10.20A, Annexure 10.1). It is thus reasonable to conclude that the NER states have not been impacted by the telecommunication revolution as much as the rest of the country. The low Internet penetration is particularly worrying given the long-term plan of rapidly increasing the spread of IT services in the region.

While telecommunication technology is essential for the spread of information technology in the region, the development of the latter is an essential prerequisite for the development of the region. Information technology cuts across all sectors and technological upgradation and development of every sector depends on the progress made in its spread in the region. This would require significant strengthening of the infrastructure for the development of the IT and ITES sectors in the region.

As mentioned earlier, a good information technology base is essential for the development of every sector in the economy. Information technology is necessary for the management of information required for grassroots planning. The compilation and collation of data on physical, human and financial resources right from the village level, preparing the plans, their implementation, monitoring and evaluation in a systematic manner requires the application of the technology. The most important application of the technology is in governance; e-governance is particularly important to ensure that the large public investments produce expected outcomes. A pro-active and responsive administration will be greatly facilitated by e-governance. The technology helps to bring the markets closer; e-choupals can provide information on prices and input supplies from the markets far and near. This also plays an important role in the agro-processing industry and in the development of handlooms and handicrafts by accessing the latest designs and marketing of the products. In this regard, the initiative of the Central Government in setting up of Community Information Centres (CIC), which are being upgraded to

Community Service Centres (CSC), are playing an important role and should, therefore, be strengthened.

Technology helps in both education and healthcare. The spread of information technology education could help the region to become an important hub for IT and ITES industries. It will also provide productive employment opportunities to the youth which can trigger the development process in the region. In the healthcare sector, information technology has an important place in the development of e-medicine. Considering the importance of IT infrastructure for the development of virtually every sector in the economy of NER, this should be of utmost priority. Given its complementarity with the power and telecommunication sectors, the plan for the development of the sector should be calibrated in a coordinated manner.

7.4 RECOMMENDATIONS OF EARLIER COMMISSIONS

Ever since the mid-1990s, every study of the NER states has talked of the need to promote infrastructure development.

7.4.1 The Shukla Commission Report (1998): Transforming the North East - Highlevel Commission Report, Planning Commission, and Government of India. Main recommendations on infrastructure;

7.4.1.1 Roads

In the interest of improved trunk connectivity, four priority roads recommended by the 1994 working group should be developed as National Highways. These are:

- The 290 km. Daboka-Lanka-Lumding-Haflong-Udarband-Silchar highway in Assam;
- The 241 km. Kohima-Mokokchung-Amguri road providing an alternative connection between Assam and Nagaland,
- The 210 km. Sairang-Manu highway linking Aizawl to Agartala, and
- The 135 km. Agartala-Udaipur-Sabroom highway in Tripura which is already included for upgradation in the PM's package.

Their construction should be given to the Directorate General of Border Roads (DGBR). Maintenance of NH 52 section between Balipara to Jonai should be entrusted to DGBR.

Following roads should also be given high priority in the Ninth Plan proposals for upgradation of roads in the state sector:

- North Guwahati Hajo-Barpeta-North Salmara, Assam (120 km.). This will provide an alternative link to North Salmara where it will join NH 31. The existing section of NH 31 between these two points is highly vulnerable to floods and is also affected by militant activities.
- Dudhnoi-Damra-Nangalbibra-Bagmara-Gasuapara-Dalu, Meghalaya (196 km.). This road will connect NH 38 and NH 51 It passes through limestone and coal deposits and is the route for exports of coal to Bangladesh

- Aizawl-Thenzawl-Lunglei-Tlabung (Demagiri), Mizoram (263 km.). Shell limestone deposits in the area between Tuirial airfield and Sailungvar Tlang will be accessed with the construction of this road. It will also provide a connection to the Karuphuli waterway through Bangladesh to Chittagong in due course.

The other state highways, major district roads and other district roads proposed, including the Arunachal East-West Highway, should be integrated into a regional master plan for roads.

In addition, there is need for a revised regional perspective plan for road development in the North East with international linkages. This should be related to and prioritized according to emerging opportunities and strategic requirements and could incorporate the NEC's proposal for a road all along the Indo-Myanmar border from Champhai in Mizoram to Vijoynagar in Tirap, Arunachal Pradesh.

As in the case of railways, Bangladesh should be approached with proposals for a road connection from Agartala to Akhaura and for the construction of a major new highway from Lunglei-Tlabung (Demagiri) in Mizoram to Chittagong. This would open up both central and western Mizoram and the Chittagong Hill Tracts for development and tourism. The Tlabung (Demagiri) connection will also provide access to the Karnaphuli waterway.

DGBR could be tasked to take on a larger role in road development and maintenance.

The Rubber Board has constructed a short stretch of rubberised road in Tripura as this surfacing is better able to withstand wear and tear and heavy rain. This pilot project should be critically evaluated under varied conditions as the technology could have a bearing on maintenance costs which are very high in the region.

7.4.1.2 Railways

- Full funding for expeditious completion of the present clutch of sanctioned projects already under way, including the Bogibeel Bridge.
- The Diphu-Karong and Bairabi-Saireng lines should be taken up in the interests of national integration. The Commission accordingly suggested a suitable provision that will enable work to commence during the Ninth Plan on these two lines and the Siliguri-New Bongaigaon conversion.
- The construction capability of the railways may be augmented commensurately.
- The operating losses on the new lines proposed should be a charge on the general budget.
- There should be a fast and conveniently timed overnight train between Dimapur and Guwahati to enable passengers to connect with air services to and from Delhi and Kolkata.
- Early discussions should be initiated with Bangladesh for linking up the IR and BDR railway systems, particularly in the Karimganj and Agartala sectors. India should be prepared to invest on such upgradation as the BDR system might require in order to carry additional Indian traffic up to Chittagong. This also

includes augmentation of related port capacity. These options could offer quicker and more cost-effective solutions to some of the problems of the North East.

India should offer to assist Myanmar which would like to extend its railway along the Chindvin valley, parallel to the Mizoram-Manipur border. This would link with the main Yangon-Mandalay rail system and could form part of the Trans-Asian Railway in which international interest has been revived. The Government of India was in fact earlier indirectly approached to provide coaching stock up to a value of 8-9 million dollars.

7.4.1.3 Waterways

- Give priority to East-West ferry crossings on the Brahmaputra, not North-South journeys because this is of better road and rail connectivity for the latter.
 - Heavy goods and containers to be transported by IWT instead of roads because this is cheaper, more fuel-efficient and safe; on the other hand, highways and vehicles are damaged by slow movement of heavy goods carriers as well as high energy expenses.
 - Promote heritage tourism along the river through heritage bungalows (tea estates), improved and safer country boats as well as luxury ships such as the Charaideo, launched in 2004 by a private Guwahati company in partnership with a British group (the tours are booked out for years).
 - Improve connectivity between roads and ghats (river ports) (Planning Commission, Assam Development Report, 2002).
 - Better flood management and deepening of channels on the Brahmaputra through more travel of vessels and regular dredging.
-
- High priority should be accorded to IWT in the North East and enhanced transit and transshipment arrangements negotiated with Bangladesh along the lines indicated.
 - The charter and competence of IWAI be enlarged with adequate financial support and a meaningful presence in Guwahati and Silchar.
 - Close liaison is necessary between the Central Water Commission and the Brahmaputra Board on the one hand and IWAI on the other so that water resource development meshes with the development of waterways.
 - The Central Inland Water Corporation (CIWTC) must be strengthened with a strong regional presence. At the same time, private operators should be encouraged to take up component segments of IWT development and operation. Funding should be provided.
 - Modernized country craft development should be taken in hand to extend services to feeder routes. There should be some agency to study this matter and play a promotional role.
 - There has to be a policy for waterfront development and location of industries to generate traffic. Short navigation canals from such waterfronts or waterways to

deepened beels with jetties and production/warehousing facilities around them might be envisaged. Ring embankments could offer flood protection.

- An R&D facility needs to be developed to undertake studies with regard to types of river craft for different categories of waterways and cargo in the North East sector. Safety should be an important factor.

7.4.1.4 Aviation

- Guwahati should be made a regional hub for Indian Airlines so that aircraft stationed there can operate services without delays on account of late arrival of aircraft from Kolkata or Delhi because of fog or other weather or technical problems.
- With the gradual lifting of the restricted area permit regime in the North East, and the opening of new trade and tourist opportunities, international flights should operate out of the region to destinations like Dhaka, Chittagong, Mandalay, Yangon and Bangkok in the first instance. Tourist packages could be developed around these services.
- An integrated plan for the utilization of the Guwahati international air cargo facility should be prepared by the Ministry of Commerce in consultation with the North-eastern states.
- A study should be initiated for inducing short take-off-and-landing (STOL) aircraft into the North East circuit in view of the need to connect remote hill areas and provide feeder tourist services.

7.4.1.5 Power

- Full funding must be provided to ongoing power projects to ensure that further cost and time overruns are avoided in this critical sector.
- The Department of Power should take concerted action to refine its prospective power development programme for the North East, currently under preparation, in consultation with the Brahmaputra Board, NEEPCO, Power Grid Corporation and the concerned states, taking account of all pending and proposed hydel, thermal and gas-based stations on the anvil. These projects should be ranked and efforts made to secure funding.
- System efficiency must be improved by urgent steps to reduce T&D losses and improve PLF. CEA or Power Grid Corporation should undertake a quick study of critical gaps and linkages within three months with priority funding.
- A similar expert assessment should be made of the additional generation that can be brought on stream by meeting fuel deficits, whether of gas or coal.
- Determination of who should execute the Karbi Langpi, Kameng and Loktak downstream projects should be speedily resolved to avoid delay and further cost escalation.
- The proposed power tariff regulatory authority should be brought into being as early as possible, or this might even be done separately for the North East as an interim arrangement, as a prelude to the reorganization of the Assam and

Meghalaya electricity boards. Consumers would prefer reliable supplies and service to notional subsidies that do not really benefit them.

- Consideration should be given to corporatizing the remaining five electricity departments in the North East so that they are insulated from political pressure and patronage in pricing, staffing and forward planning. There has to be a new culture if the huge power potential of the region is to be realized.
- SEBs be allowed to borrow for expansion purposes. We accordingly recommend that the centre guarantee these borrowings on suitable terms and conditions related to North East realities and opportunities.
- The Brahmaputra Board, and all other water resource and development agencies in the North East, must be mandated to the fullest transparency so that public confidence and accountability are enhanced. Early public hearings and consultation with NGO groups could prove to be rewarding. Delays in implementing mega projects would be disastrous and it is imperative that compensatory action to mitigate all environmental impacts and ensuring protection of biodiversity are assured.
- An early inter-state meeting should be convened by the centre at the highest level to secure full agreement on and approval for the Tipaimukh project which could have a transforming effect on the southern tier of the North East.
- Investigations of the twin Chhimtui (Kaladan) hydro projects in southern Mizoram should be conducted with an eye to investigating the possibility of navigation down the river to Sittwe (Akyab) and the sea. The cooperation of Myanmar authorities should be sought. The Kaladan is reportedly already navigable for a considerable stretch in Myanmar up to Paletwa.
- Initial planning should be taken in hand to tie the North Eastern and Eastern electricity grids in view of the expected growth of generation in the North East and Bhutan. The currently prevailing situation when surpluses in the Eastern Grid cannot be transferred to the adjacent power- short Northern and Southern Grids should be avoided.

Even in the intermediate period, power generation could become the cash-strapped North East's largest source of resource mobilisation.

7.5 THE WAY AHEAD FOR INFRASTRUCTURE

No vision for NER is implementable without major improvements in infrastructure. Thus, any attempt to pose NER as an integrated economic entity will be meaningless till inter- and intra-state connectivity is ensured, particularly via road and rail links. Even more important, the development of infrastructure in the North East must now be viewed from the standpoint of the region as a whole, rather than as a component of the five-year plans of any state. As recommended by earlier studies, an integrated transport network for NER as a whole must be drawn up keeping in mind the long-term trade and production plans for the region.

Earlier sections in this report have noted the absence of a private sector (with the exception of Sikkim), in the hill states in particular. With insurgency now abating in the hill areas, a vision for NER will involve the private sector, but this will require the state

to play a leading role. Hence, for example, while the PPP mode may work well in power and telecommunication, it is unlikely to take off in road infrastructure: the low levels of existing traffic in the region would not justify PPP models. Hence, NER will have to be granted exceptions from the use of PPP in state highway projects.¹⁶

The development of infrastructure will need to be done mainly by the Central Government rather than by State Governments. Developments in the power sector already bear this out. In the case of roads, the nature of the terrain in the hill areas makes infrastructure development particularly expensive. Here, too, the centre must play a leading role as maintenance expenditure would swallow up the small budgets of the hill states, especially as the road network expands. There is some evidence that state roads are already falling into disrepair.

Finally, telecommunication infrastructure in NER lags far behind the rest of the country. This infrastructure is particularly important given the difficulty of physical communication in the hill areas. Apart from allowing greater national and international integration for the people of the region, most of the earlier studies have pointed to the need for NER states (particularly in the hilly areas) to promote their IT sectors. As the IT industry moves from the metros of the country to outlying areas, NER states are considered the next most likely destination, given the high rates of literacy, a large pool of educated people, and dust-free environments of the states in the region.

To conclude, any vision for infrastructure development in NER must factor in not only the need for creating a unified economic zone in NER over the next ten to fifteen years but also the need to ensure connectivity from the point of view of national security.

7.6 RECOMMENDATIONS FOR INFRASTRUCTURE

- Much of the infrastructure spending in NER would have to be done by the Central Government; PPP models such as Build-Operate-Transfer (BOT) being implemented in other states are unlikely to succeed particularly in road and rail networks.
- Power is the single most important constraint to the economic growth of the NER states. In the long run, the planned development of Arunachal as the 'hydel capital' of the NE makes sense. However, environmental and other concerns need to be sorted out before appraisal, not after DPRs are in place.
- In the short run, say five years, targeted generation should be lowered to 5,000 MW (double the present capacity of the NE) to eliminate power constraints to the economic development of NER. In addition, internal transmission grids are the biggest priority in all the states.
- In the immediate future, the hill areas could substantially meet consumer demands in far-flung areas via micro-hydel projects. The Ministry of Non-Conventional Energy Sources (MNES) could be approached for appropriate subsidies.

¹⁶ Similar concerns were expressed in the Sixth Sectoral Summit of NEC.

- In planning road networks under SARDP particular attention should be given to roads within states as these are crucial to both creating a unified NER market and improving tourist activity.
- However, the funding pattern and source of funds must be specified upfront or the planned network will remain a pipe dream. Logically, the planned extensions of existing lines to states by 2010 should be tackled first, and connectivity of state capitals dealt with in the subsequent five years.
- Air connectivity in NER remains an issue, due to the inability to determine the hub which has remained Kolkata by default. Guwahati is the natural hub but it should be possible to link state capitals directly to each other through the use of air taxis.
- In the long run, NER can benefit greatly from the IT revolution, if telecommunication infrastructure is developed along the lines followed by the rest of the country. However, since hilly terrains are not very conducive to normal broadband connectivity, the use of optic fibre to enhance connectivity seems to be indicated.
- Much more attention should be given to inland water routes as a method of connectivity within the region. The existing potential is largely untapped.

Chapter 8

Human Development

An important measure of human development is the extent to which people's capabilities are enhanced to participate meaningfully in political and economic activities¹. Increases in capabilities increase freedoms over their life choices. People's capabilities are built and enhanced by expanding opportunities to access knowledge and improve their skills, and by providing them with a healthy environment in which to exercise their livelihood choices. In this context it becomes vital to build people's capacities if they are to contribute to, participate in and benefit from the region's development. This chapter looks at some of the main components of human development - access to education, health and basic necessities in the region - highlighting the constraints in the provision of regionally balanced and universal access to these services in the North East. While state governments need to take an active part in resolving many of these issues, people-based participation in the development process will mean greater involvement of local organizations such as Panchayats and Village Councils, in the delivery of these services at the grassroots level.

8.1 EDUCATION

Education provides the underpinning to any vision of NER. One of the most basic components of human development, it impacts on the welfare of almost everyone in the region; in fact, the lack of quality education limits the growth process. Further, a focus on children, women and youth is vital in this region with its substantial 'young' population. Recent population growth in many of the NER states has meant that a large proportion of the population is less than 14 years, accounting for as much as 40 and 42 percent of the state population in Arunachal Pradesh and Meghalaya, respectively. In its broadest sense, education will be the critical input for equipping these young people to expand their life choices.

Clearly, in any people-centric vision of NER, education and the building of skills and knowledge will be the cornerstone. This is the only capital that people without land and financial capital can acquire to enhance their income streams and improve their living conditions. In the development process, education is vital to growth across all sectors. The past decade has seen visible improvement in overall educational attainment of several of the north-eastern states: male and female literacy rates have increased (Table 8.1A in Annexure 8.1), and so have school enrolments (Table 8.2A in Annexure 8.1) and school infrastructure. Recruitment of teachers has kept pace with the expansion in school infrastructure, as indicated by the very favourable average pupil-teacher ratios across NER states, which is far lower than the national average (see Table 8.16A in Annexure 8.1). Progress is also being made in increasing enrolment and retention in

¹ The capabilities approach to development was enunciated by Amartya Sen (in *Development as Freedom*).

elementary schools through the Sarva Shiksha Abhiyan (SSA - Education for All) that has been introduced in phases among the North Eastern states since 2001-02.

Despite the expansion of educational infrastructure and impressive literacy rates and pupil-teacher ratios in the region, the standard of education in NER is generally low, and the skills and knowledge base of school and college graduates has not equipped them to compete at the national level for further studies or employment, or engage effectively in entrepreneurial activity (see tables 8.8A and 8.9A on school performance in Annexure 8.1). The vision for the region thus calls for a vast improvement in the quality of education, infrastructure and facilities at all levels, so that children and youth have access to good quality education that will place them on par with the best in the rest of the country.

8.1.1 Schooling: Towards universal education

While school enrolments have been increasing, they are still low in some states: enrolment in all grades in Nagaland, for example, is far lower than the national average (at 18.1 percent in grades IX to XII against the national average of 38.9 percent) (Table 8.2A in Annexure 8.1). The success in increasing school enrolment is dampened by dropout rates, which are higher across NER than the national average (apart from Manipur), and have actually increased in Meghalaya and Mizoram since 1992-93 (Table 8.5A in Annexure 8.1). Even in Mizoram with almost 90 percent literacy, only one-fourth of the children originally enrolled complete high school.

Some of the main reasons cited for non-attendance (Tables 8.6A and 8.8A in Annexure 8.1) include economic deprivation (an important reason why males in particular do not attend an educational institution), the burden of household work (for females across the region), and distance from school (especially for rural children in Arunachal). *Jhum* cultivation, still prevalent in the region, involves all the able-bodied workers in the family, and could be a major reason for non-enrolment in rural areas, especially Meghalaya, Mizoram, Nagaland and Tripura where ‘working to supplement household income’ was cited as being more important in the rural areas. Thus, the tribal population in the region has very little access to education. Improving access to good education to these groups holds the key to improving their livelihood systems and finding a lasting solution to the problem of insurgency in the region.

Unfortunately the ‘other’ reasons for non-attendance listed in the NSS survey have not been specified; this would be an invaluable policy input, as it accounts for the vast majority of non-enrolment in Nagaland and Sikkim. Studies in other regions have shown that the absence of drinking water and toilet facilities deters students (especially girls) from coming to school.

8.1.1.1 Schooling for all: Reaching out to all Children

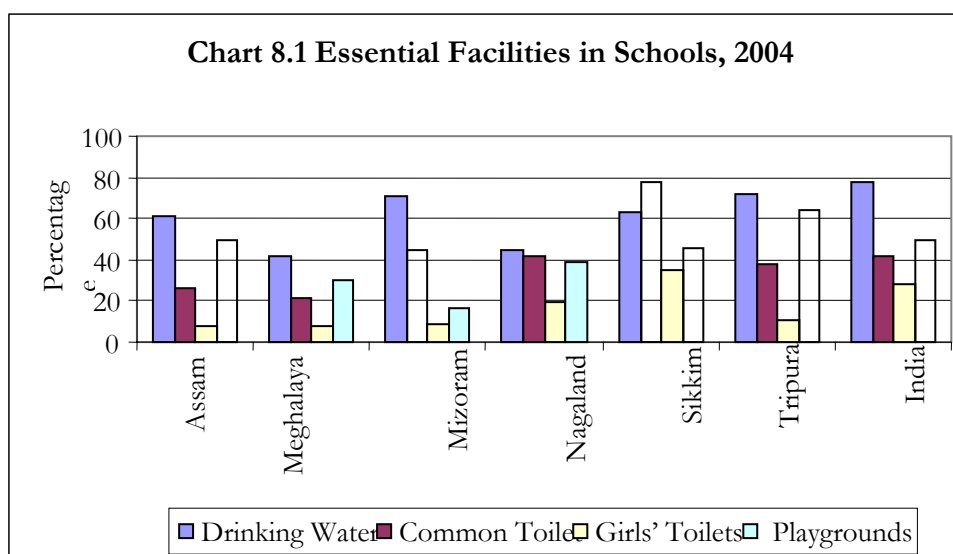
Accessibility: Access to schools is still a problem especially in remote areas with scattered habitations such as Arunachal, where almost a half (48 percent) of rural habitations do not have a primary school within one kilometre, and only 31.2 percent have upper-primary school facilities within three kilometres (Table 8.12A in Annexure 8.1). Special attention needs to be given to school enrolment in the areas under the Sixth Schedule, where Autonomous District Councils establish, construct and manage primary

schools. High dropouts in the higher grades (Table 8.5A in Annexure 8.1) means that special attention needs to be given to schooling in the early years.

Secondary school expansion: By 2010, the demand for secondary education is expected to explode across the country, buttressed by the successful efforts of the Sarva Shiksha Abhiyan (SSA) in promoting universal elementary education. The targeted gross enrolment ratio by the end of the Eleventh Plan is 85 percent for classes IX-X, a massive thrust, which will require careful planning. In the very short term this will call for an assessment of educational needs, physical infrastructure, human resources, academic inputs and effective monitoring.

8.1.1.2 School facilities

Learning takes place best in well-lit and well-maintained schoolrooms, in schools where children can visit a clean toilet, drink clean water and have good play facilities, many of which are lacking in the schools in the region (Chart 8.1, Table 8.13A in Annexure 8.1).



Source: NIEPA (2005), pp. 189-206.

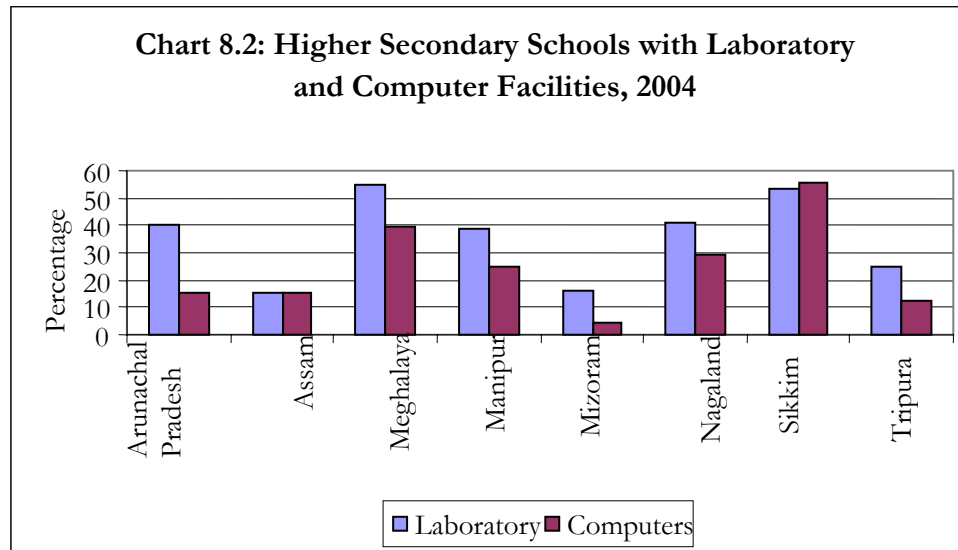
Note: Data refers to all elementary school categories in the NIEPA survey. Figures for Arunachal Pradesh and Manipur are not available in the survey.

Libraries, Computers and Laboratories: There is tremendous disparity in school facilities in NER, across regions and districts, between private and public schools and rural and urban schools (Chart 8.2, Table 8.14A in Annexure 8.1).² The neglect of science teaching in these states is evident from the poor laboratory facilities; as these figures are an aggregation of rural and urban data, and facilities are far worse in the rural areas.

Apart from Sikkim at the secondary level, less than 10 percent of the schools in the region have enough computers for their students, even those pursuing computer

² In the rural high school the study team visited outside Aizawl, students prepared for their courses in computer studies without ever using a computer, and studied chemistry and physics with no exposure to a laboratory; neither was there a functioning library.

studies. Computer literacy is a vital component of education in the 21st century, and there is no faster way for students of the North East to become part of changing trends globally and nationally than through the universalization of computer education and training. Early exposure to computers, including at the school level, is a vital foundation for further studies and employment, not just directly in IT but for almost any course of future study and work.



Source: Seventh Educational Survey.

8.1.1.3 The quality of education

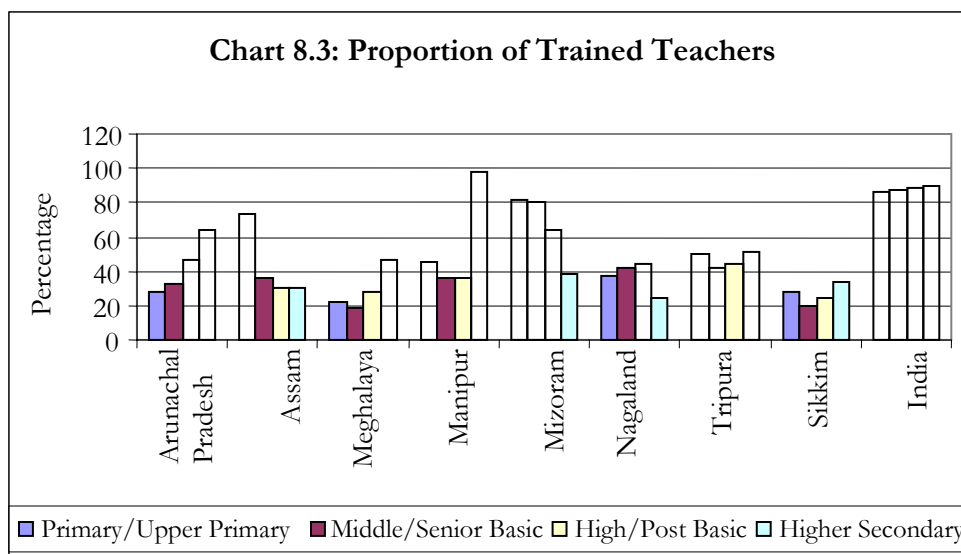
Among the various factors contributing to poor school performance, the broad consensus is that ‘teacher quality’ is the single most important variable influencing student achievement. In almost all the North Eastern states, only a small proportion of teachers – far below the national average - across all grades are trained (Chart 8.3 and Table 8.15A in Annexure 8.1).

High average pupil-teacher ratios hide a skewed distribution of teachers in most states, with more favourable ratios in the urban or developed areas. Tripura, for example, has an acute deficiency of teachers in its remote villages and forest areas.³ The scattered nature of habitations in parts of the hill states and resultant small school-going population mean that a high proportion of primary schools in NER function with only one teacher.

The quality of education is also affected by reportedly large-scale absenteeism among teachers in government schools⁴ and the practice of ‘proxy’ teaching. Often these substitute teachers do not have the requisite qualifications, so school children are short-changed by the poor quality of instruction and knowledge.

² *Tripura Human Development Report*. Mizoram and Assam also has regional imbalances in the distribution of elementary school teachers, with PTRs as high as 80:1 reportedly in some schools in Assam.

⁴ A World Bank project to measure the extent of absenteeism in primary schools in India found in general 25 per cent of Government teachers were absent, and of those present only 45 per cent were actually teaching on the day evaluators paid an unannounced visit. Assam, the only North Eastern state covered by the survey, has teacher absenteeism rates as high as 33.8 per cent, against the weighted average of 24.8 per cent for all the states (Kremer et al, 2005).



Source: Selected Educational Statistics 2003-04,

8.1.2 The Way Forward: Recommendations for school education

The fundamental importance of education to any vision for NER will mean that across the region schools, facilities, teaching and curricula will need to be geared up handle the challenges of the coming years. The vision for the region would require a shift from measuring quantitative outputs to monitoring qualitative outcomes so that efforts to increase enrolment are strongly supported by efforts to improve learning levels and performance.

8.1.2.1 Quality teaching

One of the most important tasks of a short-term strategy would be to substantially improve the quality of teacher inputs in schools. The emphasis will shift from hiring teachers to ensuring that children receive an education from a well-qualified, dedicated teaching force trained in the most recent teaching methods, in sync with the specific needs of the region, using up-to-date relevant material and curricula.

8.1.2.2 Improving access to tribal and disadvantaged groups

Ensuring greater access to various tribal groups is extremely important. Locating the schools at convenient points, creating crèche facilities to enable the children, particularly female children to attend schools and constructing hostels for tribal students from remote areas to access quality education in towns.

Recruitment and Deployment: A body to regulate appointments could ensure that recruitment is a transparent process, based on qualifications and experience. Better incentives, facilities and even security in some situations could motivate teachers to shift to villages. The absence of provisions for renting accommodation in some remote pockets makes it imperative that adequately equipped teachers' quarters are constructed in these

areas. Village Panchayats and other village-based bodies can help in the recruitment of teachers in areas which face difficulties in hiring teachers,⁵ but recruitment has to be based on a proper assessment of their qualifications and potential for training.

Training: The enormous backlog of untrained teachers at all levels in the region can only be effectively tackled through the distance mode of teaching. NCERT is developing a comprehensive module for this, and states are identifying good teachers to be trained by experts as master trainers for the rest of the teaching force. While initial training is proposed to be carried out at institutions, there is a strong case for training large numbers of teachers through distance-learning courses developed by IGNOU and other professionals in the field. Training needs will have to be assessed routinely to make sure teachers get the training they need.

Focus on good science and mathematics teaching: In the short run, there could be a drive to recruit good maths and science teachers at all levels from outside the region, as these subjects need a solid foundation in the lower grades. In the medium term, good in-service training materials need to be developed perhaps with inputs from science faculties from universities in NER, to address the issue of improved teaching in these fields.⁶

Some of the training will be tailored to address state-specific issues such as multi-grade teaching in a single classroom,⁷ creating teacher attitudes to tackle diversity in classrooms and interacting sensitively with minority groups such as tribal children.

Professionalization needs to be introduced in the teaching profession and promoted through incentives for teachers to improve their qualifications such as better pay scales and increments and more fellowships. A regional framework, which allows school teachers in the region to share their experiences and learn from each other, could promote an enthusiasm and professionalism in the profession.

8.1.2.3 Improving access

In areas where access remains a problem, innovative schemes have to be set up such as non-formal education centres with active parent and community participation have to be set up. Well-monitored *anganwadis* and non-formal education centres, especially in interior and inaccessible villages will enable children to begin school at the appropriate age. Alternative ways of bringing schooling to children of peripatetic workers are being explored in the region. One successful initiative is the Mobile Teacher Programme initiated by SSA in Mizoram to reach children of *jhum* farmers in the western hills. Here, the teacher brings schooling to the children. He cycles to the settlements, carrying his blackboard, teaching supplies and textbooks and teaches local children in their own surroundings.

⁵ This was also one of the recommendations at the Sectoral Summit on Education on August 20, 2008.

⁶ The recently instituted North Eastern Regional Educational Council (NEREC) will give priority to the quality of science and mathematics, which will include orientation training to primary school teachers. It is helping translate science and maths books into local languages. To promote IT education, it will collaborate with ERNET India to set-up high-speed links in ten universities to promote access to Internet, e-journals and distance learning.

⁷ Despite norms stipulating that schools have at least two teachers, upto 15 per cent of the schools in Assam and 14 per cent in Meghalaya have only one teacher (NIEPA 2005) Pg 56.

Given persistently high dropout rates, the functioning of various government incentives and schemes to retain children in school need to be reviewed, and even restructured so that they are effectively targeted. The effective functioning of the mid-day meal (MDM) scheme in the North East is constrained by the physical terrain, lack of manpower to implement the programme (often implemented by the school teacher alone) and the absence of monitoring. Increased community involvement, either through Self-Help Groups (SHGs) formed by mothers of school-going children in the locality, Village Education Committees (VECs), or other local bodies in the preparation or supervision would improve the quality of meals and their delivery. Low wages currently hamper implementation; hiring cooks and helpers under the National Rural Employment Guarantee Scheme could be an enticement to get helpers at minimum wages for at least 100 days.⁸

- Secondary school infrastructure has to keep pace with this planned growth, either through new secondary schools, adding secondary sections in existing elementary schools, opening additional sections in existing high schools, or even by running more than one shift where feasible in existing secondary schools.
- Higher dropout rates at the secondary level call for hostel facilities to be set up in middle and secondary schools, especially in areas with dispersed low-density habitations, with careful monitoring of the quality of services and security, especially for girls. In fact, one of the mandatory provisions for schools must be separate toilets for boys and girls, a recommendation that comes from the Peoples Vision 2020 (Appendix)
- Based on the assumption that the presence of female teachers in schools helps in the enrolment of girls, there should be a special drive to recruit women teachers, especially in Arunachal Pradesh and Assam where the proportion of female teachers is far below the national average (Table 8.15A in Annexure 8.1).
- Special attention needs to be given to the quality of teaching in the tribal areas. The Sarva Shiksha Abhiyan (SSA) could work with state education departments to raise the level of education imparted to school children in these areas.

8.1.2.4 Improving facilities

These also play an important role in student and teacher retention.

- The medium-term goal should be to ensure that schools have enough classrooms, basic necessities such as water and toilets and facilities such as sports equipment, libraries and laboratories. Schools are an ideal nurturing ground for instilling in children clean and healthy habits, but this is possible only when water and toilet facilities exist. As the states move towards universalization of primary, and eventually secondary education, the proposed increase in enrolment is only going to increase the demand for these essentials.

⁸ This was one of the recommendations of the Sectoral summit on Education in August, 2008 as workers in the MDM Scheme are paid below- minimum wage.

- Norms on infrastructure and facilities in secondary schools should be generally equivalent to those for the Kendriya Vidyalayas. Central assistance is available for improving computer facilities through the ICT@Schools Programme, aimed at enabling computer-aided education for students in government and government-aided schools.

8.1.2.5 Making learning more relevant: Meeting the region's special needs

- **Vocational Training in Schools:** The focus on relevant, job-oriented education requires more emphasis on co-curricular activities aimed at skill enhancement. The introduction of newer vocational streams even as early as Classes XI and XII could familiarize students with possible vocations and enable them to make more informed judgements about higher education choices.⁹
- **Incorporating Local Material:** Linking learning to local experiences would make education more relevant and raise retention rates. Some states have already started preparing materials and orienting teaching towards local environments to supplement standard textbooks. In one initiative to enhance science teaching in schools by basing it on local knowledge, Nagaland University will train school students and involve them in mapping the plant, animal and microbial resources of the region.¹⁰
- **Addressing Region-Specific Needs:** Curricula and teaching material need to be developed to address issues prevalent in NER such as the high proportion of single-classroom schools, where teachers have to teach in a multi-grade environment, the myriad dialects and languages prevalent in the region and strengthening science and math teaching in the region.
- **Vocational and Job Counselling:** Appropriate guidance and student counselling reduce school dropouts (by improving performance), promote career development and instil in students the right attitudes towards studies and work. Full-time school counsellors could be appointed at different levels within the school system, and counselling needs should become an intrinsic part of pre-service teacher training.

8.1.2.6 Involving private entities

- Private provisioning could help supplement government efforts to universalize education, especially at the secondary school level where migration out of the public school system is already fairly high (Table 8.11A in Annexure 8.1). Private schools are more in demand as they are considered more accountable for students' performance, which clearly indicates that people are willing to pay for what they perceive as better quality education.
- The establishment of well-managed private boarding schools within the region, perhaps funded by local private companies, (along the lines of Assam

⁹ The National Curriculum Framework (2005) has suggested that Vocational Education and Training (VET) be implemented in mission mode, involving the establishment of separate VET institutions and centres from the level of village clusters and blocks to sub-divisional/districts, towns and metropolitan area,

¹⁰ From discussions with the Vice Chancellor of Nagaland University, Professor Kannan.

Valley School outside Guwahati) would help strengthen links within the region as well as having a ripple effect on income and employment generation.

- Other school-related functions could be outsourced to private agencies. They could, for example, ‘adopt’ a school to improve specific facilities such as the library, laboratories, computer infrastructure or sports facilities. Computer education could be entirely outsourced to the private sector which can provide equipment and teaching for a fee, relieving public schools of the burden of hiring permanent teachers and investing in costly infrastructure.

However, irrespective of the extent to which private funding can supplement public provision of education, the government will continue to be ultimately responsible for ensuring that education reaches all children in the region.

8.1.3 The role local governments in education

Raising the standard of education to equip young people with the knowledge and skills needed to increase their choices will rely greatly on grassroots participation in the delivery of education at the local level. Local communities play an important role in many aspects, such as monitoring formal and non-formal institutions and the functioning of the mid-day meal scheme.

Successful educational outcomes have been linked with increased accountability of teachers to local communities, as was demonstrated after the communitization of education in Nagaland in 2002 (Box 8.1).

Box 8.1: The Importance of Social Audit: Communitization of Education in Nagaland

The Nagaland Government's experiment in communitization of education builds on the strong social ties within villages to improve the quality of primary schooling in the state. The village community owns and is authorized to develop public elementary schools within the village. Communitized villages set up a Village Education Committee (VEC) to act as the legal local authority for managing elementary education in the village. VEC has the authority to monitor teacher attendance (and take punitive action such as docking salaries for prolonged absences), and make major financial decisions (such as expenditure on textbooks, school furniture, building repairs) through access to public funds. It can arrange for inter-school utilization of teachers and recommend substitute teachers to fill long-term vacancies.

This daily participatory monitoring has yielded success: a significant improvement in teachers' attendance in 80 percent of the schools has led in turn to an improvement in students' attendance in almost all schools. Enrolment and academic performance have also improved, and parents are demonstrating an increased confidence in the public school system: in Chingmei village of Tuensang district, the local private school, which was popular among most parents, had to close down after communitization of the public school. Communities demonstrate an increased sense of ownership of the school system by contributing material and labour to repair local school buildings, footpaths and school grounds, by giving students free tuitions in the evenings and encouraging dropouts to re-enrol in the system.

Similar responsibilities can be devolved to other local government institutions functioning in the region. Many of the important initiatives that impinge on education, such as the Sarva Shiksha Abhiyan, emphasise deep community ownership in implementation through School Management Committees, Village and Urban Slum-level Education Committees and Tribal Autonomous Councils and other grassroots structures in the management of elementary schools. Schools can build on the strong community-based structures in NER and find ways to shift accountability to parents, the community and other representative organizations such as VECs and Panchayats. Most communities need some amount of capacity building to improve their management skills and to enable them to act as pressure groups to ensure that the physical, social and academic environment in schools is of the best possible standard.

8.1.4 Sports and indigenous games

An important but often ignored component of education is physical development. One of the criticisms of the secondary education curriculum in the country is that it does not nurture 'multiple intelligences' innate in children, which includes the bodily-kinesthetic or sports intelligence¹¹. The situation is no different in the North East, even

¹¹ Report of the Central Advisory Board of Secondary Education (CABE) committee on the Universalization of Secondary Education, 2005.

though the people from the region are highly regarded for their innate sporting talent. The proportion of schools without playgrounds in almost all the NER states is below even the low national average of around 50 percent (Table 8.1), so ‘education’ remains confined to classroom instruction.

Table 8.1: Schools without Playground Facilities

(Percent)

<i>State</i>	<i>RURAL</i>				<i>URBAN</i>			
	<i>Primary</i>	<i>Upper primary</i>	<i>Secondary</i>	<i>Higher secondary</i>	<i>Primary</i>	<i>Upper primary</i>	<i>Secondary</i>	<i>Higher secondary</i>
Arunachal	66.46	33.12	22.94	18.02	60.81	35.29	21.84	8.00
Assam	66.31	48.68	39.42	35.35	83.86	68.60	52.46	40.59
Manipur	58.38	40.83	30.59	32.26	54.11	40.21	32.32	28.00
Meghalaya	89.94	52.05	35.68	13.51	64.88	53.33	38.34	34.88
Mizoram	84.33	86.22	88.40	33.33	88.62	81.15	88.89	86.92
Nagaland	80.55	53.25	32.82	11.11	86.29	60.88	26.60	28.88
Sikkim	58.63	26.32	18.52	2.56	100.00	100.00	28.58	25.00
Tripura	43.10	26.60	13.81	9.94	56.90	41.38	43.90	28.85
All India	61.42	44.21	23.88	15.89	55.14	38.68	26.48	19.55

Source: Calculated from the Seventh All-India Educational Survey, Ministry of Human Resource Development.

Learning environments that are equipped with playgrounds and sports facilities and equipment will apart from intellectual abilities allow students to explore and develop the full extent of their abilities. Good physical education facilities will not only open up new avenues for recreation, talent tapping and recognition but also help wean away older children from the deleterious consequences of alcoholism and drug addiction. Excellence in sports in the national and international arena also creates ‘local heroes’, men and women from the locality whom children can look up to as role models for emulation, and a source of pride. Productive engagement in the area of sports and games will also increase the scope for integration with other states. At a more basic level, physical activity is essential for health, physical fitness and to promote individual productivity.

8.1.4.1. Sports: The Way Forward

Sports and physical activity have to form an intrinsic part of the school curriculum from elementary school through to higher secondary schooling, to allow students to explore and develop the full extent of their abilities. Schools should be well equipped with playing grounds and sports equipment to fulfil this part of the curriculum.¹²

- Where steep and hilly terrain precludes the creation of playing spaces, schools could organize regular visits to areas where schoolchildren can engage in physical exercise.

¹² The National Sports Policy, 2008 recommends that state and local governments make available at least 1 acre of land for primary schools and 2.5 acre for upper primary schools for use as playground. Guidelines are needed for the recruitment of physical education instructors, the provision of developed playing fields and equipment.

- Physical education and sports also need to become an intrinsic part of youth organizations such as Bharat Scouts and Guides, the National Social Service (NSS), which should be promoted in the states.
- Some of the North Eastern states have a long tradition of indigenous games and martial arts, and special programmes could be set up to revive, nurture and promote these traditions among young people.¹³ Two schools in the region have been identified to promote indigenous games and martial arts, one in Assam and the other in Manipur.
- The focus for training and talent spotting should be on sports and games in which people in NER have an innate ability and proven talent such as weightlifting, football, hockey and boxing.
- Media and community organizations can play a role in highlighting and spreading awareness about excellent performances by North Eastern athletes and sports people, especially women, to encourage young people to engage in serious sports.
- There is a severe shortage of professional coaches. A centre for excellence in sports can be set up in one of NER states with the facilities to train coaches.
- Regular competitive sports meets organized at the district, state and regional level (perhaps through NEC) would promote a spirit of competition in aspiring sports people.
- Educational institutions will be encouraged to build access to talent spotters to identify young people with potential in different age groups.
- Sports schools will be set up in each state, with good quality facilities, competent coaches and residential accommodation for talented players.¹⁴

8.1.5 Higher education: College and vocational training

The vision for higher education would be to equip young people in NER with skills and knowledge to expand their life choices - whether to pursue the profession of their choice, to engage in business or explore a talent - within their state or outside. As the Jain Committee Report points out, the central objective of education should be skill building and development of entrepreneurship. The rising tide of drug use and other substance abuse, insurgency-related activity and other social ills in the region have been attributed to the limited educational and employment avenues for the youth. In addition, human resources of a high quality are necessary to realize the developmental vision for NER 2020.

Higher education in the region is characterized as ‘single-track’, focusing on general education and, within that, a major concentration on the arts (Table 8.18A(b) in

¹³ The identified indigenous games and martial arts for the north eastern states are: dhopkhel (Assam), mukna, khong kangjei, sagol kangjei, kang, yubee, hiyang, tannaba, lamjei, cheibi gad-ga, than0tha and sarit-sarak (Manipur), inuknawr, inbuan, Mizo inchai (Mizoram), archery (Meghalaya), hole taso dukaranam, hinam, tuman, parok-pamin sinam (Arunachal Pradesh), gella-chutt (Tripura), and wrestling, cock-fighting (Nagaland).

¹⁴ See the National Sports Policy, 2008 for more details.

Annexure 8.1)¹⁵ - over 80 percent of the three lakh students enrolled in colleges are in the arts, which bears testimony to the assertion that the standard of science teaching is poor in the region. Further, college enrolment is very low in the region, as low as 4.8 percent in Nagaland and 5.6 percent in Arunachal against the already low national average of 10 percent (Table 8.18A (a) in Annexure 8.1). While this does not take into account the several thousand students studying outside the region, higher education within NER clearly needs to become more relevant to the population's needs.

Each of the North Eastern states now has a central university that, as an autonomous entity, can chart its own growth and development plans; several professional colleges are planned to be set up in the region over the next few years. This expansion in the 'choices' has to be accompanied by considerable improvement in the quality of education being imparted.¹⁶ Thousands of students from the North East go to other parts of the country for higher studies,¹⁷ both because of the lack of professional education as well as the level of instruction and curricula in colleges and universities in the region, both of which affect their potential for employment.

The vast amount of funding that goes towards students' studying and accommodation in universities outside the state can be viewed as 'leakages' from the NER economy, but this needs to be weighed against the costs and problems related to the setting up of education facilities of comparable quality within the region. It should also be noted that sending students out of the region for higher education helps promote national integration. Students who return, come with fresh new ideas, and those who remain outside the region encourage the rest to end their insularity from the rest of the country.

8.1.6 Higher Education : The Way Forward

Higher education infrastructure in the region has focused largely on producing college graduates in arts and social sciences, who have looked to the government for employment. With the saturation of this avenue, recent years have seen large-scale unemployment among the youth, which has contributed to social disruptions in the region. The emphasis in higher education needs to shift to building professional skills and developing entrepreneurial capacities and skills among younger people. The high proportion of people of school-going age means that the pressure on college seats within NER is only going to increase.

Noting that vocational training, entrepreneurial skills and the basic grounding in mathematics and science among students in NER are weak, rather than setting up more 'run-of-the-mill' universities, the expansion in the supply of higher-level education needs to clearly focus on one of three areas of training: those which fuel the development of the region, those in globally expanding professions or areas which focus on 'core competencies' of the people in the region.

8.1.6.1. Courses that can fuel the development of the region

¹⁵ From the Sectoral Summit on Education.

¹⁶ From various SDRs and HDRs. For example in Nagaland, less than 5 per cent of the students got a first class in the arts and law streams while less than 10 per cent passed in first class in science and commerce (Nagaland HDR)

¹⁷ For example, in 2001, estimates from the Directorate of Higher and Technical Education, showed that of the 24,000 Naga students enrolled in higher studies, nearly 10,000 students were studying outside the state.

- The increase in the number of central universities presents an ideal opportunity to gear higher education towards creating value in the region. A major thrust would be to focus on areas related to the region's need such as agro-based sciences (biotechnology, patent awareness, organic farming, water conservation, veterinary sciences and seismology), horticulture (floriculture, vegetables), agro-based industries (medicinal plants, food processing), sports medicine and physical therapy, tourism and teacher training.
- A Regional Institute of Sports, patterned on the National Institute of Sports, to tap, nurture and push new talent, could play a role in finding and exporting such talent to compete with the best.
- A Regional Institute of Sports Medicine could be another major centre of excellence that could attract trainers, coaches as well as specialist doctors and athletes/sportspersons who could benefit from treatment as in-patients
 - Existing college and university courses need to be strengthened and made more relevant and current; laboratories and classrooms will need to be upgraded. Libraries will need special focus, and need to be well stocked with more recent publications and journals. The importance of raising agricultural productivity in the region requires strengthening of the Assam Agricultural University, Jorhat.
 - The proposed expansion of higher education will call for well-qualified faculty especially in newer disciplines. One way to expose students to good teaching would be through open (or distance) learning courses, which have the advantage of being a need-based, technology-oriented curriculum which allows intensive hands-on training, and regular evaluation and frequent curriculum upgradation.
 - State funding for students living and studying in universities and colleges in other parts of the country has to be properly targeted so that the base of beneficiaries is expanded in the region.
 - Each university in the North East could set up a centre of excellence with area studies and language departments relevant to the region. Training centres would be set up in every state relating to the languages, cultures and issues of South-east Asia and China and for teaching languages of the region to scholars from other countries.¹⁸

8.1.6.2 *Training that taps into opportunities created by global trends*

¹⁸ As suggested by the Steering Committee, each university could be assisted to become a national centre of excellence in areas such as languages (Burmese, Tibetan, Chinese, Thai, Nepalese, Japanese), and Area Studies (ASEAN, SE Asian History and Literature, Tribal studies, Chinese studies). This will help spread the languages and culture of NER to scholars and visitors from other countries.

- The ‘mainstreaming’ of young people from NER into the larger national and global economy will require equipping them with directly employable skills in professions that are expanding worldwide, the most obvious ones being in the IT and ITES sectors, but also in engineering, nursing, and in the hospitality industry.

8.1.6.3 Capitalizing on the region’s innate talents and interests

Employment opportunities are expanding, mostly outside the region for now, in areas in which people from NER have an innate talent and interest: fashion technology and product design, airlines industry, sports and physical fitness and music, or those based on indigenous materials such as bamboo, silk, traditional textiles and so on. A centre of excellence in sports with the latest equipment and facilities could be set up in the region, with the aim of training aspiring sportspeople and coaches to meet the growing demand for coaching nationally as well as in the region. A Regional Mountaineering Institute for developing mountaineering skills among local youths would also tap into the innate abilities among young people as well as link up with the promotion of adventure tourism in the region. The formation of regional institutes, such as the North East Institute of Fashion Technology, North East Institute of Design and so on, would allow an exchange of knowledge and technology within the region, and showcase it outside.

8.1.7 Art and Culture

8.1.7.1 The cultural identity of the North east is unique and indicates vibrant cultures that are reflected in the clothes of the people, especially in the traditional handloom attire, jewellery and handicrafts. Bamboo plays an important role in the life of the people, and most of the handicraft items are made from this versatile grass, which now commands an impressive market both in domestic and foreign shores. The Region has rich craft traditions, which include artistic textile weaving, cane and fiber crafts, wood carvings, jewellery, carpet making, painted wood vessels and handicrafts made of ivory and tusks. Colourful shawls with intricate designs portray the unique history and lifestyle of the different tribes.

8.1.7.2 Few regions in the world can boast of a rich cultural amalgamation like North East India. Located amidst rivers, hills and valleys, lush green forests and awesome springs, the cultural life of the region is a reflection of the region unique ambience. The region has a rich culture with festivals, dances and music. Dances like *Bihu* (Assam), *Cheraw* (Mizoram), Manipuri, the *Naga* dances that display victory in war, *Nongrem* (Meghalaya), masked dances of Sikkim and Arunachal Pradesh, and the colourful offerings from Tripura all constitute a colourful cultural rainbow. Festivals like *Bihu*, *Wangala*, *Durga Puja* and other occasions bring out the beauty of every tribe. The cuisine also varies from one state to another. Tripura is famous for Hindu and Buddhist temples. The North East is known for its hospitality, and every tribe has its own way of extending a warm welcome to guests.

8.1.7.3 The rich culture of the North East has not been appropriately reflected at the State, regional and national levels.

- There is not much awareness about the protected monuments in the region even though the Archeological Survey of India (ASI) has taken an initiative to maintain

such monuments in the region including temples, rock carvings, tombs, graves, rock inscriptions/sculptures, palaces and monoliths.

- There is enough scope for cultural exchanges to depict the North East culture to other parts of India and to the world.
- Awareness about Majuli as the largest river island of the world needs to be spread in the region and outside.
- Performing literary and visual arts need to engage the attention of eminent literary persons and artists.
- There is a need for having enough trained teachers to promote the North Eastern culture in the region.
- Scope to increase multi-purpose cultural complexes in the region.
- Many more initiatives need to be taken upon documentation, dissemination of NE art and culture and propagation of tribal arts, crafts and traditions and promoting, projecting and preserving the cultural heritage of the Himalayas and for promoting Buddhist and Tibetan cultures and traditions through research work.
- Preservation of manuscripts/rare books and conservation of archival material need to be given focus.
- Institutions in the region do not have enough capacity to take advantage of its rich art, culture and traditions.

8.1.8 Art and Culture: The Way Forward

- A holistic and planned approach needs to be taken up at the central, regional and State levels to draw an action plan to rope in central organizations like the Sangeet Natak Academy, Sahitya Academy, Lalit Kala Academy, Indian Museum and Regional and state organizations to depict the rich culture of the North East.
- The Archeological Survey of India need to draw up an action plan for the maintenance of centrally protected monuments in the region. These include temples, rock carvings, tombs, graves, rock inscriptions/sculptures, palaces and monoliths.
- An action plan is required for Site restoration of ruins in all the NE states
- Majuli, the largest river island in the world, need to be appropriately projected as a World Heritage Site.
- Performing literary and visual arts need to be regularly undertaken in the region by National Academies and the National School of Drama by getting participation of local stakeholders through seminars, festivals, theatre workshops and literary forums.
- Need to set up a Centre for Cultural Resources and Training in the region with sub/centers in the NE states for promoting the North East culture in the region by training teachers.
- Need to set up multi-purpose cultural complexes in all the major cities/towns of the NE states.
- An action plan needed to comprehensively deal with the issues of documentation, dissemination of North East culture and propagation of tribal arts, crafts and traditions in the NE region and to the outside world.

- Plan to promote, project and preserve the cultural heritage of the Himalayas through support from local institutions, universities, museums and individual experts in a regular manner.
- Promoting Buddhist and Tibetan cultures and traditions by incentivising research work.
- Preservation of manuscripts/rare books and conservation of archival material for which manuscript resource centers need to set up in the region and sub-centers in the NE states.
- An action plan to organize exhibitions including reorganization and renovation of reserve collections of State museums.
- Promotion of a scientific culture through setting up of Regional Science Centres and Sub-regional Science Centres in NE States.
- Promoting and supporting a public library movement in a more liberal manner.
- Observation of centenaries and anniversaries of important national personalities and events in a regular way.
- Entering into cultural agreements with other states in the country and neighbouring foreign countries.
- Creating cultural awareness from the grassroots level in the region and organizing cultural exchange programmes at inter, intra -regional level and with the neighbouring countries.

8.2 HEALTH

The vision is to achieve overall improvement in the health status of NER, both as an end in itself, and as a fundamental requirement for raising productivity and growth within the region. This will require raising access to quality healthcare for everyone, especially for children and women, tackling the major health issues in the region (AIDS, cancer, alcoholism), and raising awareness about nutrition, environmental sanitation and disease prevention and control measures. The low use of existing facilities will be tackled by improving the quality and range of services offered both by the public and private facilities, by involving other agencies and putting in place innovative techniques that have worked in other parts of the country.

The region has witnessed declining infant mortality rates (IMR) (comparing very favourably with national averages - since 1981, Manipur has had the lowest IMR in the country), an increase in child immunization and increasing life expectancies in almost all the states. Many states have set up in impressive public health infrastructure through a network of hospitals, primary health centres, primary health sub-centres and community health centres. In fact, apart from Assam and Tripura, there is a surplus of primary and community health centres in the rural areas (see Table 8.19A in Annexure 8.1).

Despite the physical expansion of healthcare facilities, access to quality health services remains low in remote areas as well as in urban areas, especially for women and children. People still need to travel long distances to consult doctors or specialists, or to access diagnostic or therapeutic treatment; there is a shortage of trained medical staff at

almost every level; and a lack of supplementary infrastructure such as roads and environmental sanitation which exacerbate health issues.

The public health policy in NER will have three objectives: to direct financial resources towards ensuring good health services in areas where private investment is unlikely to go; to create an environment conducive to attracting and retaining private health providers, with some incentives to enter certain areas, such as smaller towns; and protect consumers by enforcing regulation of private healthcare.

8.2.1 Providing healthcare for all

High averages in most states mask major variation in health services across states, between urban and rural areas, in hilly terrains and so on. In some instances this is because of lopsided provisioning (as in Arunachal, where 88.5 percent of the general and district hospitals are located in the urban areas), in others because of the absence of transportation links with health centres.

As in many other states, primary health care provided in NER is generally poor in quality, inaccessible and unavailable,¹⁹ (perhaps with the exception of Mizoram, which appears to have a well-functioning system which people have faith in). Rural public healthcare services are especially abysmal with high levels of absenteeism, shortages of skilled medical and para-medical staff, an absence of medicines and supplies and inadequate supervision and monitoring (see Tables 8.22A and 8.23A in Annexure 8.1).

Low use of Facilities: Even when health centres exist, people do not make full use of them, for various reasons such as preference for traditional health services or private providers, poor quality of care, lack of equipment, supplies and medical staff.²⁰ Thus, the mere existence of infrastructure is not necessarily positively correlated with an improvement in health conditions of the population. This has important policy implications: building healthcare centres is not sufficient to raise health standards in the region: awareness and willingness among people are as important, as is the quality of service offered.

Dependence on Non-Traditional Providers: Many people in the region have greater faith in the vast network of indigenous medical practitioners (IMPs) who have been dispensing health advice for decades. In states such as Nagaland and Sikkim they continue to reach out to a majority of the villages and are even part of the public health system. Apart from people's intrinsic faith in these systems of medicine, IMPs have the convenience of easy accessibility, as they often live in the village and can be consulted at all hours, unlike the more restricted hours of health centres and doctors.

¹⁹ From various HDRs and SDRs.

²⁰ National-level data shows that even when free, poor and rural populations often prefer to pay for private and traditional healers, rather than visit public health centers. Low institutional births in the NER indicate that the trend is the same in this region (Table 6.14).

Lack of Tertiary Care: There is an overall lack of modern medical diagnostic and therapeutic aids in the existing facilities even in urban areas and severe shortage of medical specialists, especially in the hill states. The few laboratories and ancillary diagnostic facilities that exist, especially in Arunachal Pradesh, Manipur and Nagaland, are fairly primitive. Patients with serious ailments or complications, or requiring advanced investigations have to travel outside the state, to Guwahati, Kolkata or Delhi, for treatment. The costs of reimbursing medical expenses for government employees to the public exchequer are very high, not to mention the out-of-pocket expenses of non-governmental patients.²¹ Whether it is lack of funds, general apathy, corruption or distances that create an absence of supplies and staff at public health facilities, the outcome is that many people even among poor families now avoid using the existing public health facilities.

Box 8.2

Akha- Ship of Hope

On the *saporis* or river islands of Assam that are inundated with floods every time the mighty Brahmaputra unleashes its fury, life is a constant struggle against disease and deprivation. Some 30 Lakh people live in 2,300 remote, floating villages on the Brahmaputra in Upper Assam. Here, there are no functional *anganwadis*, no health centres, no schools, no power, not even drinking water. Till recently, immunization, ante-natal care, disease management and treatment were all unheard of. Then in 2005 the Centre for North East Studies and Policy Research (C-NES)' intervened. It partnered with NRHM, UNICEF and the government of Assam, to start *Akha* (meaning hope in Assamese) a 22 metre long, four metre wide ship that carries hope and healthcare to 10,000 forgotten people in Tinsukhia, Dhemaji and Dibrugarh districts of Upper Assam. The 120 hp powered *Akha* has an OPD room, cabins for medical staff and ship crew, medicine storage space, a kitchen, two toilet cum bathrooms and a general store. A generator set and a 200 litre water reservoir are also installed to ensure that the medical team which travels to the *saporis* has adequate power and water supply.

The idea behind *Akha* is simple use the river to tackle the problems and challenges created by it. Doctors and ANMs who are unwilling and unable to survive on these remote islands, live on this ship stocked with medicine and other supplies and hold health camps on the *saporis*. They immunize, treat, provide medicines and advise people on preventive measures. They even take critically ill patients to the nearest health centre in Dibrugarh.

²¹ The cost of reimbursing government employees for treatment was estimated at Rs. 20 crore annually in Nagaland (*Nagaland HDR*), added to this is the non-reimbursed costs of non-government patients.

In less than two years, *Akha* has provided succour to many. If we can upscale this innovative intervention under NRHM, healthcare will no longer be a distant reality for the people living on this highly volatile river. It can be upscaled to include a hospital ship with diagnostic facilities, an inpatient ward and Operation Theatre. Then healthcare would become truly inclusive.

8.2.2 *Focusing on child and maternal health*

Although infant mortality rates (IMRs) have decreased overall, they are still higher than the national average in some states (Table 8.20A in Annexure 8.1). Surprisingly few children have been vaccinated against diseases in spite of high female literacy rates and favourable sex ratios in the region. Most worryingly, child malnutrition is on the rise in five of the eight NER states and female anaemia levels are high (Charts 8.4 to 8.6).

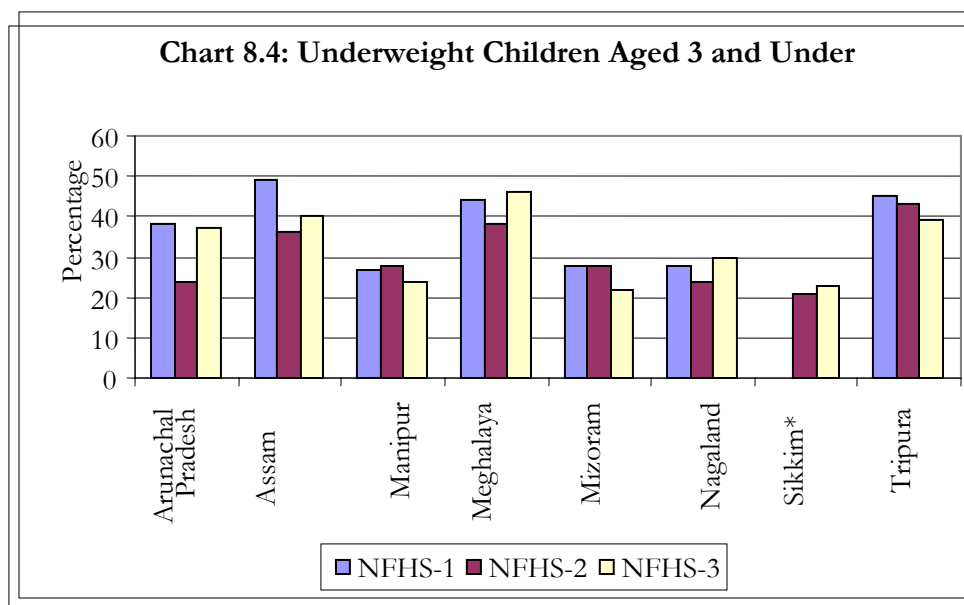
Rural women, especially in remote and inaccessible areas have some of the poorest health indicators. The maternal mortality ratio (MMR)²² has been declining in Assam (the only NE state for which data is available from the SRS) but at 490 is still far higher than the already high national rate of 301.²³ While there has been an increase in institutional births across the country, over 50 percent of the births in NER (apart from Mizoram) take place outside an institution (Table 8.21A in Annexure 8.1). The situation is particularly serious in Nagaland, where barely one in ten babies is born in an institution.²⁴

Very few deliveries are assisted by a medical professional: only one in four deliveries in Nagaland was professionally assisted (26 percent overall and only 18 percent in rural areas), and less than one-third in Assam, Meghalaya and Arunachal, way below the already low national average of 48 percent. This lack of interaction with health providers has important implications for maternal and child care including nutrition and disease prevention, immunization, child healthcare and family planning. Urgent attention should also be paid to increasing the number of assisted births (by a well-trained midwife or doctor), who can manage ‘low-risk,’ routine deliveries and also recognize and refer cases with major obstetrical complications.

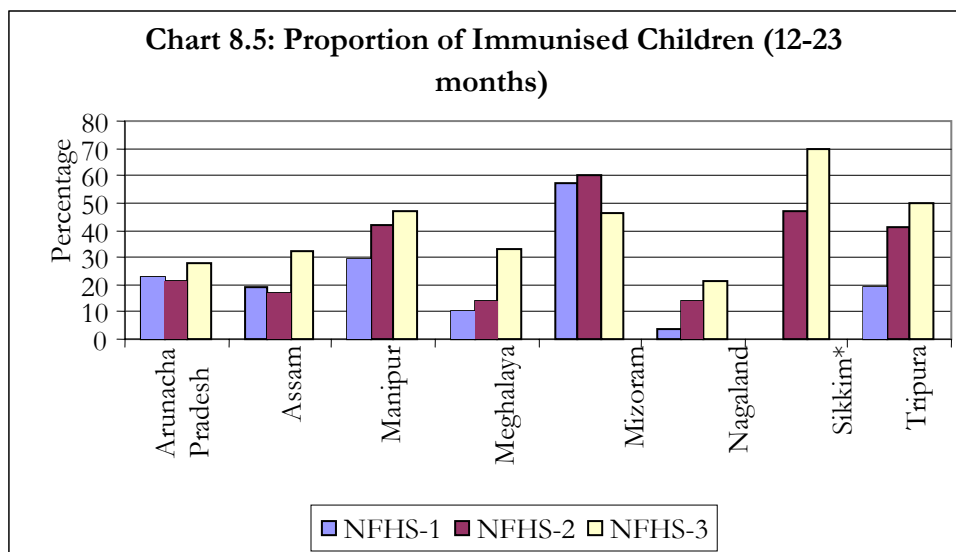
²² The number of maternal deaths per 100,000 live births.

²³ ⁴ From 2001-03 Special Survey of Deaths using RHIME (representative, re-sampled, routine household interview of mortality with medical evaluation) from <http://www.censusindia.net/> Maternal_Mortality_in_India_1998-2003.doc

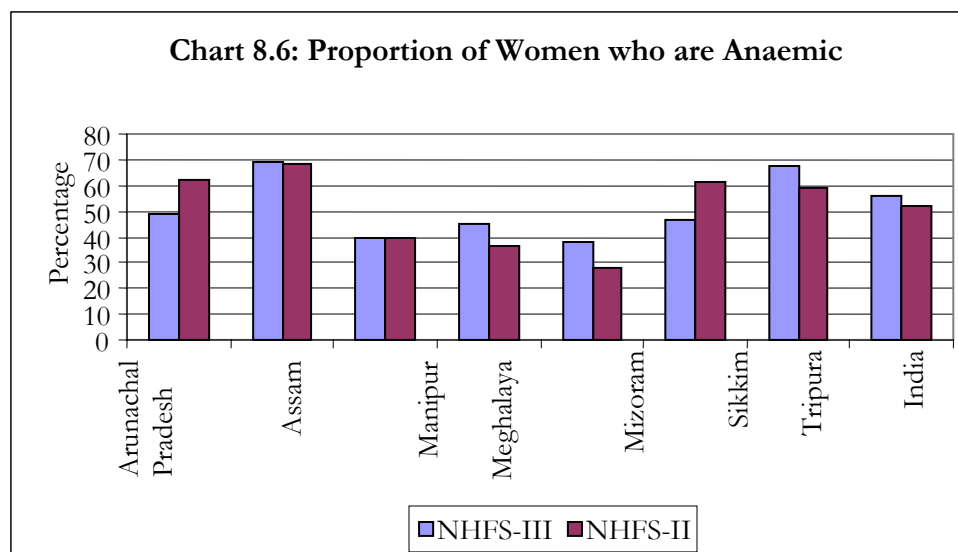
²⁴ There is a clear correlation between the proportion of non-institutional deliveries and neonatal and infant mortality rates. Kerala has the lowest NMR, with 95.8 percent institutional delivery rate, and the corresponding figure for Tamilnadu is 89 percent; Bihar and Uttar Pradesh with institutional deliveries of less than 25 percent, have predictably high rates of IMRs between 80 and 88 per 1000 live births. *Mid term Appraisal of the Tenth Plan*.



Source: *National Fact Sheet*, National Family Health Survey (NFHS-3), 2005-06, Ministry of Health and Family Welfare.



Source: National Family Health Survey 1, 2 and 3.



Source: National Family and Health Survey 1,2 and 3.

8.2.2.1 Lack of prevention and awareness

Environmental Sanitation: Public health services are also judged by their ability to prevent the onset of diseases. Water-borne diseases like diarrhoea, cholera and infectious hepatitis account for a large proportion of NER's health problems, much of which are caused by poor sanitation and water supply. Many communicable diseases can be prevented by appropriate sanitation systems. The lack of drainage in most households in NER (a higher percentage than the national average) also contributes to a potentially disease-infested environment.

Proliferation of HIV/AIDS is a major public health problem especially in Manipur (which has the third highest rate of sero-prevalence in the country after Maharashtra and Tamil Nadu) and Nagaland. The incidence of cancer in the NER at 128 per lakh people is reportedly three times higher than the national average (43 persons per lakh people). The information available suggests a high incidence of oral cancer in males and females, attributed to the widespread use of *paan masala*, beetle nut and tobacco.²⁵

8.2.3 Health: The Way Forward

As the discussion above shows, limited outreach combined with sub-optimal delivery has led to poor health outcomes in the region. The current focus on curative health interventions needs to shift to preventive measures; we also need an expansion in people's access and use of health services, private or public; an increase in awareness about infant and maternal health, prevalent diseases and vastly improved environmental sanitation.

²⁵ Data from NFHS-2 shows that Mizoram and Meghalaya are two states in the country where over 55 percent of men still smoke; in Nagaland and Manipur over 35 percent of men currently smoke (see Table 5.25A in Annexure).

8.2.3.1 Increasing access to primary healthcare

Several of the issues relating to poor rural healthcare are being addressed by the National Rural Health Mission (NRHM) set up in 2005 to address gaps in rural healthcare.²⁶

- Innovative interventions that bring healthcare and awareness about health and nutrition to people should be strengthened or evolved such as the system of boat clinics (See box 3.2) that service the riverine char areas, or mobile units attached to referral hospitals.
- In areas where it has been difficult to get doctors to work full time, public health professionals or even fully trained nurse clinicians could be appointed to head PHCs (as in Tamil Nadu where PHCs are often managed by three staff nurses in lieu of one doctor). Arunachal has started working with non-conventional agencies such as private trusts to manage their health facilities (see Box 8.3).

Box 8.3

Managing PHCs through Trusts

The Arunachal Pradesh Government recently handed over the management of Primary Health Centres (PHCs) in 16 districts to private medical trusts such as the Voluntary Health Association of India (VHAI) and the Karuna Trust as part of the National Rural Health Mission (NRHM) initiative. The trusts are now responsible for the entire functioning of the PHCs, and for the provision of all health services. They engage medical and other health workers and are responsible for full attendance at all

²⁶ As part of the National Rural Health Mission, integrated district health plans will have a holistic approach which integrates health determinants with safe drinking water, sanitation and nutrition. As funds are not tied to a specific objective, states have the flexibility to focus on areas important to them. The Mission locates an Accredited Social Health Activist (ASHA) in each village. Its emphasis in the North East given the shortage in services of doctors and specialists, is recruiting, training and upgrading the skills of locally recruited ANMs, nurses, mid wives and para-medics.

times. The government will pay for staff, drugs and consumables. Functioning and arrangements will be monitored by a PHC management committee and a state steering committee, on the basis of output-based performance indicators. So far, nine PHCs have been outsourced to the Karuna Trust, five to VHAI and one each to JAC (Prayas) and FGA (Itanagar).

Source: Draft Report on the Recommendation of the Task Force on Public-Private Partnerships for the Eleventh Plan

- Communities play a very important role in people's lives in NER, whether it is through Panchayats, tribal councils, church-based organizations, or village committees, and can be effective in spreading primary health care in more remote communities where the hilly terrain prevents the efficient delivery of the health services to the most needy in the interiors.
- A major option would be to train Panchayat members in basic healthcare, so that they can manage the PHCs. Rural PHCs could be handed over to panchayats who could run them with the support of health-based NGOs in the region such as the Voluntary Health Association of India, the Red Cross Society and Association of Social Health in India. Appropriate capacity will need to be developed consistently over a period of time among Panchayat members to enable them to manage PHCs effectively.
- Nagaland's experiment to communitize health care in its villages may be highlighted for partial or complete adoption in other states (Box 8.3).

Box 8.4: Communitization: An Innovative Health Intervention

At primary healthcare levels Nagaland's experiment with communitization of healthcare is proving successful. The management and maintenance of health facilities by the village community has improved staff attendance and ensured that salaries are disbursed on time, medicines are available and services are in line with community needs. The experiment has worked because it has engendered a sense of ownership of the facilities: each household contributes Rs. 10 for maintenance of the facilities; villagers organize cleanliness drives and have donated community-built houses for sub-centres and staff quarters; and in some villages private medical practitioners volunteer their services on fixed days at the health facility. In Khuzama village, villagers have started cultivating vegetables on community land to raise funds to supplement the stock of medicines and medical supplies.

Source: Nagaland HDR, field visits

- Given their reach into remote villages, traditional healing practices should be integrated into the healthcare framework by providing indigenous medical practitioners (IMPs) a platform for their practice, and training them to address health priorities in the region at all levels sub-centre, PHC and CHC. Community health NGOs and doctors could work with IMPs to fill in the scientific gaps in treatment to bring them in sync with today's needs and environments. There will be additional benefits for the environment as this will help preserve traditional medicinal knowledge systems and protect and conserve the region's biodiversity. Some form of licensing of IMPs will be needed to ensure the quality of services provided.

- Health Insurance: NRHM has proposed health insurance for vulnerable groups to reduce their expenses when visiting a government hospital,²⁷ and expand the use of government hospitals.²⁸ However, given the few hospitals in the rural areas of the region, hospitalization-based health insurance may not be the solution. Here, providing insurance for out-patient care and transport would be a reasonable option. This could be outsourced to a credible NGO in this region on a pilot basis. Micro-health insurance can also be promoted through Self Help Groups (SHGs) as one of the main reasons SHG members take loans is to meet medical expenses.

The low doctor-to-population ratio in the region has been attributed to the low proportion of medical colleges in the region (which has only 3 percent of the medical seats in the country).²⁹ An increase in the number of seats within the region is called for, either by expanding the capacity of existing medical colleges, or setting up new colleges with private partnerships. The location of new medical colleges outside urban areas would add an impetus to overall health services in more remote areas, and also encourage medical students to move away from their urban areas. State assistance should be available for developing infrastructure for medical education particularly in nursing and para-medical. Private investments can be also encouraged in this sector.

8.2.3.2 *Involving private provisioning in health services*

Apart from the unsustainable burden on the government, it is clear that users themselves are seeking choices beyond the public health system (Table 8.24A in Annexure 8.1). As much as 25 per cent of the people below the poverty line depend on private hospital facilities for their health needs, indicating that apart from the need to enhance the quality of public services, people are willing to pay for good health facilities.

²⁷ People incur expenses even when they visit a public hospital (NSSO 60th Round).

²⁸ NRHM: Framework for developing health insurance programmes: *Some Suggestions for States*, Ministry of Health & Family Welfare.

²⁹ Background Papers Report - National Commission on Macroeconomics and Health, 2005. From the Report of the Task Force on Medical Education for the National Rural Health Mission, Ministry of Health and Family Welfare Government of India.

The private sector is already engaged in NER either in partnership with state governments or alone at all levels of health care: by managing public health facilities, running major tele-medicine units within a public hospital (see Box 8.5), providing laboratory and blood screening services at the secondary and tertiary levels (Tripura) or operating a full-fledged hospital within a medical college (Sikkim Manipal University).

Some caution has to be exercised in the rapid expansion of private services to fill the vacuum of public provisioning in the absence of any controls, as this has often resulted in sub standard services to people. Ideally the private sector would function within the overall health policy framework for each state to achieve shared health outcomes. Regulation on private healthcare across the country has had limited efficacy, and the North East is no exception. Some states have passed legislation related to this, but of greater importance is the state governments' ability and interest in enforcing regulation, to protect people's rights.

Box 8.5

Improving Specialty Medical Care in Nagaland through Tele medicine

Tele medicine could be the answer to two major impediments to top-quality healthcare in the North East: the remoteness of most areas and the almost complete absence of medical specialization. Given the poor quality and out-datedness of the medical facilities in the state, patients invariably had to go outside for medical intervention. To fill this void the Apollo Hospitals Group recently set up the Tele medicine Centre at the Naga Hospital in Kohima in collaboration with Marubeni India Pvt. Ltd. The Naga Hospital is now tele medically linked with the Indraprastha Apollo Hospitals in Delhi, allowing medical practitioners in Kohima to access expert advice from specialists, transfer medical records and images and even get real-time assistance for complex procedures being undertaken in Nagaland.

By significantly raising the level of medical facilities available in Kohima and negating the need for locals to travel for treatment, the new Centre has drastically reduced medical expenses. Video-conferencing-based medical programmes in the telemedical facility also allow doctors practicing in Nagaland to upgrade their skills.

Sources: Apollo Website and *Nagaland Human Development Report* .

However, it is important to note that whatever the public-private mix of finance and provisioning, the government is eventually responsible for making available essential health services to poor people, in as efficient, effective and equitable a manner as possible.

8.2.3.3 Prevention and spreading awareness

Many health interventions such as improving child health and maternal care, and the prevention of the spread of HIV/AIDS and cancer will call for increasing people's awareness about the importance of environmental sanitation, preventive measures such as immunization and so on. Popular media such as television and radio should be used as much as possible to inform people of preventive measures, more nutritional practices, for home counselling and other health interventions.

- Healthcare providers (traditional birth attendants, ANMs, MPWs, *Anganwadi* workers etc.) can be trained to impart good infant and young child feeding practices during ante- and post natal check-ups. This will obviously be more successful with increasing interaction between people and healthcare institutions or trained medical workers.
- All dwelling units should be equipped with sanitation facilities and adequate water supply by 2010.
- Awareness on HIV/AIDS and the negative outcomes of drug abuse and the treatment needs to be spread through all possible agencies,³⁰ HIV care and support should be mainstreamed into the PHC system; and treatment and post-care centres for recovering addicts (including reintegration interventions such as vocational training, counselling and mainstreaming them) need to be set up. At the state level, one of the most important tasks is to check cross-border drug trafficking.

The role of NGOs and religious organizations in actively addressing the proliferation of HIV/AIDS needs to be highlighted, well-defined and coordinated within the overall public policy framework so that they work in consonance with government departments. For this they will need support from the government in the form of skills and capacity building and possibly funding.

8.2.4 The central role for local bodies in public health

³⁰ The recommendation is to use diverse channels the postal network, village kiosks, *e-choupals*, retail outlets, the local barber, cobbler, *dhobi* and *paanwala* along with marketing networks of FMCGs to disseminate health-related information and health products (from the *Eleventh Plan Report on PPPs in Healthcare, Planning Commission*)

Many of the above recommendations recognize the central role of local bodies in improving the health outcomes in the region. The National Rural Health Mission (NRHM) strategy also places Panchayats at the forefront of its programmes. It proposes to train and enhance the capacity of Panchayats to own, control and manage public health services and promote access to improve healthcare at the household level through a female health activist (ASHA). ASHA is chosen and accountable to the Gram Panchayat to act as the interface between the community and the public health system. Panchayats are also involved in Rogi Kalyan Samitis for good hospital management. Members of PRIs will be trained in health issues, and this could be combined with training on public health, to provide a more holistic approach to health outcomes.

8.3 BASIC SERVICES

Good sanitation and drainage, clean water, electricity and permanent housing structures are now considered necessities and preconditions for development. States have made efforts to increase the reach of these services, but there are still large gaps and thousands of households still do not have these necessities. Poor access to amenities in rural areas coupled with the lack of non-farm employment opportunities has propelled people to move to urban centres. Increasing urbanization along with the expansion of the administrative sector over the past decade have in almost every state resulted in untrammelled, unplanned urban growth and pressures on urban amenities, with serious implications on the environmental and economic sustainability of these towns.

This section first looks at the ‘quality of life’ indicators in NER (sanitation, sewage and waste disposal, water supply and electricity), and then analyses the pattern of urban development that is taking place. The vision would be to improve living conditions and increase access to amenities and employment opportunities (especially non-farm employment) in the rural areas, so that the rural-urban disparities, so stark in the region, are reduced.

8.3.1 Sanitation and sewage disposal

If their statistics are to be believed, NER states have done fairly well in providing households with toilet facilities in their dwellings (Table 7.32 A in Annexure 7.1). However, specialists say that households in a state like Assam have barely 8 per cent toilet coverage while Meghalaya has reported 11 percent in a survey done for the World Bank (report by Group of Consultants, to Government of Meghalaya on Rural Drinking water Supply and Sanitation in Meghalaya, May 2007). Large disparities continue to exist between rural and urban supply. Drainage continues to be a problem (Table 8.32A in Annexure 8.1) both in the rural and urban areas. The lack of sanitation, poor systems of sewage and disposal of solid waste (and lack of safe drinking water) are among the main reasons for poor health and high morbidity levels.

8.3.2 Shelter

Housing is central to improving people’s quality of life. Data related to housing in the North East (Table 8.29A in Annexure 8.1) can be somewhat deceptive because of the definition of permanent structures: in the national census, houses built with bamboo and

cane are classified as temporary structures (*kutch*a housing). However, this style of building is the natural outcome of the resource base of the region, and traditional building styles and techniques. Thus, NE households use bamboo and wood to construct walls however, there is an increasing shift to metal sheets and concrete.

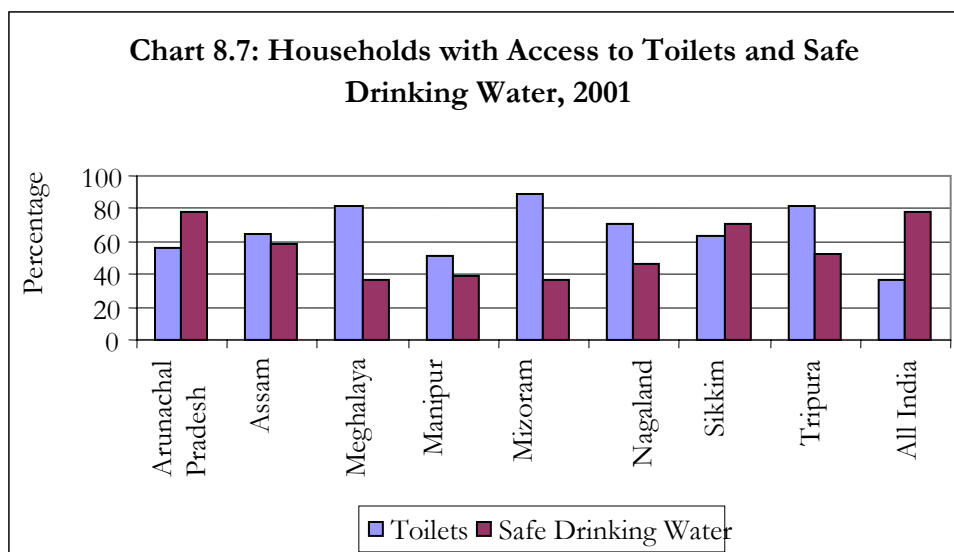
A more appropriate path for improving the quality of housing in the region, as observed by the study team, given the abundance of bamboo, is being initiated in some of the Cane and Bamboo Technology Mission offices.³¹ This is clearly a more appropriate technology for NER, based on the use of low-cost local materials, and eventually more sustainable in the long run.

8.3.3 Water supply

While the supply of good quality water to NER has increased over the last 20 years, the proportion of households which have access in all states, apart from Arunachal, is still below the national average (Chart 8.7 and Table 8.31A in Annexure 8.1). Rural water coverage is particularly poor in Manipur, Meghalaya and Mizoram, where less than 30 per cent of the households have access to safe water. A higher proportion (than the national average) of both urban and rural residents in the NER has to 'fetch water from far away' (Table 8.32A in Annexure 8.1). Interestingly, the urban areas of the North East are less fortunate in basic services when compared with the national averages (the urban deprivation index for several NER states is higher than the national index Table 8.32A in Annexure 8.1), while the rural deprivation index for almost all the NER states is better than the national average.

The slippage in water provisioning between 1991 and 2001 in states like Manipur and Sikkim exposes a major problem in this area, which is not asset creation, but the critical need to sustain the schemes through appropriate maintenance mechanisms. High maintenance costs, which state governments are increasingly finding difficult to meet have resulted in an erosion of the ground covered in giving access.

³¹ Different forms of bamboo thatching, reinforced with water-repellent surfacing, are being experimented with in the Cane and Bamboo Technology Missions at Dimapur and Guwahati, as also the use of bamboo to build sturdy, strong walls (Study team report).



Source: Census of India, 2001

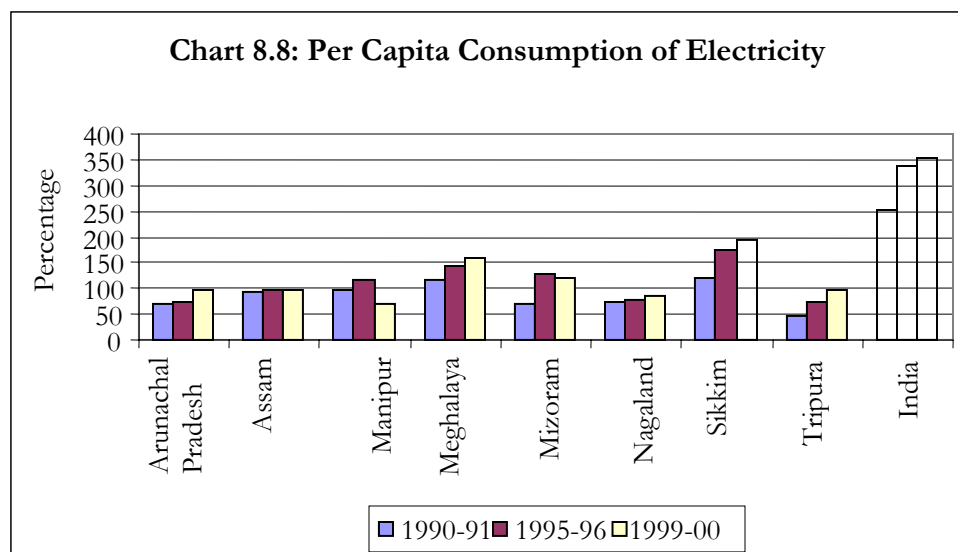
8.3.4 Roads

Good road connectivity of habitations, especially in the villages, with neighbouring towns and district headquarters, has become a vital precondition for development, especially in this region with its almost total lack of rail and air networks. A poor road network linking rural areas with urban centres has been responsible for their relative isolation and precluded large proportions of people from fully participating in the development of the region. Roads are the main support system for improving access to health and education, quite apart from access to other services, markets and amenities.

Road connectivity is, therefore, a useful indicator of the 'inclusionary' aspect of development process and, perhaps, reach of the market as well. It is particularly relevant in the Indian context where over 80 per cent of the population continues to live in rural areas and where over 50 percent of villages with population of less than 1000 are yet to be connected by roads (National Human Development Report, 2007).

8.3.5 Electricity

Access to electricity is a basic necessity, and while some progress has been made in the region (Table 8.33A in Annexure 8.1), in Assam only 28 percent of the households have electricity connections. Further, the rural-urban gap in access to electricity is still very large in states such as Assam, Arunachal Pradesh, Meghalaya, Nagaland and Tripura.



Source: Planning Commission (2002)

A very different and more accurate picture emerges, however, when we look at the per capita use of electricity in NER (Chart 8.8, Table 8.34A in Annexure 8.1), which is far below the average per capita consumption (planning commission, 2002). The unfortunate reality in the north east is that while a substantial proportion of houses are ‘electrified’ there is hardly any electricity available for them.

8.4 MANAGING URBAN GROWTH

A separate section on urban development is important in this vision document because of the important role the urban centres play as drivers of growth, by being effective commercial and administrative hubs for the rest of the state. Further, all the urban centres in NER (as in several other parts of the country) have started experiencing serious problems from pressure on the basic services as discussed above, but also as a result of unplanned urban development leading to undesirable environmental and social outcomes. In Agartala, the study team observed open drains lining almost every street, which were infested with mosquitoes, the almost complete absence of any street lighting which made it difficult to walk outside at night and frequent power black outs. Urban slum population is as high as 65 percent in Shillong and 16 percent in Agartala.³² The poor suffer the most from the high prevalence of water-borne diseases on account of lack of access to safe drinking water. Studies in many metropolitan cities show a higher rate of diseases and longer duration per illness from poor quality of drinking water supply in slum areas.

The corresponding influx in hill capitals such as Gangtok, Aizawl, Shillong and Kohima is beginning to have environmentally unsustainable outcomes, given the scarcity of land and the fragility of the environment. Buildings are constructed flouting existing

³² Slum Population, Series 1, Primary Census Abstract, Census of India 2001, from *Urban Finance*, vol. 8, no. 4, October-Dec 2005, p. 8.

regulation, adjacent to mountain streams and in violation of height restrictions. The lack of a public transport system in many of the cities (Gangtok, Imphal, Aizawl) means that people have to rely on taxis for all their transport needs, further adding to the congestion on the narrow roads and to parking problems. The explosion in the vehicular population has added noise and air pollution to the concrete mass of construction, and with the pressure on land, has eroded all the greenery of these mountain environments. The scarcity of land in these hill environments exacerbates the problem of effective solid waste disposal.

Urban development, such as it is in NER, has been skewed spatially with its focus on capital cities such as Imphal, Gangtok and so on, to the neglect of other towns in the states, such as district headquarters. In Nagaland, this has led to the migration of people to Dimapur and Kohima not only from the rural areas, but also from smaller urban centres, because of their relative lack of urban infrastructure and employment opportunities.³³ The further pressure this places on the urban services and infrastructure of the relatively better developed towns needs to be factored in when urban strategy is planned. At the same time, it is important to develop infrastructure and services in the smaller cities so that they do not disintegrate into ‘ghost towns’ with deteriorating civic amenities.

Much of the urban congestion results from administrative activity government offices and officers moving about to meet each other. Here, the shifting of several government offices away from the main city centres in Guwahati, Aizawl, and Kohima are excellent efforts to reduce traffic congestion. Imphal and Gangtok have similar plans to decongest their city centres which should be implemented as soon as possible.

³³ *Nagaland Human Development Report*

8.4.1 Basic services and urban development: The Way Forward

Various reports have suggested ways to improve basic services in NER, all based on the accepted view that development in the region will only be possible if there is a vast improvement in the quality of overall infrastructure, and services (see Annexures for a summary of these). Our recommendations reiterate most of these suggestions

8.4.1.1 The way ahead: Central role for local governments

The provision and expansion of basic services itself creates a large amount of employment. Direct employment is created by the actual setting up of these labour-intensive activities; the presence of these services will attract industry and commerce, which in turn will create indirect employment.

- The newly introduced concept of a PURA (see Annexure 8.3), by improving rural services and employment opportunities, presents a possible solution to rapid urbanisation.

Box 8.5

Nagaland's Water Communitization Experiment

Village communities in Nagaland are being made responsible for water maintenance as part of the communitization process. Before this, the PHE departments were responsible for thefts, leakages, waste, distributions, and so on. With communitization, users are responsible for acquiring the land for catchments and installations, designing schemes to suit their needs, sharing the costs (5-20 percent of the total), implementing the scheme (clearing forests where needed, and taking up civil works) and, after commissioning, taking over its operation and maintenance. Maintenance costs will be borne by consumers through their own efforts at resource mobilization by levying a fee on users at a government-approved rate.

Communitization of water is a demand-driven approach: users come to the government agency for technical support related to water supply. The PHE Department will supply and install the water pipes and service reservoirs, help in scheme selection designs and evaluation to ensure sustainability of the investment and ensure effective integration of the project components in the village. It will train Village Watsan (water and sanitation) Committees on maintenance, basic repairs, revenue collection, and resource mobilization through workshops, seminars, posters, and audio-visual publicity.

Source: *Water Communitization in Nagaland*, Department of Public Health Engineering, Government of Nagaland.

- Communities working with NGOs, community-based organizations, church-based organizations, or Panchayati Raj institutions are the most effective agents for delivery of services. The Swajaldhara Scheme, being implemented in various parts of the region, relies on a high degree of involvement from local participation

through water users' associations or PRIs in the implementation and maintenance of water supply. The responsibility of water supply has shifted to the village Panchayats and to promote community participation and improving the management of water supply, Public Health Engineering Departments are providing services to strengthen capabilities of the several user communities that have been formed in the villages. A similar experiment is being initiated in Nagaland (see Box 8.5).³⁴

- Similarly, in the area of sanitation, the Total Sanitation Campaign (aimed at providing subsidized individual and community latrines) is part of the core responsibility of every Panchayat, especially the Gram Panchayat. While achievements are often impressive in terms of latrines constructed, without the creation of public awareness and social sanction against open defecation, the programme targets are in danger of slipping back.

8.4.2 Managing urban development

- Many of the problems related to urban development in the North East require urgent attention, and fortunately the imminent implementation of JNNURM has persuaded many of the state governments in the North East to begin instituting safeguards against further haphazard growth and unregulated construction, to levying some modicum of recovery charges for essential services and to involving residents in the planning and implementation of development by the setting up of elected urban local bodies.
- JNNURM has the potential to transform infrastructure and vastly improve civic amenities in selected cities, but it may not be enough to cope with the scale of urbanization expected in the coming decades as populations move out of villages in search of jobs. It is imperative to begin the process of development of new townships and growth centers. New growth centers could be created around existing small and medium towns or around mega-industrial or infrastructure projects or set up in the periphery of mega cities. These centers would ideally be located along existing or proposed high-capacity transport corridors.
- Much of the traffic congestion in the small hill capitals such as Gangtok, Aizawl and Kohima results from government activity. The speedy implementation and use of e-governance could facilitate video-conferencing and telephone conference calls, minimizing the need for travel within the city. But the longer-term solution being implemented in Aizawl (and already in place in Guwahati) is the relocation of government offices and departments away from the main city centre.
- Most urban centres in the hills have no public transport system within the city, and are serviced by mini-cabs or shared taxis. The introduction of mini-buses, capable of carrying 10-15 passengers, perhaps through private-public

³⁴ The Shukla Committee has several valid recommendations related to transparency and monitoring of schemes (see Annexure to this chapter).

partnerships, would have a beneficial effect on vehicular decongestion and air pollution.

- There are few playgrounds or green areas in the town limits, and these need to be built into any plans for urban areas.
- Buildings can be constructed keeping in mind the traditional cultural aesthetics of the region or state, and using materials locally available, which would be more appropriate and instil in people a pride in their heritage. Building government offices along these lines, which would have an excellent demonstration effect, could make a beginning.

Chapter 9

Employment and Manpower Planning

Augmenting human capabilities in the region will require building skills among people so that they themselves become agents of change and development, and at the same time raise the potential for employment. The strategy for inclusive growth necessarily involves skill development as it not only increases wage employment opportunities but also creates avenues for self/employment. Employment growth will be a crucial objective of a people-based development strategy, as it raises standards of living, improves access to basic services and leads to an overall improvement in social welfare. The large youth population in the region, with over 30 per cent of the people between the ages of 15 and 29 years in Nagaland, Manipur, Mizoram and Sikkim (against the national average of 26.5 per cent) makes a focus on employment creation an essential element in planning for NER (Table 8.1A in Annexure 8.1). Creating job opportunities is a challenge for a development strategy for any state or region but more so in NER with its largely agrarian economies, low levels of industrial activity and significant dependence on the public sector for employment-creation opportunities. At the same time, the supply of manpower has been constrained by the lack of good quality professional and vocational training in the region that would raise the skills base and boost entrepreneurial abilities.

While the region witnessed a rapid expansion of employment in the 1980s and 1990s, most of the job creation took place within public administration in response to the formation of new states, the need to establish an administrative machinery and possibly to compensate for the lack of employment opportunities from private investment (Table 8.2A in Annexure 8.1). The share of public sector in overall employment was as high as 96.8 per cent in Manipur in 200 (Chattopadhyay 2006). That this situation is unsustainable for any length of time is evident from the widening gap between per capita GSDP in the region and the average per capita GDP for the country as a whole.

Two essential elements of any strategy for increasing employment are: (i) expanding economic activity to raise the demand for different levels of skills, which would in turn facilitate the shift to a high-growth economy; and (ii) human capital development, which would essentially mean an enhancement of employable skills.

9.1 EMPLOYMENT AND POPULATION DYNAMICS

The significantly young population in the region¹ reiterates the need for careful manpower planning and employment generation over the next few years. Employment generation has undergone a crisis of sorts in the aftermath of the freeze on public sector jobs in the last plan period, but surprisingly rising unemployment and underemployment are concomitant with high wage rates, especially in the hill states.

¹ As much as 18.6 per cent of the population is in the 20-29 years age group and 10.2 per cent in the 15-19 years age group. See Table 9.1A.

The region is still very dependent on agriculture for employment both in the rural and urban areas, with 85-88 per cent of jobs still concentrated in this sector. The significant unused cultivable area, especially in the hill states indicates that the farm sector still has the potential to provide livelihoods (NEDFI, 2003). However, declining productivity in agriculture calls for some degree of Government intervention in creating livelihood opportunities in the region. As in the rest of the country, there was a steep decline in the number of cultivators and an increase in the number of agricultural labourers during the 1990s (Table 8.10A in Annexure 8.1), but the situation in NER is exacerbated by the limited livelihood opportunities in both the farm and non-farm sectors. However, the growing number of 'other workers' indicates that there was some improvement in the non-farm employment scenario in the 1990.

Some encouraging trends are that the proportion of rural self-employed people increased in many of the North Eastern states between 1999-2000 and 2004-05, and the share of casual labour fell, especially in Assam, Sikkim and Nagaland (Table 8.11A (a) in Annexure 8.1). The trend in urban areas is somewhat similar during the same period, except in Assam and Meghalaya where self-employment fell, the share of regular employment increased, and casualization of labour increased marginally in Assam (Table 8.11(b) in Annexure 8.1).

Unemployment declined marginally between 1993-94 and 1999-2000 in Assam, Arunachal Pradesh and Tripura, but increased in the other five states, a situation which has been more adverse for women and in urban areas (Tables 8.12Aa, b and c in Annexure 8.1). Rising unemployment and underemployment has been accompanied by wages that are higher than the national average and in general rose between 1999-2000 and 2004-05 (Tables 8.13A (a) and (b) in Annexure 8.1). Underemployment with high wages presents a paradoxical situation. High wages could be a serious constraint to private investment, especially from outside NER, given that regulations and local conditions in some hill states restrict the free inflow of labour.²

9.2 THE WAY AHEAD: RECOMMENDATIONS FOR MANPOWER PLANNING

A vision that emphasizes building capacities and opportunities would have a two-pronged approach of developing human capital and expanding economic activity to boost employment in the region.

9.2.1 Developing Human Capital

The strategy to create a pool of employable people in the region will be based on a holistic planning framework that compasses interventions that begin at the school level and continue beyond to draw in people from all levels of education, and provide them options for training and skill building. While the best option for the large number of children who do not complete school would be attempting to retain them within the school system, some manpower planning would be required for those who leave the system after the Xth Grade, and the XIIth Grade.

² In Mizoram, factory owners have to obtain annual permits for workers from outside the state; further, strike on non-Assamese labour in Assam appear to be a manifestation of non-conducive local conditions for hiring of outside labour.

9.2.1.1 The school level: An important first step

At the very base of a sound strategy to develop human capital will be good quality education inputs at the school level (this has been emphasized in the Chapter on Human Development in the Education section). There is widespread evidence that education has a positive impact on labour productivity. Studies have shown that the spread of technology depends on learning potentials and motivations linked to the extent of formal schooling, with a causal link from education to economic growth. The base of employable skills will be built in schools, which apart from improving the overall education will increase the use of computers in the classroom, and greatly raise the level of maths and science teaching across all grades.

While there has been a temptation in many economies to vocationalize secondary schools, a more cautious approach is required in view of the empirical evidence that several people who studied vocational subjects eventually took jobs unrelated to their training³. Such evidence coupled with the high unit-cost of vocationalizing the curriculum (scale diseconomies), favour the more conservative policy of emphasizing general skills, with the introduction of selective vocational courses at the secondary level (to prepare the base for jobs in carpentry, electrical appliances, construction, hotelling and so on).

9.2.1.2 Vocational interventions at all levels

Job-oriented training needs to be made available across all educational levels, including those who leave school in Grades X and XII. In fact, the school-to-work transition can be facilitated through good Vocational Education and Training (VET) programmes that equip people with tradable skills.

- An important first step would be to document and quantify the skills base of the region, and the supply of training available. This would be a vital input into the manpower planning process, as it would help identify gaps in skills and in training facilities. The demand side of the situation would also need to be assessed, and this could be best done by a regional planning agency such as NEC or one of its bodies, working in conjunction with industry associations and perhaps private consultants. Inputs would come from all agencies that might have an impact on the future labour needs of the region including Government departments (for planned infrastructure expansion, tourism facilities etc.), private industry and agencies (involved in the delivery of basic services such as schools and healthcare) and others. These will be linked with the development of sectors as proposed in this report, which are vitally dependent on the availability of certain types of skills in the region (raising non-farm employment, tourism, hospitality and so on). Private sector and potential employers are well-positioned to track technological developments in different occupations and to assess demand for specific skills and developing sector-wise skill profiles.

³ Given a natural preference for secure government jobs in most NER states that is probably also the case in this region. In the absence of a placement profile of vocational schools this could not be verified.

- Operationalizing the process of delivering appropriate vocational training courses in the region would be based on outputs from the above surveys which would help identify the nature of training and skill development needed to meet current and potential (near future) demand. The existing network of ITIs and polytechnics in the region need to be expanded to raise the skills base, and efforts are being made to do this. Existing courses need to be strengthened and upgraded for higher-level training; in addition, training has to be expanded to cover trades correlated to the technical skills needed by the region, in coordination with NER's new industrial policy. Training courses have to be more dynamic and incorporate training on new technologies so that graduates from these institutes can compete outside the region, and even globally. Given the lack of a modern industrial base in the region, linkages may need to be developed with industries outside NER for internships and employment.
- Private firms could help in identifying the courses needed, developing competency-based curricula and learning materials. They can also provide experts who conduct the training, as well as the space and tools on which people can be trained and help with placements.
- In some instances, private parties could very effectively work in collaboration with State Governments to train and certify people as is being done with the IT Department in Mizoram (Box 9.1).

Box 9.1

Private-Public Collaboration in Job-Oriented Technical Training: IT Entrepreneurs Training Programme in Aizawl

A major new initiative between the Government of Mizoram and private IT companies is bringing international-level training and business development to unemployed people in the state. A partnership between the IT Cell of the Government of Mizoram and New Horizons India (a US-based company) the IT Entrepreneurs Training Centre and Prometric Testing Centre was set up at Aizawl in 2005. The centre provides employment-related training and skills to young, educated unemployed people in an environment equipped with the latest IT technology. The first batch of 200 students were inducted in September 2006, for a two-year course, which includes training in software development and business communication, that will equip them to set up their own business ventures. NEC will fund training for 400 such candidates over a period of two years.

New Horizons will also set up a prometric testing centre at Aizawl to allow students to apply for certification from international companies like Microsoft, Oracle and CISCO, which will expand employment opportunities outside the state and even internationally. The Government pays the certification fees for the first attempt to encourage students to apply for certification.

The training also supports self-employment among graduates. The cell is setting up an IT Resource Centre where graduates will be given space and access to

infrastructure and support to operate small IT consultancy firms or other small businesses or to apply for other jobs online, so that they need not invest in IT infrastructure.

Source: Field visit by the study team to the IT Cell, Planning and Programme Implementation Department, Government of Mizoram, Aizawl.

- A strong focus of the strategy to increase employment will be making information available both on the variety of skill development opportunities available by district, state and in NER; this should ideally be delivered on a user-friendly website (which is managed and kept up to date by NEC and where the information is perhaps even translated into regional languages). This information should also be made available in print form in schools and colleges and other venues at which young people congregate. A similar effort could be made to provide information on jobs that are available, or Government self-employment schemes. Media can play its part in spreading awareness about opportunities for skill enhancement and possible careers.
- Training institutes will need to have a strong job placement focus by developing links with private industry, or by making available information on Government schemes for setting up their own enterprises.
- Through the project on ‘Providing Urban Amenities in Rural Areas’ (PURA), (see annexure and for details) Nagaland University will be part of programme aimed at creating world-class vocational training institutions in construction, carpentry, welding, computer maintenance and services and ITES.
- An avenue for promoting employable skills among youth is the community polytechnic, typically a wing of an existing polytechnic, which promotes rural and community development through the application of science and technology in its immediate surroundings, using the infrastructure of the polytechnic. At present 19 community polytechnics function in the region.
- This ambitious plan for upgrading the technical foundation of the people will call for a large number of trainers. A regional training institute could be set up to train and certify skilled workers to become trainers. These trainers can then set up a network of institutes with certification from the apex training institute.

9.2.1.3 Building entrepreneurial capabilities

- The other focus of manpower planning will be to promote those skills and avenues that can help develop entrepreneurial talent in NER. For a start, vocational training institutes could include courses on small/and medium/enterprises to equip those planning to set up their own enterprises in various business-related functions including entrepreneurship development, basic finance and accounting and ICT training.
- Apart from business-related skills, training can be provided in skills that are amenable to self-employment, such as IT (see Box 9.1). Here, private companies are well equipped to provide the training and equipment for this purpose. In

Assam, for example, private companies such as Punjab National Bank and Bosch Machine Tools have collaborated with the State Institute of Rural Development to train young unemployed people for the Development of Entrepreneurs in Assam (IDEA), in Kahikuchi outside Guwahati. The aim is to give those interested the skills and basic business acumen to initiate their own businesses. Instructors train them in a variety of areas: improved design and production in handicrafts (with a focus on bamboo-based crafts), horticulture development in clusters (especially vegetable cultivation), the use of machine tools, improved technology and marketing of handlooms, management of rural micro-enterprises, improved agricultural practices, dairy and poultry farming and agro-processing.

9.2.1.4 An expansion in the supply of professional education

- There is also an expansion in the supply of professional education planned for NER. Each state now has at least one central university, which can offer professional oriented courses along with the usual graduate-level courses. The recommendation is to set up centres of excellence in each university which will focus on the needs of the region (area studies, languages, sports training and so on), which in turn will create specialists in their fields. There are plans to set up an Indian Institute of Management (IIM) in Shillong, and there is an IIT in Guwahati. The goal will be to create a pool of professionally qualified people in the northeast capable of being employed anywhere in the country, and abroad. The focus will be on two main areas: developing skills and knowledge in globally expanding professions, or areas which focus on ‘core competencies’ of the people in the region.
- In the first instance, this will mean equipping young people with directly employable skills in professions that are growing worldwide, the most obvious ones being in the IT and ITES sectors, but also in nursing, the hospitality industry, airlines, and so on (see Box 9.2 for a sampling). Such institutes must be set up by private agencies, either in partnership with State Governments such as the Manipal Group of Karnataka (as Sikkim Manipal University of Health, Medical and Technological Sciences), or in collaboration with well-recognized, experienced private training providers from other states; hospitality training (ITC and Radisson), fashion design and technology (National Institute of Fashion Technology, Pearl Academy, Shrishti in Bangalore and the National Institute of Design in Ahmedabad), para-medical and nursing (Manipal, Vellore) (This list is only indicative).

Box 9.2

Focus on Some Professions

Nursing: The current global shortage of nurses in developed countries such as the United States, United Kingdom and Australia is expected to increase exponentially over the next few years, especially with the ‘greying’ of their populations. Already these countries have a substantial number of foreign-trained nurses working in their health systems, and the shortfall is estimated to be 285,000 in the US by 2010 and 53,000 in the UK by 2011 (Aiken,

2004). Nursing training within the country is best-established in Kerala which has 200 nursing schools, mostly run by private entities. Graduates from these have been much in demand within the country and abroad, but the Kerala nursing colleges no longer have the capacity to meet this demand. With the excellent reputation of nurses from NER, there has to be a focus on expanding facilities within NER for nursing (and other allied health professionals). At present, nursing training is offered in several north-eastern states, but could be expanded to all hospitals that can support the training. Collaboration with private nursing training colleges across the country would help provide the qualified trainers needed for this expansion.

Hospitality: Already hotels and restaurants in the major cities in the country are increasingly being staffed by people from the Northeast, who display an innate aptitude, talent and interest for this line of work. Professional training in the hospitality industry will equip them to move up the ladder to management positions.

Airlines: The expansion and proliferation of private airlines in the country has led to the large-scale recruitment of personnel at all levels management, flight attendants, ground staff, baggage handlers and so on. Increasingly, the new hires, especially in the service departments are being recruited from NER and three stewardess training institutes have already functioning in Guwahati.

Sports: The emphasis on promoting sports and physical education from the school level as enunciated in the National Sports Policy, 2008, through to college and beyond will require a large pool of trainers and coaches in the country, not to mention related professions such as sports medicine and physical therapy. The innate physical and sporting abilities of people in the northeast could be channelled into this arena.

Fashion: This is another rapidly emerging field as products by Indian designers are increasingly in demand in the larger cities in India and abroad. Fashion, textiles and design are areas well-suited to the talents and abilities of women and men in NER, especially Mizoram and Nagaland, who have already shown an aptitude for supplying innovatively woven textiles to markets abroad and within the country.

9.2.2 Capitalizing on the Region's Innate Talents and Interest

- Employment opportunities are expanding, mostly outside the region for now, in areas in which people from NER have an innate talent and interest: fashion technology and product design, airlines industry, sports and physical fitness and music, or based on indigenous materials such as bamboo, silk and traditional textiles. A centre for excellence in sports with the latest equipment and facilities could be set up in the region, with the aim of training aspiring sportspeople and coaches to meet the growing demand for coaching nationally as well as in the region. A Regional Mountaineering Institute for developing mountaineering skills among local youths, would also tap into the innate abilities among young

people as well as link up with the promotion of adventure tourism in the region. The formation of regional institutes such as the North East Institute of Fashion Technology and the North East Institute of Design would allow an exchange of knowledge and technology within the region, and showcase it outside.

- Well-established autonomous technical institutes from the rest of the country such as the National Institute of Fashion Technology (NIFT) and the Manipal Foundation could be encouraged to open centres in NER. (This list is only indicative). Their presence will provide existing training facilities with healthy competition as well as a chance to raise the quality of their instruction. Further, there is a synergy between some of the strengths and talents of the region and rising global and national demand for qualified professionals in these areas. The promotion of these professions could be the focus of professional higher education in NER.
- While English is the intended medium of instruction and assessment in several secondary and high schools, some of the graduates from schools in the region find it difficult to make the transition to study and work outside their states because of lack of practice in spoken English. One suggestion of the Sectoral Summit on Education in August, 2007 was to set up regional language centres in the main cities where students could practise their English and Hindi-speaking skills. In this context, the use of interactive radio instruction and computer-aided learning would also help.

9.2.3 Expanding Economic Activity to Boost Employment

Expanding the base of economic activities in the region include land-based activities agriculture, horticulture, social forestry and agro-based industrialization offer ample potential in NER. The forest resources of this region can support and sustain industries if they are used according to a working plan, which most of the states have yet to develop.

Further, several states are rich in mineral resources (Assam, Arunachal Pradesh, Tripura, Nagaland and Meghalaya) but these have only been substantially exploited in Meghalaya and Assam. These resources support an urban industrial base creating opportunities for many, and in addition have spillover effects on the rural areas through ancillary activities.

Apart from providing an enabling physical infrastructure for the expansion of activities that create jobs, Governments will also need to make available information about feasibility, accessibility, markets and finance on a wide scale. Some part of the infrastructure can be provided through public employment schemes. At the same time Governments should make efforts to create a favourable environment for private investment to supplement their efforts. Strategies to give a push to public investment in critical infrastructure and to attract private investment in industry and agriculture are discussed in the relevant chapters in this report.

The Central Government plans to go in for bamboo plantation over 6 million

hectare during the next ten years under its National Mission on Bamboo Technology and Trade Development. An enabling framework is required to realize this potential.

- Integrating local markets and opening up markets in neighbouring countries by increasing connectivity would provide the much-needed thrust to employment growth. Development of labour markets would, however, require easing entry restrictions and emphasis on skill development.
- It would be prudent to focus on production based on locally available raw materials, which would add value within the region, reduce transport costs and help states exploit their comparative advantages.

Chapter 10

Institutional Infrastructure

We have argued that lasting peace and prosperity in the region requires qualitative change in the governance system to maximize self/governance and (designing and implementing) grassroots planning in the planning strategy. Making a success of this strategy requires augmentation of the capacity of not only the people to effectively participate in governance and in economic activities but also of the institutions to support and promote new systems of governance and development. In general, developing capacity in institutions is fundamental to converting fragile economies into stable ones. Meeting the vision and placing NER on the path of progress to enable it to catch up with the rest of the country will require strong and capable institutions at all levels and across all activities: from local governance institutions to district and state levels and beyond at the level of NER, to community-based initiatives, to formal institutions for education and health, Non-Governmental Organizations and even the media.

10.1 THE INSTITUTIONAL FRAMEWORK IN THE NORTH EAST: A GAP IN CAPABILITIES

10.1.1 Local Governance Institutions

The expanded role that local governance institutions will play in the planning process will require the development of their capacity to prepare grassroots level plans and the designing, monitoring and implementation of different programmes. Similarly, effective decentralized delivery and monitoring of services such as water, sanitation, primary health and education, to the grassroots level, will call for an increase in their abilities. There is a wide variation in types of local self-governance institutions in the region¹ with differing levels of capabilities to meet their responsibilities.

Many of the social sector and development programmes, including the employment guarantee programme, rural housing and water supply are based on active local community involvement in designing, monitoring and implementation. The National Rural Employment Guarantee Programme, (NREGP) for example, is structured around a system where projects providing work are determined by the Gram Panchayat, progress is monitored at the Panchayat level, including the maintenance of records of those registering for work and funds are disbursed only after the Gram Sabha certifies that the work has been satisfactorily completed.

Local bodies can play an important role as gatekeepers to public health and education initiatives by tracking outcomes such as the construction of school facilities, filling of vacancies, training of teachers and helping retain children in schools. The

¹ Local Self-government institutions range from Panchayati Raj Institution in the rural areas of Assam (apart from two districts covered by the Sixth Schedule), Arunachal Pradesh, Manipur and Sikkim to the autonomous district councils in most of the remaining areas which are under the Sixth Schedule of the Constitution, apart from Nagaland and parts of Manipur, with their own local institutions.

recently launched National Rural Health Mission (NRHM) provides for the active involvement of Panchayati Raj Institutions (PRIs) in managing, administering and being accountable for health services at the community level. Supervision of health sub/centres will improve attendance of staff, motivate appropriate quality of care and provide constant feedback on patient satisfaction.

10.1.2 Government agencies and departments

Even though the vision for peace and prosperity in the northeast is based on participatory development from the grassroots up, the role of Government agencies is crucial to the process. The shifting role of Government agencies from providing goods, services and jobs to creating an enabling environment for the development of productive economic activities, helping develop sectors with potential such as tourism and horticulture (detailed in the chapters on industry, services and rural development), focusing on appropriate infrastructure creation and a larger regulatory and monitoring role will call for the development of new skills and capacities at all levels.

Many public programmes are still implemented by the state, and the successful delivery of these schemes to the people depends on the quality of functioning of the bureaucracy and administration. Many states have not been able to take full advantage of the schemes available for them they lack the managerial capacity to handle funds or prepare and monitor need-based projects. Often public administration is poor because of weak accountability mechanisms, lackadaisical staff and lethargic leadership. A study is being convened to identify gaps in the skills of Government functionaries at all levels; this would entail building of a battery of trainers from among Government employees as well as the NGOs. An elaborate programme for upgrading the State Institutes of Public Administration should be taken up by Development of North East Region in collaboration with DoPT.

The capacity of Government officials in the region to prepare projects and implement programmes and schemes remains low, and this leads to delays in submission and cost escalations. DPRs prepared by State Governments are often not in conformity with the technical norms of the line ministries, and it sometimes takes many revisions before they are acceptable. For example, a major problem identified by the Ministry of DONER in the implementation of NLCPR-funded projects was that poorly prepared DPRs led to delays in submission and cost escalation in projects.²

Though in the initial years, the Government will have to play an important role in production, distribution and promotion, with the passage of time, the role of the public sector will shift to less direct participation in actual production and distribution, but a greater role in promotion, monitoring and regulation. The implication of devolution of service delivery to Panchayats and Village Councils, will mean a sharp increase in the number of agencies (contractors and sub-contractors), in the delivery of services and goods. This has made the task of overseeing the system far more complex, and calls for greater technical skills among Government departments and different types of regulations.

² Identified by the Ministry of DONER.

10.1.3 Other elements in the institutional framework

Self-Help Groups: The Self-Help Group (SHG) movement was initially slow to take roots in the northeast, but in recent years the growth in the number of SHGs in the region has been among the highest in the country. These SHGs have been instrumental in expanding employment opportunities (such as the manufacture of fish feed, small-scale agro-processing and poultry keeping) and income, especially among poor rural people.

NGOs and Community-Based Organizations: NGOs and religious organizations are doing excellent work with local people in several health-related interventions such as improving maternal and child health in the *chars* areas of Assam, or addressing the proliferation of HIV/AIDS in states like Mizoram and Nagaland.

10.2 RECOMMENDATIONS: THE WAY AHEAD

10.2.1 Local governance institutions

Effective grassroots level participation in planning and service delivery will require building the capability of Panchayats encompassing training, provision of adequate functionaries, technical assistance and other support to them.

Recognizing that the vast expansion in their tasks will need substantial expansion in their capacities, the National Capability Building Framework (NCBF)³ was formulated by the ministry of Panchayati Raj and relates to training and capacity building of Panchayat elected representatives and others. The framework covers every stakeholder in Panchayati Raj, especially elected representatives and officials, who would be enabled to upgrade their knowledge and skills to better perform their responsibilities in programme implementation and service delivery, and equips them with skills required for day-to-day performance of executive duties. Training is treated as a continuous and sustained process aimed at long-term transformation and development (see Table 9.1A for a detailed list of training under the Framework).

One way to ensure that PRIs function well as institutions of self-government is to provide them with physical infrastructure, administrative staff support and training to enable their members to discharge their duties effectively. The ministry of Panchayati Raj has formulated a comprehensive programme called Gram Swaraj to help states in assuring necessary physical infrastructure, administrative staff support and capacity building and training to enable Panchayats to effectively perform their duties as institutions of self-government.

The Planning Process: The development of village-level plans by the Gram Panchayat and municipal plans in the urban areas relies on active participation of the people. The success of this approach in turn depends in the first instance on the extent to which local-level bodies are empowered and functions and funds are devolved to them. Progress on this has been varied across the region.

³ NCBF is based on the action points of the Seventh Round Table of State Ministers of Panchayati Raj held at Jaipur in December 2004.

Building development plans from the grassroots will require significant capacity building at the third tier of Government, to ensure that plans evolved at the ground level are technically viable and effectively coordinated with plans at the higher levels. The involvement of NGOs in helping PRIs in this process has been very effective in many cases and they should be encouraged. The Approach Paper to the Eleventh Plan recommends that a small portion (say 1 per cent) of the budget provision for CSS be earmarked for the development of capacity to support District Planning Committees (DPCs).

Service Delivery: A fundamental step for ensuring that local-level bodies become effective in service deliveries is to develop their capacities in the widest sense of the term. In addition, clearly demarcated roles will need to be assigned to Panchayats through activity mapping. The benchmarking of services will ensure that local bodies can be clearly judged in terms of outcomes.

Accountability systems also need to be set up so that citizens, the ultimate recipients of services from Panchayats, can hold them to account for inadequate service delivery. Important tools for accountability include the Right to Information Act, 2005, as it allows stakeholders, especially beneficiaries from the system, to obtain information necessary to enforce accountability. IT is also a powerful tool which enables beneficiaries to enforce their rights. The setting up of CSCs in rural areas will mean that the Internet will soon be accessible in villages. For example, a website monitoring the progress of Bharat Nirman will now have the list of villages electrified under RGGVY, the list of villages where drinking water has been provided, or those villages with all-weather roads.

10.2.1.1 Areas under the Sixth Schedule

In the areas in the northeast covered by the Sixth Schedule, the exercise of powers across district councils varies greatly, and capacity building in this context would firstly involve a standardization of these powers.⁴ Further, village councils that do exist are merely involved in the dispensation of justice rather than as institutions of planning and service delivery. Even the devolution of functions to these bodies varies widely across the region: State Governments and Autonomous District Councils (ADCs) have been very slow in transferring agreed departments to the councils, and run parallel machineries even in vital areas such as rural development, education and health.

Very few Autonomous district Councils (ADCs) have access to planning professionals, and this lack of specialization has led to short-term thinking on development and ad-hoc conceiving of development projects without proper technical and financial consideration. Planning processes will have to be instituted and professionalized for more effective implementation. At the district council level, professionals and experts in planning, monitoring and evaluation agencies will need to be inducted into the structure of the council's administration. As mentioned above in the case of PRIs, good project design is also important for accelerated and time-bound development. Capabilities for preparing project documents will need to be improved, which should be addressed when improving capability for planning.

⁴ A more detailed discussion is available in Chapter 2 of this report on participatory planning.

10.2.1.2 Communitization

Nagaland which is neither under the Sixth Schedule or Parts IX and IXA of the Constitution has its own traditional system of village bodies. Recent experiments with communitization at the village level to harmonize the ‘village community body’ with the traditional village body have been successful so far. However, despite the achievements of the communitization process in many areas in Nagaland, strengthening and supporting the institutions delivering these services would increase their effectiveness. At the very start, training of Village Council (VC) members will improve their competency and functioning in the areas of service delivery and planning for their units, and the Nagaland Government has formulated an elaborate training and capacity building exercise for these members.

Further, closer partnerships between Village Councils and Government agencies would improve the quality of services. For example, the efforts of Village Education Councils (VECs) to improve schooling for children would be boosted by simultaneous Government efforts to improve the quality and supply of teacher training, teaching materials and infrastructure. A major bottleneck faced in the communitization of education has been a lack of support from Government functionaries. District-level education functionaries still need to adjust to their new roles as partners and not providers of services. To achieve this, greater collaboration among VECs, the beneficiaries and Government functionaries involved is required. The competence of supervisory officers will also be needed to strengthen the Government-community partnership that is crucial to the process of communitization.

Communitization, too, will benefit from well-developed channels of evaluation, monitoring and feedback to improve the quality of services. Capacities need to be built among people to create informed and vigilant communities who can act as pressure groups to ensure that their wards are provided with adequate physical, social and academic services. Sustaining the process through enhanced community involvement is thus vital, and this can be done through mass awareness, a responsibility which should be shared by Village Councils and Government functionaries. A degree of independent monitoring could be provided by a senior district official regularly visiting communitized schools to see how problem areas are being dealt with. Further, a special cell could be set up within the official machinery to monitor the communitization programme and address issues as they arise.

10.2.2 Government institutions for responsive governance and service delivery

At a fundamental level, good coordination across the various directorates in the same department, (in health, for example, this would cover public health, family welfare and medical services) leads to better outcomes as they work in synergy with each other without wasting effort. Continuous monitoring and review are also important. The self-employment programmes implemented by different ministries need to be integrated into a single programme that cuts across ministries. The programme should also provide for training and capacity building of educated unemployed youth, particularly in rural areas, as such unemployment has assumed serious proportions in the region.

Apart from enhancing their information-based capacity, Government departments and agencies need to enhance their capacity to respond to people's demands for better services and to improve their accountability.

The capacity of Government officials in the region to prepare projects and implement programmes and schemes needs to be built by various ministries through the capacity building components of their programmes and schemes. Efforts are being made by the Ministry for capacity building of State Government officials through various training courses.

10.2.2.1 Providing support services

In building a base of knowledge and skills among people, Government agencies and departments can provide practical and active support to help people in different professions:

- Agricultural extension wings in all states need to be trained to reach farmers and emphasize modern scientific methods of agriculture, especially in cash crops. This is being done in the case of floriculture, where through the Horticulture Mission, trained officials guide new growers of anthuriums and other exotic flowers on the technical aspects of successful cultivation in Mizoram and other states.
- Impart training to artisans and craftspeople in design, new technologies, materials and so on to help them produce marketable crafts and artefacts. Marketing support will have to be provided to SHGs to ensure their sustainability. In Assam, through the State Institute of Rural Development, weavers are being trained outside Guwahati in new weaving technologies, and dyeing processes, to raise the quality of their output and improving their earning capacities.
- Spread awareness among youth (this could involve setting up a website with current information) about training and employment (and self-employment) opportunities for school or college dropouts; provide or facilitate appropriate rural-based training related to crafts, agro-processing etc.
- The capacities of Government agencies and research institutes themselves need to be developed to deal with these tasks. The network of research institutes in the region such as the Assam Agricultural University in Jorhat, the Central Agricultural University in Manipur, Indian Council for Agricultural Research (ICAR) and the Central Institute of English and Foreign Languages in Shillong will need to be well-equipped in terms of facilities and faculty to conduct region-specific research that will supplement efforts to fuel development in areas crucial to the northeast. For example, the vast emphasis on raising the quality of education in the country across levels will require that institutions like SCERT and DIETs are strengthened to provide the inputs required to teachers in the form of training and materials. The staff of these institutes will be given the orientation and training needed to equip them for this, along with exposure visits to other parts of the country to enable them to understand the extent of the contribution that they can make to the universal education effort.

10.2.3 The North East Council (NEC) and its institutions

NEC has an important role to play in promoting progress and prosperity in the region, by dint of its unique role as a regional planning body. By working closely with State Governments it could help coordinate state-specific plans for region-wide benefits, as well as preparing investment plans relating to infrastructure and services which have inter-state spillovers within the region. At the start it can maintain regularly updated socio-economic database banks for the use of all member states as a tool for developmental planning for the region. It could also commission a GIS resource map for the entire region. It could also be an invaluable resource in building capacity among officials, especially in technical fields such as road building where it could help conduct capacity building and training programmes on procedures followed by different ministries such as the ministry of transport.

To take its place at the centre of regional planning in the northeast, however, NEC would need to build its capacity to the greatest extent. This will mean at the very outset it's the professionalization, so that it is staffed with professionals, with departments run by people who are thoroughly familiar with the subjects they deal with. Thus, the head of the health department should be well-versed in the issues, constraints and needs of different parts of the region to be able to bring about the most appropriate interventions that will significantly impact on health outcomes. Further, good inter-departmental coordination within the NEC will ensure that planning and policies are based on holistic considerations and do not take place independent of initiatives in other areas. NEC departments also need to work closely with State Government departments to ensure that planning efforts at the state level are coordinated with their own proposals.

The North East Handicrafts and Handlooms Development Corporation (NEHHDC) and the North East Regional Agriculture Marketing Corporation (NERAMAC) have been incurring losses, and there are various initiatives and recommendations to facilitate their taking a central role in the regional development process. In both cases, their roles have been confined to a small part of the region; an expansion in their activities to cover the entire region would make them more effective. These two agencies, along with NEDFI, can play an important role in promoting trade and industry, by becoming more proactive in providing professional guidance and support to entrepreneurs. They could also develop synergies with other related institutions to eliminate overlaps and duplications.

NERAMAC should shift from its production activities and confine itself to procurement and marketing activities. For better management and outcomes, NERAMAC and NEHHDC need to have some private sector inputs, especially as the role of NEHHDC has become largely redundant as each state in the region (except Arunachal) has its own Handloom and Handicraft Corporation. In fact, the Task Force on Connectivity and Promotion of Trade and Investment in North-East States has recommended that these three agencies can be rejuvenated during the Eleventh Plan through an infusion of funds and a transfer to joint venture, with a majority holding (84 per cent) by private agencies and outcomes (Planning commission, 2006).

10.2.4 Other agencies: Self-help groups, civil societies and the media self-help groups

An effective SHG movement, to a large extent, relies on the interest and awareness of the NGOs embedded in the region. Given the diversity of the region, local organizations of all types can be effective promoters of SHGs, making rural beneficiaries aware of the functioning of SHGs and SHG-bank linkages.

To give an impetus to the SHG movement, especially in states where it has been slow to take hold, will require better coordination among the various agents that operationalize the programme: DRDA, different Government agencies involved, banks and community-based organizations. Some of these may need capacity building to make them more effective in spreading information about SHGs and how their linkages with banks work and in helping the groups develop their own skills in managing enterprises.

10.2.4.1 Non-governmental organizations and civil society

The role of civil society needs to be highlighted, well-defined and dovetailed into the overall public health policy framework so that they work in consonance with the Government Departments. Given their reach into the more remote areas, and their rapport with local people, their efforts could be intensified and expanded, for which the capacities of several of them needs to be developed, their skills base expanded, and in some cases, given some funding.

Because these agencies often work closely with people in areas where other agencies have little reach, they can play an important role in sensitizing and raising consciousness among the people living there. They can articulate demands for improved public services and serve as watchdogs for public-sector performance, as well as insisting on transparency and accountability on outcomes and the use of funds.

Another important role is promoting grassroots participation in governance: apart from helping to build people's awareness of the functioning of local governance bodies, they can play a lead role in the capacity building of these bodies through training, exchange programmes, building networks and sharing information. They can assist District Planning Committees and local-level bodies undertaking village planning, resource mapping and identification of development schemes. By educating people on how to hold the grassroots bodies to account they can improve their functioning. They can also help in the independent monitoring of schemes and programmes to increase their effectiveness.

10.2.5

The Media The media is a particularly important agent of change. It can focus attention on service delivery failures and sensitize people to local problems and ways to deal with these. It can play an important role in demanding accountability for service delivery performance from Government officials and Departments.

10.2.6 Information and communication technology (ICT)

ICT is a vital input in capacity building for local governance organizations, particularly for transparency, disclosure of information to citizens and social audit,

monitoring to improve the quality of service delivery, improving internal management and efficiency, capacity building of representatives and officials of the Panchayats, and e-procurement. It will help build information systems for planning, compilation and coordination at various levels of local Government.

E-governance is in the initial stages of implementation, but it is proving to be useful in improving the delivery of public services to people in other parts of the country (see Box 10.1).

ICT will play an invaluable role in building capacity among local-level bodies such as Panchayats, ULBs and Village Councils, especially for building capacity among representatives and officials of the Panchayats.

The Expert Group on Planning at the Grassroots Level (chaired by Mr. V. Ramachandran) recommended that these objectives would be realized if the following steps were taken:

- (a) Development of appropriate software for Panchayat activities and maintenance of a repository of software including source codes, which can be used by all Panchayats for their activities.
- (b) Capacity building of elected Panchayat representatives and officials to make meaningful use of IT tools.
- (c) Building a vibrant net-community of Panchayats using NPP, through which they can network with each other as also with other entities engaged with them.
- (d) Content management for back-end and for respective Panchayat portals as a part of the National Panchayat Portal.
- (e) Undertaking process re-engineering in consonance with activity mapping for functions transferred to Panchayats, so as to put in place IT-enabled planning, decision-making, implementation, service delivery, reporting and public disclosure including information dissemination under the National Right to Information Act or State Right to Information Acts.
- (f) Strengthening the National Panchayat Portal to provide a single-window entry to information and services provided by Panchayats. (Ministry of Panchayati Raj, 2006).

Box 10.1

Using IT to Expand Capacity in Public Services: The E-Seva Project in Andhra Pradesh

The E-Seva Project has greatly expanded the capacity of Government Departments and Agencies, while providing people with greatly improved services (in selected areas) and information about departments and agencies of the Central and State Government through a chain of computerized Integrated Citizen Service Centres (ICSC) now called E-Seva centres. Andhra Pradesh has 43 E-Seva centres spread across Hyderabad and Secunderabad. Each centre has 8-10 counters operated by private contract staff, and the computer can process multiple types of transactions by accessing a central web server, which in turn communicates with departmental servers. Departments access and update their databases when a transaction is performed at an E-Seva counter.

Services accessed include payment of utility bills, reservation of train tickets, municipal services such as getting birth and death certificates, vehicle permits and driving licences, passport applications and telephone connections. Using IT in the delivery of services modularizes tasks, making it possible to outsource them to the private sector and greatly improves the quality of service delivery.

Apart from reducing the pressure on Government Departments and greater timeliness of payment of dues, this frees up Government Departments to do other tasks that only they can handle. By outsourcing the distribution of applications, the passport department has effectively multiplied its number of receiving counters several fold. Further, by connecting the computerized ends of several departments with the service centres, IT has been effectively able to 'glue together' separate departments without making too many changes in their organization.

Source: Subhash Bhatnagar (2006) 'Andhra Pradesh's E-Seva Model.'

Chapter 11

Public Finances

The vision of achieving peace and prosperity in the region requires significant investments in its social and physical infrastructure. Indeed, much of the investment needed to generate incomes to catch up with the rest of the country by 2020 would have to be made by the private sector and this will be possible only when a proper investment climate is created. An important precondition for the creation of a conducive investment climate is a quantum jump in investments in infrastructure facilities by the Central and State Governments. This chapter analyses public finances of the NER states to estimate the resource availability for investments in social and physical infrastructure.

Analysis of public finances of the states in the region is necessary to understand the volume of resources committed by them to providing basic public services and the ways and means of augmenting the fiscal space either by raising more resources through tax and non-tax revenues or by reprioritizing to commit resources to strengthening infrastructure. This review of the finances of the State Governments in the region is with the view to assessing their contribution to strengthening the infrastructure in the region.

11.1 SOURCES OF FINANCING

Fiscal space for making investments in physical and social infrastructure depends on the generation of revenue and the committed expenditure for administration, interest payments and calamity relief. A Significant proportion of the expenditure on social services falls within the revenue account and so also the expenditure on maintenance of physical infrastructure. Capital expenditure on physical infrastructure depends on the surplus generated in the revenue account and the volume of borrowing. The latter comprises of market borrowing, which is determined by the Central Government (in consultation with the Reserve Bank of India), the share of small savings collections and Central Government loans to the states. The practice of Central Government directly lending to the states has been discontinued since 2005-06. In addition to these, the State Government borrows indirectly through special purpose vehicles (public enterprises) from the Housing and Urban Development Corporation (HUDCO), Life Insurance Corporation (LIC), NABARD and similar other institutions.

In the case of the North Eastern states, each Central Government Department is required to earmark 10 per cent of its plan budget for the region and the unspent balance of it, if any, is credited to the non-lapsable fund. This fund is used for infrastructure development in the North East States through the Ministry of DoNER. It is supplemented by a separate budgetary provision for NEC for development projects/ schemes in NER. In addition, there is direct spending by the Central Government departments including those from the Border Roads Organization.

11.1.2 Budgetary contribution

The budgetary receipts of the states comprise of tax and non-tax revenues within the revenue account and borrowings which are placed in the capital account. Revenue receipts comprise of own tax and non-tax revenues and central transfers in the form of share in central taxes, statutory grants recommended by the Finance Commission,

central assistance for state plans given by the Planning Commission and grants given for central sector and centrally sponsored schemes by various central ministries.

In the NER states, aggregate receipts as a ratio to GSDP was 31.68 per cent in 1995-96 which improved to 35.81 per cent in 2005-06 (Table 11.1). Out of this, revenue receipts were 28.40 per cent in 1995-96 and they accounted 30.98 per cent in 2005-06 and capital receipts were 4.28 per cent in 1995-96 and they increased to 4.82 per cent in 2005-06. However, inter-state variations do exist among the states in the region Table 12.1A in Annexure 12.1. The aggregate receipts were as high as 89.21 per cent in Arunachal Pradesh and as low as 28.86 per cent in Assam in 2005-06. Revenue receipts were 68.82 per cent in Arunachal Pradesh and it was 28.94 per cent in Tripura.

Table 11.1: Aggregate Budgetary Receipts in NER as a ratio to GSDP

(Per cent)

<i>Receipt Head</i>	<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
Aggregate Receipts (I+II)	31.68	31.60	32.35	31.28	34.66	35.81	38.92
I Revenue receipts*	28.40	26.92	25.53	24.88	28.83	30.98	35.11
A Own receipts (a+b)	5.34	4.95	5.23	5.35	6.42	8.88	8.68
(a) Own tax revenue	3.03	3.15	3.38	3.63	4.05	5.06	4.98
(b) Own non/tax revenue	2.31	1.81	1.85	1.83	2.38	2.80	2.81
Transfers (c+d)	22.06	21.98	20.30	19.52	21.31	23.22	28.44
(c) Share in central taxes	6.56	9.46	8.52	4.42	5.32	6.02	6.36
(d) Grants from the centre	15.50	12.51	11.88	15.10	15.99	18.20	21.08
II Capital Receipts (e+f+g)	4.28	4.68	6.82	6.40	6.93	4.82	3.81
(e) Internal debts	1.30	1.38	2.48	2.46	3.85	8.84	3.52
(f) Loans and advances from the centre	2.88	3.23	4.22	3.82	2.95	-4.23	0.29
(g) Recoveries of loans etc.	0.10	0.08	0.12	0.13	0.14	0.11	0.10

Source: Computation for fiscal analysis has been made by using data from Finance Accounts of all the states for each year. For 2006-08 (Revised Estimates), data from Budget Papers have been culled out. For Arunachal Pradesh and Tripura figures for their (Budget Estimates) have been used.

Note: * It is negative due to massive adjustment in Assam for this year.

Contribution of revenue receipts in aggregate budgetary receipts was 86.48 per cent in 1995-96 and in 2005-06 it was 86.88 per cent (Table 11.2). In 2005-06, it was higher in Manipur (91.68 per cent) and Tripura (95.31 per cent), but it was lower in Arunachal Pradesh (88.03 per cent) (Table 12.2A in Annexure 12.1.)

11.1.2.1 States' Own revenues

Fiscal autonomy and fiscal space for increasing development expenditure requires that the states in the region should mobilize revenue from the tax handles assigned to

them. However, the analysis of tax-GSDP ratios of the states in the region shows that resource mobilization efforts of the states in the region leave much to be desired. The tax revenue relative to their GSDP in the region is much lower than the all-state average. The Twelfth Finance Commission which made a detailed analysis showed that while the all-states' tax-NSDP ratio averaged 6.54 per cent for 1999-2002, it was as low as 0.89 per cent in Mizoram, 1.14 per cent in Manipur, 1.18 per cent in Nagaland, 1.21 per cent in Arunachal Pradesh, 2.12 per cent in Tripura, 3.25 per cent in Meghalaya, 4 per cent in Sikkim and 4.29 per cent in Assam. The average tax-GSDP ratio for the states in the region in 1995-96 was as low as 3.03 per cent which improved slightly in 2001-02 to 3.63 per cent. However, the introduction of VAT in the states in the region has helped to increase the tax-GSDP ratio to 5.06 per cent. Nevertheless, the tax ratio in the region has remained significantly lower than the all-states' average. Thus, in 2006-08 (RE), the average tax-GSDP ratio in the region was 5 per cent as compared to the all-states' average tax-GSDP ratio of over 8 per cent. It is important that all the states in the region should make concerted efforts to increase revenues from the taxes assigned to them.

Table 11.2: Composition of Budgetary Receipts of NER

(As per cent of aggregate total)

Receipt Head		1995-96	1998-98	1999-00	2001-02	2003-04	2005-06	2006-08 (RE)
I	Revenue receipts*	86.48	85.19	88.93	89.53	80.01	86.88	86.48
A	Own receipts (a+b)	16.85	15.68	16.18	18.12	18.53	21.85	16.85
(a)	Own tax revenue	9.56	9.96	10.44	11.60	11.68	14.18	9.56
(b)	Own non/tax revenue	8.30	5.82	5.83	5.52	6.85	8.58	8.30
	Transfers (c+d)	69.62	69.51	62.86	62.41	61.48	65.02	69.62
(c)	Share in central taxes	20.80	29.92	26.34	14.14	15.35	16.85	20.80
(d)	Grants from the centre	48.92	39.59	36.41	48.28	46.14	48.16	48.92
II	Capital Receipts (e+f+g)	13.52	14.81	21.08	20.48	19.99	13.23	13.52
(e)	Internal debts	4.10	4.36	8.68	8.85	11.10	24.88	4.10
(f)	Loans and advances from the centre	9.10	10.21	13.04	12.21	8.50	-11.84	9.10
(g)	Recoveries of loans etc.	0.32	0.24	0.36	0.41	0.39	0.31	0.32

Detailed analysis of states' own revenue shows that their contribution in total revenue has been small, although it has shown an increasing trend from 16.82 per cent in 1995-96 to 21.85 per cent in 2005-06. However, there is considerable variation in the own revenue contributions among different states in the region (Table 12.2A in Annexure 12.1). The highest contribution of own revenues in the total in 2005-06 was the highest in Assam (34.04 per cent) and the lowest in Manipur (6.5 per cent). The contribution of own revenues in Arunachal Pradesh, Manipur, Mizoram, Nagaland and Tripura was less than 15 per cent. Thus, by and large, the states in the region overwhelmingly depend on

central transfers for meeting their developmental expenditure and contributions from their own sources are not significant.

The performance of the states in the region in mobilizing non-tax revenues too is not impressive. In earlier years, the states in the region used to mobilize revenues from logging and other forest produces or from royalty from mineral products (as in Assam). The Supreme Court judgment restricting the felling of trees has significantly eroded this source of revenue. The royalty payments on minerals essentially depend upon the decisions of the Central Government. Some states like Nagaland and Sikkim collect revenues from lotteries. Nevertheless, by and large, non-tax revenue is not a stable and dependable source. The states in the region have not been able to collect user charges on the public services provided to any appreciable extent. More importantly, the performances of their public enterprises have continued to drain the resources of the State Governments in the region. Non-tax revenue relative to GSDP was 2.31 per cent in 1995-96 which after passing through a phase of dips increased to 2.80 per cent in 2005-06. The inter-state comparison shows that it was high in Arunachal Pradesh (8.52 per cent) and Sikkim (6.61 per cent) and the least in Tripura (0.61 per cent) and Nagaland (1.30 per cent) in 2005-06.

11.1.2.2 Central transfers

Transfers from the centre are the major source of finance for governmental activities in the region. They flow from various sources; First, the awards of the Union Finance Commissions (statutory transfers) determine each state's share in central taxes and grants to support specified functions for non-plan current expenditure. In addition, other (non-statutory) transfers flow through the Planning Commission as grants and loans for various projects. In addition, states could receive grants from different central ministries for various schemes. The region benefits from the Non-Lapsable Central Pool of Resources (NLCPR) under which all the specified union ministries have to spend at least 10 per cent of their Plan budget in NER. The unspent balance from this 10 per cent is transferred to the NLCPR (for details see Annexure 12.2). Funds in NLCPR are used to finance infrastructure projects in NER. The ministry of DoNER sanctions these infrastructure development projects and monitors their progress.

Total central transfers as a ratio to GSDP were 22.06 per cent in 1995-96. Of this, the share of central taxes was 6.56 per cent and 15.50 per cent accounted for total grants. In 2005-06, total transfers as a ratio to GSDP were 23.22 per cent, of which the share of central taxes were 6.02 per cent and grants were 18.20 per cent (Table 11.1). Inter-state variations are given in Tables 12.1A in Annexure 12.1. Total transfers relative to GSDP were much higher in Arunachal Pradesh (58.90 per cent), Mizoram (46.13 per cent), Sikkim (46.96 per cent) and Manipur (43.89 per cent), whereas in Assam they were as low as 15.40 per cent followed by Meghalaya (22.94 per cent) and Tripura (25.50 per cent) in 2005-06. Share of central taxes to GSDP ratio was high in Arunachal Pradesh (10.11 per cent) and it was the lowest in Nagaland (3.38 per cent) in 2005-06. Total grants to GSDP ratio were the highest in Arunachal Pradesh (48.88 per cent) and the least (9 per cent) in Assam in 2005-06.

As already mentioned, the states in the region depend overwhelmingly on external receipts and they constituted 69.62 per cent in 1995-96 and came down to 65.02 per cent of total receipts in 2005-06 (Table 11.2). Out of this, funds from central taxes were 20.80 per cent in 1995-96 which came down to 16.85 per cent in 2005-06. The grants from the centre for various schemes were 48.92 per cent in 1995-96 and in 2005-06 they contributed 48.16 per cent in aggregate budgetary receipts of NER.

11.1.2.3 Capital receipts

Capital receipts mainly come through loans from the centre for various purposes, raised internally from various sources and a bit of recovery of loans and advances. These receipts are supposed to be utilized primarily for investment purposes. The trend of this source as a ratio to GSDP shows that in 1995-96 total capital receipts in NER were 4.28 per cent, of which 1.30 per cent was internal debts and loans from the centre were 2.88 per cent. In 2005-06, these ratios were 4.82 per cent, 8.84 per cent and -4.23 per cent respectively (Table 11.1). Table 12.1A in Annexure 12.1 presents inter-state variations of the extent and trend of capital receipts. Total capital transfers as a ratio to GSDP were highest in Arunachal Pradesh (20.49 per cent) and this ratio was 1.42 per cent in Tripura in 2005-06. Internal debts were more than 10 per cent in Arunachal Pradesh and Assam and as low as 1.30 per cent in Tripura. The ratio of loans from the centre as a ratio to GSDP was the highest in Arunachal Pradesh (8.55 per cent) and was less than 0.5 per cent in Manipur, Meghalaya, Mizoram and Tripura.

As per their contributions in aggregate budgetary receipts, Capital receipts constituted 13.52 per cent in 1995-96 of which internal debts were 4.10 per cent and total central loans were 9.10 per cent (Table 11.2). In 2005-06, these contributions were 13.23 per cent, 24.88 per cent and -11.84¹ per cent respectively for these components. These contributions have wide variations among constituting states in the region. In 2005-06, the lowest contribution of total capital receipts was 22.98 per cent in Arunachal Pradesh and lowest of 4.69 per cent in Tripura. Internal debts were highest in Assam (40.84 per cent) and least in Tripura (4.29 Per cent) In Arunachal, the central loans contributed to the extent of 8.48 per cent while there were only 0.19 per cent in Manipur.

11.1.3 Expenditure commitments

The analysis of public expenditures incurred by the states in 2005-06 shows that the share of capital expenditure has increased over time. In 1995-96, the share of revenue expenditure was 81.09 per cent and that of capital expenditure was 18.91 per cent. In 2005-06, revenue expenditure was 83.66 per cent of total expenditure and capital expenditure was 16.34 per cent (Table 11.3). Among the states this composition varied as may be noticed in Table 12.3A in Annexure 12.1. In 2005-06, capital expenditure was high in Sikkim with 28.95 per cent and was as low as 9.34 per cent in Assam. Further, about one-third of the total expenditure was incurred under non-developmental heads and the rest two-third was on developmental heads in 2005-06 (Table 11.3). Table 12.3A in Annexure 12.1 shows that in Arunachal Pradesh and Sikkim the ratios of non-developmental and developmental expenditure were almost a quarter and three quarters

¹ There were massive adjustments in central loans in Assam, which disturbed the ratios.

respectively in 2005-06. Within the revenue account, more than 39 per cent was for non-developmental activities and the remaining 61 per cent was for developmental activities. On capital account, developmental expenditures accounted for 91 per cent. Education and health are the important two sectors under developmental expenditures.

Table 11.3: Composition of Expenditure of NER

(As per cent to respective totals)

<i>Expenditure Head</i>		<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2007-08 (RE)</i>
As per cent to total expenditure								
1	Revenue expenditure	81.09	83.13	84.54	85.55	82.30	83.66	80.20
2	Capital expenditure	18.91	16.88	15.46	24.45	18.80	16.34	19.80
I	Total expenditure (A+B)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
A	Non/developmental	29.19	31.42	35.25	36.53	36.42	34.25	32.26
B	Developmental (1+2)	80.81	68.58	64.85	63.48	63.58	65.85	68.84
1	Social services, of which	35.24	36.34	36.28	35.33	34.41	32.86	33.30
a.	Education, sports, art and culture	19.48	20.31	21.14	20.62	19.98	18.65	16.91
b.	Medical and public health	5.46	5.49	5.23	4.98	4.38	4.01	5.51
2	Economic services	35.58	32.24	28.48	28.15	29.18	32.85	34.43
II	Revenue expenditure (C+D)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
C	Non/developmental, of which*	33.44	36.31	40.03	41.14	41.19	39.18	38.09
a.	Interest payments	11.29	12.83	13.58	14.18	15.12	16.28	12.68
D	Developmental (1+2)	66.56	63.69	59.98	58.86	58.81	60.82	61.90
1	Social services, of which	38.83	38.60	38.18	36.66	35.60	35.14	36.03
a.	Education, sports, art and culture	22.45	23.06	24.08	23.08	22.59	20.58	20.45
b.	Medical and public health	5.92	6.08	5.62	5.34	4.63	4.28	5.38
2	Economic services	28.83	25.09	21.89	22.21	23.21	25.68	25.88
III	Capital expenditure (E+F)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
E	Non/developmental	5.88	3.58	3.60	6.10	6.43	9.00	8.64

Expenditure Head		1995-96	1997-98	1999-00	2001-02	2003-04	2005-06	2007-08 (RE)
F	Developmental	94.12	96.42	96.40	93.90	93.58	91.00	91.36
1	Social services, of which	21.62	23.43	23.63	26.54	26.96	20.58	22.24
a.	Education, sports, art and culture	3.12	4.65	1.64	4.35	3.60	2.68	2.61
b.	Medical and public health	2.94	2.14	2.65	2.54	2.80	2.62	6.08
2	Economic services	82.50	82.99	82.88	68.36	66.61	68.95	69.11

As a ratio to GSDP, total expenditure of all the states in the region was 30.89 per cent in 1995-96 and it had increased to 32.40 per cent by 2005-06 (Table 11.4). On developmental expenditure, the ratio was more or less stagnant but with an expectation of improvement in all its sectors. The revenue expenditure is likely to have increased more as compared to capital expenditure.

Table 11.4: Expenditure of NER as a Ratio to GSDP

(Per cent)

		1995-96	1997-98	1999-00	2001-02	2003-04	2005-06	2007-08 (RE)
I	Total expenditure (A+B)	30.89	30.05	32.26	31.04	31.41	32.40	40.68
A	Non/developmental	8.99	9.44	11.38	11.34	11.44	11.10	13.12
B	Developmental (1+2)	21.80	20.60	20.89	19.80	19.98	21.30	28.55
1	Social services, of which	10.85	10.92	11.80	10.98	10.81	10.61	13.54
a.	Education, sports, art and culture	5.99	6.10	6.82	6.40	6.28	5.82	6.88
b.	Medical and public health	1.68	1.65	1.69	1.54	1.38	1.30	2.24
2	Economic services	10.95	9.69	9.19	8.84	9.16	10.61	14.00
II	Revenue expenditure (C+D)	26.04	25.56	28.03	26.96	28.09	28.10	32.62
C	Non/developmental, of which*	8.81	9.28	11.22	11.09	11.16	10.62	12.43
a.	Interest payments	2.94	3.25	3.80	3.82	4.10	4.41	4.14
D	Developmental (1+2)	18.33	16.28	16.81	15.88	15.93	16.48	20.19
1	Social services, of which	9.82	9.88	10.80	9.88	9.64	9.52	11.85
a.	Education, sports, art and culture	5.85	5.89	6.85	6.22	6.12	5.58	6.68
b.	Medical and public health	1.54	1.55	1.58	1.44	1.25	1.16	1.85

		1995-96	1997-98	1999-00	2001-02	2003-04	2005-06	2007-08 (RE)
2	Economic services	8.51	6.41	6.11	5.99	6.29	6.96	8.44
III	Capital expenditure (E+F)	4.85	4.48	4.23	4.08	4.31	5.29	8.05
E	Non/developmental	0.28	0.16	0.15	0.25	0.28	0.48	0.80
F	Developmental	4.48	4.32	4.08	3.84	4.04	4.82	8.36
1	Social services, of which	1.03	1.05	1.00	1.08	1.16	1.09	1.89
a.	Education, sports, art and culture	0.15	0.21	0.08	0.18	0.16	0.14	0.21
b.	Medical and public health	0.14	0.10	0.11	0.10	0.12	0.14	0.49
2	Economic services	3.44	3.28	3.08	2.85	2.88	3.65	5.58

11.1.4 Fiscal balances

The fiscal restructuring plan recommended by the Twelfth Finance Commission and the reforms undertaken by the states in response to that has mainly been with the objective of ensuring macro/economic stability and debt sustainability. Thus, the focus has been to analyse primary and fiscal deficits. The quality of deficits was seen in terms of the proportion of revenue deficits in fiscal deficits and hence, the focus on revenue deficits (RD). Thus, gross Fiscal Deficit (FD) represents the total volume of borrowing by the states. Primary Deficit (PD) essentially represents the volume of borrowing excluding the borrowing for debt servicing and is estimated as fiscal deficit minus interest payments. The revenue deficit is measured as the difference between aggregate revenues and revenue expenditures. This shows the volume of borrowed funds used to meet current expenditures.

In terms of deficit indicators, the fiscal position of the states in NER taken together presents a reasonably satisfactory picture. The region has a surplus in the revenue account (Table 11.5 and Table 12.5A for different states in Annexure 12.1). The major reason for this may be found in the fact that according to the Gadgil formula 90 per cent of plan assistance to the special category states is given as grants and the remaining as loans in contrast to 30 per cent grants and 70 per cent loans in the rest of the country². However, the better showing in revenue accounts position is mainly due to the surpluses generated by Arunachal Pradesh and Sikkim. Other NER states had a mixed pattern in different years but in more recent years, show revenue surpluses except in Assam. Assam had large revenue deficits relative to GSDP in most of the years.

Table 11.5: Trends of Fiscal Balances of NER

(Per cent)

<i>Fiscal Balance</i>	1995-	1997-	1999-	2001-	2003-	2005-06	2007-
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² Since 2005-06, based on the recommendations of the Twelfth finance Commission, the Central Government has discontinued the practise of giving plan loans and State Plan Assistance comprises of only grants.

		96	98	00	02	04		08 (RE)
A	Revenue deficit	-1.36	-1.36	2.50	2.08	-0.64	-3.88	-2.49
B	Fiscal deficit	4.01	3.52	8.18	6.36	3.91	1.56	5.85
C	Primary deficit	1.08	0.26	3.38	2.54	-0.19	-2.85	1.61

Note: (-) indicate surpluses

Gross Fiscal Deficit as a ratio to GSDP was 4.01 per cent in 1995-96, but increased to 6.36 per cent in 2001-02 to decline in 2005-06 to 1.56 per cent. It is likely to go up again to 5.85 per cent. The fiscal situation of the region does not present any serious problem of instability or problem of sustainability. Of course, there has been deterioration in the situation of primary surplus as a ratio to GSDP of 1.08 per cent in 1995-96 to 2.85 per cent by 2005-06. But in the next year it is planned to turn around to a surplus of 1.61 per cent.

The trend of revenue deficit, which is the difference between revenue account expenditure and the revenue receipts, shows that quite often receipts have been falling short of meeting expenditure. Therefore, the states have been taking loans to meet current account expenditures.

11.2 PROFILE OF PSUs IN NER

Public Sector Undertakings (PSUs) are important economic agents of state economies. They implement state plans and programmes, generate employment and their performance affects the state's budget. Resource of PSUs comprise (i) paid up capital as investment from Government and other equity participation, share advance and grants and subsidies; (ii) borrowings from Government, banks and others; (iii) working capital loans as ways and means and cash credit; and (iv) their own internal resources retained as various reserves.

Loss-making PSUs pose a big challenge for the Government because, on the one hand, they have to protect employment and on the other, prevent a drain to the exchequer. There are 119 listed PSUs in NER and their state-wise break-down is provided in (Table 12.6A). There were 94 functioning enterprises as on March 31, 2006. Of this, 83 were Government companies and 11 were statutory companies. Among non-functioning PSUs, 23 were Government companies. Assam accounted for over 41 per cent of the total PSUs followed by Meghalaya, Sikkim and Tripura at 13, 12 and 10 per cent, respectively. The activities of these companies cover various sub-sectors of both manufacturing and services (Table 12.8A in Annexure 12.1)

Total investment in these companies was to the extent of Rs. 3,826.88 crore as on March 31, 2006. Of this, Rs. 3,535.24 crore (95 per cent) was in functioning units and the remaining 5 per cent was in non-functioning companies (Table 12.8A in Annexure 12.1). Assam accounted for over 56 per cent of the total investment in PSUs in NER followed by Meghalaya, Tripura and Sikkim with over 25 per cent, 8 per cent, and 4 per cent

shares, respectively. PSUs in NER provide employment to 36,494 persons³ (Table 12.9A in Annexure 12.1). Over 80 per cent of these were employed by PSUs in Assam. Total accumulated losses of these PSUs were Rs. 8,202.68 crore as on March 31, 2006 (Assam alone accounted for Rs. 6,465.55 crore in this). Out of this Rs. 8,108.59 crore (98.8 per cent) was in functioning companies (Table 12.10A in Annexure 12.1). The State Governments provide budgetary support to them in the form of equity, subsidy, grant and loan.

The major cause of the poor performance of some of the PSUs is not difficult to understand. These PSUs are being managed more as State Government departments than as business entities. Government control is all/pervading in the management of the PSUs. Indeed some of the enterprises are promotional and they cannot be expected to make profits. Even in the case of power and transport utilities, it would be difficult to expect generation of significant returns (given the hilly terrain and the nature of the region). Nevertheless, the losses of such high proportions in PSUs call for a detailed study and each state should undertake such a study to identify the causes of their poor financial performance and the reform measures needed. Based on this, they should restructure the public enterprises to ensure more professional management, charging of economic prices on the products and greater accountability.

The important issue in the finances of the Northeastern states is the overwhelming dependence on central transfers. The deficit position basically reflects the volume of transfers and the decisions on capital expenditures. The revenues raised from own sources in these states, except in Assam, are negligible. Thus, volatility in central transfers determines the variations in deficits as well as the size of capital expenditures.

11.3 PLAN FINANCING

11.3.1 North Eastern Council (NEC)

The Plan Schemes of the North Eastern Council include financial assistance to the North Eastern States for infrastructure, building works etc. in line with the agreed pattern of assistance of 90 per cent grant and 10 per cent loan (loans are now raised by the State Governments). During the Tenth Plan, NEC Plan Schemes focused, *inter-alia*, on completing on-going works and initiation of major projects for improved road and air-connectivity. The assistance given by NEC is mainly for regional projects.

11.3.2. Non-Lapsable Central Pool of Resources (NLCPR) Scheme

The broad objectives of the Non-lapsable Central Pool of Resource Scheme (Annexure 12.2) is to ensure speedy development of infrastructure by way of filling the existing infrastructural gaps in NER by increasing the flow of budgetary financing for new infrastructure projects/schemes in the region. Both economic and social infrastructure sectors such as power, roads and bridges, irrigation, education, health, water supply and sports. are considered for providing support under the central pool.

³ Data for Manipur pertains to 2004-05. It has been reported that in Manipur all the PSUs have recently been closed and all the employees have been given golden hand shake retirement (personal communication with officials in Manipur).

Budgetary support is extended for the NLCPR Plan Scheme of the ministry of DoNER against accruals to NLCPR.

11.3.3. Externally Aided Projects

Ministry of DoNER has initiated a dialogue with the Asian Development Bank (ADB) and with the World Bank for mobilizing additional resources, introduction of professional management practices through institutional development and capacity building, improved monitoring and evaluation. The projects under formulation are the North East State Road Project (NESRP) and the North Eastern States Trade and Investment Creation Initiative (NES-TICI) with Technical Assistance (TA) from (ADB) NESRP is at an advanced stage and implementation is expected to commence during 2007-08. The World Bank has completed a study on “Natural Resources, Water and Environmental Nexus for Development and Growth in North-East India”. Specific projects are being identified in consultation with the World Bank, Planning Commission, concerned central ministries, NEC and the N.E. States. The World Bank has already and separately initiated project preparation work for a NER Livelihoods Project (NERLP).

Total Tenth Plan size – Rs. 80,943 crore. Of which, the respective shares were as follows: State plan – Rs. 35,861 crore (43.3 per cent), central ministries/ central sector/ CSS Rs. 39,441 crore (48.8 per cent), NEC Rs. 2,512 crore (3.1 per cent) and NLCPR – Rs. 3,129 crore (3.9 per cent) (Table 12.11A).

11.4 THE WAY FORWARD

Public finance forms the core of the development vision of any economy/region. While it is true that the NER states are classified as special category states and are characterized by a hilly terrain, low population density, special locational disadvantages they cannot be expected to become self-reliant financially at least in the medium/term yet good fiscal health is imperative to the sustainable development and growth of NER. These states do have the potential to tread on a sustainable growth path that would lead to expansion in employment opportunities and improvement in the quality of life; fiscal discipline will only accelerate this process. However, a strong political will to take some hard measures will be required to achieve this. The broad contours of fiscal reform include augmentation of revenues, expenditure efficiency and accountability, public sector reforms and FRL. Given the special characteristics and the current situation in individual states an appropriate mix of these measures will be required for each of the states. In the present scenario, since potential of additional resource mobilization internally is limited, the fiscal reform strategy will largely focus on expenditure compression and efficiency.

11.4.1. Resource mobilization

11.4.1.1 Reform of the tax system

Own tax to GSDP ratio in five NER states ranged from 1.0-2.2 per cent except in Sikkim (9.52 per cent), Assam (6.88 per cent) and Meghalaya (4.30 per cent) in comparison to all-states' average of about 8 per cent. Additional revenue can be mobilized by improving the tax administration, particularly by strengthening the information system from the existing taxes such as tax on motor vehicles and goods and passengers, professional tax, excise duty, stamp and registration fee and VAT.

Introduction of an urban land tax could also yield substantial revenue particularly in states with plantation crops. Implementation of these would require updating of land records and strengthening of the revenue administration. This is expected to bring in transparency to the system that would not only yield the tax revenue but would also ease a potential constraint in the way of private investment and thus expansion in employment opportunities.

11.4.1.2 Improved recovery of costs of public services

Available estimates of cost recovery show a dismal performance. Thus it would be important to undertake a detailed study to identify areas where there may be clear scope for improving cost recovery and productivity improvements to reduce the cost of provision. Further, some subsidies may have been required to achieve the desired scale of operation, which in turn, may be constrained due to sparsity of population⁴. Also, in the case of services where the introduction of a service was a prime concern, the assessment of the subsidization strategy should be viewed as a revenue maximization strategy or a loss minimization strategy. While there may be a case to subsidize certain identified services and to target some services to identified disadvantaged groups, there is merit in rationalizing user charges which will enable attracting private funds both as direct investment and borrowings from the market.

11.4.1.3 Explore compensation for forest conservation

Forests deliver a multitude of ecosystem benefits, some of which are local or regional (e.g., protection against landslides, from soil erosion, and of local climate and watersheds) and at least two are global benefits in terms of carbon sequestration to mitigate climate change problems, and the protection of biodiversity. During our meetings with state officials one of the points that came up in at least three states related to a perception about the potential for carbon finance in the forest sector of NER. It appears that there is lack of clarity on this issue.

⁴ Quite often the technological indivisibility of operating a service may lead to excess capacity building in the short run. The preliminary sunk cost of provisioning may inhibit any subsequent attempt to take advantage of the later technological improvements (either in the form of divisibility of operations or in the form of up-gradation of the scale of operations). This then reflects as poor planning, which unless undertaken meticulously may have severe long term implications.

In principle, the global benefits of forests should motivate at least some partial payments. The Twelfth Finance Commission has, in principle, recognized the need to compensate the states with forest cover for the loss of revenue; alternative economic activities and higher cost of providing public service. However, the grants given to the states by the Commission have been meagre. It is important to make a representation to Finance and Planning Commissions collectively by all the states in the region to get the necessary compensation for providing this international public good.

Given that there is a trade-off between commercial and conservation benefits of forests, from even the national perspective NER should explore the possibility of resource transfers from the Central Government for the spillover benefits generated from forest conservation/opportunity cost of forest conservation. Estimation of these would, however, require detailed data which are hard to obtain.

In this context, it may be noted that the greatest gain in carbon storage and biodiversity, potentially would come from protecting mature marginal frontier forests that would have been harvested without the offset payment. Therefore, payments to protect the full forest are not necessary because the volume at risk is mainly the forests at the margins.

This, however, should not be taken to underplay the socio-economic logic behind the idea of 'compensation for conservation'. Compensation should be paid because forest rich states are also forest dependent states. Loss of revenue from resources they possess affects them in two ways. One, they hardly like to budget for maintaining and enhancing their forest resources as it is not profitable any more besides revenue compression leads to cuts in vital developmental expenditures. Two, since it is the poorest that bear the burden of conservation since their lives are crucially linked to both the resources and the services the forests provide, social and economic inequities widen and often find expression in extremism.

11.4.2 . Expenditure control

Reorienting expenditure priorities for the maximum benefit keeping in view the local/regional strengths and availability of services/assets/human resources which may be complementary in nature. This would, however, require a macro perspective, and intra-governmental and inter-departmental coordination. It is important that the designs and delivery structures of programmes, under the centrally sponsored schemes and other national level schemes, provide flexibility for suitable modification, merging and combining with existing programmes to improve expenditure efficiency.

Subsidies which have not served their objectives or have become irrelevant in the present context should be repealed. For instance, with the introduction of a generous industrial policy for the NER states, many state/provided subsidies which have not been able to make a difference should be stopped. This makes a perfect case for regional cooperation.

In selective activities such as building and operation of roads and bridges and development of select sites for promoting tourism, private sector participation (PSP) can result in substantial expenditure compression. Further, PSP opens doors to modern

technology and results in cost effective service delivery besides improvement in quality of services. Public-private partnership may also cover the areas of higher education, technical education, distribution of power and drinking water, collection and disposal of garbage and liquid wastes to off-load the burden on the state exchequer. This approach should be adopted with care keeping in view the interests of the vulnerable sections of society.

In the case of many social and economic services Self-Help Groups (SHGs) and cooperatives can serve as effective mechanisms for service delivery, maintenance of assets and cost recovery through user charges.

Reforms in debt and cash management would be another strategy tool in imparting efficiency in expenditure management.

There is also a tendency to create new employment in the public sector, which results in surplus staff in Government departments. This causes a burden on scarce public resources and harbours inefficiency. Identifying and retrenching excess staff at a later date places a heavy burden on the exchequer as this is evident from the voluntary retirement schemes introduced recently in many public sector banks. Efforts should be made for greater private sector participation and employment to provide expenditure efficiency.

PSUs should be given freedom to function as corporate units. Political and bureaucratic control should be relaxed. Heads of the undertakings with professional acumen and technical knowledge should be appointed.

The mechanism of financing PSUs need not necessarily be through transfers on capital account, funds can be routed to them from the revenue account which would provide incentives to the states to closely monitor the activities and performance of PSUs. Also, financial assistance from the Government should be linked to clearly established performance milestones, in accordance with a clearly established corporate plan, so that the PSUs stop being a drain on scarce public resources.

11.4.3. Institutional framework and capacity building

To implement the suggestions emerging from discussions in the earlier sections, appropriate institutions and capacities at all levels of Government must be created. For instance, capacity and institutions for collecting, maintaining and periodically publishing reliable data on various aspects of the economy including macro/economic indicators should top the priority list. Capacity for developing modern tax designs and user charges, revenue forecasting and analysis, rationalization of subsidies and modern techniques of tax administration should be created. Some of these tasks could be assigned to specialized institutions, and for execution of these functions, capacities may be developed in Government departments with the involvement of private institutions and/or specialized professionals.

A research unit in the finance department will also be required for formulation, appraisal and evaluation of projects differentiating good projects from the others and analyzing implications of these projects in terms of their potential in achieving the stated objectives. To enhance accountability of fiscal operations full disclosure of policy

intentions, regular reports on its receipts and expenditure including contingent liabilities and deviations from budgeted estimates should be produced and made available for scrutiny.

Similarly, a project management and monitoring unit should be created. Services of professionals and practitioners should be outsourced from time to time for capacity building of officials. State level officials should then take up the task of capacity building of the third tier of Government Officials, SHGs, and Cooperatives.

11.4.4. *Suggested fiscal measures in the NEC Vision 2020 Report:*

- Set fiscal targets on the basis of a long/term macro/economic forecast.
- Constitution of state level fiscal advisory boards.
- Introduction of fiscal reform programmes.
- Reduction in administrative overheads.
- Evolving new and innovative measures for revenue augmentation.
- Making the tax system efficient.
- Better project implementation and monitoring.

Chapter 12

Private Investment

Acceleration in economic growth to realize the vision of catching up with the rest of the country requires significant impetus to market-based economic activities. Upscaling economic activities in the region would require large increases in private investment in the region. This can come about only when safety and security is ensured, property rights are enforced, efficient infrastructure and connectivity is provided, the natural transportation routes are opened up, market access for the produce from the region is provided and the state proactively acts to attract investments. In the initial years, much of the investment required for basic infrastructure will have to come from the central and state governments. However, in course of time, attempt should be made to promote public-private partnership (PPP), to leverage larger volume of financial resources into generating the state-of-the-art infrastructure in the region. An investment climate for active private sector participation will require reforms as discussed in this report.

Activating private participation including in horticulture, floriculture, micro, small and medium enterprises (MSMEs) and in large enterprises is necessary for accelerating economic growth to catch up with the rest of the country and to make growth more inclusive. MSMEs, in particular, have a vital role in expanding production in a regionally balanced manner and in generating off-farm employment. The policies and institutional changes should aim at creating an environment to encourage entrepreneurship at all levels. Towards this end, it is necessary to remove constraints and minimize transaction costs. To increase the number of successful entrepreneurs, it is necessary to create a competitive environment and encourage new entrants and also encourage existing ones to expand by removing cost disadvantages.

Private investment, thus, will have to play a critical role in realizing the vision. Public investment by creating infrastructure will have to create an environment for private investment. Other chapters have noted the virtual absence of a private sector in economic activities, the domination of the government sector in economic activities and its lack of dynamism. Although changes are not likely to be seen in the short term, it is necessary to work towards creating an enabling environment.

The Northeast offers several opportunities for investment in the region. It is rich in natural resources, it has a large literate and English speaking population and opening up natural transportation routes will bring it closer to several international markets. Data on private investment in NER has been difficult to find; the proposed investment data from Industrial Entrepreneur Memoranda provides some indications about the intentions of private investors (Table 12.1). According to this, Assam attracts a major share of existing and proposed private investment, followed by Tripura and Meghalaya.

Table 12.1: Extent and Potential Private Investment in the NER: 1998-2006

<i>State</i>	<i>Industrial Entrepreneur Memoranda Implemented</i>			<i>Industrial Entrepreneur Memoranda Proposed</i>		
	<i>No. of units</i>	<i>Investment</i>	<i>Per cent share</i>	<i>No. of units</i>	<i>Investment</i>	<i>Per cent share</i>
		<i>Rs. Crore</i>			<i>Rs. crore</i>	
Assam	86	1,280	89.4	889	6,288	54.9
Tripura	5	82	5	440	3,510	30.8
Meghalaya	18	58	4.1	54	1,094	9.6
Manipur	1	13	0.9	65	392	3.4
Arunachal Pradesh	3	9	0.6	19	151	1.3
Mizoram	0	0	0	6	10	0.1
Nagaland	0	0	0	0	0	0
Total	102	1,432	100	1,383	11,435	100

Note: Private sector, individual, assisted sector and cooperative sector have been included.

Source: *Lok Sabha Unstarred Question No. 4824*, dated 26.04.2005. (www.indiastat.com)

12.1 ENSURING PRIVATE INVESTMENT IN THE REGION

There is immense potential in NER for investors, in industry services, the social sector and in various infrastructure projects. In fact the vision for the northeast requires synergy between both private and public institutions and individuals. Some of the areas where an active private sector can play an important role and the measures needed to energize it are now discussed.

12.1.1 Maximizing self-governance

The most important precondition for businesses to flourish in the region is creating an environment of peace and tranquillity and for this, responsive governance is critical. Protection of life and property, enforcement of property rights and a proactive administration are the basic prerequisites for private economic activity. Armed insurgencies in some parts of the region by various groups have vitiated the environment and so kept away private businesses. Often there are exaggerated accounts and the investment decisions are taken on the basis of perceptions rather than actual facts. While there are several reasons for insurgencies by different groups, maximizing self/governance in the region can significantly mitigate the problem. Participatory governance will create a sense of belonging and ownership of governance systems.

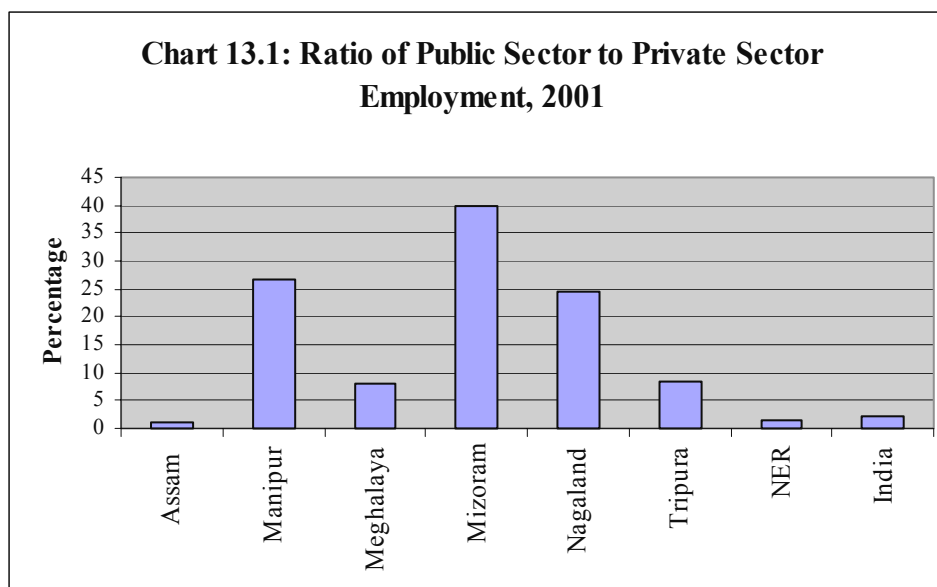
Establishing participatory governance in the region by activating Panchayati Raj Institutions and municipalities in areas under the jurisdiction of Parts IX and IXA of the Constitution and Village Development Councils in the areas covered under Schedule VI of the Constitution with maximum participation of the people is necessary for establishing peace and tranquillity in the region. Grassroots planning should help create the infrastructure according to the needs and preferences of the people to harness the resources of the region for its benefit.

12.1.1.1 Agriculture

In the move from largely subsistence cultivation to a surplus economy with the emergence of commercial crop cultivation, private entrepreneurs can be encouraged to set up storage, distribution and marketing infrastructure such as a cold-storage chain along major arterial highways. This is critical for exploiting the horticulture potential of the region and bringing perishables speedily to marketing hubs. The operation of the cold-chain could be on a public-private partnership (PPP) or on a lease basis. Already flowers grown in Mizoram and Meghalaya are being distributed outside the region by a private distributor, M/s Zopar, which also supplies imported seed varieties to farmers. There is considerable scope for encouraging food processing firms such as Dabur and ITC to set up processing units. However, this would require harmonization of policies by different states in the region to enable them to access the raw material from many states to take advantage of the economies of scale. This could provide significantly higher incomes to farmers growing ginger, pineapple and citrus fruits. The growing and marketing of organic food products will also depend on private sector initiative.

12.1.1.2 Manufacturing

The manufacturing sector is small at present, and within this, the private sector accounts for a lower proportion of employment than the public sector (Chart 12.1 Table 13.1A in Annexure 13.1). The development strategy is to expand manufacturing to absorb the surplus labour from agriculture once productivity begins to increase. There is plenty of unexploited potential for private investment in industry based on locally available resources such as natural gas and petrochemicals, bamboo, natural rubber, tea and horticultural products. The goal of creating more value for agricultural produce within the region will also call for greater investment in agro-processing, bamboo processing, handicrafts and so on. In this too the private sector can play a crucial role in providing the latest designs to artisans and in marketing and exporting their products.



Source: *Employment Review* for various years, Directorate General of Employment and Training.

12.1.1.3 Services

The proposed strategy will create employment opportunities in some service sectors such as tourism, transportation, hospitality and IT and ITES. Private investment and know-how will play an important role in expanding all these areas. The kind of tourism proposed by the states given their low carrying capacities such as adventure and eco-tourism, are best delivered by private individuals. Mizoram, for example, recognizes the important role of outside tour operators in attracting tourists to the state, and is trying to work out joint ventures between its local tour operators and bigger agencies outside NER. Further, private investors should be encouraged to increase the supply of hotel rooms (currently in short supply in most states), as the fixed costs would be too high for private operators given the perceived threat of insurgency.¹ The private sector should also be involved in organizing carnivals and cultural festivals and operating tours for people from outside the region.

12.1.1.4 Infrastructure

Private partnerships are proposed in the developing of power and telecommunication networks to link the region, through the PPP mode. Most of the commissioned projects are (or would be) in the central sector or under private partnership (Table 13.3A in Annexure 13.1). Arunachal is expected to generate an additional 22,584 MW hydel power by 2020 in 166 hydel projects all over the state. Of this, only 88 MW is to be created under state projects, with the remaining being set up through central and private projects. The Sikkim Power Development Corporation Ltd., (a state government

¹ Possibly the best model would be a partnership with private operators who could run the hotels on a long-lease basis (as was followed in setting up the main hotel in Kohima, Hotel Japfu, about 15 years ago. This method would also get around the problem of land use/sale restrictions in most of the hill states.

enterprise) has negotiated for 24 projects under the PPP (BOOT) model as joint-venture projects with an estimated cost of Rs. 15,628 crore to generate more than 3,288 MW power (Table 13.3A). The period of contract for availing of concessions is 35 years and government support in terms of equity and grant is negotiated with different ratios (10 per cent, 26 per cent and 49 per cent) with various private companies. It shows that if congenial circumstances prevail, private investors will be forthcoming in injecting capital for development in infrastructure.

Another area of infrastructure proposed for PPP is the development of fairways and infrastructure related to inland-water transport in the region.²

12.1.1.5 Education

Since education is the pathway to economic advancement, the strategy for expanding education must also pay attention to ensuring equitable access. Private inputs are needed to supplement government efforts to universalize primary and secondary education and to improve facilities such as laboratories, computer infrastructure or sports facilities. Computer education could be entirely outsourced to the private sector which can provide equipment and teaching for a fee. In higher and professional education it can help with the proposed expansion in vocational training, professional institutes and other efforts to expand the pool of employable talent in the region. The region has already seen the emergence of private professional institutes such as the Sikkim Manipal University. Significant focus will have to be on skill development in the region. Information technology training companies like NIIT should be encouraged to open branches in the region.

PPP models which involve industry representatives in the management of ITIs can be successful in providing relevant skills to the youth in the region (see Box 12.7). There are a number of vocational training and entrepreneurship development institutes in other parts of the country and such institutions should be encouraged to operate from the region with clear guidelines and systems to accredit them and regulate their functioning. An appropriate certification system should be instituted to certify skills of trainees graduating from various institutions. The central government should provide the necessary guidelines and support for establishing appropriate mechanisms and state governments should institute certification bodies to issue certificates for a variety of skills (Planning Commission, 2006).

² Recommended by the Study Group on Inland Water Transport, (World Bank, 2006).

Box 12.1**Private-Public Collaboration in Job-Oriented Technical Training**

In Assam, the State Institute of Rural Development has collaborated with private companies such as the Punjab National Bank and Bosch Machine Tools, to provide training to unemployed young people at its Institute for the Development of Entrepreneurs in Assam (IDEA), in Kahikuchi outside Guwahati. The main aim is to equip people with skills and basic business acumen to initiate their own businesses. Trainers from private companies provide two-week training in improved design and production in handicrafts (with a focus on bamboo-based crafts), cluster-based horticulture development (especially vegetable cultivation), the use of machine tools and others to groups of students.

12.1.1.6 Health

The private sector is already engaged in NER in working with state governments or alone at the tertiary, secondary and primary levels of healthcare: by managing public health facilities, running major tele-medicine units within a public hospital, providing laboratory and blood screening services at the secondary and tertiary levels (Tripura) and operating a full-fledged hospital within a medical college (Sikkim Manipal University). It is also necessary to start nursing institutions in the region.

12.2 ENABLING PRIVATE INVESTMENT: THE WAY AHEAD

Enabling private investment in the region will call for a shift from the current policies which focus on providing subsidies and incentives such as easy credit facilities, tax holidays, export promotion parks and capital investment subsidies to one of minimizing transaction costs. Inflows of private capital are more likely to be enticed by a responsive administration and governance, availability of critical inputs like power, connectivity and other infrastructure and access to markets. Similar problems may result from land laws and existence of age-old common property rights in many states in the region. The functioning of markets in the region also calls for greater transparencies in resource-sharing policies, including land. Other prerequisites for the emergence of markets are the establishment of banking and other financial intermediation.

12.2.1 Land for private investment

The region is subject to myriad land tenure systems; while acquiring land to set up an enterprise is not difficult in some parts, in some states people from outside cannot legally buy or lease land. Land is owned by the community, so no individual transactions can take place. Private investment in these areas is practically non-existent, but is becoming more important as the development process gathers momentum. Thus, while industrial policy resolutions in these states propose leasing land for setting up industry, lack of ownership rights may pose a hurdle to industrialization.

States have followed different paths in dealing with this issue depending on the Constitutional rights accorded to their respective communities: in Meghalaya, for example, the state can take over land for developmental purposes if it is in the ‘tribal interest.’ State governments have to clearly spell out the different ways in which entrepreneurs and enterprises can safely and legally acquire land for industrial activity.

12.2.2 Expanding the supply of professionals and skilled people

Much of the region is labour-scarce, and in these areas the proposed increase in economic activities will be hampered unless steps are taken to expand the labour pool. A related concern is the high wage rates in the region, especially in hill states, which have deterred private investment, especially in labour-intensive activities. Shortages of professionally trained people and skilled workers are especially acute due to lack of good training facilities and weak quality of instruction in the region.³ In the short-term, the region needs to open up to outside labour to allow economic development to take place, and at the same time to enhance and update the quality of training available.

12.3.3 Improving enabling infrastructure: Connectivity and power

The lack of market-enabling infrastructure in the region has been well documented. The development of markets is vital for private investment, and this can only happen with speedy connectivity (by road, train or other means) and efficient modes of communication. Some degree of inter-governmental planning is important for developing a well-coordinated infrastructure that will enable large-scale transportation of inputs and finished products to market hubs and from there to final consumers.

12.3.4 Ensuring a secure environment

An important issue in the northeast relates to the security of life and property. Lack of proper law-enforcing mechanisms within a state may cause market failures or in other words prevent the emergence of markets. Law and order across the states, calls for a joint-security management approach developed by all the states together, rather than the present disjointed-security systems.

12.3 SUGGESTED MEASURES OF NEC VISION 2020 FOR FINANCING DEVELOPMENT

- Micro-credit is of special importance as more than 80 per cent of the farming communities are marginal farmers with little access to credit.
- Coverage of entire region under NABARD’s Potential Linked Credit Plan by 2015.
- Expansion and strengthening of the SHG-bank linked credit system. The number of linkage units should be raised to at least 50,000 by 2015 and to 1 lakh by 2020 from the existing 5,000 units.

³ During a field visit to industrial enterprises in the Bodhjungnagar Industrial Growth Centre outside Agartala, the study team was informed that a major hurdle in setting up the manufacturing unit was the lack of skilled manpower in the state. Initially, managers had to bring in skilled workers from outside Tripura, but they are now hiring local ITI graduates who may not have the skills but display an aptitude and potential for training.

- SHGs engaged in farming and non-farming micro-level enterprises should be increased to reach 1 lakh by 2015 and 2 lakh by 2020. A special drive needs to be launched for this.
- NEDFI and SIDBI should create a separate micro-credit fund of Rs. 1,000 crore only for the northeast.
- The number of bank branches should increase and the branches of all-India financial institutions need to be doubled by 2015.
- The credit-deposit ratio should go up to 45 per cent by 2010; 50 per cent by 2015; and 60 per cent by 2020.
- States will need to make special efforts to strengthen the structural base to ensure the efficient performance of rural micro-enterprises and emergence of more SHG-led enterprises.
- The level of priority sector lending by banks should be increased to at least 40 per cent by 2020 by creating local competitive entrepreneurship on a wider scale.
- State administrations need to work together to create a conducive environment for the success of rural micro-enterprises, e.g., by motivating people, promoting the market and creating a sound infrastructure base.

Chapter 13

Look East Policy: A North East Perspective

No vision for NER is complete without a discussion of the Look East Policy and the opportunities for trade and development associated with it. While it is not easy to date the exact emergence of the central government's Look East (LE) Policy it would be reasonable to infer that it was more or less part of the official policy launched in 1991. The basic logic for the policy stems from the landlocked nature of the NER states and their long international border. The NER states share 98 per cent of their border with Bangladesh, Bhutan, China, Myanmar and Nepal while a narrow strip of land constituting just about 2 per cent links the region with the rest of India. It is this tenuous geographical link with the country that leads to virtual isolation and high transport cost of supplies to and from the rest of the country. This has been the logic for the transport subsidy given in all the industrial policies for the NER states.

The LE policy should be an important factor in promoting economic ties of the NER states with its neighbours with a view to ending its economic isolation (Aiyar, 2008a). Further, given the close geographical proximity of the NER states with the neighbouring countries it is not surprising that the people of this region share cultural ties with the residents of these countries.¹ Finally, strengthening India's relations with its South Asian neighbours and China are now an important part of India's foreign policy. Hence, in discussing the implications of the policy for NER we will consider the cultural, security, economic and administrative dimensions that drive the policy before looking at its implications for trade and development of NER.

Ironically, despite the fact that the Look East Policy has been in existence for more than a decade and a half and even as it has substantially benefited the states in other parts of India, its benefits to NER has been negligible. Logically, the Look East Policy must begin with NER. However, as far as the region is concerned, the policy has remained a slogan and has not as yet evolved into a harmonious and productive relationship with neighbouring countries. Thus, despite the Look East Policy, NER remains under economic imprisonment within its international frontiers.

The peace and development of the region critically depends on liberation from this economic imprisonment. This would require a quantum change in the relationship with neighbouring countries which the Government of India should continue to strive for. Developing economic linkages on mutually beneficial terms and strengthening cultural ties that have historically existed are important. Indeed, in economic terms, the Look East Policy should go beyond the immediate neighbours and reach out to the markets in East Asian and South East Asian countries. The policy can yield rich dividends only when it is realized by all stakeholders both nationally and internationally that "South East Asia Begins where North East India ends" (Aiyar, 2008 b). This would require significant

¹ For some excellent compilations on the LE policy see *Dialogue Quarterly*, July-September, 2008.

initiatives to open the natural transportation networks through the sea, inland waterways and land routes.

13.1. CULTURAL DIMENSIONS

The cultural links between NER and the people of the neighbouring countries have existed for hundreds of years. From Eastern Burma/Myanmar and Northern Thailand and their cusp with Yunnan came the Tai-Ahoms of the Shan ethnic group, who ruled Assam for 600 years until the British overthrew them. Today, Arunachal Pradesh, Nagaland, Manipur and Mizoram share a 1,643 km long border with Myanmar.

Most of the people living in Arunachal Pradesh are either of Tibetan or Thai-Burmese origin. Another 15 per cent of the population is immigrants, including 30,000 Bangladeshi and Chakma expatriates, and immigrants from other parts of India, notably Assam and Nagaland (Hunter, 1898). Towards the north, the history of Sikkim involved a series of wars involving China, Bhutan and Nepal. In 1891, China sent troops to support Sikkim and defend Tibet against the Gurkhas. In a more recent development, Tripura was heavily affected by the partition of India and the majority of the population now comprises Hindu Bengalis, many of whom came as refugees from East Pakistan after independence in 1947. Tripura thus has a strong ethnic link with Bangladesh and shares the longest border with that country. However, armed conflict in Tripura has been a problem since the end of the 1980s as an aftermath of the 1971 Indo-Pak war (Bhattacharjee, 1994, Palit, 2004). Cultural links, as a part of the LE Policy, must be urgently facilitated by people-to-people contacts between NER and neighbouring countries. This could be done by promoting interaction in musical, sporting and other such events in which neighbouring countries could be invited to participate.

13.2 SECURITY DIMENSIONS

At the same time, India has tried to promote relations with Bangladesh as part of various SAARC initiatives. For the Indian subcontinent, promotion of harmonious relations among the partners of SAARC is as much a security imperative as an economic compulsion (Bhattacharjee, 1994, Palit, 2004). India must continue to pursue trade facilitation for mutual benefit. In particular, considerable gains can be had by minimizing transportation costs and creating businesses based on local economies. Access to Chittagong port for the NER states is critical for the development of NER. There are also considerable gains to be had from enabling passage of people besides goods through inland waterways².

However, India has made considerable headway in obtaining a sea-link for NER states to the Sittwe port in Myanmar which is one crucial link in the chain of efforts to end the landlocked isolation of NER from the rest of the country. Needless to say,

² At present, goods can be transported through inland waterways passing through Bangladesh. However, it is important to enable access for the transportation of people as well.

Myanmar also plays an important role in helping India deal with some of the extremist outfits operating in NER states (Sanajaoba, 2003).

13.3 ECONOMIC DEVELOPMENTS IN THE LOOK EAST POLICY

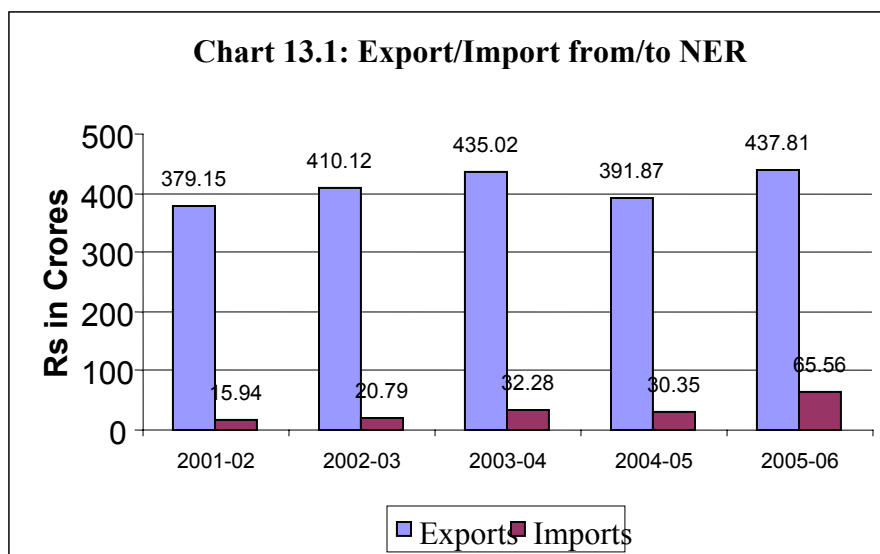
The LE Policy should promote commercial links between NER states and the neighbouring countries to try and break the economic and geographic isolation of this region from the rest of the country. In particular, the emphasis should be to promote trade links. The following sections will look at some of the measures taken in the context of trade with Myanmar, Bangladesh and China and how much more needs to be done in this regard. (The analysis is based on quantitative information given in Annexure 11.1). Since new trade links take some time to develop, we will look at both the short-and long-run trade strategies as part of the LE Policy for NER. Thus, while in the immediate short-run of the next few years, the strategy should attempt to promote ties of NER with its immediate neighbours, in the long-run NER must look beyond its borders to tap into the benefits of India's burgeoning trade with the ASEAN bloc.

13.3.1. NER trade: Short-run considerations.

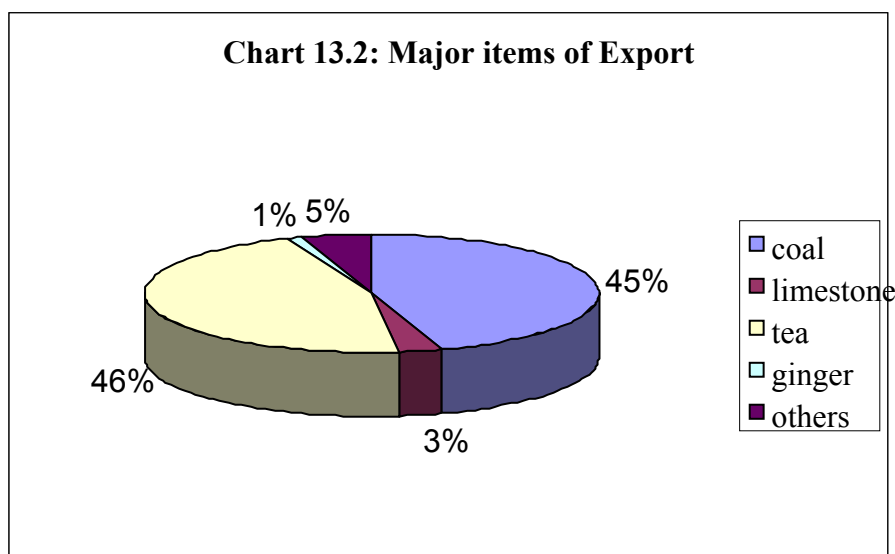
In the short-run the most important issue is to promote trade of NER with its immediate neighbours. This is often referred to as border trade. In Charts 13.1 and 13.2 we look at the progress of border trade in the last few years in terms of volume and major items traded.

As can be seen from these Charts total exports and imports through the region have hovered around Rs. 400 crore for the last few years despite trade agreements. About 91 per cent of exports come from tea and coal. The region largely exports primary products like boulder stone, limestone and fruits. The contribution of manufactured good to the export basket is negligible. Exports of items produced in other parts of the country through NER like motor parts, umbrellas and printed garments, are also not very significant. About 50 per cent of imports into NER consist of manufactured products and processed food items like fish, dry ginger, yellow peas, cement, multi-wall paper sacks, laminated poly bags, machinery equipment and parts, mustard, soya and palmolein oil.

To examine why trade with the neighbouring countries has not been a propellant for development in the region it is useful to analyze NER's trade with each of its neighbours.



Source: *Task Force on Connectivity and Promotion of Trade and Investment in the NERs*,
Planning Commission, GOI, Oct., 2006.



Source: Planning Commission (2006).

13.3.1.1 Myanmar

There have been some useful compilations on Indo-Myanmar trade (Das et al., 2005). Among the LE countries, Myanmar is the only member of ASEAN with which India shares a common land border. In fact, in addition to the other reasons for Myanmar's importance for the NER states, is the fact that India's trade with Myanmar grew enormously in the 1990s, although not as much as Myanmar's trade with China (Table 11.2A in Annexure 11.1). Between 1998-98 and 2005-06, India's volume of

trade with Myanmar doubled though its importance in India's trade declined. Myanmar's trade with India is an insignificant part of India's trade (about one-tenth of a per centage in 2006-08) but is quite large in relation to the size of the economies of the NER states.

As far as the major trade items are concerned, India's exports to Myanmar consist mainly of iron and steel and pharmaceuticals (63 per cent of total exports), electrical and non-electrical machinery (10 per cent of total exports), cycles, auto-parts and accessories and cotton yarn. Major items entering India are blankets, electronic goods, betel nuts, pulses, teak, groundnuts, iron scrap, gold, silver and precious stones. However, among registered imports, wood and wood products and vegetables account for about 98 per cent of total imports (for more details see Annexure 11.1, Tables 11.3A and 11.4A). It is important to remember that internationally Myanmar is one of the few countries which can supply *tur dal* which is an item of mass consumption in India, where the domestic production is insufficient.³ The post-cold war foreign policy calculus of India in general and the LE policy in particular has created an enabling environment which can break the landlocked condition of NER by opening it to the markets of the neighbouring countries across the border, establishing joint-venture enterprises and bringing cross-border investments for the development of infrastructure, manufacturing and services. The LE Policy acquires special significance in the light of cross-country initiatives for economic cooperation like the Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation (BIMSTEC) and Mekong-Ganga Cooperation (MGC).

Some important infrastructure initiatives have also been launched to promote NER trade with neighbouring countries. The Asian Highway Link, Asian Railway Network and a Natural Gas Pipeline Grid projects under active consideration of BIMSTEC have tremendous implications in removing the communication isolation of NER. While NER will have access to the Asian Highway through the Imphal-Tamu feeder road, the railway systems of India and Myanmar are planned to be linked at the Dibrugarh railhead, which will give NER access to the Asian Railway Network. India constructed a road in 2001 in Myanmar linking the township of Tamu with the railhead at Kalemyo which connects Mandalay, the commercial hub of Myanmar. There is a proposal to construct a 1,360 km. Trilateral Highway from Moreh (India) to Mae Sot (Thailand) through Bagan (Myanmar). The detail project report on this is under progress (Strategic Digest, 2004). With the signing of India-Thailand Free Trade Agreement (2003), the steady rise in two-way trade with Myanmar and spectacular growth in Sino-Indian trade, the prospects of NER becoming a hub for transit trade are only brightening.

However, one must add that there is a perception that the LE thrust has not yet produced any perceptible tangible benefits for NER.⁴ The opening of border trade with Myanmar, through the provision of the Indo-Myanmar Border Trade Agreement (1994),

³ In 1998, Myanmar offered land for cultivation to India on a lease basis in the Kubaw valley, which excited interest but was not pursued (Verghese 2001, pp. 184-5).

⁴ This was the conclusion reached by a number of participants at a symposium held in Mizoram in November, 2006. (See Mizoram University Symposium 2006 J.K. Patnaik in the same volume).

has not had any major impact on the regional economy,⁵ as India's ASEAN trade continues to be conducted mainly through the sea route. The continental land route via NER-Myanmar-Thailand is not yet considered safe and cost-effective. Moreover, India and Myanmar have also agreed to open four checkpoints for increasing trade between the two countries. These include the Pangsau Pass, Paletwa, Lungwa-anyong and Pangsha-Pangnyo. There has been one significant downside to India's trade links with Myanmar. According to the Annual Report (2001), of the International Narcotics Control Bureau, the 1,643 km Indo-Myanmar border has been utilized as a transit point between the Golden Triangle and the Golden Crescent. Some studies have argued that the mismatch between India and Myanmar's trade statistics is large due to the drug trade (Association for Environment and Development Research, 1999).

To look at some of the reasons why trade between India and Myanmar has not taken off it is useful to look at the Indo-Myanmar trade agreement of 1994 (see, Annexure 11.2). We have already noted that NER is largely an agricultural based economy. In earlier chapters we have noted the need to improve productivity of agricultural products and transform the region to one producing crops for the market. However, the Indo-Myanmar trade agreement has restricted the scope of agricultural trade in enlarging the market for the agricultural produce of NER. For one, trade is restricted to border residents and allowed only in non-motorized vehicles. Further, trade is restricted to barter trade under the Reserve Bank of India barter mechanism. Third, even in this barter trade imports from Myanmar must precede exports from NER. Fourth, no monetary trade transactions are allowed and normal trade is only permissible in items other than the specified 22 agricultural items. Finally, even this barter trade (for value less than \$20,000) is subject to usual customs documentation which is far too complicated for the few who engage in such trade.

Hence, it is clear that administrative restrictions (see also Section 11.4 below) have prevented even border trade from increasing over time.

13.3.1.2 Bangladesh

India's exports to Bangladesh are dominated by agricultural commodities and cotton although, in recent years, machinery and transport equipment have been gaining importance (Table 11.5A in Annexure 11.1). However, the volume of exports is still very small in relation to India's total trade. India's imports from Bangladesh are dominated by inorganic chemicals, vegetable and other fibres and fish products (about 85 per cent of imports). (Details are given in Annexure 11.1, Table 11.6A). In general, Bangladesh has had a consistently unfavourable trade balance with India due to an insufficiently diversified export basket (Table 11.8A, Annexure 11.1). Inland-water trade between India and Bangladesh is important in linking not only Assam but states like Arunachal to Bangladesh. Water-borne trade is more important than land trade with Bangladesh (from a comparison of Tables 11.8A and 11.9A, Annexure 11.1). There are urgent and longstanding concerns in Bangladesh arising from the perennial, large bilateral trade

⁵ Das (2005) see also report of the Task Force on Connectivity, Planning Commission, October 2006.

deficit with India, and from the large volumes of informal imports accounting for 15-50 per cent of Bangladesh's imports from India across the land border to avoid Bangladesh import duties. It is also worthwhile to see what per centage of India's trade with Bangladesh via the land custom stations (LCS) takes place through LCS located in NER. Calculations show that only about 5.3 per centage of (legal) trade with Bangladesh takes place through LCS located in NER.

Concerns regarding Bangladesh's high trade deficit in its trade with India have been particularly acute on the Bangladesh side in the context of discussions between the two governments on the possibility of a bilateral free trade agreement (FTA) along the lines of the India-Sri Lanka FTA. Due to size disparity, the trading relationship between the two countries is far less significant for India than it is for Bangladesh. Nevertheless, closer economic integration with Bangladesh is seen as a very important way of reducing the economic and political isolation of the eight north eastern states from the rest of the country. Under South Asian Free trade Area (SAFTA), the preferential tariffs agreed in the various rounds of SAARC Preferential Trading Agreement (SAPTA; which so far has been largely ineffective in generating much intra-regional trade) will continue, but a number of ambitious new objectives have been enunciated. These include the eventual elimination of tariff and non-tariff barriers on trade between the members, the harmonization of customs procedures and documentation, the facilitation of banking relationships and cooperation and improvements in the infrastructure for regional trade and cross-border investments.

We have noted that almost all of India's trade with Bangladesh is water borne and thus has little relation to NER which has no port links. One aspect of the Indo-Bangladesh trade that concerns NER is what is known as informal trade. It is worth looking at this in some more detail.

13.3.2 India's informal Trade with Bangladesh

It may be noted that most of the Indo-Bangladesh trade which affects NER in particular is of the informal border trade variety. Ever since Bangladesh's independence there has been substantial informal, unrecorded trade across the India-Bangladesh land borders and a number of studies both in Bangladesh and in India have dealt with different aspects of it (World Bank, 2006). Much of this trade is quasi-legal and is best characterized as 'informal' rather than illegal, because there is wide participation by local people in the border areas, the trade generally bypasses customs posts, and because as S. K. Chaudhuri's classic study noted 'the field operators generally operate *in liaison with* the anti-smuggling enforcement agencies'. Informal trade of this kind usually involving large numbers of local people individually transporting small quantities often just as headloads or by cycle rickshaws is sometimes called 'bootleg' smuggling.

At the other extreme there is trade which goes on in larger quantities mostly by truck through the formal legal customs posts and other channels, but which involves explicitly illegal practices such as underinvoicing, misclassification and collusion and bribery of customs and other officials, and which in Bangladesh is sometimes called 'technical' smuggling. While it is difficult to get documented data on such trade some indicative numbers are given in Table 13.1. While this trade is

minimal particularly from India's point of view, it is important for the border communities and is the kind of trade which will use the formal channels as and when border trade procedures become more trader-friendly.

Table 13.1: India's Informal Trade with Bangladesh, 2002: Bangladesh Imports from India

(\$ US million)

<i>Items Smuggled</i>	<i>2002 Bangladesh Survey*</i>	<i>Goyal: Trade Financing Report**</i>	<i>Differenc e</i>
Live animals (mainly cows & buffaloes)	100	222	+122
Sugar	28	250	+ 223
Rice	9	30	+ 21
Wheat	14	48	+34
Onions	1	10	+9
Total	151	560	+409

Source: *World Bank* (2006)

Note: * The 2002 study is the first documented attempt to estimate the size and scope of 'technical' smuggling.

** There are a number of other estimates of the approximate total size of technical smuggling, but none of them explain in detail how the estimates are arrived at. Estimates in the Goyal study were based on the opinions of relatively few people and may not be reliable, since the focus of the study was on financing and they were not systematically checked against the estimates of other informed people. However, Goyal's estimate for sugar smuggling is roughly consistent with the sugar case study, which estimates sugar smuggling at between \$180 million and \$215 million in 2001-02 and from \$100 million to \$128 million in 2002-03. A partial explanation for these discrepancies may be that Goyal's and the sugar study's estimates were including 'technical' as well as 'bootleg' smuggling, whereas the Bangladesh surveys which distinguish individual products are in principle for 'bootleg' smuggling only. Even so, the resulting discrepancy in the estimate of total land border smuggling is very large. For example, the total discrepancy of just these five commodities as reported in Goyal's study, would about double the survey-based total (bootleg + technical) estimate for 2002-03 from \$422 million to \$831 million, and assuming a smaller discrepancy for sugar of \$100 million, still increases the total survey-based estimate by about 40 per cent, from \$422 million to \$808 million. These very large differences underline the importance of coordinated contemporaneous surveys on both sides of the border with iteration between the survey teams involved to explore and narrow down discrepancies.

Unfortunately, all the studies which have aimed to quantify cross-border smuggling including the 2002 Bangladesh survey, the 1998 Bangladesh surveys reported by Rahman and Razzaque and the 1994 NCAER survey have faced time and resource constraints which would have been needed for this kind of coordination, and therefore, are based solely on the analysis of survey results dealing with imports in the case of the Bangladesh surveys, and on exports in the case of the 1994 NCAER survey in India.

However, an inspection of Tables 13.1 and 13.2 clearly indicates that trade is largely in agricultural commodities. This reflects the nature of the economies of both Bangladesh and NER which are largely agrarian. As in the case of Myanmar, border trade in agricultural commodities between NER and Bangladesh can help expand the market for agricultural commodities for NER economies. In addition, there is a large demand for agricultural products, meat, eggs and fish products which NER presently imports from the rest of the country at very high costs. It would seem that importing these products from Bangladesh would be cost effective and also solve the problem of insufficient imports from Bangladesh. However, the existing high tariffs on Bangladesh imports (see, Planning Commission, 2006) and the lack of border trade infrastructure has limited this trade to the informal variety which is unlikely to increase dramatically. It is necessary to convert this informal trade to formal border trade between NER and Bangladesh. In particular, zero duties on such trade should be included in Indo-Bangladesh trade agreements. The operation of SAFTA should take this into account.

Table 13.2: Commodity Composition of Informal Trade, India-Bangladesh (2002)

<i>Items</i>	<i>Share of Total (per cent)</i>
Cows and buffaloes	43 per cent
Agricultural products, pulses and timber	14 per cent, of which 90 per cent is rice and wheat
Processed foods	18 per cent, of which 88 per cent is sugar
Textiles	16 per cent, of which sarees are 63 per cent
All other	10 per cent, around 43 products

Source: *World Bank*. (2006)

13.3.2.1 China

China's economic importance in world trade and as one of India's major trade partners has been growing.⁶ It is a measure of the growing trade between the two countries that border trade is now to be resumed formally between them via the Nathu La Pass in Sikkim. The road from Gangtok to Nathu La is being expanded to accommodate container traffic, and infrastructure is being developed at the trade mart at Sherathang.

⁶ Mining and quarrying, metal and metal products, chemicals and chemical products, textiles, clothing and leather, food, beverages and tobacco, agriculture and hunting, machinery and equipment, coke, petroleum products and nuclear fuel, electrical and electronic equipment, precision instruments, motor vehicles and other transport equipment, wood and wood products, forestry and fishing products and rubber and plastic products have been some of the principal items in Sino-Indian trade in recent years (see Table 12.6A, Annexure 12.1 for details)

Development of infrastructure at Nathu La is being financed by the central government (Rs. 18.88 crore during 2006-08, of which the department of commerce has provided Rs. 2.16 crore), the Ministry of Home Affairs and DONER (Rs. 8.84 crore and Rs. 9.08 crore, respectively). A study on the various aspects of border trade through Nathu La has been conducted by NCAER and is under examination for appropriate action.⁷

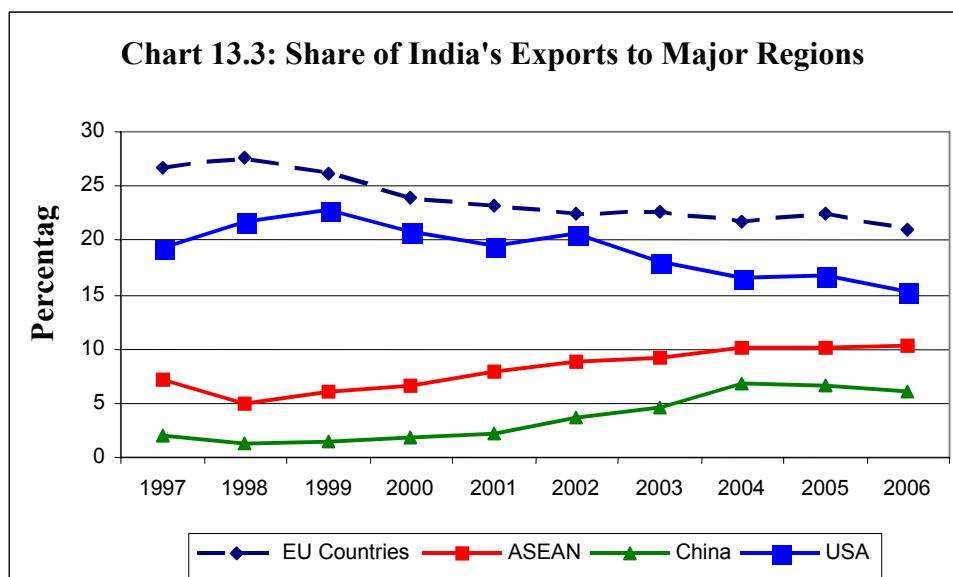
The details of the commodities in India's trade with China are shown Tables 11.10A and 11.11A (in Annexure 11.1). About 85 per cent of India's exports consist of ores, chemicals (organic and inorganic) and iron and steel. India's imports consist mainly of electrical products, mechanical machinery, organic chemicals and silk (about 80 per cent). The growth of India's trade with China has been phenomenal with China's share in India's total trade going up from around 2.5 per cent in 1998 to around 8 per cent in 2006 (see Charts 13.3 and 13.4). India also has a substantial trade deficit with China.

However, from the point of view of NER the main trade likely to occur in the next few years is border trade via the Nathu La Pass. Currently, the permitted trade via Nathu La is mainly barter trade in 44 items with a transaction value of Rs. 25,000 in one day and little customs formalities. The items allowed for export are agricultural implements, blankets, copper products, clothes, textiles, cycles, coffee tea, barley, rice, flour, dry fruits, dry and fresh vegetables, vegetable oil, *gur* and *misri*, tobacco, snuff, cigarettes, canned food, agro-chemicals, local herbs, dyes, spices, watches, shoes, kerosene oil, stationery, utensils and wheat and for import are goat skin, sheep skin, horses, goats, sheep, wool, raw silk, yak tail, yak hair, china clay, borax, seaibelyite, butter, goat cashmere and common salt. However, so far little benefit can be observed due to problems of road connectivity, trade restrictions and short operational period (Planning Commission, 2006) It may be noted that the only point at present for border trade is the Nathu La pass.

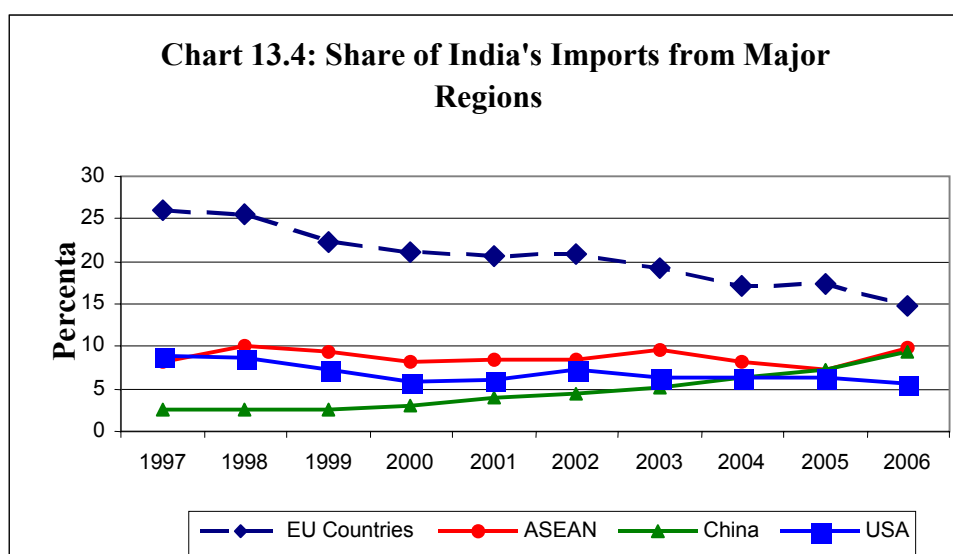
13.3.3 The LE Policy: Long run considerations

The ASEAN countries' share in India's total trade went up from around 8 per cent in 1998-98 to over 10 per cent in April-December 2006, compared to 18 per cent for EU, 8 per cent for China and about 10 per cent for the US (Table 11.12A and 11.13A in Annexure 11.1). The changing country composition of India's trade shown in Charts 13.3 and 13.4 indicate that there has been a diversification of trade away from EU and the US to China and ASEAN. This has been one significant consequence of India's LE Policy.

⁷ 'Trade Promotion Initiatives in the Northeast Region'. Also available at <http://commerce.nic.in/annual2006-08/html/chapter12.html>



Source: Source: *Export-Import Data Bank*, Ministry of Commerce, Government of India.



Source: Source: *Export-Import Data Bank*, Ministry of Commerce, Government of India.

Within the ASEAN, India's major trade partners are Thailand, Malaysia and Singapore. One of the important developments of India's LE Policy has been the expansion of trade with its South East Asian neighbours. However, very little of the benefit of this trade has gone to the NER region as most of the trade is sea borne (Aiyar, 2008b)

The commodity composition of India's trade with ASEAN countries is given in Annexure 11.1, Tables 11.12A and 11.13A. Almost 50 per cent of India's exports to ASEAN consist of mineral products (fuels and oils) and gems and jewellery. Another 20 per cent consists of organic chemicals, iron and steel and animal fodder and waste. In

the case of India's imports, about 50 per cent consist of electrical and non-electrical machinery, vegetable oils and fats and mineral fuels and oils.

Hence, it is clear that for NER to tap into ASEAN trade in a more organized way it would have to develop a more mature industrial sector and much better air and sea connectivity. In particular there are wood products, ores and rubber products which could be profitably developed in NER for trade with ASEAN. This should be part of a trade strategy for NER in the next decade or so.

13.4 ADMINISTRATIVE MEASURES TO PROMOTE NER TRADE

Apart from economic incentives, trade is also facilitated by a host of administrative measures which facilitate the growth of trade. A number of such measures have been taken up in the context of the NER, particularly in light of the growing importance of the LE Policy.

One important initiative has been bilateral trade agreements with bordering countries.

- The Indo-Myanmar Trade agreement was signed in 1994. Some details of the agreement are given in Annexure 11.2. The trade agreement is quite restrictive and largely promotes border trade. Traditional free exchange/barter trade is restricted to the 22 items agreed upon by the two countries, finding mention in Schedule I of the Agreement. While normal trade is possible for all items under OGL, trade in agricultural items and forest based products is restricted to border residents under headload restrictions and under barter deals.
- There is also the Kunming Initiative of 1999 under which non-official policy makers and businessmen meet to discuss ways of promoting cooperation between China, Myanmar, Bangladesh, China and NER. In one important infrastructure initiative, the inland waterway project between India and Myanmar on the Kaladin river link NER to the Sittwe port in Myanmar. There is also a proposal to link the port via a highway from South Mizoram.

In addition, some administrative measures have also been announced at the level of the central government. An Empowered Committee under the Chairmanship of the Commerce Secretary functions in the Department of Commerce to monitor and implement the initiatives for the North Eastern Region following the announcement made by the Prime Minister in January 2000 for the development of the North East known as 'PM's Action Plan for the North East'. The Committee also monitors the implementation of the recommendations of the Task Force on Development of Border Trade and Inter-Country Trade from the Northeastern Region, which goes into issues concerning infrastructure constraints in the North East and the measures needed to overcome them. With a view to promoting exports from the region, a North East Cell has been set up in the department of commerce. Consequent to the announcements made by the Prime Minister for the development of exports from the North Eastern Region, an Export Development Fund (EDF) was set up with the objective of promoting exports from the region, especially with the neighbouring countries like Bangladesh, Bhutan and Myanmar. Activities, which have a linkage with exports from the region, are eligible

for assistance from the fund. Recent visits by the Minister of State for Commerce to Shillong and Agartala have led to specific Action Points for infrastructure relating to trade facilitation in Meghalaya and Tirpura (see, Appendix 11.2).

Finally, overland trade is normally conducted through land customs stations (LCSs). For the current status of LCS in NER see Appendix 11.1, Table 11.14A. LCSs are notified gateways for transit of goods, services and human beings between neighbouring countries. India has 136 notified Land Customs Stations, of which the following 11 in the North East have been identified for prioritization for development of infrastructure:

1. Agartala	Tripura–Bangladesh
2. Borsorah	Meghalaya-Bangladesh
3. Dawki	Meghalaya-Bangladesh
4. Demagiri	Mizoram-Bangladesh
5. Ghasuapara	Meghalaya-Bangladesh
6. Karimganj Steamer Ghat	Assam-Bangladesh
7. Moreh	Manipur-Bangladesh
8. Old Raghana Bazar	Tripura-Bangladesh
9. Srimantapur	Tripura-Bangladesh
10. Sutarkhandi	Assam-Bangladesh
11. Zokhawthar	Mizoram-Myanmar

An Inter-Ministerial Committee under the Chairmanship of the Commerce Secretary is coordinating the steps taken by various Ministries and agencies for the development of trade in the North East including border trade along the Indo-Myanmar and Indo-Bangladesh borders. Development of export infrastructure in four border towns of Moreh, Sutarkandi, Dawki and Zokhawthar has been given priority. The Central Warehousing Corporation (CWC), the appointed agency for the development of export infrastructure at Moreh, Dawki and Sutarkandi, has conducted a study of the infrastructure facilities required at Moreh (Manipur), Dawki (Meghalaya) and Sutarkandi (Assam) under the erstwhile Critical Infrastructure Balance Scheme (CIBS). The infrastructure at Zokhawthar is being developed by the Border Roads Organization (BRO) in cooperation with the Government of Mizoram.

Some other elements of subsidy are given to promote trade (exports and imports) via NER. For example, inland transport assistance would now be available with respect to identified products to all the north eastern states.⁸ The rates of inland transport assistance are quite generous 90 per cent of the air freight charged by the airline from any airport in the NER states to Bagdogra, Guwahati or Kolkata for exports. In case of highly perishable commodities, 50 per cent of the air freight charged by the airline from any airport in the north eastern states to Delhi or Mumbai airports for exports. Rs. 1 per kg. or actual freight paid, whichever is less, if the goods are transported from anywhere in the northeast by road for exports through any notified LCS in the Northeastern states or

⁸ NCAER study, also available at <http://commerce.nic.in/annual2006-08/html/chapter12.html>

through Guwahati airport. Rs. 2 per kg. or actual freight paid, whichever is less, if the goods are transported from Northeastern states to Kolkata or any other port by rail through ICD, Guwahati for exports. Rs. 2 per kg. or actual freight paid, whichever is less, if the goods are transported from Northeastern states by rail through ICD, Guwahati to any place in West Bengal for processing and export.

In addition, storage facilities are also being provided. Thus, a common pack house facility is being set up by the Assam Industrial Development Corporation for processing and handling of fresh ginger for exports. A post-harvest handling-cum-auction centre for fruits and vegetables is being considered for Mizoram. Walk-in-type cold stores are being set up at Imphal, Aizawl and Dimapur and a centre for perishable cargo at Guwahati airport. The following proposals for funding through the Export Development Fund have been approved:

- ◆ Passion fruit in Mizoram and Nagaland
- ◆ Ginger in Manipur and Nagaland
- ◆ Mushroom processing in Manipur and Nagaland
- ◆ Turmeric processing in Nagaland
- ◆ Vanilla processing in Manipur
- ◆ Safed musli in Assam
- ◆ Bee-keeping in Mizoram
- ◆ A lab for testing export products in Assam
- ◆ Cluster development of farms for organic farming is under preparation for Nagaland and Tripura

The State Trading Corporation (STC) has set up a branch at Kolkata which is engaged in international and domestic trading from West Bengal and other Northeastern states. The various activities undertaken are:

- ◆ Imports of Vanaspati from Nepal to cater to the requirements of Assam, Meghalaya, Mizoram and the rest of India.
- ◆ Import of hydrocarbons for power plants generating power mainly for eastern and Northeastern states.
- ◆ Trade in raw jute and tea.
- ◆ Supply of pulses and tea to the defence forces, and the supply of pulses to the domestic market.
- ◆ Export of muli bamboo from Tripura and Mizoram thereby helping the local growers/traders of these states.

Agri-Export Zones (AEZs) have been set up for the Northeastern region in Tripura for pineapples; Sikkim for floriculture, orchids, ginger and cherry and; Assam for fresh and processed ginger.

13.5. RECOMMENDATIONS OF PREVIOUS STUDIES

Ever since the mid-1990s, every study of the NER states has talked of the need to pursue the LE Policy. The Shukla Commission also dealt with this in some detail, its main recommendations being upgradation of infrastructure like the Tamu-Kalewa-Moreh road (now completed), and the rail link to Bangladesh and developing the

Asian road link through Myanmar to Laos and Thailand. However, while recognizing the existence of transit trade it suggests the establishment of production facilities for medicinal products, bicycles and so on in NER in a Special Economic Zone (SEZ). The issue is whether NER can move beyond being a mere transit point for such goods from other parts of the country.

In another set of studies (Mizoram University Symposium, 2006) participants from various states of NER discussed the possibility of NER becoming a common market like the European Union. While the usual infrastructure linkages were stressed upon one of the participants noted that ‘India can hardly look eastward without also looking at the North East Region!’ (p. 9). The presenters at the symposium posed the important issue of lack of land linkages within NER, which is recognized as a major constraint to the development of the ‘common market’ in the NER.

13.6. THE WAY FORWARD

Critical to the progress towards prosperity in NER is its liberation from economic imprisonment. This would require a qualitative change in the relationship of the country with the neighbouring countries contiguous to NER. There are considerable gains to be had by improving relations. In the case of Bangladesh, for example, there could be significant gains from transit fees and access to the markets in NER. This could contribute significantly to the reduction in Bangladesh’s trade deficit with India. Given that economic interests of NER are affected by the nature of relationship with these countries, it is important that the Foreign, Defence and Home Ministries have a consultation process with the states in NER to take account of their views.

Various political, economic and cultural factors have shaped the making of the Look East Policy for the north-east. To give effect to the policy, a large number of administrative measures have been taken in recent years to promote NER trade. The recommendations of various studies to develop infrastructure at Moreh and open up other trade points has also seen considerable progress. Yet, despite this so far the LE Policy has not delivered any concrete economic gains to the NER states. To look at the place of the LE Policy in the long-term calculus of the NER states it is important to understand some important principles governing trade between countries, the basic premise being that it is companies/individuals who conduct trade and not governments.

The most common form of trade between geographically contiguous areas is border trade, already taking place between the NER states and bordering countries and is in fact formalized in agricultural trade under the Indo-Myanmar trade agreement. Typically, border trade is (at an organized level) in commodities where transport costs are high in relation to the final price of the product (examples of such products are timber, cement, coal and other minerals). This trade would take place naturally and the state needs to only facilitate it administratively and via road and rail infrastructure.

However, for a majority of the items traded internationally, transport costs account for only about 5 per cent of the final price. In fact, estimates by UNCTAD (2005) show that in most cases trade barriers (formal and informal) are more restrictive for trade than transport costs. Hence, there is a limit to overland trade promotion via the NER

states and it is not surprising that most Indo-Bangladesh trade is conducted via West Bengal given the insecurity of trading via the NER states (Chaudhari, 1995). A transport subsidy to NER states is unlikely to overcome this problem. In fact, troubled relations in Manipur has made even the relatively more developed Moreh trading post relatively redundant, to the extent that informal trade will need greater incentives to convert to legal trade and formal trade is unlikely to divert via Manipur in place of West Bengal. Coal/limestone trade has sustained the trade link between Meghalaya and Bangladesh,⁹ but it is debatable how long ‘rat-hole’ mining in Meghalaya will be sustainable given environmental concerns in NER in general.

Promoting trade between the NER states and the neighbouring countries requires going beyond the calculations of ‘geographical contiguity’ and looking at those commodities in which the NER states have a comparative advantage in an economic sense. Here two main points need to be made. First, there are a few agricultural items in which the NER states have a comparative advantage vis-à-vis the rest of the country (see chapter on Agriculture). The NER states can actively consider trading these items only when their own domestic surpluses become sufficient, and domestic surpluses are constrained by the lack of marketing due to uncoordinated production efforts of the individual states. This is particularly true in the case of fruits and vegetables. Second, it is debatable that NER trade with neighbouring countries is always more profitable (and hence more likely) than with the rest of India. Many growth centres like Kolkata, Delhi and Mumbai offer economically larger markets than those of Bangladesh and Myanmar. This is already showing up in the nascent floriculture industries of NER where exports are mainly to Guwahati, Kolkata and Delhi and even to Holland at the international level. This, however, does not mean that promoting trade with neighbouring countries is not important, but that the strategy should look beyond and create the infrastructure for trading with the rest of the country and internationally based on comparative advantages.

Third, the dynamics of trade in agricultural products is somewhat different from the dynamics of trade in industrial goods. Trade in agricultural items is generally of the inter-industry variety since product differentiation is not easy while trade in industrial goods admits of so-called ‘intra-industry’ trade (Krugman and Obstfeld, 2000). In agricultural items the excess demand in the NER states for items like meat, meat products and fish make them potentially important import items, so supplies from neighbouring states are likely to be cost-effective. However, this is largely ruled out by the restrictions on such trade, for example, in the Indo-Myanmar trade agreement. Further, the pattern of Indo-Myanmar and Indo-Bangladesh trade indicates that the demand of both Myanmar and Bangladesh is largely for industrial items such as processed foods and drinks (including animal foods), miscellaneous minerals and manufactured goods, textile fibers, textiles and clothing and machinery and transport equipment. While there is a good possibility for exports of agro-processing industries and floriculture-based industries, it is debatable that the best markets for these lie in the adjoining countries. Hence, the immediate need seems to be to promote trade in basic agricultural commodities (rice, fish, pulses etc.). Booming trade relations with China are reflected in the urgency to make

⁹ http://www.ide.go.jp/English/Publish/Jrp/pdf/jrp_133_05.pdf.

free border-trade via the Nathu La a reality. The caveats offered earlier in the case of border trade apply with equal force here.

In summary, the kind of trade being promoted is important: whether it is border trade or 'regular' trade. In border trade, benefits would accrue to the NER states from storage, customs and tourism, which are typical for such 'transit' states. In addition, there are likely to be significant advantages of trade in agricultural items as these are normally perishable. However, for these benefits to accrue, the restrictions imposed on agricultural trade (a feature of all RTAs entered into by India) must be relaxed. In the context of border trade, in the longer term there are possibilities of increased trade in items like timber products, cement, steel and coal for which industrial capacities in NER will have to be built near the location of mineral resources.

In the case of 'non-border trade' items, the current state of industrial activity suggests that the maximum scope is for trade in agro-processing and floriculture. Perhaps the best way to promote trade under the LE Policy is to create the infrastructure and let the traders decide the direction of trade. Finally, in the context of the LE Policy, it is important to note that attempts to promote trade with neighbouring countries without promoting trade within the region are unlikely to succeed. Here the issue of intra-state road linkages is crucial.

13.8 RECOMMENDATIONS FOR THE LOOK EAST POLICY

- To immediately increase border trade in agriculture and some industrial goods it is necessary to remove current restrictions on border trade via Moreh, Nathu La and other entry points.
- Unrestricted trade with neighbouring countries in agricultural and meat products could lead to considerable reduction in the costs of these items in NER.
- The LE Policy has important security dimensions. There is urgent need to promote interaction with neighbouring countries through sports, music and other cultural activities.
- In the case of neighbouring countries which are members of WTO, formal request for trade facilitation would improve trade access for NER states.
- In the longer term, industrial output of NER should cater to the demand for industrial goods in the neighbouring countries. This is particularly important for border trade in items like cement, coal, timber and steel.
- To facilitate trade it is essential to activate existing land-customs stations (LCS) and to provide a secure transport corridor for traders.
- In the long run, NER needs to plug into the growing trade with ASEAN countries particularly in items like wood products, ores and rubber products.
- It is imperative to integrate IT facilities in promoting infrastructure for trade with the ASEAN countries.

Chapter 14

Governance and Security

Establishing peace and security and responsive governance is an essential prerequisite for development. The only long-run solution is rapid economic progress, but this is difficult in a politically unstable environment. This is the crux of the issue of underdevelopment in NER, as will be discussed later in this chapter. The region is inhabited by diverse communities with different ethno-linguistic origins, religious beliefs and tribal practices, cultural ethos and above all an irreconcilable historical past. Their interests are often in conflict with one another and their aspirations are not easily reducible to any common denominator.

The question of governance, therefore, should be posed in a somewhat broader perspective in the context of NER. It is not sufficient to club all the states into one group say, northeast it is also necessary to be able to create a unified economic and political vision for the region. It is indeed a difficult task to be achieved. One possible way might be through increasing inter-dependences amongst the states by means of greater economic unification of NER. A necessary prerequisite for such unification is synchronization of development policies of the states. What needs to be emphasized is that without a cooperative approach to governance, it is not possible to achieve permanent peace in this region. And unless there is permanent peace, no development efforts will ever bear any fruit. What this essentially means is that a northeast political vision must precede a northeast economic vision.

Governance in a somewhat narrower sense implies imposition and execution of a system of rules and regulations which can provide law and order in a society that can ensure security of life and enforce property rights of the people. In playing this role, a government can be exclusive, in the sense that it can perform this role independently of people at large. However, in a modern democratic society a government also has to play many inclusive roles, which means it has to depend on the cooperation as well as participation of the people in administering its functions. For instance, a government has to play the role of a prime mover of development in a society where market forces may be unable to generate progress for good reasons. A well-known example is that under the market mechanism there is an under-supply of public goods such as the means of communication, water and power, education and health, management of forests and common property and various other social utilities. Moreover, a modern welfare state has a moral responsibility to ensure a degree of social, economic and political justice in society. Hence, the state is morally bound to adopt certain optimal redistribution policies. To perform such roles efficaciously, the state has to mobilize resources through taxation and cost-recovery policies. While the efficiency of the government is determined by its ability to mobilize the maximum amount of resources on the one hand, its success as a

provider of good governance depends on its ability to redistribute the benefits optimally to its citizens.

Besides the maintenance of law and order, a government of a welfare state plays an important role in the economy it runs/promotes and if necessary creates enterprises, builds capabilities in the people through human development and determines policies and regulates markets, with far-reaching implications for growth and social welfare. Of course, the present trend in a globalizing world demands least governmental intervention in an economy, with its role being limited as far as possible to that of an enabler and facilitator in a market-based system. However, in the context of the northeast where states' ability to generate resources are limited and private initiatives are almost absent, direct governmental intervention is necessary.

14.1 GOVERNANCE, LAW AND ORDER AND SECURITY

The basic foundation of the market-driven development path is based on the assumption of the existence of an organized and efficient market system. However, for an efficient market to exist certain basic preconditions need to be fulfilled. A primary requirement for a market to function properly is that there should be proper law and order such that any transaction can be carried out in the market without any fear or coercion. The second important precondition for markets to function is the presence of well-defined property rights. In the absence of either of these two conditions, either the market fails to exist or it functions wrongly.

In the discussion on development alternatives in the context of NER this crucial point is often ignored. In several of the NER states, markets do not exist for many commodities, either due to extortions and fear of life and property (consequence of extremism) or because of the absence of well-defined private property rights (land, for example) or simply due to poor connectivity.

14.2 LAW AND ORDER IN THE NORTHEAST

Barring Sikkim, a latecomer to the North-east (it became part of the North Eastern Council formally in 2002), parts of the region have been convulsed by conflicts between the state and armed groups, as well as popular movements, fighting for a range of demands from outright secession to greater ethnic autonomy within the Constitution. One of the longest running armed movements has been the Naga insurgency, which started in the 1950s, and today has moderated into organizations that are in active negotiations with the Central Government for a long-term settlement. Ceasefires are in place with both major factors of the National Socialist Council of Nagalim (NSCN) while ceasefires are also being observed with a number of others in Meghalaya, Assam, Manipur and Tripura. In Mizoram, however, a peace accord between the Mizo National Front and New Delhi, which was inked in 1986, has held firmly, with former insurgents rising democratically to high political offices such as Mr. Laldenga and Mr. Zoramthanga, who have served as Chief Ministers.

Not less than 40 armed groups function in seven states, although only a clutch are dominant and powerful enough to make a substantial impact. The smaller ones function often either as extortionist rings or as part of a network of informers and rent collectors for the bigger ones. Not less than 15 groups were banned by the centre, although the ban on the NSCN factions was lifted when the ceasefires with each group started.

While large parts of the region are not harmed by insurgent or security activities, the confrontations and subsequent emotional and geographical distance from Delhi have been fuelled by poor governance, high levels of corruption and political instability in some of the states.

Many of the armed groups are widely viewed in NER as extortionist, money-making rackets which have lost public support and have become, in the eyes of many, illegal enterprises which prey on fear and vulnerability and profit from extensive corruption, rent-seeking and poor governance.

14.3 LAW AND ORDER: EVIDENCE FROM THE STATES

Violence caused by terrorism has been increasing over the years¹ (Table 3.2A in Annexure 3.1). In 2001, 23.13 per cent of the total terrorist incidences in India took place alone in this region, which increased to 28 per cent in 2005 and further to 29.4 per cent in 2006. Among the NER states barring Sikkim and Mizoram, the incidence of terrorism is highest in Manipur and lowest in Mizoram. Manipur, Assam and Nagaland are the most terrorist-affected states in the region. Assam shows the highest number of civilians killed due to terrorist violence, which was around 11 per cent of the total civilians killed in India in 2001 due to terrorism. The number of civilians killed declined marginally in 2006; the number of security forces killed increased in NER to the corresponding figure for India. The most terrorist-ridden states in the region are Assam, Manipur, Nagaland and Tripura.

The rise in terrorism has had an impact on the strength of the police force being maintained in these NE states. The number of police per 100 sq. km. has increased sharply over the years in all these states (Table 3.4A in Annexure 3.1). An important point to be noted is that the four states, namely, Assam, Manipur, Tripura and Nagaland, had higher number of police force per 100 sq km as well as per lakh of population in comparison to the national figure in 1981. Although the number of police per lakh of population declined for both India as well as for these NE states, the numbers were still higher for the NER than the national average. However, with regard to the number of IPC cases per civil police, except for Assam the rest of the NE states show lower figures as compared to the national average.

Table 3.5A (in Annexure 3.1), gives information on the expenditure on total police force and police training per one lakh of population. It can be seen from this Table

¹ Data on terrorist activity in the country is available in the *Statistical Abstract of India* which gives information on Jammu and Kashmir, the Northeastern states and Naxal-affected states.

that in the NE states this number is higher than the national figure. Among the Northeastern states, although Assam spends a lower amount than the rest, its expenditure is still higher than the national amount. Police expenditure per lakh of population is higher in Nagaland, Mizoram and Sikkim compared to the other NE states. Similarly, Nagaland and Mizoram spend much more in comparison to the other states in police training. It is, therefore, clear that a huge amount of resources is being diverted for policing.

It is quite evident from this analysis that the law and order and security situation is a matter of concern in the NE states. At present, there is a ceasefire in Assam and Nagaland. The ceasefire in Nagaland has been fairly effective in maintaining peace and order, but the situation in Assam has been getting increasingly tense in the recent past. The situation in Tripura is also no different. In such a politically volatile situation developmental activities are hindered by the fear psychosis. This is amply reflected in the economic performance of all the states whether one looks at their GDP growth, industrial growth or per capita income growth. Clearly, the success of developmental policies crucially depends on establishing law and order in these states.

14.4 VIEWS OF VARIOUS NER COMMITTEE REPORTS ON LAW AND ORDER

Earlier committee reports (Shukla Committee and Jain Committee) on NE have ignored this crucial issue in their analysis of the developmental requirements for these states. The State Development Reports also have not discussed the issue of governance, although they emphasize the issues of decentralization, involvement of women in governing institutions, transparency in the functioning of local governments etc.

14.5 STEPS TAKEN BY THE GOVERNMENT TO ENSURE PEACE, SECURITY AND HUMAN RIGHTS²

In order to ensure peace and security in the region the central government has taken several necessary steps such as entering into several peace talks and ceasefire agreements. For instance it has signed a formal ceasefire with the Isak Muivah groups of the NSCN w.e.f. August 1, 1998, which was extended to July 31, 2008, and another ceasefire agreement with NSCN (K) in April 28, 2004, which was extended up to April 28, 2008. A group of ministers has been constituted to hold talks with the NSCN (I/M). A Suspension of Operation (SoO) was signed on May 24, 2005 between the central government, the Government of Assam and NDFB w.e.f. June 1, 2005 for a period of one year. SoOs have been signed with Hima Halan Daogah (DHD), a militant outfit of Assam w.e.f. January 1, 2003 (later extended to December 31, 2008) and with ANVC w.e.f. July 23, 2004 for a period of one year (later extended to July 22, 2008).

In order to ensure peace and security, the central government has increased the reserve battalions³ and so far 34 such battalions have been sanctioned for NE. The

² Based on the *Annual Report 2006-08 on Internal Security*, Ministry of Home Affairs, Government of India.

government is also implementing a scheme for reimbursement of security-related expenditure for states seriously affected by insurgency. The central government has also been funding schemes for the modernization of the state police forces. It has formulated a 100 per cent centrally funded 'surrender and rehabilitation scheme'. While these measures are important in the short-run, lasting peace and security requires resolution of the basic causes of dissatisfaction. It is in this context that the maximization of self-governance and participatory development strategy is important.

14.6 CAUSALITY BETWEEN INSURGENCY AND DEVELOPMENT

Underdevelopment is caused by insurgency and terrorism and therefore all developmental efforts will be in vain, unless political volatility is controlled simultaneously. Thus, the development vision for NER should focus on the primary requirements of safety and security in these states. However, there is an alternative view which maintains that insurgency is the cause of underdevelopment, in which case the vision would be to hasten the pace of development to solve the problems of insurgency in the long run. However, the causality runs both ways. That is, insurgency and unemployment resulting from poor economic development feed on each other. Thus, poor economic performance contributes to rise in insurgency and hence the solution for insurgency lies in the achievement of rapid economic progress of the region.

And indeed, commonality of such a view can also be found in the writings of professional economists (see Sachdeva, 2005) as well as in the official position on long-term approaches to solve the problems of insurgency in NER. The current official position on the solution also advocates rapid economic development. As a logical conclusion of this line of argument, NER is cast today in India's Look East Policy paradigm. Since the 1990s, political dialogue has been emphasized as the key to peace building.

While insurgency cannot be solved by economic development, the latter can be a tool for improving socio-economic conditions. However, both in the medium and the long-term, only political dialogue and initiatives, which accommodate a range of concerns, and are based on mutual trust and flexibility, not exclusivity, and produce goodwill not ill-will, can settle these challenges.

Insurgency and underdevelopment, especially unemployment, feed on each other. Poor governance, corruption and economic performance sustain conditions for insurgency and alienation.

The current official position, however, and the view of some professional economists (Sachdev, 2005) promote rapid economic development through huge public investments in infrastructure, particularly pressing ahead with a Look East Policy that places NER in

³ IRBNS was mooted by the Ministry of Home Affairs in the background of increasing problems of law and order and emerging internal security scenario in the country, which put considerable pressure on CPFs (see *Annual Report 2006-08*, Ministry of Home Affairs).

such a paradigm. Yet, in the areas currently afflicted with politically volatile situations, markets are unlikely to exist or provide the right signals. As a consequence, private capital does not flow into the region in search of investment opportunities, in fact, there is a reverse flow of financial capital out of the region. To quote a well-known economist from the region:

“.....due to inhospitable investment environment, savings arising in the region get outlet into the more investment friendly region. This largely explains very low credit-deposit ratio in NER states. Such asymmetrical market integration a large inflow of goods into and outflow of savings from the region has impeded the pace of growth in the region.”

Thus, insurgency continuously hampers the economic performance of the region, so rapid economic development will not be possible without a proper strategic and security policy by the central government.

Under prevailing circumstances profit-seeking private investment is unlikely to flow into the region and, therefore, public investment has to play a more proactive role in boosting the rate of economic growth. In particular, public investment must be made in such activities as creation of infrastructure such as roads, bridges, railway coverage, power generation, proper drainage system, flood control and water harvesting, irrigation (both minor as well as major), drinking water, hotels and transport facilities, airport construction in inaccessible areas and reliable and fast-moving public transport. The creation of such infrastructure can raise agricultural productivity which is a *sine qua non* for rapid growth through industrialization. Without increasing income-generating possibilities in the rural sectors of the economy necessary forward and backward linkages for industrialization cannot be created. Thus public investment alone will help in the creation of a critical mass which will facilitate private investment from outside the region⁴. The 19th century saw massive trade and investment in the plantation sector of Assam, but the tea industry had no linkages with the rural economy; it developed as an enclave and hence rapid investment and export growth had no impact on the earning potentials of the rest of the economy.

Thus the role of the States would be to ensure certain basic minimum prerequisites: free and unhindered mobility of goods and services (infrastructure) across the region as well as within the region; well-defined property rights; and law and order and security of life, such that markets can function and reflect the true scarcity costs of goods and factors.

North Eastern Region Vision 2020

Volume III

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&
North Eastern Council**

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CHAPTER 1: THE NORTHEASTERN REGION: THE CHALLENGES OF DEVELOPMENT

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(Rupees)

Year	Arunachal Pr.	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	NER	India GDP
1995-96	10,337	6,531	6,498	8,651	10,003	10,563	8,588	6,321	6,790	9,704
1996-97	9,600	6,602	6,925	8,739	10,470	10,774	9,194	6,886	6,919	10,287
1997-98	9,678	6,563	7,370	9,037	10,029	11,111	10,099	7,498	7,023	10,601
1998-99	9,780	6,456	7,369	9,667	9,874	9,920	10,870	8,158	7,012	11,015
1999-00	9,972	6,577	8,080	10,158	10,153	9,515	11,595	8,672	7,207	11,472
2000-01	10,276	6,759	7,871	10,539	11,866	12,320	12,068	10,216	7,632	11,762
2001-02	10,590	6,983	8,439	10,730	12,261	12,504	12,609	10,478	7,888	12,227
2002-03	10,259	7,131	9,081	10,990	13,385	12,812*	13,614	10,958	8,116	12,496
2003-04	11,083	7,412	9,817	11,418*	14,741*	13,126*	14,486	11,878*	8,519	13,332
2004-05	11,196*	7,513	10,282*	11,864*	15,924*	13,447*	15,413*	12,875*	8,769	14,031
Average Annual Growth Rates (%)										
1995-96 to 04-05	1.39	1.68	4.97	3.73	5.50	3.21	6.52	8.22	3.01	3.89
1995-96 to 99-00	-0.53	-0.08	5.10	4.31	-0.29	-2.87	7.98	8.35	1.33	4.11
2000-01 to 04-05	2.19	2.75	7.10	3.03	8.03	2.26	6.48	6.06	3.61	4.49

Source: www.mospi.nic.in.

Notes: Average annual growth rates are computed.

* Estimated using growth rates.

Table 1.2A: Composition of GSDP*(Based on the averages for the period from 2000-01 to 2004-05)**(percent)*

Sector		Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	NER	All-India
1	Agriculture	25.2	28.4	22.3	21.3	20.4	33.1	16.9	19.5	26.2	20.2
2	Forestry & logging	3.5	1.8	1.8	1.0	0.9	2.5	1.9	1.4	1.8	0.9
3	Fishing	1.1	2.2	3.0	0.8	1.1	0.6	0.1	1.9	1.8	1.0
4	Mining & quarrying	1.6	6.2	0.0	8.7	0.1	0.1	0.1	0.8	4.4	2.2
a	Sub-total of primary	31.3	38.5	27.1	31.8	22.6	36.3	19.0	23.7	34.1	24.4
5	Manufacturing	3.6	9.4	8.7	2.2	1.2	0.8	2.9	2.8	6.7	15.1
5.1	Manufacturing: Registered	0.0	7.2	0.1	0.7	0.3	0.4	2.9	1.5	4.4	10.1
5.2	Manufacturing: Unregistered	3.6	2.2	8.6	1.5	0.9	0.4	0.0	1.3	2.3	5.0
6	Construction	16.0	4.5	12.5	9.5	11.5	10.9	17.9	19.3	8.5	6.0
7	Electricity, gas and water supply	3.6	1.1	2.3	3.5	1.7	0.4	4.7	2.5	1.6	2.3
b	Sub-total of Secondary	23.2	15.0	23.5	15.2	14.4	12.1	25.5	24.6	16.9	23.4
8	Transport, storage & communication	7.0	5.4	5.8	5.2	3.4	17.5	1.9	6.4	6.4	9.0
8.1	Railways	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.2
8.2	Transport by other means	4.8	2.0	4.3	4.3	2.3	17.0	1.9	3.0	3.8	5.0
8.3	Storage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
8.4	Communication	2.2	2.4	1.5	0.9	1.0	0.4	0.0	3.3	2.0	2.7
9	Trade, hotels and restaurants	4.3	15.4	9.7	14.7	9.1	5.3	7.1	12.3	13.0	15.2
10	Banking and insurance	2.7	4.9	1.6	2.5	2.6	1.3	2.6	2.2	3.7	5.8
11	Real estate, ownership of dwellings and business services	2.5	3.7	3.8	9.0	14.0	8.7	5.8	2.6	4.8	7.6
12	Public administration	17.3	7.0	16.9	13.6	21.0	12.1	17.5	15.0	10.6	6.3
13	Other services	11.7	10.1	11.6	8.0	13.1	6.8	20.6	13.1	10.5	8.3
c.	Sub-total of Tertiary	45.5	46.5	49.4	53.0	63.0	51.6	55.5	51.7	49.0	52.2
14	GSDP	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: www.mospi.nic.in.

Table 1.3A: Sectoral Composition of GSDP: Selected Years*(Percent)*

Sectors	Composition			Coefficient of Variation		
	1995-96	2000-01	2004-05	1995-96 to 99-00	2000-01 to 04-05	1995-96 to 04-05
NER States						
Primary	41.21	37.39	35.96	1.78	1.45	5.17
Secondary	16.15	16.54	16.82	4.65	3.90	4.08
Tertiary	42.63	46.06	47.22	1.79	1.47	4.65
Arunachal Pradesh						
Primary	38.00	37.33	31.49	7.26	6.60	8.00
Secondary	31.58	19.01	22.14	15.88	8.25	15.85
Tertiary	30.41	43.67	46.37	13.96	2.69	12.70
Assam						
Primary	46.28	42.06	41.57	3.00	0.83	4.76
Secondary	15.15	15.89	15.35	6.01	5.42	6.16
Tertiary	38.57	42.05	43.08	3.07	2.08	6.10
Manipur						
Primary	33.62	31.94	26.42	5.66	7.57	10.00
Secondary	19.62	19.29	21.01	5.04	3.38	4.08
Tertiary	46.76	48.77	52.57	1.94	2.91	5.31
Meghalaya						
Primary	32.04	31.22	29.85	1.40	1.82	2.79
Secondary	14.14	15.46	14.74	3.13	3.05	3.16
Tertiary	53.82	53.32	55.41	0.78	1.60	1.56
Mizoram						
Primary	28.79	27.48	21.78	9.35	9.67	11.12
Secondary	15.42	9.56	14.74	7.65	17.76	13.35
Tertiary	55.79	62.96	63.48	4.46	1.26	4.91
Nagaland						
Primary	22.62	29.31	34.47	9.63	6.11	13.83
Secondary	19.27	16.33	12.23	17.12	14.09	23.12
Tertiary	58.11	54.36	53.30	3.83	2.07	3.20
Sikkim						
Primary	35.74	26.33	18.59	19.04	13.61	24.46
Secondary	20.30	23.30	36.24	6.80	15.99	26.05
Tertiary	43.96	50.37	45.17	11.54	4.41	8.63
Tripura						
Primary	34.31	27.91	27.84	2.12	3.15	8.78
Secondary	12.94	20.14	21.90	5.62	5.98	20.63
Tertiary	52.76	51.95	50.26	1.07	1.31	1.78

Source: www.mospi.nic.in.

Table 1.4A: Plan-wise Projected Per Capita GDP at 2006-07 Prices of India

Plan	GDP (FC) at 2006-07 Prices		Population	Per Capita GDP at 2006-07 Prices	
	Level (Rs crore)	Average GR (% per annum)	Average GR (%)	Level (Rs)	Average GR (%)
2006-07 (Base year)	3,743,472			33,659	
XI FY Plan (2007-08 to 2011-12)	24,419,920	9.00	1.39	42,079	7.51
XII FY Plan (2012-13 to 2016-17)	37,573,074	9.00	1.24	60,665	7.67
XIII FY Plan (2017-18 to 2019-20)	31,665,640	9.00	1.11	81,322	7.80
<i>Growth rate per annum (%)</i>		<i>9.00</i>	<i>1.26</i>		<i>6.65</i>
Estimated Per Capita GDP at 2006-07 prices as on 2019-20				87,459	

Note: Growth rate of real GDP at 1993-94 prices for the period 2000-01 to 2004-05 was 5.86 percent per annum.

**Table 1.5A: Projected Per Capita GSDP at 2006-07 Prices of NE States:
2007-08 to 2019-20**

Year/Plan	GSDP (FC) at 2006-07 Prices			Population		Per Capita GSDP at 2006-07 Prices	
	Level (Rs crore)	Annual GR (%)	Average GR (%)	Persons (crore)	Average GR (%)	Level (Rs)	Average GR (%)
2006-07 (Base year)	92,233			4.17		22,139	
2007-08	99,150	7.5		4.22		23,491	
2008-09	107,578	8.5		4.28		25,165	
2009-10	117,798	9.5		4.33		27,213	
2010-11	130,167	10.5		4.38		29,702	
2011-12	145,136	11.5		4.44		32,718	
XI FY Plan			10.00		1.25		8.64
2012-13	162,553	12.0		4.49		36,211	
2013-14	182,872	12.5		4.54		40,258	
2014-15	207,102	13.3		4.60		45,064	
2015-16	236,096	14.0		4.65		50,778	
2016-17	271,511	15.0		4.70		57,724	
XII FY Plan			13.67		1.17		12.35
2017-18	313,595	15.5		4.76		65,948	
2018-19	364,554	16.3		4.81		75,856	
2019-20	424,706	16.5		4.86		87,462	
XIII FY Plan			16.37		1.05		15.16
GR (% pa)	12.95			1.18		11.64	
Actual growth rate per annum (%)	5.34						
Target level						87,459	
Projected level						87,462	
Gap between target and achieved						-3	

Source: NIPFP computation.

Data Sources: 1. Population estimates: Registrar General of India, Census 2001.

2. Quick estimates of GDP at factor cost: Government of India, Press Note on Revised Estimates of GDP, dated 31 May 2007

3. GSDP: mospi.nic.in

Table 1.6A: State-wise Plan-wise Projected Per Capita GSDP of NE States at 2006-07 Prices

Year	GSDP (FC) at 2006-07 Prices		Average growth rate of population (%)	Per Capita GSDP at 2006-07 Prices	
	Level (Rs crore)	Average growth rate (%)		Level (Rs)	Average growth rate (%)
ARUNACHAL PRADESH					
2006-07 (Base year)	3089			26,425	
Eleventh Plan	19,685	8.75	1.19	162,086	7.47
Twelfth Plan	32,132	11.90	1.14	249,644	10.64
Thirteenth Plan	31,291	14.25	1.01	233,209	13.10
Required GR (%)		11.18	1.13		9.93
GR (%) during 2000-01 to 2004-05		4.05			
Projected level				87,556	
Gap between target and achieved				-97	
ASSAM					
Eleventh Plan	342,168	10.00	1.28	114,534	8.61
Twelfth Plan	640,722	16.00	1.19	201,501	14.63
Thirteenth Plan	738,071	20.25	1.07	222,279	18.98
Required GR (%)		14.75	1.20		13.39
GR (%) during 2000-01 to 2004-05		4.12			
Projected level				87,337	
Gap between target and achieved				122	
MANIPUR					
2006-07 (Base year)	4,971			21,539	
Eleventh Plan	33,581	10.75	1.19	140,056	9.45
Twelfth Plan	59,469	13.25	1.13	234,034	11.98
Thirteenth Plan	60,895	15.75	1.03	229,929	14.57
Required GR (%)		12.87	1.13		11.60
GR (%) during 2000-01 to 2004-05		9.35			
Projected level				87338	
Gap between target and achieved				121	
MEGHALAYA					
2006-07 (Base year)	6630			26,841	
Eleventh Plan	42,247	8.75	1.19	164,720	7.47
Twelfth Plan	68,395	11.35	1.13	251,630	10.10
Thirteenth Plan	65,968	14.25	1.01	232,774	13.11
Required GR (%)		10.96	1.13		9.72
GR (%) during 2000-01 to 2004-05		5.77			
Projected level				87,388	
Gap between target and achieved				71	
MIZORAM					
2006-07 (Base year)	3653			38,613	
Eleventh Plan	24,178	9.50	1.18	245,954	8.22
Twelfth Plan	38,061	9.50	1.13	365,532	8.27
Thirteenth Plan	32,652	9.50	1.02	300,778	8.40
Required GR (%)		9.50	1.13		8.27
GR (%) during 2000-01 to 2004-05		9.34			
Projected level				108,443	
Gap between target and achieved				-20,984	
NAGALAND					
2006-07 (Base year)	8201			38,700	
Eleventh Plan	52,722	8.50	1.19	239,576	7.22

Year	GSDP (FC) at 2006-07 Prices		Average growth rate of population (%)	Per Capita GSDP at 2006-07 Prices	
	Level (Rs crore)	Average growth rate (%)		Level (Rs)	Average growth rate (%)
Twelfth Plan	79,275	8.50	1.14	340,077	7.28
Thirteenth Plan	65,627	8.50	1.01	269,978	7.41
Required GR (%)		8.50	1.13		7.28
GR (%) during 2000-01 to 2004-05		7.78			
Projected level				96,506	
Gap between target and achieved				-9,047	
SIKKIM					
2006-07 (Base year)	1957			33,969	
Eleventh Plan	12,764	9.00	1.21	213,131	7.69
Twelfth Plan	19,638	9.00	1.12	313,189	7.79
Thirteenth Plan	16,551	9.00	1.00	253,200	7.92
Required GR (%)		9.00	1.00		7.92
GR (%) during 2000-01 to 2004-05		8.84			
Projected level				90,888	
Gap between target and achieved				-3,429	
TRIPURA					
2006-07 (Base year)	11,119			32,636	
Eleventh Plan	70,449	8.00	1.19	199,132	6.73
Twelfth Plan	106,575	9.00	1.13	284,331	7.78
Thirteenth Plan	92,719	11.50	1.02	237,199	10.38
Required GR (%)		9.02	1.13		7.80
GR (%) during 2000-01 to 2004-05		7.27			
Projected level				87,115	
Gap between target and achieved				344	

Source: NIPFP computation.

Note: Gaps are computed by keeping the target per capita level at Rs 87,459.

GR (%) = Annual growth rate (%).

Table 1.7A: Estimated Investment Requirement at 2006-07 Prices: 207-08 to 2019-20

Year	Estimated GSDP at 2006-07 prices (Rs crore)	Assumed growth rate of GSDP (%)	Annual Increment of GSDP (Rs crore)	Estimated investment requirement (Rs crore)*	Estimated GDP at 2006-07 prices (Rs crore)	Investment Requirement as percent of	
						GSDP	GDP
SET – I							
2006-07	92,233				3,743,472		
2007-08	99,150	7.5	6,917	27,670	4,080,384	27.9	0.68
2008-09	107,578	8.5	8,428	33,711	4,447,619	31.3	0.76
2009-10	117,798	9.5	10,220	40,880	4,847,905	34.7	0.84
2010-11	130,167	10.5	12,369	49,475	5,284,216	38.0	0.94
2011-12	145,136	11.5	14,969	59,877	5,759,796	41.3	1.04
XI FY Plan	599,830	10.0	52,903	211,613	24,419,920	35.3	0.87
2012-13	162,553	12.0	17,416	69,665	6,278,177	42.9	1.11
2013-14	182,872	12.5	20,319	81,276	6,843,213	44.4	1.19
2014-15	207,102	13.3	24,230	96,922	7,459,102	46.8	1.30
2015-16	236,096	14.0	28,994	115,977	8,130,422	49.1	1.43
2016-17	271,511	15.0	35,414	141,658	8,862,160	52.2	1.60
XII FY Plan	1,060,134	13.7	126,375	505,499	37,573,074	47.7	1.35
2017-18	313,595	15.5	42,084	168,337	9,659,754	53.7	1.74
2018-19	364,554	16.3	50,959	203,837	10,529,132	55.9	1.94
2019-20	424,706	16.5	60,151	240,606	11,476,754	56.7	2.10
XIII FY Plan	1,102,855	16.4	153,195	612,779	31,665,640	55.6	1.94
Total	2,762,819			1,329,891	93,658,634	48.1	1.42
SET – II							
2007-08	99,150	7.5	6,917	27,670	4,080,384	27.9	0.68
2008-09	107,578	8.5	8,428	33,711	4,447,619	31.3	0.76
2009-10	117,798	9.5	10,220	40,880	4,847,905	34.7	0.84
2010-11	130,167	10.5	12,369	49,475	5,284,216	38.0	0.94
2011-12	145,136	11.5	14,969	59,877	5,759,796	41.3	1.04
XI FY Plan	599,830	10.0	52,903	211,613	24,419,920	35.3	0.87
2012-13	162,553	12.0	17,416	62,699	6,278,177	38.6	1.00
2013-14	182,872	12.5	20,319	73,149	6,843,213	40.0	1.07
2014-15	207,102	13.3	24,230	87,230	7,459,102	42.1	1.17
2015-16	236,096	14.0	28,994	104,379	8,130,422	44.2	1.28
2016-17	271,511	15.0	35,414	127,492	8,862,160	47.0	1.44
XII FY Plan	1,060,134	13.7	126,375	454,949	37,573,074	42.9	1.21
2017-18	313,595	15.5	42,084	134,669	9,659,754	42.9	1.39
2018-19	364,554	16.3	50,959	163,069	10,529,132	44.7	1.55
2019-20	424,706	16.5	60,151	192,485	11,476,754	45.3	1.68
XIII FY Plan	1,102,855	16.4	153,195	490,223	31,665,640	44.5	1.55
Total	2,762,819			1,156,785	93,658,634	41.9	1.24

Source: NIPFP computation.

Note: * indicate investment are estimated assuming Incremental Capital Output Ratio (ICOR) = 4 for entire period in Set-I and also for XI Five Year Plan in Set-II. It is 3.6 for XII Five Year Plan, and 3.2 for first three year of XIII Five Year Plan period.

Annexure 2

CHAPTER 2: EMPOWERING PEOPLE: PARTICIPATORY GOVERNANCE, GRASSROOTS PLANNING AND Service Delivery

ANNEXURE 2.1

Table 2.1A: Number of Rural Local Bodies in the NER

States	Gram Panchayats	Village Councils	Block Panchayats	Zila Parishads	ADC	Hill ADC	Total
Arunachal Pradesh	1,747	0	150	15	0	0	1,912
Assam	2,487	0	203	20	0	0	2,710
Manipur	166	0		4	6	0	176
Meghalaya	0	0	0	0	3	0	3
Mizoram	0	737	0	0	0	3	740
Nagaland	0	1286	0	0	0	0	1,286
Sikkim	166	0	0	4	0	0	170
Tripura	540	0	23	4	0	0	567
NER State	5,106	2,023	376	47	9	3	7,564
All States	234,327	2,023	6,795	531	9	3	243,688

Source: Government of India (2004), *Report of the Twelfth Finance Commission* (2005-10) November.

Table 2.2A: Number of Urban Local Bodies in the NER

States	Municipal Corporations	Municipalities	Town/ Nagar Panchayats	Town Committee	Municipal Councils	Total
Arunachal Pradesh	ULBs do not exist					
Assam	1	28	54	0	0	83
Manipur	0	0	18	1	9	28
Meghalaya	0	6	0	0	0	6
Mizoram	ULBs do not exist					
Nagaland	0	0	0	9	0	9
Sikkim	ULBs do not exist					
Tripura	0	0	12	0	1	13
NER State	1	34	84	10	10	139
All States	109	1,432	2,162	10	10	3,723

Source: Government of India (2004), *Report of the Twelfth Finance Commission* (2005-10) November

Table 2.3A: Status of Elected Panchayat Representatives, 2006

(Number, Percent)

State	Panchayats	Elected Panchayat Representatives at All Levels						Women	
		General	Schedule Castes		Schedule Tribes		Total		
			No.	%	No.	%		No.	%
Arunachal Pradesh	1,789	0	0	0	8,260	100.0	8,260	3,183	38.5
Assam	2,431	23,206	1,344	5.3	886	3.5	25,436	9,903	38.5
Manipur	169	1,684	43	2.4	41	2.3	1,768	646	36.5
Sikkim	170	639	57	5.7	309	30.7	1,005	384	38.2
Tripura	540	3,914	1,509	26.3	310	5.4	5,733	1,986	34.6
All States	239,544	19,74,848	5,26,618	18.6	3,27,313	11.6	28,28,779	10,38,989	36.7

Source: *Institute of Social Sciences (2007)*: Panchayat Raj Update, January.

Table 2.4A: Departments and Subjects Transferred to Panchayats

(Number)

State	Departments/Subjects Transferred to Panchayats			Departments/Subjects Not Transferred to Panchayats		
	Funds	Functions	Functionaries	Funds	Functions	Functionaries
Arunachal Pradesh	5	13	2	24	16	27
Assam	-	-	-	29	29	29
Manipur	-	22	4	29	7	25
Sikkim	29	29	29	-	-	-
Tripura	-	12	-	29	17	29

Source: *The State of the Panchayats, A Mid-Term Review and Appraisal*, 22, November 2006, Vol. II., Ministry of Panchayati Raj, Government of India.

Note: Does not apply on Meghalaya, Mizoram and Nagaland.

Table 2.5A: Status of Activity Mapping by Panchayati Raj Institutions (PRIs)

<i>States</i>	<i>Transfer of Subjects Through Legislation</i>	<i>Activity Mapping Undertaken</i>	<i>Most Recent Position</i>
Arunachal Pradesh	-	3 subjects	An officer of the state government was designate to prepare the Activity Mapping document with assistance from PRIA, an NGO. The work is still under progress.
Assam	29 subjects	29 subjects	Assam has undertaken a detailed activity mapping in June 2007. Orders are to be issued for the devolution of funds to match activity mapping
Manipur	22 functions	22 subjects	Activities Mapping of 22 subjects was completed in 2001. However, Manipur has agreed to revisit their activity mapping.
Sikkim	28 functions		Sikkim has competed a detailed activity mapping in October, 2006.
Tripura	29 subjects	21 subjects	In 1994 orders were issued for devolving 21 subjects. In respect of 8 subjects orders are awaited because of operational problems related to 6 th schedule. Activities Mapping exercise is on and it is also looking at administrative powers to the PRIs. Earlier only functional and financial devolution existed. Current exercise is aimed at administrative control to PRIs for 10 departments.

Source: *The State of the Panchayats, A Mid-Term Review and Appraisal*, 22, November 2006, Vol. III, Ministry of Panchayati Raj, Government of India.

Note: Meghalaya, Mizoram and Nagaland are out of implementation of CAA.

Table 2.6A: Activity Mapping: Distribution of Functions

District Panchayat	Intermediate Panchayat	Village Panchayat (GP)
<ul style="list-style-type: none"> ○ Supervise, guide and support services for implementation of Literacy mission projects ○ Monitor functioning of the scheme in the district promote people's participation in programmes through involvement of local leadership. 	<ul style="list-style-type: none"> ○ Supervise project staff of adult education department, including literacy centre and continuing education workers ○ Assist officers concerned with the programme in procurement and distribution of material and other supplies connected with literacy. ○ Manage a demand-driven fund for infrastructure at the GP level. ○ Run the logistic support to facilitate implementation of the programme. 	<ul style="list-style-type: none"> ○ Select and assist literacy centre workers survey and identify illiterates, site selection, location and construction of literacy and continuing education centres, ○ Ensure community participation through organization regular meetings, ○ Monitoring the implementation of the programme, ○ Involve GP members in the functioning of literacy centres, particularly in ensuring attendance in the centre and availability of facilities. ○ Engage with NGOs and other activists working and independently operating literacy and continuing education centres.

Source: Ministry of Panchayati Raj (2006): *The State of the Panchayats: A Mid-Term Review and Appraisal*, Vols. II, III, Government of India.

ANNEXURE 2.2

I. Constitutional Provisions of Local Governance

A. Sixth Schedule

By clauses (a) and (f) of sub-paragraph (1) of paragraph 3 of the Sixth Schedule to the Constitution of India, the District Council (DC) for an Autonomous District is empowered to make laws with respect to the establishment of Village or Town Committee or Councils and their powers and any matter relating to Village or town administration including village or town police and public health and sanitation. Earlier, Arunachal Pradesh was also part of the Sixth Schedule and administered by the governor of Assam as the agent of the President. But currently, Assam (barring the two districts covered by the Sixth Schedule), Arunachal Pradesh, Manipur and Sikkim have passed legislation bringing local bodies under the CAA.

Functions and Power of Autonomous District Councils

The ADCs are vested with extensive legislative and judicial powers. They govern themselves and try the cases under their own customs and laws through their own judicial set-up. Following are the powers

and functions of the ADC, which emanate from the Sixth Schedule and also and to make laws for the purpose;

1. Allotment, occupation or use or setting apart of land other than any land in any reserved forest, for the purposes of agriculture or grazing or for residential or other non-agricultural purposes or for any other purpose likely to promote the interests of any village or town;
2. Management of any forest, not being a reserved forest, within the autonomous district;
3. Use of any canal or water-course for the purpose of agriculture;
4. Regulation of the practice of *jhum* or other forms of shifting cultivation;
5. Establishment of village or town committees or councils and to regulate any other matter relating to village or town administration;
6. Village or town police;
7. Public health and sanitation;
8. Regulation, by laws, of inheritance of property, marriage and divorce, and social customs;
9. Constitution of VCs or courts for trial of suits and cases between the parties all of whom belong to Scheduled Tribes;
10. Establishment, construction or management of primary schools, dispensaries, markets, cattle ponds, ferries, fisheries, roads, road transport and waterways;
11. Assessment and collection of land revenue;
12. Levying and collection of taxes on lands and buildings, and tolls on persons resident within the ADCs;
13. Levying and collection of taxes on professions, trades, callings and employment; on animals vehicles and boats; on the entry of goods and tolls on passengers and goods carried in ferries; for maintenance of schools, dispensaries or roads; and
14. Regulation and control of money-lending or trading by persons resident in the ADC.

Functions of Village Committees

1. Distribution of village lands for yearly shifting *jhum* cultivation.
2. Regulation and enforcement of community labour for community works without wages for the welfare of community. Sanitation of the village.
3. Of late, the Government constituted from time to time Village Development Committee to be involved in the process of development activities taken up by the Government. VC Members are included in the Committee. They have to verify that the projects have actually been undertaken.

As regards the functional domain under CAA, it is wider compared to as given under Sixth Schedule. It may be noted that out of the list of Eleventh Schedule only rural housing (item no. 10), drinking water (item no. 11), rural electrification including distribution of electricity (item no. 14), and health and sanitation (item no. 23) are under VCs.

II. 73rd & 74th Amendments to the Constitution of India

The Constitution of India has inserted two indicative lists of functions, which may be assigned to the grass root level governments by their respective states. These lists are not mandatory and restrictive. Additions and deletions is the prerogative of respective legislatures guided by traditions and public demands.

Powers, authority and responsibilities of Panchayats: These powers are covered under Article 243G of the Constitution of India. The state may endow the Panchayats with such powers and authority to enable them to function as institutions of self-government and such law may contain provisions for the devolution of powers and responsibilities upon Panchayats, at the appropriate level, subject to such conditions as may be specified therein, with respect to-

1. The preparation of plans for economic development and social justice;
2. The implementation of schemes for economic development and social justice as may be entrusted to them including those in relation to the matters listed in the Eleventh Schedule.

Powers to impose taxes by, and Funds of, the Panchayats: These powers are covered under Article 243H of the Constitution of India. The state may –

1. Authorise a Panchayat to levy, collect and appropriate such taxes, duties, tolls and fees in accordance with such procedure and subject to such limits;

2. Assign to a Panchayat such taxes, duties, tolls and fees levied and collected by the State government for such purposes and subject to such conditions and limits;
3. Provide for making such grant-in-aid to the Panchayats from the Consolidated Fund of the state; and
4. Provide for constitution of such Funds for crediting all moneys received, respectively, by or on behalf of the Panchayats and also for the withdrawal of such moneys there from.

Powers, authority and responsibilities of Municipalities, etc: These powers are covered under Article 243W of the Constitution of India. The state may endow

1. The Municipalities with such powers and authority to enable them to function as institutions of self-government and such law may contain provisions for the devolution of powers and responsibilities upon Municipalities, at the appropriate level, subject to such conditions as may be specified therein, with respect to - the preparation of plans for economic development and social justice; and The implementation of schemes for economic development and social justice as may be entrusted to them including those in relation to the matters listed in the Twelfth Schedule.
2. The Committees with such powers and authority as may be necessary to enable them to carry out the responsibilities conferred upon them including those in relation to the matters listed in the Twelfth Schedule.

Powers to impose taxes by, and Funds of, the Municipalities: These powers are covered under Article 243H of the Constitution of India. The state may –

1. Authorise a Municipalities to levy, collect and appropriate such taxes, duties, tolls and fees in accordance with such procedure and subject to such limits;
2. Assign to a Municipalities such taxes, duties, tolls and fees levied and collected by the State government for such purposes and subject to such conditions and limits;
3. Provide for making such grant-in-aid to the Municipalities from the Consolidated Fund of the state; and
4. Provide for constitution of such Funds for crediting all moneys received, respectively, by or on behalf of the Municipalities and also for the withdrawal of such moneys there from.

Functional Domain of Local Governments under CAA

XI Schedule for PRIs

Serial-wise functions are: (1). Agriculture, including agricultural extension; (2). Land improvement, implementation of land reforms, land consolidation and soil conservation; (3). Minor irrigation, water management and watershed development; (4). Animal husbandry, dairying and poultry; (5). Fisheries; (6). Social forestry; (7). Minor forest produce; (8). Small-scale industries; (9). *Khadi*, village and cottage industries; (10). Rural housing; (11). Drinking water; (12). Fuel and fodder; (13). Roads, culverts, bridges, ferries, waterways and other means of communication; (14). Rural electrification including distribution of electricity; (15). Non-conventional energy sources; (16). Poverty alleviation programme; (17). Education including primary and secondary schools; (18). Technical training and vocational education; (19). Adult and non-formal education; (20). Libraries; (21). Cultural activities; (22). Market and fairs; (23). Health and sanitation, including hospitals, primary health centers and dispensaries; (24). Family welfare; (25). Women and child development; (26). Social welfare including welfare of the handicapped and mentally retarded; (27). Welfare of the weaker sections, and in particular of the scheduled castes and tribes; (28). Public distribution system; and (29). Maintenance of community assets.

XII Schedule for Urban Local Bodies

Serial-wise functions are: (1). Urban planning including town planning; (2). Regulation of land use and construction of buildings; (3). Planning of economic and social development; (4). Roads and bridges; (5). Water supply for domestic, industrial and commercial purposes; (6). Public health, sanitation conservancy and solid waste management; (7). Fire services; (8). Urban forestry, protection of the environment and promotion of ecological aspects; (9). Safeguarding the interests of weaker sections of society, including the handicapped and mentally retarded; (10). Slum improvement and up gradation; (11). Urban poverty alleviation; (12). Provision of urban amenities and facilities such as parks, gardens, playgrounds; (13). Promotion of cultural, educational and aesthetic aspects; (14). Burial and burial grounds, cremations, cremation grounds and electric crematorium; (15). Cattle ponds,

prevention of cruelty to animals; (16). Vital statistics including registration of births and deaths.; (17). Public amenities including street lighting, parking lots, bus stops and public conveniences; and (19). Regulation of slaughter houses and tanneries

Constitution of District Planning Committees

Constitution of District Planning Committees (DPC) by the States has been made mandatory as per the Article 243ZD of the Indian Constitution inserted through the 74th Amendment. District Planning Committee is a monitoring and facilitating body, and need not be engaged in executing any plans or projects by itself.

The main functions of the DPC are

- Consolidation of plans prepared by the *Panchayats* and Municipalities in the district.
- Preparation of a draft development plan for the district as a whole.
- Conducting an objective SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis for the district.

Resource Raising Powers of PRIs and ULBs

The CAA does not specify any list of taxes or non-taxes by which these bodies can fill their funds. However, the states can assign certain taxes of local nature to them like property tax, vehicle tax, entertainment tax, profession tax, etc. But their fiscal relation is dependent on the acceptable recommendations of the state finance commission.

Finance Commission

- (1) The Finance Commission constituted under article 243-I & Y shall also review the financial position of the Panchayats and Municipalities and make recommendations to the Governor as to -
 - (a) the principles which should govern -
 - (i) the distribution between the state and the Panchayats and Municipalities of the net proceeds of the taxes, duties, tolls and fees leviable by the state, which may be divided between them under this Part and the allocation between the Municipalities at all levels of their respective shares of such proceeds;
 - (ii) the determination of the taxes, duties, tolls and fees which may be assigned to, or appropriated by the Panchayats and Municipalities;
 - (iii) the grants-in-aid to the Panchayats and Municipalities from the Consolidated Fund of the state;
 - (b) the measures needed to improve the financial position of the Panchayats and Municipalities;
 - (c) any other matter referred to the Finance Commission by the Governor in the interests of sound finance of the Panchayats and Municipalities.
- (2) The Governor shall cause every recommendation made by the Commission under this article together with an explanatory memorandum as to the action taken thereon to be laid before the Legislature of the state.

Functions of Autonomous District Councils under Sixth Schedule

Under Article 244(2) and 275(1), it has endowed upon ADCs with the following functional domain. The District Councils and / or Regional Councils to make laws with regard to (a). the allotment, occupation or use, or the setting apart, of land, other than any land which is a reserved forest for the purposes of agriculture or grazing or for residential or other non-agricultural purposes or for any other purpose likely to promote the interests of the inhabitants of any village or town; (b). the management of any forest not being a reserved forest; (c). the use of any canal or water-course for the purpose of agriculture; (d) the regulation of the practice of *jhum* or other forms of shifting cultivation; (e). the establishment of village or town committees or councils and their powers; (f). any other matter relating to village or town administration, including village or town police and public health and sanitation; (g). the appointment or succession of Chiefs or Headmen; (h). the inheritance of property; (i). marriage and divorce; and (j). social customs.

The ADCs are also conferred with the powers under the Code of Civil Procedure, 1908, and the Code of Criminal Procedure, 1898, and on certain courts and officers for the trial of certain suits, cases and offences for the trial of suits or cases arising out of any law in force in any autonomous district or region being a law specified in that behalf by the Governor, or for the trial of offences punishable with death, transportation for life, or imprisonment for a term of not less than five years under the Indian Penal Code or under any other law for the time being applicable to such district or

region, confer on the District Council or the Regional Council having authority over such district or region or on courts constituted by such District Council or on any officer appointed in that behalf by the Governor, such powers under the Code of Civil Procedure, 1908, or, as the case may be, the Code of Criminal Procedure, 1898, as he deems appropriate, and thereupon the said Council, Court or officer shall try the suits, cases or offences in exercise of the powers so conferred.

The District Council of an autonomous district may make regulations for the regulation and control of money-lending or trading within the district by persons other than Scheduled Tribes resident in the district. Such regulations may (a). prescribe that no one except the holder of a licence issued in that behalf shall carry on the business of money-lending; (b). prescribe the maximum rate of interest which may be charged or be recovered by a money-lender; (c). provide for the maintenance of accounts by money-lenders and for the inspection of such accounts by officers appointed in that behalf by the District Council; and (d). prescribe that no person who is not a member of the Scheduled Tribes resident in the district shall carry on wholesale or retail business in any commodity except under a licence issued in that behalf by the District Council:

Powers of the District Council

The ADC may establish, construct, or manage primary schools, dispensaries, markets, cattle pounds, ferries, fisheries, roads, road transport and waterways in the district and may, with the previous approval of the Governor, make regulations for the regulation and control thereof and, in particular, may prescribe the language and the manner in which primary education shall be imparted in the primary schools in the district. They may be entrusted either conditionally or unconditionally to that Council or to its officer's functions in relation to agriculture, animal husbandry, community projects, co-operative societies, social welfare, village planning or any other matter to which the executive power of the state extends.

Resource Raising Powers of ADCs'

Under the Sixth Schedule the ADCs are empowered with certain resource-raising powers.

- (1) It is limited to land within such region and the District Council for an autonomous district in respect of all lands within the district except those which are in the areas under the authority of Regional Councils, if any, within the district, shall have the power to assess and collect revenue in respect of such lands in accordance with the principles for the time being followed by the Government of the State in assessing lands for the purpose of land revenue in the State generally. It shall have power to levy and collect taxes on lands and buildings, and tolls on person resident within such areas.
- (2) The District Council for an autonomous district shall have the power to levy and collect all or any of the following taxes within such district, that is to say-
 - (a) taxes on professions, trades, callings and employments;
 - (b) taxes on animals, vehicles and boats;
 - (c) taxes on the entry of goods into a market for sale therein, and tolls on passengers and goods carried in ferries; and
 - (d) taxes for the maintenance of schools, dispensaries or roads.

In addition, licences or leases for the purpose of prospecting for, or extraction of, minerals are also included to their resources. Such share of the royalties accruing each year from licences or leases for the purpose of prospecting for, or the extraction of, minerals granted by the state government in respect of any area within an autonomous district as may be agreed upon between the state government of the and the District Council of such district shall be made over to that District Council.

The organizations that can bring out effective solutions jointly or singly are Central government, UN agencies, international donor agencies, non-governmental organizations (NGO), and local representational bodies (both rural and urban). Bringing all the developmental agencies operating in the district on a single platform in order to provide an opportunity to listen to each other and identify the development potential of the district and devise suitable strategies for the development of the district.

II. Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

I. Need for Development of the Urban Sector

1. Background

- (1) **Need for Urban Sector Development:** According to the 2001 census, India has a population of 1027 million with approximately 28 percent or 285 million people living in urban areas. As a result of the liberalization policies adopted by the Government of India is expected to increase the share of the urban population may increase to about 40 percent of total population by the year 2021. It is estimated that by the year 2011, urban areas would contribute about 65 percent of gross domestic product (GDP). However, this higher productivity is contingent upon the availability and quality of infrastructure services. Urban economic activities are dependent on infrastructure, such as power, telecom, roads, water supply and mass transportation, coupled with civic infrastructure, such as sanitation and solid waste management.
- (2) **Investment Requirements in the Urban Sector:** It is estimated that over a seven-year period, the Urban Local Bodies (ULBs) would require a total investments of Rs. 1,20,536 crores. This includes investment in basic infrastructure and services, that is, annual funding requirement of Rs. 17,219 crores. It is well recognised that in order to fructify these investments, a national level initiative is required that would bring together the State Governments and enable ULBs catalyse investment flows in the urban infrastructure sector.
- (3) **Need for National-Level Reform-Linked Investments:** There is a need to integrate the reform initiatives and scale up the effort to catalyse investment in urban infrastructure across States in the country. There is a felt need to set up an initiative that will provide reformlinked assistance to State Governments and ULBs in the country.
- (4) **Need for Sustainable Infrastructure Development:** Another crucial aspect requiring immediate attention is that physical infrastructure assets created in urban areas have generally been languishing due to inadequate attention and/or improper O&M. The fiscal flows to the sector have laid emphasis only on the creation of physical assets. Not much effort has been made either to manage these assets efficiently or to achieve self-sustainability. It is therefore necessary that a link be established between asset creation and management, as both are important components for ensuring sustained service delivery. This is proposed to be secured through an agenda of reforms.
- (5) **Need for Efficiency Enhancement:** Concurrent with statutory reforms, such as the enactment of a model municipal law, reduction in stamp duty, repeal of the Urban Land (Ceiling and Regulation) Act, 1976 (ULCRA) etc, there is an urgent need to take measures to enhance efficiencies in urban service deliveries.

2. Rationale for the JNNURM

- (1) **National Common Minimum Programme of the Government of India:** The National Common Minimum Programme attaches the highest priority to the development and expansion of physical infrastructure. Accordingly, it is proposed to take up a comprehensive programme of urban renewal and expansion of social housing in towns and cities, paying attention to the needs of slum dwellers.
- (2) **Commitment to Achieving the Millennium Development Goals:** The Millennium Development Goals commit the international community, including India, to an expanded vision of development as a key to sustaining social and economic progress. As a part of its commitment to meet the Millennium Development Goals, the Government of India proposes to: (i) facilitate investments in the urban sector; and (ii) strengthen the existing policies in order to achieve these goals.
- (3) **Need for a Mission-led Initiative:** Since cities and towns in India constitute the second largest urban system in the world, and contribute over 50 percent of the country's GDP, they are central to economic growth. For the cities to realise their full potential and become effective engines of growth, it is necessary that focused attention be given to the improvement of infrastructure.

II. Jawaharlal Nehru National Urban Renewal Mission

1. The Mission

Mission Statement: *The aim is to encourage reforms and fast track planned development of identified cities. Focus is to be on efficiency in urban infrastructure and service delivery mechanisms, community participation, and accountability of ULBs/ Parastatal agencies towards citizens.*

2. Objectives of the Mission

- (1) The objectives of the JNNURM are to ensure that the following are achieved in the urban sector;
- (a) Focussed attention to integrated development of infrastructure services in cities covered under the Mission;
 - (b) Establishment of linkages between asset-creation and asset-management through a slew of reforms for long-term project sustainability;
 - (c) Ensuring adequate funds to meet the deficiencies in urban infrastructural services;
 - (d) Planned development of identified cities including peri-urban areas, outgrowths and urban corridors leading to dispersed urbanisation;
 - (e) Scale-up delivery of civic amenities and provision of utilities with emphasis on universal access to the urban poor;
 - (f) Special focus on urban renewal programme for the old city areas to reduce congestion; and
 - (g) Provision of basic services to the urban poor including security of tenure at affordable prices, improved housing, water supply and sanitation, and ensuring delivery of other existing universal services of the government for education, health and social security.

3. Scope of the Mission

The Mission shall comprise two Sub- Missions, namely:

- (1) **Sub-Mission for Urban Infrastructure and Governance:** This will be administered by the Ministry of Urban Development through the Sub- Mission Directorate for Urban Infrastructure and Governance. The main thrust of the Sub-Mission will be on infrastructure projects relating to water supply and sanitation, sewerage, solid waste management, road network, urban transport and redevelopment of old city areas with a view to upgrading infrastructure therein, shifting industrial and commercial establishments to conforming areas, etc.
- (2) **Sub-Mission for Basic Services to the Urban Poor:** This will be administered by the Ministry of Urban Employment and Poverty Alleviation through the Sub-Mission Directorate for Basic Services to the Urban Poor. The main thrust of the Sub-Mission will be on integrated development of slums through projects for providing shelter, basic services and other related civic amenities with a view to providing utilities to the urban poor.

4. Strategy of the Mission

The objectives of the Mission shall be met through the adoption of the following strategy:

- (1) **Preparing City Development Plan:** Every city will be expected to formulate a City Development Plan (CDP) indicating policies, programmes and strategies, and financing plans.
- (2) **Preparing Projects:** The CDP would facilitate identification of projects. The Urban Local Bodies (ULBs) / parastatal agencies will be required to prepare Detailed Project Reports (DPRs) for undertaking projects in the identified spheres. It is essential that projects are planned in a manner that optimises the life-cycle cost of projects. The life-cycle cost of a project would cover the capital outlays and the attendant O&M costs to ensure that assets are in good working condition. A revolving fund would be created to meet the O&M requirements of assets created, over the planning horizon. In order to seek JNNURM assistance, projects would need to be developed in a manner that would ensure and demonstrate optimisation of the life-cycle costs over the planning horizon of the project.
- (3) **Release and Leveraging of Funds:** It is expected that the JNNURM assistance would serve to catalyse the flow of investment into the urban infrastructure sector across the country. Funds from the Central and State Government will flow directly to the nodal agency designated by the State, as grants-in-aid. The funds for identified projects across cities would be disbursed to the

ULB/Parastatal agency through the designated State Level Nodal Agency (SLNA) as soft loan or grant-cum-loan or grant. The SLNA / ULBs in turn would leverage additional resources from other sources.

- (4) **Incorporating Private Sector Efficiencies:** In order to optimise the life-cycle costs over the planning horizon, private sector efficiencies can be inducted in development, management, implementation and financing of projects, through Public Private Partnership (PPP) arrangements.

5. Expected Outcomes of the JNNURM

On completion of the Mission period, it is expected that ULBs and parastatal agencies will have achieved the following:

- (1) Modern and transparent budgeting, accounting, financial management systems, designed and adopted for all urban service and governance functions
- (1) City-wide framework for planning and governance will be established and become operational
- (2) All urban residents will be able to obtain access to a basic level of urban services
- (3) Financially self-sustaining agencies for urban governance and service delivery will be established, through reforms to major revenue instruments
- (4) Local services and governance will be conducted in a manner that is transparent and accountable to citizens
- (5) E-governance applications will be introduced in core functions of ULBs/Parastatal resulting in reduced cost and time of service delivery processes.

III. Assistance under JNNURM

1. Financial Assistance under JNNURM

The Government of India has proposed substantial assistance through the JNNURM over the seven-year period. During this period, funds shall be provided for proposals that would meet the Mission's requirements². Under JNNURM financial assistance will be available to the ULBs and parastatal agencies which could deploy these funds for implementing the projects themselves or through the special purpose vehicles (SPVs) that may be expected to be set up. Assistance under JNNURM is additional central assistance, which would be provided as grant (100 percent central grant) to the implementing agencies. Further, assistance from JNNURM is expected to facilitate further investment in the urban sector. To this end, the implementing agencies are expected to leverage the sanctioned funds under JNNURM to attract greater private sector investments through PPP that enables sharing of risks between the private and public sector.

2. Areas of Assistance under JNNURM

(1) Assistance for Capacity Building, City Development Plan (CDP), Detailed Project Reports (DPRs), Community Participation, Information, Education and Communication (IEC)

- (a) The JNNURM will provide assistance for the above-stated components with a provision of 5 percent of the total central assistance or the actual requirement, whichever is less. In addition, not more than 5 percent of the Central grant or the actual requirement, whichever is less may be used for Administrative and Other Expenses (A&OE) by the States For capacity building, ULBs and parastatal agencies could engage consultants, in consultation with the SLNA, and seek reimbursement from the Ministry of Urban Development (MoUD) of the Ministry of Urban Employment and Poverty Alleviation (MoUEPA).

(2) Investment Support Component

- (b) Investment support will be provided to implementing agencies on a project-specific basis for eligible sectors and projects proposed to be undertaken in eligible cities subject to approval of the Central Sanctioning and Monitoring Committee (CSMC) of MoUD/ MoUEPA. As part of the process for seeking investment support, each ULB seeking assistance from the JNNURM

would be required to prepare a CDP that shall *inter alia* include strategy to 2 Refer Section IV: *Eligible Cities, Sectors and Projects* implement reforms, city-level improvements and an investment plan to address the infrastructure needs in a sustainable manner. Assistance under investment support can be deployed in the following forms:

- 1) **Enhancing Resource Availability:** The JNNURM assistance can be used to leverage additional resources available with the ULBs in addition to their existing resources and transfers from the State. These resources could be utilised for capital investment and O&M investments in a project.
- 2) **Enhancing Commercial Viability of Projects:** In respect of projects, which are not commercially viable on a stand-alone basis, assistance under the JNNURM may be sought for enhancing project viability. This assistance could be in the nature of viability gap support to projects.
- 3) **Ensuring Bankability of Projects:** Cash flows of infrastructure projects having long gestation periods are susceptible to variations in cash flows, rendering a project non-bankable. To enhance predictability of underlying cash-flows, credit enhancement mechanisms such as establishing liquidity support mechanisms, up-front debt-service reserve facility, deep discount bonds, contingent liability support and equity support are required in order to make the projects bankable. The JNNURM assistance could therefore be used for funding such support mechanisms.

IV. Eligible Sectors and Projects

1. Sectors and Projects Eligible for Assistance under the Sub-Mission Directorate for Urban Infrastructure and Governance

The sectors and projects eligible for JNNURM assistance would be as follows:

- (1) Urban renewal, that is, redevelopment of inner (old) city areas [including widening of narrow streets, shifting of industrial and commercial establishments from non-conforming (inner city) areas to conforming (outer city) areas to reduce congestion, replacement of old and worn out pipes by new and higher capacity ones, renewal of the sewerage, drainage, and solid waste disposal system etc.] ;
- (2) Water supply (including desalination plants) and sanitation.
- (3) Sewerage and solid waste management.
- (4) Construction and improvement of drains and storm water drains.
- (5) Urban transportation including roads, highways, expressways, MRTS, and metro projects.
- (6) Parking lots and spaces on PPP basis.
- (7) Development of heritage areas
- (8) Prevention and rehabilitation of soil erosion and landslides only in cases of special category States where such problems are common; and
- (9) Preservation of water bodies.

NOTE: Land cost will not be financed except for acquisition of private land for schemes and projects in the North Eastern States and hilly States, namely Himachal Pradesh, Uttarakhand and Jammu and Kashmir

2. Sectors and Projects Eligible for Assistance under the Sub-Mission Directorate for Basic Services to the Urban Poor.

The sectors and projects eligible for JNNURM assistance in eligible cities would be as follows:

- (1) Integrated development of slums, housing and development of infrastructure projects in
- (1) Slums in the identified cities;
- (2) Projects involving development, improvement, and maintenance of basic services to the urban poor.
- (3) Slum improvement and rehabilitation of projects.
- (4) Projects on water supply, sewerage, drainage, community toilets, and baths etc.

- (5) Projects for providing houses at affordable cost for slum dwellers, urban poor, economically weaker sections (EWS) and lower income group (LIG) categories.
- (6) Construction and improvement of drains and storm water drains.
- (7) Environmental improvement of slums and solid waste management.
- (8) Street lighting.
- (9) Civic amenities like community halls, child care centres etc.
- (10) Operation and Maintenance of assets created under this component.
- (11) Convergence of health, education and social security schemes for the urban poor

NOTE: Land cost will not be financed except for acquisition of private land for schemes and projects in the

North Eastern States and hilly States, namely Himachal Pradesh, Uttarakhand and Jammu and Kashmir.

4. Inadmissible Components for JNNURM Assistance

Projects pertaining to the following are not eligible for JNNURM assistance:

- (1) Power
- (2) Telecom
- (3) Health
- (4) Education
- (5) Wage employment programme and staff components.
- (6) Creation of fresh employment opportunities

V. Agenda of Reforms

The thrust of the JNNURM is to ensure improvement in urban governance and service delivery so that ULBs become financially sound and sustainable for undertaking new programmes. It is also envisaged that, with the charter of reforms that are followed by the State governments and ULBs, a stage will be set for PPPs. The agenda of reforms is given in the section below. The National Steering Group (NSG) may add additional reforms to identified reforms. A Memorandum of Agreement (MoA) between States/ULBs/Parastatal agencies and the Government of India, a prerequisite for accessing the Central assistance, would spell out specific milestones to be achieved for each item of reform. All mandatory and optional reforms shall be completed within the Mission period.

1. Mandatory Reforms

(1) Mandatory Reforms at the Level of ULBs, and Parastatal Agencies

1. Adoption of modern accrual-based double entry system of accounting in ULBs and parastatal agencies.
2. Introduction of a system of e-governance using IT applications, such GIS and MIS for various services provided by ULBs and parastatal agencies.
3. Reform of property tax with GIS. It becomes a major source of revenue for ULBs and arrangements for its effective implementation so that collection efficiency reaches at least 85 percent within next seven years.
4. Levy of reasonable user charges by ULBs and Parastatals with the objective that the full cost of O&M or recurring cost is collected within the next seven years. However, cities and towns in the North East and other special category States may recover only 50 percent of O&M charges initially. These cities and towns should graduate to full O&M cost recovery in a phased manner.
5. Internal earmarking, within local bodies, budgets for basic services to the urban poor.
6. Provision of basic services to the urban poor including security of tenure at affordable prices, improved housing, water supply and sanitation. Delivery of other existing universal services of the government for education, health and social security is ensured.

(2) Mandatory Reforms at the Level of States

- (a) Implementation of decentralisation measures as envisaged in 74th Constitutional Amendment Act. The State should ensure meaningful association and engagement of ULBs in planning the function of parastatal agencies as well as the delivery of services to the citizens.
- (b) *Repeal of ULCRA.
- (c) *Reform of Rent Control Laws balancing the interests of landlords and tenants.
- (d) Rationalisation of Stamp Duty to bring it down to no more than 5 percent within next seven years.
- (e) Enactment of the Public Disclosure Law to ensure preparation of medium-term fiscal plan of ULBs and parastatal agencies and release of quarterly performance information to all stakeholders.
- (f) Enactment of the Community Participation Law to institutionalise citizen's participation and introduce the concept of the Area Sabha in urban areas.
- (g) Assigning or associating elected ULBs with "city planning function". Over a period of seven years, transferring all special agencies that deliver civic services in urban areas to ULBs and creating accountability platforms for all urban civic service providers in transition.

** Note: In respect of people oriented schemes relating to water supply and sanitation, the under-mentioned State level mandatory reforms may be taken as optional reforms (b) Repeal of Urban Land Ceiling and Regulation Act (c) Reform of Rent Control Act*

2. Optional Reforms (common to States, ULBs and Parastatal Agencies)

The following optional reforms are expected to be undertaken by ULBs, parastatal agencies and State governments:

- a. Revision of bye-laws to streamline the approval process for construction of buildings, development of site etc.
- b. Simplification of legal and procedural frameworks for conversion of land from agricultural to non-agricultural purposes.
- c. Introduction of Property Title Certification System in ULBs.
- d. Earmarking at least 20-25 percent of developed land in all housing projects (both public and private agencies) for EWS and LIG category with a system of cross subsidisation.
- e. Introduction of computerised process of registration of land and property.
- f. Revision of byelaws to make rain-water harvesting mandatory in all buildings and adoption of water conservation measures.
- g. Byelaws for reuse of recycled water.
- h. Administrative reforms i.e. reduction in establishment costs by adopting the Voluntary Retirement Scheme (VRS), not filling posts falling vacant due to retirement etc., and achieving specified milestones in this regard.
- i. Structural reforms.
- j. Encouraging PPP.

Note: Cities under the JNNURM will have the freedom to opt for any two reforms from the optional category in each year of implementation.

ANNEXURE 2.3

RECOMMENDATIONS BY OTHER REPORTS

Recommendations made by some studies may be of some interest here.

Sikkim Vision 2020 observed that provision of basic services will remain within the purview of state; though community participation in many ways can be explored. Delegation of powers, functions and finance to the local bodies is essential to improve service delivery at the grassroots.

Participation of local bodies in decision making is needed for formation of policies that are more realistic and relevant in local needs. Encourage use of technology in public service delivery especially in view of communication and access problems in Sikkim. On line systems can be introduced in various government offices to effect staff savings and speed up service delivery. IT can be used to increase government citizen interface through initiatives on the e-governance front. In addition to allowing easy and convenient access to government services, such initiatives are helpful in cutting down corruption. Use of IT e.g. video-conferencing system will enable speedy decision making.

The **Sikkim Development Report** recommended that for efficient working of the 73rd and 74th CAA, infrastructure of Panchayats needs to be improved. Panchayat members should be trained to use CIC's so that villages can learn from them and take advantage of the facility. Community based conservation programme like Swajaldhara to be initiated soon. Panchayats can form self help group (SHG's). Monitoring by panchayats can increase the efficacy of employment generation programmes. Play role of investigators in locating the gaps in policy implementation.

On local decentralisation and governance issues, **Assam State Development Report** has observed that local governments especially in rural areas are not very well developed. They are very poor compared to other states; both urban and rural local governments play a relatively insignificant role in provision of local services. In addition to low levels of spending by local governments in both rural and urban areas, most of the spending is on non-developmental items including staff salaries and other administrative expenses. Local governments generate negligible resources in rural areas. Even by ULBs meagre resources are generated. Weak local governments, lacking powers, functions and resources result in poor pace of development and adversely affect poverty alleviation. Benefits of rural development programmes are reaching undeserving classes. Therefore, reform local government machinery to improve availability of trained staff either transfer own staff or make new recruitment locally. Work on accounts and establishment may be computerised and work carried out by technical competent staff to allow downsizing. Develop training infrastructure and train technical staff. Done through induction courses and regular refresher courses. Train local staff so as to make them more supportive of the community action programmes.

Mizoram Development Report (2007) takes note of the Government of India's (2002) recommendation for careful steps to be taken to devolve political powers through the intermediate and local-level traditional political organisations, provided their traditional practices carried out in a modern world do not deny legitimate democratic rights to any section in their contemporary society. To begin with, the subjects given under the Sixth Schedule and those mentioned in the Eleventh and Twelfth Schedules could be entrusted to the DCs and ADCs. The system of in-built safeguards in the Sixth Schedule should be maintained and strengthened for the minority and micro-minority groups while empowering them with greater responsibilities and opportunities, for example, through the process of Central funding for Plan expenditure instead of routing all funds through the state Governments. The North Eastern Council (NEC) can play a central role here by developing a process of public education on the proposed changes, which would assure communities about protection of their traditions and also bring in gender representation and give voice to other ethnic groups.

Specifically to improve the functioning of ADCs, Chakraborty (2006) has suggested to reduce administrative expenses of the ADCs by restricting the numbers of members and employees; wind up the State Government offices in the ADCs relating to the subjects entrusted to them; entrust only those functions which they can undertake or carry out without much additional administrative costs; prioritise schemes of agricultural and horticultural development and agro-based industries; empower VCs and involve them in preparation of village-based development-plans and in implementation of the same. Plans for the ADCs should be prepared village-wise in consultation with the respective VCs and the plan-grants should go to the concerned VCs for implementation of such Village-based or Village-wise micro-development schemes; introduce Panchayati Raj and *Nagarpalika* institutions in the autonomous districts by withdrawing the exemption given in various Articles. 243M(1) and 243ZC(1) of the Constitution; and introduce direct funding of developmental schemes as well as to share the administrative costs on the part of the Central Government by making suitable amendment in Article 275(1) of the Constitution as the state is fully inhabited by the Scheduled Tribes only.

North Eastern Council (NEC) Draft Vision 2020, important suggestions on governance.

- Need is of a responsive, committed, transparent and efficient administration.
- Capacity building for e-governance as mentioned in the CMP.
- Planning Commission to provide special assistance to the State of NER to enable them to strengthen/improve project formulation, execution, evaluation and monitoring system.
- NEC to have a cell of expert professional in core sector through outsourcing to assist the states in developing an efficient system.
- Excessive bureaucratic interference, which inhibits flow of private investment, should be avoided.
- Centre to provide adequate financial resources for development in the core sectors of the region's economy. CMP promises that "all NER states will be given special assistance to upgrade and expand infrastructure".

The increasing complexity of the urban sector and the relative weakness of sector institutions points to the need for more careful preparation of projects, including more emphasis on institutional aspects to maximize project benefits and increase sustainability. The strategy calls for more in-depth sector analysis and focus on policy and institutional issues, which in turn requires more emphasis on capacity building. It should be out of sight that grave challenges of sustainable urban development are staring how the quality of life may be improved, urban poverty can be mitigated which is proving to be more serious compared to rural poverty, and protection of urban environment.

Annexure 3

CHAPTER 3: TRANSFORMING GOVERNANCE AND SECURITY

ANNEXURE 3.1

Table 3.1A: Incidence of Cognizable Crimes under the Indian Penal Code 1981 to 2003

(per lakh population)

State	Year	Murder	Dacoity	Robbery	House-Breaking	Theft	Riots
Arunachal Pradesh	1981	NA	NA	NA	NA	NA	NA
	1990	4.51	4.86	8.1	28.57	38.75	3.82
	2000	6.23	4.31	9.16	24.65	39.59	1.83
	2003	7.06	3.39	5.5	23.19	33.91	0.64
Assam	1981	3.06	1.98	3.34	28.41	55.47	29.19
	1990	4.29	3.44	7.03	14.81	34.43	21.43
	2000	5.72	2.66	2.78	10.35	21.15	12.79
	2003	4.47	1.77	1.96	9.78	20.74	12.54
Manipur	1981	8.66	3.73	10.49	15.34	46.52	11.82
	1990	5.44	0.44	2.23	8.22	15.73	8.00
	2000	9.08	0.5	1.13	3.10	8.83	3.94
	2003	6.28	0.13	0.25	2.85	10.55	3.06
Meghalaya	1981	6.14	2.17	4.27	18.64	45.89	11.98
	1990	6.65	1.86	2.65	10.09	28.17	2.76
	2000	5.38	3.99	5.42	7.24	16.48	0.43
	2003	7.59	3.6	5.77	6.94	15.61	0.22
Mizoram	1981	NA	NA	NA	NA	NA	NA
	1990	3.91	1.59	6.52	32.48	73.94	
	2000	4.49	0.67	1.91	43.09	105.04	0.22
	2003	5.16	0.56	2.36	54.65	146.2	0.34
Nagaland	1981	3.61	1.16	6.97	36.91	62.72	4.77
	1990	5.87	2.65	11.74	29.1	36.21	1.98
	2000	5.58	2.11	6.29	8.60	13.12	0.55
	2003	4.58	0.96	4.63	4.78	11.11	0.4
Sikkim	1981	2.53	0.0	2.84	10.43	31.29	0.95
	1990	2.21		2.46	13.04	19.93	
	2000	3.52	0.37	0.37	13.69	11.29	3.15
	2003	2.59	0.37	0.56	8.88	12.03	1.85
Tripura	1981	4.53	7.79	6.14	41.55	116.56	20.26
	1990	5.77	3.37	6.38	26.8	38.48	19.51
	2000	9.59	1.16	2.22	7.43	9.21	8.96
	2003	7.96	1.13	2.16	5.23	8.65	8.59
NER	1981	3.65	2.5	4.10	28.26	59.26	25.55
	1990	4.64	3.1	6.59	16.48	34.21	17.51
	2000	6.17	2.42	3.09	10.59	21.03	9.85
	2003	5.12	1.68	2.32	9.95	21.45	9.53
India	1981	3.32	2.13	3.36	22.99	61.6	16.11
	1990	4.14	1.31	3.01	15.52	41.73	12.15
	2000	3.64	0.66	2.04	10.26	25.18	7.83
	2003	3.19	0.52	1.71	9.04	23.88	5.58

Source: *Statistical Abstract India*, various issues**Table 3.2A: Incidents of Terrorist Violence in NER: 2004-06***(number)*

State	Year	Incidents	Civilians Killed	Security Forces Killed
Arunachal Pradesh	2004	41 (0.8)	6 (0.4)	2 (0.4)
	2005	32 (0.6)	3 (0.2)	1 (0.2)
	2006#	12 (0.3)	-	-
Assam	2004	267 (5.0)	194 (12.0)	17 (3.1)
	2005	398 (8.1)	173 (11.1)	7 (1.5)
	2006#	334 (8.7)	120 (11.3)	25 (7.6)
Manipur	2004	478 (8.9)	88 (5.5)	36 (6.7)
	2005	554 (11.2)	158 (10.2)	50 (10.7)
	2006#	418 (10.9)	73 (6.9)	27 (8.2)
Meghalaya	2004	47 (0.9)	17 (1.1)	8 (1.5)
	2005	37 (0.7)	1 (0.1)	-
	2006#	36 (0.9)	6 (0.6)	-
Mizoram	2004	3 (0.1)	-	1 (0.2)
	2005	4 (0.1)	2 (0.1)	-
	2006#	5 (0.1)	-	-
Nagaland	2004	186 (3.5)	42 (2.6)	-
	2005	192 (3.9)	28 (1.8)	1 (0.2)
	2006#	254 (6.6)	26 (2.5)	2 (0.6)
Tripura	2004	212 (4.0)	67 (4.2)	46 (8.5)
	2005	115 (2.3)	28 (1.8)	11 (2.4)
	2006#	71 (1.8)	13 (1.2)	14 (4.3)
NER	2004	1234(23.1)	414 (25.7)	110 (20.4)
	2005	1332 (3)	393 (25.3)	70 (15.0)
	2006#	1130 (29.4)	238 (22.5)	68 (20.7)
India	2004	5333	1609	540
	2005	4938	1554	468
	2006#	3844	1059	328

Till October 2006

Note: figures in parenthesis are percentages of India totals.

Source: *indiastat.com*

Table 3.3A: Status of Militancy in NER States: 2003-04*(number)*

State	Year	Incidents	Extremists Killed	Extremists Arrested	Security Forces Killed	Arms Recovered	Arms Surrendered	Extremists Surrendered	Civilians Killed
Arunachal Pradesh	2003	50	31	32	1	34	-	18	7
	2004	41	35	16	2	12	4	23	6
Assam	2003	358	207	215	12	186	609	2,958	182
	2004	267	104	161	17	121	188	742	194
Manipur	2003	243	128	232	27	29	3	5	50
	2004	320	112	370	38	66	-	5	62
Meghalaya	2003	85	37	103	7	53	4	20	35
	2004	47	22	33	8	23	19	95	17
Mizoram	2003	3	-	-	1	-		1	-
	2004	3	3	6	1	10	4	32	-
Nagaland	2003	199	70	90	3	64	15	29	13
	2004	186	55	68	-	31	-	22	42
Tripura	2003	394	50	336	39	76	122	268	207
	2004	212	51	192	46	53	86	365	67

Source: indiastat.com

Table 3.4A: Strength of Police Force in NER: 1981-2003*(number)*

State	Year	Police per 100 sq. km	Police per lakh of population	IPC Cases per Civil Police
Arunachal Pradesh	1981	NA	NA	NA
	1990	4.6	470	0.9
	2000	6.4	450	1
	2003	6.8	510	0.9
Assam	1981	39.6	1,560	2.1
	1990	52.7	170	1.7
	2000	69.8	210	2.5
	2003	66.4	190	2.9
Manipur	1981	31.5	4,990	1
	1990	50.4	630	0.5
	2000	65.2	570	1.4
	2003	61.3	550	1.3
Meghalaya	1981	20.8	3,520	0.6
	1990	32.6	430	0.3
	2000	37.1	340	0.7
	2003	38.7	360	0.8
Mizoram	1981	NA	NA	NA
	1990	19.8	600	0.7
	2000	30.2	660	2.4
	2003	33.7	770	1.5
Nagaland	1981	55.8	11,920	0.3
	1990	96.6	1440	0.2
	2000	91.2	890	0.5
	2003	71	570	0.5
Sikkim	1981	23.3	5,400	0.2
	1990	31.5	510	0.2
	2000	57.1	720	0.3
	2003	43.8	550	0.3
Tripura	1981	58.1	2,970	1.3
	1990	79.4	340	1
	2000	130.3	360	0.7
	2003	161	510	0.6
India	1981	27.3	1,310	2.1
	1990	34	1,400	1.8

State	Year	Police per 100 sq. km	Police per lakh of population	IPC Cases per Civil Police
	2000	41	130	2.2
	2003	41.4	120	2.1

Source: *Statistical Abstract India*, various issues.

Table 3.5A: Expenditure on Police and Training in NER: 2000-01 to 2004-05

(Rs crore per lakh population)

State	Police Expenditure					Police Training Expenditure				
	2000-01	2001-02	2002-03	2003-04	2004-05	2000-01	2001-02	2002-03	2003-04	2004-05
Arunachal Pradesh	5.7	6.29	6.12	7.31	5.04	0.21	0.22	0.21	0.2	0.17
Assam	2.17	2.2	2.3	2.26	2.75	0.02	0.02	0.02	0.02	0.03
Manipur	5.08	5.59	4.94	5.35	5.89	0.07	0.12	0	0.08	0
Meghalaya	4.1	4.06	4.27	4.74	4.85	0.03	0.03	0.04	0.04	0.05
Mizoram	9.11	9.86	10.63	11.95	10.91	0.32	0.36	0.42	0.23	0.25
Nagaland	8.42	6.87	10.65	12.55	11.19	0.24	0.3	0.28	0.35	0.34
Sikkim	7.44	7.53	8.9	9.17	10.3	0.1	0.09	0.1	0.1	0.1
Tripura	5.41	6.37	6.68	7.02	6.81	0.14	0.14	0.16	0.16	0.1
India	1.51	1.53	1.59	1.67	1.81	0.02	0.02	0.02	0.02	0.02

Note: population projected according to the 1991-2001 decadal population growth.

Source: *Statistical Abstract India*, various issues

Annexure 4

CHAPTER 4: AGRICULTURAL GROWTH, RURAL DEVELOPMENT AND NON-FARM RURAL EMPLOYMENT ACTIVITIES

ANNEXURE 4.1

Table 4.1A: Sectoral Shares in NSDP: At constant base 1993-94

State	Year					
		Agriculture	Primary	Manufacturing	Infrastructure	Services
Arunachal Pradesh	1993-94	46.94	1.42	3.13	21.83	26.68
	1998-99	35.29	0.72	3.21	25.81	34.97
	2002-03	33.48	1.36	2.70	23.58	38.88
Assam	1993-94	42.07	5.97	8.42	7.40	36.15
	1998-99	40.12	6.28	7.97	7.00	38.63
	2002-03	37.37	4.58	7.29	8.66	42.09
Manipur	1993-94	37.87	0.00	7.39	11.76	42.97
	1998-99	35.61	0.00	7.73	13.86	42.80
	2002-03	29.08	0.00	8.62	17.42	44.87
Meghalaya	1993-94	28.62	3.38	2.57	12.64	52.78
	1998-99	26.77	6.99	1.99	13.23	51.02
	2002-03	25.96	6.86	2.73	16.77	47.67
Nagaland	1993-94	25.85	0.00	3.01	25.77	45.37
	1998-99	29.09	0.00	2.15	26.36	42.40
	2002-03	37.30	0.09	0.65	27.94	34.02
Sikkim	1993-94	37.24	0.16	5.69	15.20	41.71
	1998-99	23.88	0.16	4.43	16.36	55.16
	2002-03	24.17	0.03	3.47	23.68	48.65
Tripura	1993-94	37.40	0.61	3.27	9.45	49.27
	1998-99	30.68	1.56	1.06	15.82	50.88
	2002-03	24.97	0.56	2.49	23.92	48.06
Mizoram	1993-94	33.10	0.13	2.73	7.85	56.19
	1998-99	29.29	0.14	1.23	11.61	56.38
	2002-03	23.90	0.08	0.96	16.65	57.12
NER	1993-94	36.14	1.46	4.53	13.99	43.89
	1998-99	31.34	1.98	3.72	16.26	46.53
	2002-03	29.53	1.70	3.61	19.83	45.17
India	1993-94	33.01	1.63	16.72	12.23	36.41
	1998-99	28.64	1.59	16.86	13.54	39.37
	2002-03	21.80	1.92	15.90	16.26	44.12

Note: 1. Differences in methodology of compilation means that data for different states are not strictly comparable.

2. For Mizoram constant price data are not available; the deflator for Meghalaya has been used to calculate constant price data for Mizoram.

3. Figures are calculated.

Source: Central Statistical Organisation (CSO) website as on 26-11-1999 for old series and as on 23-2-2006 for new series.

Table 4.2A: Growth Rates of Agriculture in the Northeast, 1993-94 to 2002-03: At constant base 1993-94

(percent)

State	1993-94 to 1997-98	1998-99 to 2002-03	1993-94 to 2002-03
Arunachal Pradesh	-3.3	0.8	-1.3
Assam	1.6	2.5	1.0
Manipur	2.9	3.0	3.4
Meghalaya	6.9	5.7	6.1
Nagaland	6.6	20	12.9
Sikkim	3.7	6.0	4.6
Tripura	3.4	3.2	3.9
Mizoram	4.3	7.6	4.4
NER	3.3	6.1	3.8
India	2.6	-3.4	0.6

Note: 1. Differences in methodology of compilation means that data for different states are not strictly comparable.

2. For Mizoram constant price data are not available; the deflator for Meghalaya has been used to calculate constant price data for Mizoram.

3. Figures are calculated.

Source: *Central Statistical Organisation (CSO)* website as on 26-11-1999 for old series and as on 23-2-2006 for new series.

Table 4.3A: Share of Agricultural Products, Forestry and Fishing in Agriculture: At 1993-94 constant prices

(percent)

State	Years	Agricultural Products	Forestry	Fishery
Arunachal Pradesh	1993-94	73.61	24.45	1.94
	1998-99	83.47	13.38	3.14
	2002-03	84.52	12.13	3.38
Assam	1993-94	88.57	5.20	6.23
	1998-99	88.86	5.29	5.85
	2002-03	88.77	5.18	6.05
Manipur	1993-94	82.35	9.35	8.30
	1998-99	76.75	13.11	10.13
	2002-03	82.88	6.69	10.45
Meghalaya	1993-94	91.03	5.10	3.87
	1998-99	92.82	3.97	3.22
	2002-03	93.27	3.76	2.97
Nagaland	1993-94	80.73	17.91	1.36
	1998-99	85.78	11.91	2.31
	2002-03	92.02	6.65	1.33
Sikkim	1993-94	94.17	5.68	0.15
	1998-99	92.37	7.29	0.34
	2002-03	93.11	6.62	0.26
Tripura	1993-94	84.02	7.23	8.75
	1998-99	86.15	6.02	7.82
	2002-03	86.56	6.24	7.20
Mizoram	1993-94	83.77	11.24	5.03
	1998-99	92.39	2.55	6.03
	2002-03	92.81	2.37	5.00
NER	1993-94	84.78	10.77	4.45
	1998-99	87.32	7.94	4.86
	2002-03	89.24	6.20	4.58
India	1993-94	91.96	4.68	3.37
	1998-99	92.01	4.53	3.45
	2002-03	89.90	5.37	4.72

Note: 1 Owing to differences in methodology of compilation, data for different states are not strictly comparable.

2 Mizoram constant price data are derived from Meghalaya's current-constant price deflator.

3 Figures are calculated.

Source: *Central Statistical Organisation (CSO)* website as on 26-11-1999 for old series and as on 23-2-2006 for new series.

Table 4.4A: Forest Production, 2001-02

States	Timber <i>Cu metres</i>	Fuelwood <i>Cu metres</i>	Bamboo <i>No.</i>	Canes <i>No.</i>
Arunachal Pradesh	15,546	38,222	29,398	10,627,920
Assam	-	6,682	5,00,000	
Manipur	-	-	-	
Meghalaya	6	-	-	
Mizoram	-	-	17,843,568	
Nagaland	-	-	35,430	189,250
Sikkim	-	168	-	
Tripura	894	4,632	138,651	
North-East				
India	NA	NA	NA	NA

Source: Statistical Abstracts of India 2003-04

Table 4.5A: Livestock Population and Output, 2003-04

States	Total Live- Stock (000 Number)	Poultry (000 Number)	Total Milk (000 Number)	Eggs (Crore Number)	Cattle (000 Number)	Buffaloes (000 Number)	Sheep (000 Number)	Goats (000 Number)	Poultry (000 Number)	Meat (5+6+7+8+9) (000 Number)
	1	2	3	4	5	6	7	8	9	10
Arunachal Pradesh	1257	1743	46	0.9	458	11	19	231	1743	2462
Assam	13829	21664	727	51.4	8440	678	170	2987	21664	33939
Manipur	971	2941	71	7.9	418	77	6	33	2941	3475
Meghalaya	1551	2821	69	9.4	767	18	18	327	2821	3951
Mizoram	280	1125	15	3.1	36	6	1	17	1125	1185
Nagaland	1349	2789	63	6.8	451	34	4	175	2789	3453
Sikkim	337	322	48	1.3	159	2	6	124	322	613
Tripura	1458	3057	84	10.1	759	14	3	472	3057	4305
North-East	21032	36462	1123	90.9	11488	840	227	4366	36462	53383
India	485002	489012	88082	4040.3	185181	97922	61469	124358	489012	957942

Source: Statistical Abstract of India 2003-04

Table 4.6A: Ratio of Livestock to Population, 2003-04

States	Total Live-Stock (Number)	Poultry (Number)	Total Milk (Litre)	Eggs (Number)	Cattle (Number)	Buffaloes (Number)	Sheep (Number)	Goats (Number)	Poultry (Number)	Meat (5+6+7+8+9) (Number)
	1	2	3	4	5	6	7	8	9	10
Arunachal Pradesh	1.145	1.587	0.042	8.197	0.417	0.010	0.017	0.210	1.587	2.242
Assam	0.519	0.813	0.027	19.283	0.317	0.025	0.006	0.112	0.813	1.273
Manipur	0.423	1.282	0.031	34.439	0.182	0.034	0.003	0.014	1.282	1.515
Meghalaya	0.669	1.217	0.030	40.538	0.331	0.008	0.008	0.141	1.217	1.704
Mizoram	0.315	1.266	0.017	34.887	0.041	0.007	0.001	0.019	1.266	1.334
Nagaland	0.678	1.401	0.032	34.170	0.227	0.017	0.002	0.088	1.401	1.735
Sikkim	0.623	0.595	0.089	24.036	0.294	0.004	0.011	0.229	0.595	1.133
Tripura	0.456	0.956	0.026	31.570	0.237	0.004	0.001	0.148	0.956	1.346
North-East	0.539	0.935	0.029	23.317	0.295	0.022	0.006	0.112	0.935	1.369
India	0.471	0.475	0.086	39.274	0.180	0.095	0.060	0.121	0.475	0.931

Note: Figures are calculated.

Source: *Statistical Abstracts of India*, 2003-04

Table 4.7A: Fish Production, 2003-04

States	Total Production	Per Capita Output
	(Million Tonnes)	(Kg per head)
Arunachal Pradesh	2,650	2.41
Assam	180,945	6.79
Meghalaya	6,179	2.68
Mizoram	3,380	3.8
Tripura	17,980	5.62
NER	231,847	5.95
India	6,399,390	6.22

Source: *NER Data Bank*.

Table 4.8A: Growth of the Primary Sector, 1993-94 to 2002-03: At constant base 1993-94*(percent)*

State	Growth Rate
Arunachal Pradesh	8.5
Assam	1.2
Manipur	-
Meghalaya	15.3
Nagaland	-
Sikkim	-8.4
Tripura	10
Mizoram	2.3
NER	3.6
India	6.4

Note: 1 Owing to differences in methodology of compilation, data for different states are not strictly comparable.

2 Mizoram constant price data are derived from Meghalaya's current-constant price deflator.

3 Figures are calculated.

Source: *Central Statistical Organisation (CSO) website* as on 26-11-1999 for old series and as on 23-2-2006 for new series.

Table 4.9A: Mineral Production in the Northeast, 2003-04*('000 ton)*

State	Coal	Natural Gas	Petroleum (crude)	Lead	Limestone
Arunachal Pradesh	-	2	76	-	-
Assam	733	2,013	4,595	-	467
Manipur	-	-	-	-	-
Meghalaya	5,439	-	-	-	393
Mizoram	-	-	-	-	-
Nagaland	-	-	-	-	-
Sikkim	-	-	-	123	-
Tripura	-	509	-	-	-
India	361,168	30,932	33,380	73,081	154,125

Source: *Statistical Abstracts of India 2003-04*

Table 4.10A: Ratio of Mineral Production to Geographic Area*(production in '000 tonnes; area in '000 hectares)*

States	Coal	Natural Gas	Petro (crude)	Lead	Limestone
Arunachal Pradesh	-	2.4E-04	0.0091	-	-
Assam	0.0934	2.6E-01	0.5858	-	0.0595375
Manipur	-	-	-	-	-
Meghalaya	2.425	-	-	-	0.1752196
Mizoram	-	-	-	-	-
Nagaland	-	-	-	-	-
Sikkim	-	-	-	0.1733	-
Tripura	-	4.9E-01	-	-	-
India	1.0987	9.4E-02	0.1015	0.2223	0.4688551

Note: Figures are calculated.

Source: *Statistical Abstracts of India* 2003-04**Table 4.11A: Coal Reserves, 2000-01***(number)*

State	Proved	Indicated	Inferred	All Reserves
Meghalaya	118	41	301	460
Arunachal Pradesh	31	11	48	90
Assam	259	27	34	320
Nagaland	3	1	15	19

Source: *NER Data Bank*

Table 4.12A: Mineral Production, 1998-99 to 2000-01*(quantity in '000 M.T, gas in million cubic metres, value in '000 Rs)*

State	Minerals	1998-99		1999-00		2000-01	
		Quantity	Value	Quantity	Value	Quantity	Value
Meghalaya	Coal	4,238	-	4,060	-	4,065	-
	Limestone	389	-	495	-	500	-
Arunachal Pradesh	Petroleum	76	2,63,644	98	3,39,962	78	4,34,460
Assam	Coal	1,793	13,28,613	572	5,99,781	660	692,076
	Natural Gas	1,265	13,91,500	1,888	25,94,112	2,018	36,32,400
	Petroleum	5,271	182,85,099	5,029	174,45,601	5,200	2,89,64,000
	Limestone	509	86,798	465	-	475	1,09,015
Tripura	Natural Gas	305	3,35,500	356	4,89,144	376	6,76,800

Source: *NER Data Bank*

Table 4.13A: State-Wise Major Mineral Resources, 2000-01*(reserves in million tons)*

States		Coal	Limestone	clay	Iron ore	Sillimanite	Quartz	Feldspar	Silica sand	Kaolin	Quartzite	Granite #	Oil & Gas	Chromite	Dolomite	Graphite	Nickel & cobalt
Meghalaya	1	64.24	87.65	0.27	-	0.05	0.02	0.02	-	2.40	-	-	-	-	-	-	-
	2	214.17	877.11	20.12	3.61	-	0.08	0.11	0.54	2.64	-	-	-	-	-	-	-
	3	322.85	3375.85	68.37	-	-	-	-	2.30	0.60	-	-	-	-	-	-	-
Assam	1	228.37	92.34	0.32	-	0.30	-	-	-	-	-	-	-	-	-	-	-
	2	26.83	5.20	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-
	3	65.01	365.00	22.38	19.94	50.00	-	-	-	-	16.54	926	1180.00	-	-	-	-
Manipur	1	-	0.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	6.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	8.12	2.52	-	-	-	-	-	-	-	-	-	0.01	-	-	-
Arunachal Pradesh	1	31.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2	11.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3	47.96	350.00	-	-	-	-	-	-	-	3.13	-	-	-	246.97	84.97	-
Mizoram	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	5.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nagaland	1	3.43	0.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2	1.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3	15.16	308.25	-	-	-	-	-	-	-	-	-	555.00	-	-	-	4.50
Tripura	1	-	-	-	-	-	0.01	-	-	-	-	-	-	-	-	-	-
	2	-	-	0.00	-	-	0.12	-	-	-	-	-	-	-	-	-	-
	3	-	-	0.30	-	-	0.07	-	-	-	-	-	588.00	-	-	-	-

Note: 1=Proved; 2=Probable; 3=Possible

in million cubic meters

Source: NER Data Bank

Table 4.14A: State-wise Major Crops Cultivated

States	Major Crops	Plantation Crops	Fruits	Vegetables	Spices
Arunachal Pradesh	Rice, maize,	rubber, coffee, tea	bananas, apples,	Potatoes	Turmeric,
	millet, wheat,		pineapple, plum,		chillies, ginger
	pulses, sugar cane		orange, walnut,		
			guava, grapes		
Assam	Rice, maize,	Rubber, coffee, tea	bananas, pineapple,	Sweet potatoes,	
	millet, wheat,		plum, orange, papaya	cabbage, onion,	
	pulses, coconut,			tapioca	
	sugarcane, jute,				
	cotton, areca nut				
Manipur	rice, maize, oil	rubber, coffee	Pineapple, bananas,	cabbage, peas,	
	seeds, pulses,		passion fruit, lemon,	brinjal, carrot,	
	sugarcane, wheat		orange, amla	cauliflower, beans,	
				knol - khol,	
				potatoes, radish	
Meghalaya	rice, maize, jute,	rubber	bananas, pineapple,	Tomatoes, brinjal,	Chillies, ginger,
	rapeseed, mustard		pears, guavas, cashew	potatoes, cabbage,	turmeric
				jack fruit	
Mizoram	rice	rubber, coffee, tea	bananas, pineapple,		Chillies, ginger
			passion fruit		
Nagaland	rice, maize, jute,	rubber, coffee, tea	bananas, pineapples	Jack fruit, sweet	Garlic
	rapeseed, mustard,			potatoes, cabbage,	
	grams, cotton,			onion, tapioca	
	sugarcane				
Sikkim	rice, maize, wheat	tea	oranges, apples	Potatoes	Ginger, cardamom
Tripura	cotton, sugarcane,	rubber, coffee, tea	bananas, apples,	Potatoes, tomato	
	Rice		pineapple, plum,		
			orange, guava, grapes,		
			papaya, litchi		

Source: Compiled from the *Shukla and Jain Committee Reports*

Table 4.15A: Distribution of Handicrafts in the Northeast, 1995-96

State	Units (number)	Artisans (number)	Production (Rs. crore)
Assam	30,360 (2.39)	100,482 (2.45)	7,820.94 (29.72)
Arunachal Pradesh	4,044 (0.31)	15,735 (0.38)	855.56 (3.25)
Manipur	98,051 (7.74)	379,988 (9.29)	147.60 (0.56)
Meghalaya	11,512 (0.90)	53,564 (1.31)	2,580.67 (9.80)
Mizoram	2,213 (0.17)	5,260 (0.12)	5.93 (0.02)
Nagaland	17,603 (1.39)	79,878 (1.95)	9,463.99 (35.98)
Sikkim	2,198 (0.17)	9,768 (0.23)	5.59 (0.02)
Tripura	77,375 (6.11)	244,495 (5.98)	60.80 (0.23)
NER	2,31,844 (19.18)	8,89,170 (21.71)	20,941.08 (79.58)
Grand Total	1266,009 (100.00)	4103,293 (100.00)	26,312.13 (100.00)

Note: Figures in parentheses are percentages to total

Source: *NER Data Bank*; according to the Census of Handicrafts, 1995-96.

Table 4.16A: Distribution of Handlooms in the Northeast, 1995-96

(total number)

States	Working Looms	Idle Looms	Total Looms
Arunachal Pradesh	45,060	456	45,156
Assam	12,98,731	1,10,437	14,09,168
Manipur	2,66,915	3,346	2,70,261
Meghalaya	7,783	418	8, 201
Mizoram	14,388	9,406	23,794
Nagaland	71,636	5,867	77,503
Tripura	1,16,659	2,413	1,19,072
NER	18,21,172	1,32,343	19,53,515

Source: *NER Data Bank*, based on the Handloom Census of India.

Table 4.17A: Bamboo Resources of the Northeast

State	Bamboo Growing Area (sq. km.)	Bamboo Growing Stock (million tons)
Mizoram	9,210	10.89
Assam	8,213	13.41
A. Pradesh	4,590	9.84
Manipur	3,692	11.47
Meghalaya	3,102	4.41
Tripura	939	0.86
Nagaland	758	3.66
NER	30,504	54.53

Source: Dialogue, October - December, 2003, Volume 5 No. 2

Note: The source of this table does not provide the year of the data.

Table: 4.18 A: Major Crafts in the Northeast States

State	Major Groups
Assam	Textile crafts; cane and bamboo
Arunachal Pradesh	Textile crafts; cane and bamboo
Mizoram	Textile crafts; cane and bamboo
Manipur	Textile crafts; cane and bamboo
Meghalaya	Cane and bamboo; textile crafts
Nagaland	Textile craft; cane and bamboo; wood
Sikkim	Textile craft; cane and bamboo
Tripura	Cane and bamboo; textile crafts; wood

Source: *NER Data Bank*.

Table: 4.19 A: Artisan Households Dependant on Handloom and Handicrafts as a Source of Livelihood

(percent)

Income from Handloom and Handicrafts	Households
0-10	0.00
10-20	4.17
20-30	1.04
30-40	4.17
40-50	6.25
50-60	2.08
60-70	7.29
70-80	9.38
80-90	5.21
90+	60.42

Source: *NER Data Bank*.

ANNEXURE 4.2

I. North Eastern Council (NEC) Draft Vision 2020, main suggestions on Agriculture and Allied Sectors

- Objective is to make region marginally surplus in food production by introducing integrated modern agricultural methods and develop agriculture horizontally and vertically.
- Create efficient service centers for farming.
- Land reforms.
- Promote horticulture on massive scale, increase area under horticulture.
- Create efficient market infrastructure through a regional master plan.
- Use self-help groups as tools of change in the sector.
- By 2020 the production of meat, milk and egg should be raised to 2.26 lakh MT, 2 MT and 3,500 million, respectively.
- Fisheries
 1. Raise production of fish to 12.14 lakh MT to ensure a per capita availability of 21 kg/person/year by 2020.
 2. Increase the area of water under fisheries to 11.53 ha by 2020.
 3. Use the maximum area of reservoir and unregistered beels and swamps for fisheries.
 4. Promote the culture of mahseer for in situ conservation and increased production.
 5. Exploit the riverine stretch (of about 2,000 km) for fisheries.
 6. Establish eco-hatcheries at district level.
 7. Establish fish producers' co-operative societies and farmers' clubs to increase production and expand marketing.
 8. Double the area under forest fishery by 2020.
- **Sericulture**
 1. Bring 2.35 lakh hectares of wasteland suitable for sericulture under it.
 2. Set up clusters of 200 ha. with 300 m farmers in each district by 2020.
 3. Establish a sericulture development mission with special central grant.
 4. Raise production level of sericulture to 5,063 MT.
 5. Increase the generation of family income to Rs. 580 crore per annum under Eri and about Rs. 1,100 crore under Muga by 2020.
- **Mission Mode**
 1. Immediately launch the Northeastern Regional Bamboo Mission and Northeastern Regional International Trade Mission. The Bamboo Mission will create one lakh jobs, lead to double-digit rise in economic growth and enhance community and family income.
 2. Expand the global export network for bamboo products especially to South East Asian markets.
 3. Develop border trade infrastructure and roads to connect the 17 functional land customs stations in the region.
 4. Open a functional air cargo complex in LGB airport with domestic transshipment arrangements in Kolkata and Delhi.
 5. Set up three product-specific SEZs in the NER.
 6. Ensure that NERITraM and the concerned states jointly take up a programme for creating minimum infrastructure facilities in all the states to support a sound base for small enterprises to produce exportable goods.
 7. Introduce a new transport subsidy package for items exported from the NER which provides air, rail and inland transport subsidies from any part of the NE up to the port of transshipment.
 8. Provide incentives to local entrepreneurs for setting up agro-horticultural processing units with export potential.

9. Waive excise and import duties on capital goods imports, especially agricultural tools and machinery, and food and bamboo processing machinery.
10. Develop two more agri-export zones in the NER into comprehensive free enclaves.
11. Create a Northeastern regional export development fund under NERETraM for border trade and related infrastructure.

ANNEXURE 4.3

Computed Indices for Specialisation and Dependency in Agriculture in the NER

The specialisation patterns and comparative advantages of the different states have been analysed with the help of four indices: the Regional Specialisation Index (RSI), the National Specialisation Index (NSI) in various agricultural crops, the consumption (demand) intensities for different crops and comparative productivity advantages in various crops for each state and the country.

REGIONAL SPECIALISATION INDEX (RSI)

To see how the different states of the NER have specialized in different product lines, a Regional Specialisation Index (RSI) was constructed. It is expected that the variation in the availability of resources and scope for trade should drive certain patterns of specialization. And this pattern being determined by market forces can be taken as one in which the particular region has a production advantage. For this purpose the RSI is defined as:

$$RSI = X_{ij}/X_j/X_{iNE}/X_{NE}$$

Where X_{ij} is the net sown area of the product i in state j , X_j = net sown area in state j , X_{iNE} = net sown area of the product i in the NE and X_{NE} = total net sown area in the NE.

Table 4.15A shows the regional specialisation index for 20 crops in the NE states in terms of net area sown. This index indicates the share of the net sown area of any state devoted to the production of a particular crop, compared to the average for the region. An RSI value of more than 1 indicates that the particular state has a revealed comparative advantage in that crop vis-à-vis other states of the NER. The crops considered for RSI are rice, maize, small millet, wheat, total cereals, total pulses, total food grains, sesamum, rapeseed and mustard, total oilseeds, tea, coffee, natural rubber, bananas, sugarcane, potatoes, chillies, ginger, coconut, turmeric and pineapples.

Table 4.20A: Regional Specialisation Index (RSI) for the Northeast States, 2003-04

Crop	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
Rice	0.87	1.11	1.35	0.57	0.75	0.6	0.19	1.02
Maize	5.78	0.18	0.69	1.8	2.85	2.92	9.47	0.17
Small millet	14.64	-	-	1.42	-	3.64	2.3	-
Wheat	1.12	1.17	-	0.2	-	0.92	2.9	0.16
Total cereals	1.23	1.05	1.27	0.62	0.82	0.76	0.75	0.94
Total pulses	0.97	0.95	0.97	0.49	1.21	1.89	1.67	0.65
Total food grains	1.22	1.05	1.25	0.61	0.83	0.81	0.79	0.93
Sesamum	0.88	0.79	1.03	1.25	4.6	1.92	-	1.03
Rapeseed & mustard	1.62	1.22	0.09	0.39	0.27	0.63	0.8	0.14
Total oilseeds	1.63	1.08	0.14	0.43	0.84	1.55	1.04	0.18
Tea	0.09	1.42	-	-	-	0.1	-	0.41
Coffee	-	0.27	-	3.19	11.71	4.89	-	-
Natural rubber	-	0.25	-	2.93	-	-	-	9.61
Bananas	1.47	0.95	1.72	1.31	1.92	0.6	-	1.08
Sugarcane	0.85	1.27	-	-	1.48	0.46	-	0.5
Potatoes	0.81	0.95	0.71	2.61	-	0.44	2.81	0.71
Chillies	1.49	0.67	8.74	1.06	1.3	0.41	-	0.87
Ginger	4.1	-	1.92	5.27	10.02	0.45	7.08	0.48
Coconut	-	1.27	-	-	-	0.46	-	1.49
Turmeric	1.37	0.98	-	1.95	-	0.75	-	1.6
Pineapple	3.89	0.42	5.40	2.94	0.84	0.81	-	1.43

Note: Figures are computed.

Source: *Statistical Abstract of India, 2003-04*

Outcomes of the Regional Specialisation Index (RSI)

- **Arunachal Pradesh** has a production advantage in the area dedicated to maize, **small millet**, wheat, total cereals, total food grains, rapeseed and mustard, total oilseeds, banana, chillies, ginger and turmeric. Small millet has shown greatest advantage for Arunachal Pradesh as indicated by RSI value of 14.64.
- **Assam** has a production advantage in rice, wheat, total cereals, total food grains, rapeseed and mustard, total oilseeds, tea, sugarcane and coconut. For obvious reasons **tea** has shown the greatest revealed production advantage for Assam as indicated by an RSI value of 1.42.
- **Manipur** has a production advantage in rice, total cereals, total food grains, sesamum, bananas, chillies and ginger. **Chillies** have shown the greatest revealed production advantage as indicated by RSI value of 8.74.
- **Meghalaya** has a production advantage in maize, small millet, sesamum, coffee, natural rubber, bananas, potatoes, chillies, ginger and turmeric. However, **ginger** has shown the greatest revealed production advantage for Meghalaya as indicated by an RSI value of 5.27.
- **Mizoram** has a production advantage in maize, total pulses, sesamum, coffee, bananas, sugarcane, chillies and ginger. **Ginger** has the greatest revealed production advantage for Mizoram as indicated by its RSI value of 10.02.

- **Nagaland** has a production advantage in **maize, small millet**, total pulses, sesamum, total oilseeds and coffee with relatively highest comparative advantage in the first two items. The apparent greatest production advantage in coffee for all the states is somewhat misleading. The areas under coffee are no longer operational and were purchased in the early 1980s for coffee plantation for land preservation. There is no actual production of coffee any more. This caveat also applies to the apparent comparative advantage indicated for coffee for other states as well.
- **Sikkim** has a comparative advantage in maize, small millet, wheat, total pulses, total oilseeds, potatoes and ginger. However, **maize** has shown the greatest revealed production advantage as indicated by an RSI value of 9.47.
- **Tripura** has production advantages in rice, sesamum, coffee, natural rubber, coconut and turmeric But its highest production advantage lies in **natural rubber** with an RSI value of 9.61.
- **Arunachal Pradesh, Manipur, Meghalaya and Tripura** have a relative advantage in the production of **pineapple**.

NATIONAL SPECIALISATION INDEX (NSI)

The RSI is based on regional production patterns. To observe where the NE states stand in comparison to the rest of the country, the National Specialisation Index (NSI) is constructed for the same 20 crops for all NE states and it is defined as:

$$NSI = X_{ij}/X_{iNE}/X_{ii}/X_i$$

Where X_{ij} is the net sown area of the product i in state j , X_{iNE} = net sown area of the product i in the NE, X_{ii} = net sown area of the product i in India and X_i = total net sown area in India. The results are given in Table 4.16A

Table 4.21A: National Specialisation Index (NSI) for the Northeast States, 2003-04

Crop	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
Rice	2.41	3.07	3.75	1.59	2.08	1.66	0.52	2.82
Maize	4.58	0.14	0.55	1.42	2.26	2.31	7.51	0.14
Small millet	15.77	-	-	1.53	-	3.92	2.48	-
Wheat	0.13	0.14	-	0.02	-	0.11	0.34	0.02
Total cereals	1.58	1.36	1.63	0.8	1.05	0.97	0.97	1.22
Total pulses	0.26	0.25	0.26	0.13	0.32	0.5	0.44	0.17
Total food grains	1.33	1.15	1.37	0.67	0.91	0.88	0.87	1.02
Sesamum	0.48	0.44	0.57	0.69	2.54	1.06	-	0.57
Rapeseed and mustard	3.35	2.53	0.19	0.8	0.56	1.31	1.65	0.28
Total oilseeds	0.98	0.65	0.09	0.26	0.51	0.93	0.63	0.11
Tea	1.66	27	-	-	-	1.82	-	7.78
Coffee	-	0.29	-	3.46	12.69	5.3	-	-
Natural rubber	-	0.36	-	4.3	-	-	-	14.13
Bananas	6.94	4.47	8.13	6.18	9.08	2.84	-	5.08
Sugarcane	0.21	0.32	-	-	0.37	0.12	-	0.13
Potatoes	2.68	3.13	2.35	8.59	-	1.46	9.25	2.35
Chillies	2.08	0.93	12.16	1.48	1.81	0.57	-	1.22
Ginger	47.27	-	22.15	60.67	115.47	5.17	81.61	5.54
Coconut	-	0.67	-	-	-	0.25	-	0.79
Turmeric	5.59	4.02	-	7.97	-	3.05	-	6.54
Pineapple	90.17	9.74	125.24	68.17	19.44	18.72	-	33.24

Note: Figures are calculated.

Source: *Statistical Abstracts of India*, 2003-04

Outcomes of the National Specialisation Index (NSI)

- **Arunachal Pradesh** has revealed a comparative production advantage in rice, maize, small millet, total cereals, total food grains, rapeseed and mustard, tea, coffee, bananas, potatoes, chillies, ginger and turmeric. **Ginger** has shown greatest revealed comparative advantage for Arunachal Pradesh as indicated by NSI value of 47.27.
- **Assam** has revealed a comparative advantage in rice, maize, total cereals, total food grains, rapeseed and mustard, tea, bananas, potatoes and turmeric. For obvious reasons **tea** has shown greatest revealed comparative advantage for Assam as indicated by NSI value of 27.
- **Manipur** has revealed a comparative advantage in rice, total cereals, bananas, potatoes, chillies and ginger. **Pineapple** has shown greatest revealed comparative advantage for Manipur as indicated by NSI value of 22.15.
- **Meghalaya** has revealed a comparative advantage in rice, maize, small millet, wheat, coffee, natural rubber, bananas, potatoes, chillies, ginger and turmeric. However, **pineapple** has shown greatest revealed comparative advantage for Meghalaya as indicated by NSI value of 22.15.
- **Mizoram** has revealed a comparative advantage in rice, maize, total cereals, sesamum, coffee, bananas, chillies and ginger. However **ginger** has shown greatest revealed comparative advantage for Mizoram as indicated by NSI value of 115.47.
- **Nagaland** has revealed a comparative advantage in rice, maize, small millet, sesamum, rapeseed and mustard, tea, coffee, bananas, potatoes, ginger and turmeric. However, **pineapple** has revealed greatest comparative advantage for Nagaland as indicated by NSI value of 3.92. The high value for coffee in Nagaland is a statistical aberration.
- **Sikkim** has revealed a comparative advantage in maize, small millet, rapeseed and mustard, potatoes and ginger. However, **ginger** has revealed greatest comparative advantage for Sikkim as indicated by NSI value of 81.61.
- **Tripura** has revealed a comparative advantage in rice, total cereals, total food grains, tea, natural rubber, bananas, potatoes, chillies, ginger and turmeric. **Natural rubber** has a NSI value of 14.13; hence it has a comparative advantage in its dedicated net area sown.
- **All the NE states** have shown their relative advantage in the production of pineapple.

DEMAND INTENSITY MEASURE (DIM)

The demand intensity measure (DIM) is basically the consumption share of the i^{th} product in state j with respect to the all-India consumption share in that product. Table 4.17A shows the outcome of calculations of the Demand Intensity Measure, Z , which is defined as:

$$Z = (c_{ij}/C_{il}) \times 100,$$

where C_{ij} is the per capita consumption expenditure in state i for the j^{th} commodity and C_{il} = national average per capita consumption expenditure for the same commodity. This shows the intensity of demand relative to the country. Thus, a value if Z greater than 100 indicates a high demand intensity relative to the all-India level.

Table 4.22A: Demand Intensity Measure (DIM)

Crop	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Tripura	Grand Total	NER
Rice	111.1	219.85	170.52	101.38	123.98	256.78	989.62	259.79
Wheat	9.87	31.02	4.87	21.1	23.97	18.55	110.71	21.29
Maize	298	1.96	0	14.38	14.38	0	543.63	77.12
Cereal	77.88	144.4	105.33	69.14	83.77	162.48	645.41	166.46
Gram	5.3	66.23	23.84	1.32	10.6	0.66	179	21.19
Cereal substitutes	118.3	0	1.22	76.83	79.27	47.56	659.28	103.66
Pulses	40.03	74.16	39.45	30.93	47.3	82.94	320.74	73.29
Milk & milk products	13.87	43.12	10.96	28.91	35.51	60.54	195.23	47.56
Edible oil	23.72	95.36	38.79	55.71	52.63	105.88	378.46	86.61
Meat, fish and eggs	136.8	231.9	104.68	205.17	240.54	405.89	1345.2	346.91
Vegetables	60.32	115.36	44.57	68.12	140.43	164.47	599.29	150.94
Fruits (fresh)	25.91	81.12	41.81	52.7	53.01	140.58	406.3	97.72
Fruits (dry)	1.48	15.13	4.43	8.12	9.41	39.67	85.34	20.11
Sugar	26.12	77.36	24.77	48.06	61.01	66.47	313	73.6
Salt	86.09	138.7	100	63.04	109.13	198.26	911.29	174.35
Spices	26.68	71.25	42.17	28.55	37.88	96.59	311.5	75.71
Beverages, etc.	22.75	70.34	29.22	125.38	51.2	64.89	367.53	87.6
Food total	49.45	105.55	56.87	71.14	79.59	133.33	496.47	125.74

Source: National Sample Survey, 2003.

Note: No figures available for Nagaland and Sikkim.

DEPENDENCY INDEX (DI)

The Dependency Index (DI) is the ratio of per capita consumption to per capita production. Here an attempt is made to explain whether there is any matching between the crop specialised and produced with the major crop consumed. A state can consume more of a product it produces or else it can import former and specialise only in an export-oriented crop pattern which is driven by geography, climate, soil, rainfall, etc.

Calculation of the DI is little risky as data is not available on the same products both for consumption as well as production for all NE states. Consumption data is obtained from NSS which has a different set of product classification in contrast to the *Statistical Abstract of India* where production data is listed. Despite these problems, a mapping has been prepared which approximately places similar products in the desired product category. Table 4.21A shows the mapping of C_{ij} and P_{ij} for ease of calculation for all NE states, except Nagaland and Sikkim.

$$DI = (c_{ij}/C_{ii}) / (P_{ij}/P_{ii}) \times 100$$

P_{ij} and P_{ii} have been defined above. The results of these calculations are shown in Tables 2.18A(a) and 2.18(b); thus, a DI greater than 100 indicates dependency. (Due to non-availability of data the DI cannot be calculated for all commodities.)

Table 4.23A (a): Dependency Index (DI) for All Products, 2003-04

Crop	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Tripura	NER
Rice	67.55	129.58	90.73	100.37	83.66	136.36	165.96
Wheat	126.61	793.91	-	1,715.11	-	832.10	676.57
Maize	86.34	54.18	-	18.61	9.27	-	343.57
Total cereals	69.62	186.94	122.69	134.52	107.19	191.80	228.63
Total pulses	79.80	455.70	438.04	260.38	152.60	770.66	476.96
Total oilseeds	23.71	398.02	2187.18	529.34	229.93	2,081.85	415.03
Fruits	49.00	69.52	46.25	44.65	126.20	152.75	95.69
Sugarcane	441.11	484.92	595.72	-	3,126.27	1,022.00	618.62
Spices	1.21	183.48	16.82	2.02	1.15	76.77	27.74
Total foodgrains	45.98	144.64	70.67	146.28	106.34	167.31	182.77
Milk	28.35	135.98	-	82.74	180.11	197.41	168.72
Meat	5.68	16.96	-	11.15	16.80	28.09	23.59
Egg	262.14	188.92	-	79.07	108.31	201.98	283.66
Fish	123.38	74.38	-	166.71	137.68	157.24	127.00

Source: Calculated from NSSO, 2003 and *Statistical Abstract of India, 2003-04*.

Note: No data is available for Nagaland and Sikkim. The ratio is calculated separately for meat, eggs and fish assuming that their proportions in consumption expenditure are 0.1, 0.4 and 0.5, respectively.

Table 4.23A (b): Dependency Index for Milk, Meat, Eggs and Fish, 2003-04

	AP	Assam	Meghalaya	Mizoram	Tripura	NER
Milk	28.35	135.98	82.74	180.11	197.41	168.72
Meat	5.68	8.48	5.58	16.80	28.09	23.59
Weights Assigned	0.10	0.05	0.05	0.10	0.10	0.10
Eggs	131.07	118.08	108.72	108.31	201.98	141.83
Weights Assigned	0.20	0.25	0.55	0.40	0.40	0.20
Fish	172.74	104.13	133.37	137.68	157.24	177.80
Weights Assigned	0.70	0.70	0.40	0.50	0.50	0.70

Note: Figures have been calculated.

Source: *Statistical Abstracts of India, 2003-04* and NSS, 2003

CONCLUSIONS FROM THE ANALYSIS OF THE INDICES

None of the states specialises in any products as they all produce some amount of all the products (Table 4.14A). This clearly indicates that in the absence of sufficient trade among these states, they have been forced to produce every product, rather than specialising in those in which they have a natural production advantage, and in the process increasing agricultural productivity and growth. This of course does not apply to Sikkim, which given its geographical position, has no land links with the other NER states. Sikkim's trade links in all products are mainly with West Bengal via the railhead at Siliguri. Despite this pattern, each state demonstrates certain production advantages: Arunachal in small millets, Assam in tea¹, Meghalaya in ginger,

¹ The Sectoral Summit at Guwahati on 9-11 March, 2007 recommended the introduction of a transport subsidy of Rs. 1.50 per kg. for tea exported directly from ICD, Amingaon, Assam, and that more mini-factories be set up. The Tea Board will also develop a separate logo for Assam Orthodox Tea. The Summit also recommended that the Assam Government issue 'possession certificates' to small tea growers to enable them to register with the Tea Board.

Mizoram in ginger, Manipur in chillies, Nagaland in small millets, Tripura in natural rubber² and Sikkim in maize.

Table 4.24A: RSI: Highest Comparative Advantage for Products of the Northeastern States

State	Products
Arunachal Pradesh	Small millet, maize, ginger
Assam	Tea, rapeseed and mustard, sugarcane
Manipur	Chillies, rice, ginger
Meghalaya	Ginger, potatoes, sesamum
Mizoram	Ginger, maize and sesamum
Nagaland	Coffee, small millet, maize
Sikkim	Maize, ginger, potatoes
Tripura	Natural rubber, coconut, bananas

The specialisation patterns suggested by the NSI are slightly different from those derived from the RSI index. Thus, in comparison to the rest of the country, the region has distinctive production advantages in few products such as **ginger** (Arunachal, Mizoram and Sikkim), **tea** (Assam), **natural rubber** (Tripura) and **pineapples** (Manipur, Meghalaya and Nagaland).

Table 4.25A: NSI: Highest Comparative Advantage of Products of the Northeastern States

State	Products
Arunachal Pradesh	Ginger, bananas, small millet
Assam	Tea, bananas, turmeric
Manipur	Pineapples, ginger, chillies
Meghalaya	Pineapples, ginger, potatoes
Mizoram	Ginger, pineapples, sesamum
Nagaland	Pineapples, small millet, turmeric
Sikkim	Ginger, potatoes, maize
Tripura	Natural rubber, pineapples, bananas

Agricultural productivity, however, also depends on factors other than land utilisation, such as differing natural land requirements for different crops or the role played by trade in determining resource allocation. Further, land utilisation patterns in a relatively closed subsistence economy is crucially determined by the consumption needs of farmers, i.e., local demand patterns. Some of these have been factored in the comparison of relative productivities across states in the top five commodities (as indicated by the RSI) to national productivity levels.³

² The Third Sectoral Summit held at Guwahati on 09-11 March, 2007 recommended that the Rubber Board fund area expansion and rejuvenation of sick plantations and introduce technology for increasing productivity; also that it address location-specific agro-management and processing issues and maintain and support nurseries run by gram panchayats and SHGs.

³ Yield per hectare has been used to indicate productivity. A relative productivity greater than one would indicate that the specialization given by the RSI has some economic basis.

Table 4.26A: Relative Productivity of Principal Crops in the NER in 2003-04

(quintals per hectare)

Crop	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
Rice	0.63	0.74	1.13	0.88	0.92	0.66	0.69	1.04
Maize	0.69	0.35	1.13	0.75	0.95	0.73	0.76	0.44
Small millet	1.96	1.06	-	1.65	-	1.94	1.63	0.00
Wheat	0.55	0.39	-	0.61	-	0.86	0.52	1.57
Total cereals	0.64	0.76	1.18	0.89	0.96	0.70	0.72	1.09
Total pulses	1.64	0.86	0.81	1.16	1.38	1.30	1.50	0.95
Total foodgrains	0.74	0.85	1.32	1.00	1.07	0.77	0.81	1.23
Sesamum	1.53	1.22	1.11	1.11	1.36	1.67	0.00	1.04
Rapeseed & mustard	0.88	0.45	0.39	0.56	0.56	0.89	0.61	0.70
Total oilseeds	0.96	0.49	0.44	0.61	0.67	1.00	0.70	0.67
Tea	0.54	0.96	0.13	0.18	0.06	0.07	0.16	0.52
Coffee	-	-	-	-	-	-	-	-
Natural rubber	-	0.61	-	-	-	-	-	0.61
Banana	0.12	0.54	0.50	0.49	0.12	0.71	-	0.50
Sugarcane	0.37	0.66	-	0.03	0.04	0.81	-	0.73
Potatoes	0.41	0.39	-	0.46		0.24	-	0.00
Chillies	1.33	0.61	0.56	0.62	0.59	9.15	-	1.33
Ginger	2.35		0.48	1.49	1.82	3.85	1.40	0.25
Coconut	-	1.21	-	-	-	0.42	-	0.33
Turmeric	1.08	0.19	-	1.54	-	1.39	0.87	0.77
Pineapple	0.28	0.96	0.54	0.56	0.16	0.93	-	1.30

Note: Figures are calculated.

Source: *Statistical Abstracts of India*, 2003-04

An analysis of the results of the table show that the RSI depicting the patterns of land utilization roughly corresponds to the specialisation patterns by productivity advantages. Thus, *all the states* for which data is available have a relative yield advantage in *small millets*, *pulses* (except Manipur and Assam), *sesamum* (except Nagaland) and *ginger* (except Manipur). In some cases there are divergences from the RSI results. First, Arunachal and Meghalaya have very low relative productivity of wheat although they have a high area specialization. This is also true for tea in Assam⁴, chillies in Manipur, and rubber in Tripura (even though Tripura is the largest rubber-growing area after Kerala).

These exceptions are the results of three quite unrelated forces: subsistence nature of farming, history, and the cost of conversion from one crop to another. The first factor was already emphasized in our earlier observation that some of the area specialisation seems to be dictated more by subsistence requirements in the absence of very little trade among the states of the NER. The second factor and also partly the third may explain the case of tea in Assam. Similarly, forest conservation policies may prevent conversion of natural rubber growing fields to growing of other agricultural crops. Except for Tripura, none of the other states have shown better relative productivity in the production of pine apple.

Interestingly, the demand preferences of all the states are similar: rice, cereals (except Meghalaya and Mizoram), meat, fish, eggs and vegetables (except for Arunachal, Manipur and Meghalaya). This data can be

⁴ This is due to the fact that old tea plantations are still maintained in Assam.

used to infer possible trade especially among the states with exports of items where demand intensity is low relative to national average and imports in the other items.⁵

The demand side of the sector is given by the Demand Intensity Measure (DIM). In general, for any state demand is more diversified than production with the excess demand constituting import and the excess supply export⁶. Inspection of the DIM reveals the extent to which demand preferences in the NER states diverges from the national average.

The same information is obtained more directly by calculation of the Dependency Index for states which is defined as the ratio of consumption share to production share. The DI indices shown above indicate that *the NER is highly dependent on imports for almost all the commodities for which we could get data. The only exception is spices*⁷. However, there are variations across states which indicate that there is a reasonable scope for trade among the states of the NER. For example, while the NER has high dependency on maize this is not true for states like Arunachal, Assam, Manipur and Meghalaya which could profitably export maize to the other states. Similarly, Assam, Manipur and Meghalaya could be net exporters of fruits to the other states.

⁵ The People's Vision recommends a new transport subsidy for all items exported from NER which will introduce a air, rail and inland transport subsidy from any part of NE up to port of transshipment be introduced.

⁶ The Third Sectoral Summit at Guwahati on 9-11 March, 2007 recommended that APEDA operationalise four Agriculture Export Zones (AEZs) by December 2007: one in Tripura for pineapples, two in Sikkim for ginger, orchids and cherry peppers and one in Assam for fresh and processed ginger.

⁷ The Third Sectoral Summit held at Guwahati on 09-11 March, 2007 recommended that the Spices Board be strengthened, to intensify its activities in the NER to promote spices production and productivity, particularly of organic spices. Investments by the Spices Board are to be increased commensurate with the proposed intensified programmes in the region.

ANNEXURE 4.4

SECTORAL SUMMIT RECOMMENDATIONS FOR PRIMARY SECTOR

3rd Sectoral Summit of NEC to Review Commodity Boards and APEDA, Inland Water Transport, Flood & Erosion Control and Irrigation Sector Programmes in the North Eastern Region held at Guwahati on 09-11 March 2007.

FLOOD & EROSION CONTROL & IRRIGATION ISSUES:

- (i) NER is one of the highest rainfall zones in the World. Main rivers causing floods in the region are the Brahmaputra, Barak and their tributaries.
- (ii) Floods in Assam are mainly caused by high rainfall in the catchment area, unstable steep slope, long monsoon period, large scale denudation of forest cover etc.
- (iii) As assessed by RBA, of the total flood prone area of 3.58 mha, 3.15 mha falls within Assam. Other States have some flood prone areas.
- (iv) It is recognized that absolute flood control and protection is not feasible and that flood management measures are aimed at reasonable degree of protection from flood losses. A combination of structural and non-structural measures in a phased manner is the most accepted strategy for flood management.
- (v) Central Water Commission (CWC) has taken up flood forecasting and warning systems, maintains hydro meteorological stations, undertakes surveys and investigation, monitors irrigation projects, carries out techno economic appraisal of irrigation and flood management schemes and provides technical advice to the States and others.
- (vi) Brahmaputra Board was established through a Central Act in 1980 and became operational in 1982. It is mandated to carry out survey and investigation, prepare master plans and DPRs and undertake construction of multipurpose dams and other works in the NER.
- (vii) Brahmaputra Board has carried out survey and investigation, prepared 36 master plans for Brahmaputra and Barak rivers and some of their tributaries, prepared DPRs for five multipurpose projects and 11 drainage development schemes. It has executed three numbers of anti-erosion and flood control projects and is implementing the Pagladiya dam project at an estimated cost of Rs.542.90 crore.
- (viii) The Task Force on Flood Control recommended in 2004, immediate and short term measures in different States at a cost of Rs.1915.00 crore. Out of the Rs.163.51 crore earmarked for Immediate Measures, only Rs.107.00 crore has been utilized till date.
- (ix) Ministry of Water resources is consulting the State Governments on the proposal to establish a North-East Water Resource Authority (NEWRA). Government of Arunachal Pradesh has expressed their reservations.
- (x) Assam representative requested that the Brahmaputra Board should be more active in carrying out its mandate. He recommended Central Assistance to Arunachal Pradesh for afforestation so that silting and erosion can be controlled. Most hydro power projects are expected to come up in Arunachal Pradesh.
- (xi) Arunachal Pradesh representative stated that the Brahmaputra Board has not done any work in the State. He suggested that any policy for flood control in NER be developed in consultation with the concerned States. He expressed the view that issues related to inter-State boundary dispute be resolved before taking up various projects in the region.
- (xii) Tripura representative stated that about 25% of the State is flood prone. Some of the flood control measures could not be taken up due to objections from Bangladesh. Brahmaputra Board is yet to take up any work in the State. Master Plan for eight (8) rivers is required to be taken up on priority by the Board.
- (xiii) Mizoram representative requested for early completion of survey and investigation work on the Kaladan River project by CWC.
- (xiv) Sikkim stated that the State is erosion prone. As against the 16 projects prepared for taking up erosion control measures, the Brahmaputra Board has sanctioned only two projects.
- (xv) Nagaland stated that not a single project has been considered by the Brahmaputra Board.
- (xvi) Meghalaya requested CWC to expedite technical vetting of Uiam Lake Protection project.

Accelerated Irrigation Benefit Programme (AIBP)

- (i) AIBP is a major Central Programme for assisting the States to take-up irrigation schemes/projects. Most schemes in NER are minor irrigation (MI) projects. Scope of AIBP has been extended to include surface MI projects in the NER.
- (ii) Prior to 12/2006, AIBP funding was in the ratio of 75:25(Centre: State) and the Central Share was in the form of 90% grant and 10% loan to be arranged by the state wef 02-04-2004. Wef 12/2006, funding is on 90:10 (Centre:State) basis.
- (iii) State-wise details were explained. Bottlenecks identified are delay in land acquisition, inadequate and late release of funds by the States and the difficult law & order situation in some of the States.
- (iv) Under AIBP, MOWR have, during the Xth Plan period, released a total of Rs.559.49 crores to the eight NE States including Rs.231.76 crores for major & medium projects and Rs.327.73 crores for minor schemes. In addition, it has approved 3093 MI schemes, of which 2338 schemes have been completed and another 95 are planned. Under MI schemes, 46,500 ha potential has been created of which 34,300 ha is utilized.
- (v) Under Bharat Nirman, irrigation potential of 2, 93,110 ha is targeted which includes 1,09,140 ha of major & medium irrigation and 1,83,970 ha of minor irrigation.
- (vi) Development of Ground Water in NER is in the nascent stage- due to hilly terrain only about 30% of the existing area can be developed- the region has an inherent advantage in rain water harvesting due to high rainfall.
- (vii) Member(NE), Planning Commission stated that absorption of AIBP funds is very poor in the North Eastern States. He emphasized the need for the States to access and optimizes use of AIBP funds.
- (viii) Assam representative assured that State Govt. share for implementation AIBP Schemes is being arranged and Central funds would be utilized properly.
- (ix) Meghalaya representative requested NEC to assist in hiring competent professional Consultants for taking up micro/minor irrigation projects.
- (x) Mizoram representative complained about delay in release of funds by Ministry of Water Resources due to which very limited working period is available for implementation.
- (xi) Tripura representative pointed out that under AIBP only surface irrigation schemes can be taken -up. Due to inadequate surface flow, Tripura is unable to access benefits under this scheme. He requested that AIBP norms be altered to include ground water development and provision for renovation, extension of pipelines and maintenance also. He suggested that the project cost in NER be increased to Rs.2.00 lakh per hectare and that funds be released in one installment before the working season commences.
- (xii) Member, NEC cautioned against widespread exploitation of underground water as it has been found, at several locations, to contain hazardous elements.
- (xiii) Nagaland representative suggested that the construction of check dams should be made a part of AIBP.
- (xiv) Arunachal Pradesh representative also requested that the AIBP include extension/renovation of existing schemes. He favored tapping of ground water wherever feasible.
- (xv) Sikkim representative suggested revision of AIBP guidelines which require a minimum of 20 hectares to be eligible and proposed 5 hectares as the threshold for MI schemes in small hill States. MOWR representative informed that the requirement of minimum irrigation potential area of 20 ha per scheme under AIBP is as per guidelines effective from 12/2006.
- (xvi) Manipur representative admitted that MI schemes in the State have been delayed but assured that these would be completed soon.

CONCLUSIONS:

- (i) Ministry of Water Resources (MOWR) and Brahmaputra Board to take up immediate and short term measures in consultation with the States for flood and erosion control on priority.
- (ii) The Ministry of Water Resources (MOWR) is consulting the States on the proposal to constitute NEWRA. The Govt. of Arunachal Pradesh expressed their reservations about the constitution of this authority.
- (iii) The Brahmaputra Board to play a more active role in taking up flood control schemes in all NE States and should not confine its activities to any one State as it appears to have happened so far.
- (iv) Brahmaputra Board to expedite preparation of DPRs in respect of eight proposals of the State of Tripura.
- (v) CWC to expedite preparation of DPR by 12/2007 in respect of Mizoram Govt's revised proposal for a 450MW Kolodyne project.
- (vi) NEC would provide funding to the States for engaging Consultants for preparation of project reports for micro/minor irrigation projects.

- (vii) Planning Commission to examine the pattern of release of installments so that the loss of working period can be avoided.
- (viii) CWC to ensure early release of funds for implementation of various projects.
- (ix) MOWR to examine the possibility of modification in the AIBP scheme, like increasing the limit of project cost per ha, providing for maintenance etc. for minor irrigation schemes, reducing the area of irrigation potential to five ha per scheme etc.
- (x) MOWR to examine the possibility of taking up ground water irrigation scheme under AIBP including construction of check dams.
- (xi) MOWR to take up the matter with the Central Ground Water Board (CGWB) to explore the possibility and desirability of exploitation of ground water in the NER in view of the possibility of hazardous elements.

Commodity Boards and APEDA

(a) TEA BOARD

ISSUES:

- (i) The North Eastern Region (NER) accounts for 55% of the area under tea and 53% of total production. Assam and Tripura are the major tea growing States – 2.8 lakh ha – 455 mkg production – about 6.2 lakh people employed – 535 registered tea estate factories – 205 bought leaf factories – nearly 20% output from small tea growers.
- (ii) Over 40,000 small tea growers in Assam – only 2927 growers registered with Tea Board – most growers do not possess proper land documents and hence not eligible for financial assistance from Tea Board, Banks, etc.
- (iii) Community ownership of land in States Assam and Tripura leads to difficulty in determination of ownership and in creation of security for obtaining credit.
- (iv) In respect of Arunachal Pradesh, MOEF have stipulated that prior clearance be obtained before taking up tea cultivation. – this has hampered many growers.
- (v) Limited availability of skilled manpower, especially in the hill States like Meghalaya, Mizoram, Arunachal Pradesh and Nagaland, also impacts on production.
- (vi) Small tea growers do not get remunerative prices for green tea leaf.
- (vii) Assam tea has distinctive quality – Tea Board has introduced a logo for Assam tea and initiative steps to registered orthodox tea as a GI.
- (viii) Scope for export of specialty tea including organic, high-grown, produced by small growers in hilly non-traditional regions.
- (ix) Guwahati Tea Auction Centre biggest in India – in 2005, 143 kgs of tea (Rs.865 crores) handled by this Centre – this constitutes 30% of total tea produced in NER.
- (x) Tea Board development programmes include assistance for replanting/rejuvenation of old and uneconomical sections, assistance to small growers, modernization of tea factories and creation of facilities of dual manufacture of tea, marketing of Assam logo, research grant to TRA, training through Indian Institute of Plantation Management (IIPM), NPC, etc.
- (xi) Tea Board has special development programmes for small tea growers which includes training programmes, setting-up of nurseries, providing advisory services, arranging study towards, financing SHGs – there is a proposal to set-up a separate small grower development wing within Tea Board.
- (xii) There are 39 sick/closed tea gardens due to poor price realizations and inability to take-up rejuvenation of old tea gardens.
- (xiii) While all other agricultural products are entitled to Central transport subsidy, this subsidy is not available for tea under NEIP, 1997.
- (xiv) Land ownership is a problem especially in Assam where small tea growers have not been issued pattas.
- (xv) Replantation/rejuvenation holds the key to long term competitiveness of Indian tea.
- (xvi) Department of Commerce have established Special Purpose Tea Fund (SPTF) on 17 January, 2007 – with assistance from this fund 1 lakh ha proposed to be renovated in the NER over the next 15 years with investment of about Rs.2,500 crore.
- (xvii) Productivity in NER is low compare to countries like Kenya where productivity is as high as 25 tonnes/ha.

CONCLUSIONS:

- i) Tea Board to introduce incentives for orthodox tea planting and set-up Village Resource Centers to assist small tea growers during 11th Plan. More mini factories be set up.
- ii) Tea Board to announce a separate logo and GI for Assam Orthodox Tea within three months.
- iii) Assam Government to issue “possession certificates” to all small tea growers within one month to enable them to register with Tea Board.
- iv) Indian Institute of Plantation Management be set up at Jorhat by June, 2007 with mandate to undertake training programmes.
- v) Transport subsidy for tea exported directly from ICD, Amingaon, Assam @ Rs.1.50 per kg to be introduced.
- vi) Tea Board to support promotional activities in association with the industry.
- vii) Tea Board to streamline electronic auction system for online trading of tea.
- viii) Tea Board to support Tea Research Association (TRA) and Tea Research Foundation (TRF).
- ix) Tea Board to support labour welfare measures including capital grants for extension of school buildings and construction of hostels, medical facilities and purchase of equipment, sports activities, sanitation and drinking water for tea garden labour.
- x) Tea Board to support diversification/multi-cropping and intensify marketing support.

(b) RUBBER BOARD ISSUES

- (i) Rubber plant is native of Brazil and was introduced in India in 1873 – it has 6-7 years gestation period and economic life of about 25 years – natural rubber is raw material for about 35,000 products in India.
- (ii) India ranks 2nd in productivity (1727 kg/ha/annum), 4th in production (7,72,000 tonnes) and consumption (7,89,000 tonnes) and 5th in area (5,97,000 ha) under rubber cultivation.
- (iii) In India, rubber is traditionally grown in Kerala, Kanyakumari, NER (mostly in Tripura and Assam), Karnataka and Tamil Nadu – 58,432 ha (comprising 9.8% of the total) area in NER under rubber cultivation.
- (iv) Rubber plantations provide gainful self employment and sustainable livelihoods besides ecological benefits including carbon sequestration.
- (v) Rubber plantations are a success story in Tripura which is now the 2nd largest rubber growing State with 33.7% of the potential area under rubber – rubber is identify as a priority crop for rehabilitation project in Tripura – Govt. of Tripura and Rubber Board jointly work on block plantation projects – around 2750 tribal families settled through block planting in around 3100 ha – Tripura Rehabilitation and Plantation Corporation constituted to take up rubber paste resettlement of tribal people – Tripura Forest Development Plantation Corporation have taken up commercial planting of rubber – TTAADC also involved in tribal settlement through rubber planting – Government of Tripura has contributed 40% of the cost of Community Processing Centres and established a Rubber Park with common facilities for rubber based industrial units.
- (vi) Against a potential of 4.5 lakh ha in the NER, the present rubber plantation area covers only 13%. This is due to various factors including lack of technical assistance, shortage of manpower, insufficient supply of planting material, law and order problems etc.
- (vii) Rubber Board currently has two zonal offices, eight regional offices, one residential training centre, four regional research station, one rubber research and training centre in the NER.
- (viii) Carbon Sequestration offers major opportunity – Rubber Board is collaborating with TERI.
- (ix) Rubber Board has identified potential rubber growing areas in other NE States also.
- (x) It was recognized that rubber plantation holds tremendous potential for providing employment and sustainable livelihoods - need for intensive extension work to convert NER into a mini-Kottayam.

CONCLUSIONS:

- (i) Rubber should be the major thrust area during the 11th Plan, with active collaboration among the stakeholders – Department of Commerce, Rubber Board, Ministry of DONER/NEC and the North Eastern States.
- (ii) Rubber Board to fund for area expansion and rejuvenation of sick plantations and introduce technology for increasing productivity.
- (iii) Rubber Board to address locations specific agro-management and processing problems.
- (iv) Rubber Board to upgrade quality at primary process level for better price to farmers and support formation and empowerment of farmer groups.
- (v) Rubber Board to maintain and support nurseries by Gram Panchayats and SHGs.
- (vi) Department of Commerce to strengthen all Commodity Boards including Rubber Board to enable intensification of their activities in the NER.

(vii) States to earmark and allot land for rubber plantations and emulate the Tripura model. State Governments to designate department and officer as nodal agency in the respective States for coordination with the Rubber Board.

(viii) A Task Force chaired by Shri P.P. Shrivastav, Member, NEC with representatives from the Rubber Board, DONER/NEC and Department of Commerce and the NE States as members be constituted to prepare a detailed Action Plan for taking up Rubber Plantation in the identified areas of the NE States. Dr. Binay Singh, Adviser, Agriculture), NEC shall be the convenor. The Task Force should examine existing Central programmes, identify gaps and recommend specific measures for promoting rubber plantations in the NE. The Tripura model of rubber cultivation to be considered by the Task Force. Report to be submitted by 15.4.2007 to the Chairman, NEC.

(c) SPICES BOARD

ISSUES:

- (i) The NE's climatic conditions offer vast scope for promoting production of spices, particularly high value organic spices.
- (ii) Spices (lakadong turmeric, bird eye chilli, ginger) grown in the NE have high intrinsic value and hold vast industrial and pharmaceutical potential.
- (iii) Hill areas of Sikkim, Nagaland, Meghalaya, Mizoram, Manipur and Arunachal Pradesh hold high potential for large cardamom, organic ginger, turmeric and chillies.
- (iv) ITC has shown its willingness to work in association with Sikkim, Meghalaya and Nagaland and the Spices Board for cultivation, processing and export of Cardamom, Ginger, Turmeric and Naga Chilli.
- (v) Tata tea is investing in cultivation of black pepper and marketing on ginger and other spices.
- (vi) Spices Board pays the cost for obtaining organic certification by the growers and has recognized 12 agencies for this purpose.
- (vii) Spices Board needs to strengthen its presence in NE and assist the States and growers for improving productivity and marketing the produce.
- (viii) Current investments by the Spices Board in the NE are inadequate – Rs.17 crore proposed to be invested during the XI Plan.
- (ix) Low productivity also affects spice production in the NE.

CONCLUSIONS:

- (i) Spices Board to be strengthened and to intensify its activities in the NE to promote spices production and productivity particularly that of organic spices. Investments by Spices Board to be increased commensurate with the proposed intensified programmes in the Region.
- (ii) The tripartite agreement between ITC, State Governments and the Spices Board be signed during the 3rd N.E. Business Summit being organized jointly by M/o DONER and ICC, Kolkata at New Delhi from 10-11 April 2007.
- (iii) An MOU has been signed between Cochin University of Science and Technology (CUSAT) and the Spices Board for research on spices. Dr. C.S. Paulose of CUSAT be invited to the 3rd N.E. Business Summit.

(d) COFFEE BOARD

ISSUES:

- (i) Coffee Board carried a comprehensive survey in 1970's for coffee development in NE – over 40,00 ha in about 300 villages and 39 districts in 7 States was identified – coffee plant in programme undertaken with finance support with NABARD.
- (ii) 5473.54 ha under coffee cultivation out of which 2640.52 ha has reached bearing stage – maximum plantation area is in Nagaland (2129 ha) followed by Mizoram (933.8 ha), Meghalaya (866.20 ha) and Assam (754.39 ha).
- (iii) Coffee holdings are small and scattered. Of 1453 holdings, 1452 holdings are below 10 ha each in Nagaland; similarly out of 1510 holdings in Mizoram, 1507 are below 10 ha.
- (iv) Coffee has long gestation period which involves sustained investments and efforts. But the long gestation period acts as a deterrent to small growers.
- (v) Lack of post harvest and inadequate marketing facilities have been a hindrance to the growth of Coffee in the NE.

- (vi) Coffee Board has been implementing the Special Area Programme (SAP) in the NER since IX Plan – objective is to promote coffee cultivation in tribal tracts, wean away local community from jhum cultivation, generate self employment, increase production and productivity, expand/consolidate area under coffee cultivation and help afforestation through shade trees to maintain ecological balance.
- (vii) Under SAP, Coffee Board extends subsidy @ Rs.15,000 per ha for coffee expansion/consolidation, market support @ Rs.10 per kg, supplies seed material, training technological inputs and supports establishment of SHGs as part of community approach.
- (viii) Under SAP, Coffee Board has assisted expansion of coffee plantations in 3198 ha and coffee consolidation in 690 ha during X Plan in the NER.
- (ix) About 2,200 ha was under coffee cultivation at the end of IX Plan and around 3,200 ha has been brought under fresh planting during X Plan in the NER.
- (x) Production in 2005-06 was around 250 MTs comprising 175 MTs of Arabica and 75 MTs of Robusta – present productivity levels are very low (<100 kg/ha).

CONCLUSIONS:

- (i) Coffee Board to facilitate consolidation of holdings in NER and also provide financial support for expansion and quality up-gradation. Inter cropping in the coffee plantation also to be promoted.
- (ii) States to cooperate with Coffee Board for raising coffee plantations in clusters particularly in the States of Nagaland and Mizoram which hold maximum potential.
- (iii) Coffee Board to provide technical support and build capacity of coffee growers and State Govt. staff for improving production and productivity and facilitate marketing – Village Development Boards in Nagaland and credible NGOs like YMA in Mizoram be mobilised for community participation. NERAMAC to be involved for collection and transportation of produce to a central location for processing and marketing.
- (iv) Coffee Board to promote mixed cropping and provide infrastructure support for processing of the produce – presently there is only one coffee processing unit at Bualpui in Mizoram.
- (v) Coffee Board to focus on promoting coffee cultivation in agro-climatically suitable areas of the NER.

(e) APEDA ISSUES

- (i) Besides facilitating marketing of agriculture and processed foods, APEDA provides assistance for infrastructural facilities, training of farmers and transport subsidy. Due to lack of awareness and infrastructure in all NE States there is inadequate response to the APEDA initiatives.
- (ii) Cold storage facilities either do not exist or those that do are extremely inadequate. Similar is the position in respect of marketing arrangements.
- (iii) Out of APEDA's total exports of Rs.70,000 crore per annum (including Rs.12,000 crore per annum of basmati rice), NER's share is Rs.4.8 crore only.
- (iv) It was observed that a large proportion of exports from the NE States is through the informal route to the neighbouring countries, namely, Bangladesh. This is not reflected in APEDA's export figures.
- (v) It was also observed that traders buy up and transport produce outside the NER before exporting. As a consequence, there are no subsidy claims under APEDA's Transport Subsidy Scheme and the producers do not benefit.
- (vi) APEDA's primary responsibility is to set up cold storage facilities at five airports, viz., Guwahati, Aizawl, Imphal, Dimapur and Agartala. The need for cold chain facilities in coordination with cargo companies was emphasized.

CONCLUSION:

- (i) APEDA to operationalise four Agriculture Export Zones (AEZs) in Tripura (1) for Pineapples, Sikkim (2) for Ginger, Orchids and Cherry Pepper and in Assam (1) for Fresh & Processed Ginger by 12/ 2007.
- (ii) APEDA to submit a report to the Department of Commerce on the status of Cold Storages at the Guwahati, Aizawl, Imphal, Dimapur, Agartala and Bagdogra Airports with time lines for their completion.
- (iii) APEDA to expedite conclusions of negotiation with cargo companies to provide complete cold chains in the NER.
- (iv) APEDA to coordinate consultations with CONCOR and NERAMAC to work-out the logistics for a complete cold chain from the field to the point of export.
- (v) State Governments to designate nodal departments/officers for interaction with APEDA.

GENERAL CONCLUSIONS:

- (i) Rubber plantations were identified as the top priority thrust sector among the Commodity Boards followed by the Spices Board and APEDA.
- (ii) It was recognized that considerable work has already been initiated by the Tea Board. This may be carried forward.
- (iii) Coffee Board will pay focused attention for development of coffee plantations in Nagaland and Mizoram through clusters.
- (iv) State Governments to assist the Commodity Boards and APEDA in matters relating to land acquisition, organization of farmers, awareness programmes and identification of clusters, etc.
- (v) APEDA to ensure operationalisation of the five AEZs within 01 December, 2007.
- (vi) All for Commodity Boards and APEDA to be invited to the North East Business Summit (New Delhi: 10-11 April, 2007).

Annexure 5

CHAPTER 5: INDUSTRY: HARNESSING RESOURCES FOR PEOPLE'S WELFARE

ANNEXTURE 5.1

Table 5.1A: Share of Manufacturing in NSDP, 1993-94 to 2002-03: At constant 1993-94 prices

(percent)

States	Years	Manufacturing
Arunachal Pradesh	1993-94	3
	1998-99	3
	2002-03	3
Assam	1993-94	8
	1998-99	8
	2002-03	7
Manipur	1993-94	7
	1998-99	8
	2002-03	9
Meghalaya	1993-94	3
	1998-99	2
	2002-03	3
Nagaland	1993-94	3
	1998-99	2
	2002-03	1
Sikkim	1993-94	6
	1998-99	4
	2002-03	3
Tripura	1993-94	3
	1998-99	1
	2002-03	2
NER	1993-94	4.71
	1998-99	4
	2002-03	4
India	1993-94	17
	1998-99	17
	2002-03	16

Note: 1. Owing to differences in methodology of compilation, data for different states and union territories are not strictly comparable.

2. Data for Mizoram at constant prices is not available.

3. Figures are calculated.

Source: *Central Statistical Organisation (CSO)* website as on 26-11-1999 for old series and as on 23-2-2006 for new series.

Table 5.2A: Growth Rate of Manufacturing, 1993-94 to 2002-03*(percent)*

States	Growth Rate
Arunachal Pradesh	0
Assam	1
Manipur	8
Meghalaya	4
Nagaland*	-18
Sikkim	1
Tripura	6
India	3

Note: 1. Owing to differences in methodology of compilation, data for different states and union territories are not strictly comparable.

2. Data for Mizoram at constant prices is not available.

3. Figures are calculated.

* data only for the unregistered sector.

Source: *Central Statistical Organisation (CSO)* website as on 26-11-1999 for old series and on 23-2-2006 for new series.

Table 5.3A: Registered and Unregistered Sectors, 2003-04*(Rupees crore)*

States	Registered	Unregistered	Total Manufacturing
Arunachal Pradesh	0.0	27.3	27.3
Assam	1,009.4	352.5	1,361.9
Manipur	3	189.3	192.3
Meghalaya	40.2	29.2	69.4
Nagaland	11.3	5.8	17.2
Sikkim	8.7	13.3	22.0
Tripura	42.7	38.3	80.9
NER	1,115.3	655.7	1771.0

Source: *Handbook of the Indian Economy*, 2003-04

Table 5.4A: Employment, Output and NFCF in Registered Manufacturing**2002-03**

States	Employment as percent of Total National Employment	Factories as percent of Factories in India	Total Output as percent of National Output	Net Fixed Capital Formation (NFCF) as percent of National NFCF
Assam	1.40	1.20	1.11	0.23
Manipur	0.02	0.03	0.00	0.00
Meghalaya	0.03	0.03	0.03	-0.01
Nagaland	0.04	0.09	0.01	-0.04
Tripura	0.15	0.2	0.02	0.12
NER	1.63	1.56	1.17	0.30
INDIA	100	100	100	100

Source: Calculated from *Summary Result, Factory Sector, Annual Survey of Industry*, Central Statistical Organization.

Table 5.5A: Registered and Unregistered Small-Scale Industry, 2001-02

States	Registered SSIs	Unregistered SSIs	Total SSIs	percent of NE	percent of All India
Arunachal Pradesh	255	997	1,252	0.4	0.01
Assam	14,453	179,926	194,379	61.5	1.85
Manipur	4,599	43,400	47,999	15.2	0.46
Meghalaya	1,939	20,581	22,520	7.1	0.21
Mizoram	2,733	8,383	11,116	3.5	0.11
Nagaland	568	13,293	13,861	4.4	0.13
Sikkim	174	194	368	0.1	0.00
Tripura	959	23,393	24,352	7.7	0.23
NER	25,680	290,167	315,847	100.0	3.00
India	1374974	9146,216	10521,190	..	100

Source: *Third Census, Small-scale Industry, 2001-02*

Table 5.6A: Growth of Small-Scale Industry, 1997-98 to 2002-03

Year	AP	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
1997-98	4,456	34,258	5,322	2,982	3907	712	294	1,798
1998-99	4,546	36,482	5,447	3,247	4,313	982	306	1,867
1999-00	4,694	38,303	5,587	3,505	4,490	1,276	322	1,931
2000-01	4,750	40,419	5,778	3,778	4,610	1,600	333	1,967
2001-02	4,797	42,947	5,868	4,044	4,970	1,969	341	2,000
2002-03	5,022	45,193	5,974	4,213	5,293	2,513	351	2,020
Average Growth Rate (%)	3.19	5.93	2.46	7.45	6.33	26.62	3.76	2.60

Source: NER Data Bank.

Table 5.7A: Rural-Urban Distribution of Small-Scale Industries (SSIs) Across Activities, 2001-02

(percent)

State	Manufacturing		Repair & Maintenance		Services		Total
	Rural	Urban	Rural	Urban	Rural	Urban	
Sikkim	32.07	31.79	0.00	2.99	1.09	32.07	100
Arunachal Pradesh	12.38	22.2	2.24	29.47	3.67	30.03	100
Nagaland	62.77	11.75	9.88	1.22	9.44	4.95	100
Manipur	52.44	13.3	6.90	7.24	12.48	7.64	100
Mizoram	17.04	32.53	0.03	2.69	31.64	16.08	100
Tripura	10.06	15.14	5.83	12.00	22.56	34.40	100
Meghalaya	47.32	12.61	0.79	16.59	2.55	20.14	100
Assam	32.70	8.99	18.89	8.14	22.30	8.98	100
India	25.31	14.38	8.37	7.99	21.53	22.42	100

Source: *Third Census, Small-scale Industry, 2001-02*

Table 5.8A: Distribution of Small-scale Industries, Ancillaries and Service and Business Enterprises, 2001-02

State	Percent		
	SSIs	Ancillaries	SSSBEs
Arunachal Pradesh	0.01	0	0.01
Assam	2.00	0.31	1.74
Nagaland	0.29	6.69	0.02
Meghalaya	0.30	0.01	0.15
Mizoram	0.13	0.59	0.09
Manipur	0.72	0.59	0.26
Sikkim	0.1	0	0
Tripura	0.15	0.03	0.29
NER	3.70	8.22	2.56
India	100	100	100

Source: *Third Census, Small-scale Industry, 2001-*

Note: 1. Ancillaries are industrial undertakings engaged in the manufacture or production of parts, components, sub-assemblies, tooling or intermediates, or the rendering of services and the undertaking supplies or renders or proposes to supply or render not less than 50 percent of its production or services and whose investment in fixed assets in plant and machinery and does not exceed Rs 10 million.

2. SSSBEs: Service and business enterprises are those with investment up to Rs 500,000 in fixed assets, excluding land and building.

Table 5.9A: Gross Output and Employment in Small-Scale Industry, 2001-02.

State	Output (Rs lakh)	Percent of Total Output	Employment (No.)	Percent of Total Employment
Sikkim	2,822.7	0.01	1,322	0.01
Arunachal Pradesh	5,645.4	0.02	3,687	0.01
Nagaland	36,695.1	0.13	56,795	0.23
Manipur	47,985.9	0.17	136,811	0.55
Mizoram	14,113.5	0.05	24,850	0.10
Tripura	31,049.7	0.11	56,962	0.23
Meghalaya	33,872.4	0.12	65,586	0.26
Assam	330,255.9	1.17	429,003	1.72
NER	502,440.6	1.78	775,016	3.11
India	282,26,998	100	249,32,763	100

Source: *Third Census, Small-scale Industry, 2001-02*

Table 5.10A: Proportion of Fixed Investment in Small-Scale Industry, 2001-02*(percent)*

State	Fixed Investment
Arunachal Pradesh	0.02
Assam	0.71
Manipur	0.23
Meghalaya	0.09
Mizoram	0.08
Nagaland	0.18
Sikkim	0.01
Tripura	0.21
NER	1.53
India	100

Source: *Third Census, Small-scale Industry, 2001-02***Table 5.11A: Sick and Incipient Sick Units in Small-Scale Industry, 2001-03***(percent)*

State	Sick units	Incipient Sick Units	Sick and Incipient Sick Units	Sick Units (RBI criteria)
Sikkim	0.02	0.01	0.01	0.01
Arunachal Pradesh	0.02	0.01	0.01	0.02
Nagaland	0.01	0	0	0.01
Manipur	0.12	0.53	0.5	0.12
Mizoram	0.02	0.01	0.01	0.01
Tripura	0.45	0.21	0.2	0.54
Meghalaya	0.22	0.06	0.08	0.26
Assam	1.23	1.01	1.02	0.98
NER	2.09	1.84	1.83	1.95
India	100	100	100	100

Source: *Third Census, Small-scale Industry, 2001-02*

Note: Sick Units: where there is erosion of net worth or delay in repayment of institutional loan
Incipient Sick Units demonstrate a continuous decline in gross output

Sick or Incipient Sick Units: erosion of net worth or delay in repayment of institutional loan or continuous decline in gross output

Sick units according to RBI criteria: among units with outstanding institutional loan where there is erosion of net worth or delay in repayment of institutional loan

Table 5.12A: Export Units in Small-Scale Industry, 2001-02

State	Exporting Units			Percentage to Total
	Registered	Unregistered	Total	
Sikkim	65	90	155	0.02
Nagaland	1	453	454	0.9
Manipur	8	0	8	0.02
Mizoram	4	188	192	0.38
Tripura	10	83	93	0.18
Assam	20	1,438	1,458	2.88
NER	108	2,252	2,360	4.38
India	7,344	43,262	50,606	100

Source: *Third Census, Small-scale Industry, 2001-02*

Table 5.13A: Value of Exports in Small-Scale Industry, 2001-02

(rupees)

State	Registered Units	Unregistered Units	Total	Percentage to All-India Total
Sikkim	26,55,657	0	26,55,657	
Nagaland	1,11,20,000	6,76,30,532	7,87,50,532	0.06
Manipur	12,58,409	9,40,000	21,98,409	0.0
Mizoram	3,65,315	31,79,264	35,44,579	0.0
Tripura	5,81,000	10,32,74,288	10,38,55,288	0.07
Assam	5,13,25,230	9,27,15,545	14,40,40,775	0.10
NER	6,73,05,611	26,77,39,629	33,50,45,240	0.23
India	123100000000	189100000000	1420000000000	100

Source: *Third Census, Small-scale Industry, 2001-02*

Table 5.14A: Tea Industry, 2000-04

(million kg)

	2000	2001	2002	2003	2004
Production	846	854	826	857	830
Imports	14	17	22	7	25
Exports	207	183	201	173	190
Consumption	653	673	685	697	710

Source: NER Data Bank

Table 5.15A: Distribution of Handicrafts in the Northeast, 1995-96

State	Units (number)	Artisans (number)	Production (Rs. crore)
Assam	30,360 (2.39)	100,482 (2.45)	7,820.94 (29.72)
Arunachal Pradesh	4,044 (0.31)	15,735 (0.38)	855.56 (3.25)
Manipur	98,051 (7.74)	379,988 (9.29)	147.60 (0.56)
Meghalaya	11,512 (0.90)	53,564 (1.31)	2,580.67 (9.80)
Mizoram	2,213 (0.17)	5,260 (0.12)	5.93 (0.02)
Nagaland	17,603 (1.39)	79,878 (1.95)	9,463.99 (35.98)
Sikkim	2,198 (0.17)	9,768 (0.23)	5.59 (0.02)
Tripura	77,375 (6.11)	244,495 (5.98)	60.80 (0.23)
NER	2,31,844 (19.18)	8,89,170 (21.71)	20,941.08 (79.58)
Grand Total	1266,009 (100.00)	4103,293 (100.00)	26,312.13 (100.00)

Note: Figures in parentheses are percentages to total

Source: *NER Data Bank*; according to the Census of Handicrafts, 1995-96.

Table 5.16A: Distribution of Handlooms in the Northeast, 1995-96j

(total number)

States	Working Looms	Idle Looms	Total Looms
Arunachal Pradesh	45,060	456	45,156
Assam	12,98,731	1,10,437	14,09,168
Manipur	2,66,915	3,346	2,70,261
Meghalaya	7,783	418	8, 201
Mizoram	14,388	9,406	23,794
Nagaland	71,636	5,867	77,503
Tripura	1,16,659	2,413	1,19,072
NER	18,21,172	1,32,343	19,53,515

Source: *NER Data Bank*, based on the Handloom Census of India.

Table5.17A: Bamboo Resources of the Northeast

State	Bamboo Growing Area (sq. km.)	Bamboo Growing Stock (million tons)
Mizoram	9,210	10.89
Assam	8,213	13.41
A. Pradesh	4,590	9.84
Manipur	3,692	11.47
Meghalaya	3,102	4.41
Tripura	939	0.86
Nagaland	758	3.66
NER	30,504	54.53

Source: *Dialogue*, October - December, 2003, Volume 5 No. 2

Note: The source of this table does not provide the year of the data.

Table 5.18A: NIC 98 – Three-Digit Industries in the Northeast, 2002-03

ASSAM
014 : Other Mining and Quarrying.
151 : Production, Processing and Preserving of meat, fish, fruit, vegetables, oils and fats.
152 : Manufacture of dairy product.
153 : Manufacture of grain mill products, starches and starch, products and prepared animal feeds.
154 : Manufacture of other food products.
155 : Manufacture of beverages.
160 : Manufacture of bidi, cigarette, cigars and cheroots snuff, zarda, pan masala etc.
171 : Spinning, weaving and finishing of textiles.
201 : Saw milling and planing of wood.
202 : Manufacture of products of wood, cork, straw and plaiting materials, wood containers etc.
210 : Manufacture of pulp, paper and paper board (wall paper, news paper, printing paper etc.)
221 : Wine industries.
222 : Malt liquors and malt.
231 : Cotton spinning, weaving, shrinking and finishing of cotton textiles.
232 : Printing, dyeing and bleaching of cotton textiles.
241 : Wool spinning, weaving and finishing in mills.
242 : Wool weaving and spinning other than in mills.
251 : Jute and mesta spinning and weaving.
252 : Dyeing, printing and bleaching of jute textiles.
261 : Manufacture of all kind of threads, cordage, rope, twines, nets, etc.
269 : Manufacture of other textile goods n.e.c.
271 : Sawing and lanning of wood (other than plywood).
272 : Manufacture of wooden and cane boxes, crates, drums, etc.

281 : Manufacture of containers, boxes of paper and paperboard.
289 : Printing, publishing and allied activities n.e.c.
291 : Manufacture of leather footwear (excluding repair).
292 : Manufacture of leather wearing apparel like coats, gloves, etc.
311 : Manufacture of fertilizers and pesticides.
313 : Manufacture of drugs and medicines.
319 : Manufacture of chemical products n.e.c.
321 : Manufacture of glass and glass products.
342 : Manufacture of furniture and fixtures primarily of metal.
361 : Manufacture of insulated wires and cables.
>=400: Others.
MANIPUR
151 : Production, processing and preserving of meat, fish, fruit, vegetables, oils and fats.
153 : Manufacture of grain mill products, starches and starch, products and prepared animal feeds.
201 : Saw milling and planning of wood.
269 : Manufacture of other textile goods n.e.c.
>=400: Others.
MEGHALAYA
153 : Manufacture of grain mill products, starches and starch, products and prepared animal feeds.
154 : Manufacture of other food products.
222 : Malt liquors and malt.
269 : Manufacture of other textile goods n.e.c.
271 : Sawing and lanning of wood (other than plywood).
>=400: Others.
NAGALAND
153 : Manufacture of grain mill products, starches and starch, products and prepared animal feeds.
154 : Manufacture of other food products.
201 : Saw milling and planning of wood.
202 : Manufacture of products of wood, cork, straw and plaiting materials, wood containers etc.
222 : Malt liquors and malt.
269 : Manufacture of other textile goods n.e.c.
289 : Printing, publishing and allied activities n.e.c.

>=400: Others.
TRIPURA
All
152 : Manufacture of dairy product.
153 : Manufacture of grain mill products, starches and starch, products and prepared animal feeds.
154 : Manufacture of other food products.
160 : Manufacture of bidi, cigarette, cigars and cheroots snuff, zarda, pan masala etc.
171 : Spinning, weaving and finishing of textiles.
222 : Malt liquors and malt.
242 : Wool weaving and spinning other than in mills.
252 : Dyeing, printing and bleaching of jute textiles.
269 : Manufacture of other textile goods n.e.c.
271 : Sawing and lanning of wood (other than plywood).
281 : Manufacture of containers, boxes of paper and paper board.
289 : Printing, publishing and allied activities n.e.c.
313 : Manufacture of drugs and medicines.
361 : Manufacture of insulated wires and cables.
>=400: Others.

Source: *Annual Survey of Industries*, 2002-03, Central Statistical Organisation, Government of India

Tables 5.19A: Large-Scale Industry in the Northeast Region

Table 5.16A (a) Assam <i>(value in lakh rupees; others in numbers)</i>						
NIC 98 - 3 Digit	Employment	Factories	Total Output	Net Value Added	Net Fixed Capital Formation	Income
All	0.01	0.01	0.01	0.02	0.00	0.02
014 : Other Mining and Quarrying.	0.00	0.00	0.00	0.00	0.00	0.00
151 : Production, Processing and Preserving of meat, fish, fruit, vegetables, oils and fats.	0.01	0.01	0.00	0.00	0.00	0.00
152 : Manufacture of dairy product.	0.00	0.01	0.00	0.00	0.00	0.00
153 : Manufacture of grain mill products, starches and starch, products and prepared animal feeds.	0.01	0.01	0.01	0.00	-0.01	0.01
154 : Manufacture of other food products.	0.10	0.10	0.06	0.05	0.03	0.09
155 : Manufacture of beverages.	0.01	0.02	0.01	0.01	0.02	0.01
160 : Manufacture of <i>bidi</i> , cigarette, cigars and cheroots snuff, <i>zarda</i> , <i>pan masala</i> , etc.	0.00	0.00	0.05	0.06	0.04	0.06
171 : Spinning, weaving and finishing of textiles.	0.00	0.00	0.00	0.00	0.00	0.00
201 : Saw milling and planning of wood.	0.02	0.03	0.00	0.01	-0.01	0.01
202 : Manufacture of products of wood, cork, straw and plaiting materials, wood containers etc.	0.00	0.00	0.00	0.00	0.00	0.00
210 : Manufacture of pulp, paper and paper board (wall paper, news paper, printing paper etc.)	0.03	0.00	0.03	0.06	0.00	0.10
221 : Wine industries.	0.00	0.01	0.00	0.00	0.00	0.00
222 : Malt liquors and malt.	0.01	0.01	0.00	0.01	0.00	0.01
231 : Cotton spinning, weaving, shrinking and finishing of cotton textiles.	0.02	0.01	0.03	0.03	-0.07	0.04
232 : Printing, dyeing and bleaching of cotton textiles.	0.13	0.02	0.04	0.09	-0.06	0.09
241 : Wool spinning, weaving and finishing in mills.	0.01	0.00	0.00	0.01	-0.01	0.01
242 : Wool weaving and spinning other than in mills.	0.01	0.01	0.01	0.01	0.03	0.02
251 : Jute and mesta spinning and weaving.	0.00	0.00	0.00	0.00	0.00	0.00
252 : Dyeing, printing and bleaching of jute textiles.	0.00	0.00	0.00	0.00	-0.03	0.00
261 : Manufacture of all kind of threads, cordage, rope, twines, nets, etc.	0.00	0.01	0.00	0.00	0.00	0.00
269 : Manufacture of other textile goods n.e.c.	0.03	0.03	0.01	0.01	0.05	0.01
271 : Sawing and lanning of wood (other than plywood).	0.00	0.01	0.00	0.00	0.00	0.00
272 : Manufacture of wooden and cane boxes, crates, drums, etc.	0.00	0.01	0.00	0.00	0.00	0.00
281 : Manufacture of containers, boxes of paper and paper board.	0.01	0.01	0.00	0.00	-0.01	0.00
289 : Printing, publishing and allied activities n.e.c.	0.00	0.00	0.00	0.00	0.01	0.00
291 : Manufacture of leather footwear (excluding repair).	0.00	0.00	0.00	0.00	0.00	0.00
292 : Manufacture of leather wearing apparel, coats, gloves, etc.	0.01	0.01	0.00	0.01	0.05	0.01
311 : Manufacture of fertilisers and pesticides	0.00	0.00	0.00	0.00	0.00	0.00

313 : Manufacture of drugs and medicines.	0.00	0.00	0.00	0.00	0.00	0.03
319 : Manufacture of chemical products n.e.c.	0.02	0.01	0.01	0.03	0.00	0.04
321 : Manufacture of glass and glass products.	0.00	0.01	0.01	0.00	0.02	0.00
342 : Manufacture of furniture and fixtures primarily of metal.	0.01	0.01	0.00	0.01	0.00	0.04
361 : Manufacture of insulated wires and cables.	0.00	0.01	0.00	0.00	-0.01	0.00
>=400: Others.	0.01	0.01	0.00	0.00	0.00	0.00

Table 5.19A (b) Manipur (value in lakh rupees; others in numbers)

NIC 98 - 3 Digit	Employment	Factories	Total Output	Net Value Added	Net Fixed Capital Formation	Income
All	0.00	0.00	0.00	0.00	0.00	0.00
151 : Production, Processing and Preserving of meat, fish, fruit, vegetables, oils and fats.	0.00	0.00	0.00	0.00	0.00	0.00
153 : Manufacture of grain mill products, starches and starch, products and prepared animal feeds.	0.00	0.00	0.00	0.00	0.00	0.00
201 : Saw milling and planning of wood.	0.01	0.01	0.00	0.00	0.00	0.00
269 : Manufacture of other textile goods n.e.c.	0.01	0.00	0.00	0.00	0.00	0.00
>=400: Others.	0.00	0.00	0.00	0.00	0.00	0.00

Table 5.19A(c) Meghalaya (value in lakh rupees; others in numbers)

NIC 98 - 3 Digit	Employment	Factories	Total Output	Net Value Added	Net Fixed Capital Formation	Income
All	0.00	0.00	0.00	0.00	0.00	0.00
153 : Manufacture of grain mill products, starches and starch, products and prepared animal feeds.	0.00	0.00	0.00	0.00	0.00	0.00
154 : Manufacture of other food products.	0.00	0.00	0.00	0.00	0.00	0.00
222 : Malt liquors and malt.	0.00	0.00	0.00	0.00	0.00	0.00
269 : Manufacture of other textile goods n.e.c.	0.00	0.00	0.00	0.00	0.00	0.00
271 : Sawing and lanning of wood (other than plywood).	0.00	0.00	0.00	0.00	0.00	0.00
>=400: Others.	0.00	0.00	0.00	0.00	0.00	0.00

Table 5.19A(d) Nagaland (value in lakh rupees; others in numbers)

NIC 98 - 3 Digit	Employment	Factories	Total Output	Net Value Added	Net Fixed Capital Formation	Income
All	0.00	0.00	0.00	0.00	0.00	0.00
153 : Manufacture of grain mill products, starches and starch, products and prepared animal feeds.	0.00	0.00	0.00	0.00	0.00	0.00
154 : Manufacture of other food products.	0.00	0.00	0.00	0.00	0.00	0.00
201 : Saw milling and planning of wood.	0.02	0.02	0.01	0.01	0.00	0.02
202 : Manufacture of products of wood, cork, straw and plaiting materials, wood containers etc.	0.02	0.01	0.02	0.03	0.09	0.04
222 : Malt liquors and malt.	0.00	0.01	0.00	0.00	0.00	0.00
269 : Manufacture of other textile goods n.e.c.	0.00	0.00	0.00	0.00	0.00	0.00
289 : Printing, publishing and allied activities n.e.c.	0.00	0.00	0.00	0.00	0.00	0.00
>=400: Others.	0.00	0.00	0.00	0.00	0.00	0.00

Table 5.19A(e) Tripura (value in lakh rupees; others in numbers)

NIC 98 - 3 Digit	Employment	Factories	Total Output	Net Value Added	Net Fixed Capital Formation	Income
All	0.00	0.00	0.00	0.00	0.00	0.01
152 : Manufacture of dairy product.	0.00	0.00	0.00	0.00	0.00	0.01
153 : Manufacture of grain mill products, starches and starch, products and prepared animal feeds.	0.00	0.00	0.00	0.00	0.01	0.56
154 : Manufacture of other food products.	0.00	0.01	0.00	0.00	0.00	0.00
160 : Manufacture of bidi, cigarette, cigars and cheroots snuff, zarda, pan masala etc.	0.00	0.00	0.01	0.00	0.02	0.39
171 : Spinning, weaving and finishing of textiles.	0.00	0.00	0.00	0.00	0.00	0.01
222 : Malt liquors and malt.	0.00	0.00	0.00	0.00	0.00	0.59
242 : Wool weaving and spinning other than in mills.	0.00	0.00	0.00	0.00	0.00	0.00
252 : Dyeing, printing and bleaching of jute textiles.	0.00	0.00	0.00	0.00	0.00	0.03
269 : Manufacture of other textile goods n.e.c.	0.01	0.01	0.00	0.00	0.00	0.05
271 : Sawing and lanning of wood (other than plywood).	0.00	0.00	0.00	0.00	0.00	0.00
281 : Manufacture of containers, boxes of paper and paper board.	0.00	0.00	0.00	0.00	0.00	0.00
289 : Printing, publishing and allied activities n.e.c.	0.00	0.00	0.00	0.00	0.00	0.00
313 : Manufacture of drugs and medicines.	0.00	0.01	0.00	0.00	0.00	0.02
361 : Manufacture of insulated wires and cables.	0.00	0.01	0.00	0.00	0.00	0.00
>=400: Others.	0.00	0.00	0.00	0.00	0.00	0.00

Source: *Annual Survey of Industries, 2002-03*, Central Statistical Organisation, Government of India.

Table: 5.20A: Trends in Small-Scale Industry Growth, 1997-98 to 2002-03

State	(number)					
	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Arunachal Pradesh	4,456 (7.00)	4,546 (2.01)	4,694 (3.26)	4,750 (1.19)	4,797 (1.00)	5,022 (4.7)
Assam	34,258 (6.84)	36,482 (6.49)	38,303 (4.99)	40,419 (5.52)	42,947 (6.52)	45,193 (5.23)
Manipur	5,322 (3.08)	5,447 (2.35)	5,587 (2.57)	5,778 (3.42)	5,868 (1.54)	5,974 (1.81)
Meghalaya	2,982 (8.87)	3,247 (8.87)	3,505 (7.94)	3,778 (7.79)	4,044 (7.04)	4,213 (4.18)
Mizoram	3907 (6.40)	4,313 (10.39)	4,490 (4.10)	4,610 (2.67)	4,970 (7.94)	5,293 (6.49)
Nagaland	712 (15.78)	982 (37.92)	1,276 (29.93)	1,600 (25.39)	1,969 (23.06)	2,513 (27.63)
Sikkim	294 (4.60)	306 (4.06)	322 (5.53)	333 (3.08)	341 (2.39)	351 (2.92)
Tripura	1,798 (3.90)	1,867 (3.83)	1,931 (3.31)	1,967 (1.86)	2,000 (1.67)	2,020 (1.00)

Note: Figures in brackets are the percentage increase over the previous year.

Source: *NER Data Bank*.

Table: 5.21A: Major Small-Scale Industry in the Northeast

State	Major SSIs
Arunachal Pradesh	Handloom and handicrafts, cane and bamboo, painting, carpet making.
Assam	Tea, jute, silk, paper, cement, polyester yarn, food processing, handlooms and handicrafts.
Manipur	Food products, hosiery, garments and other textiles, wood, paper and printing, leather, rubber and plastic, non-metallic mineral, electrical machinery and parts, transport equipments and parts.
Meghalaya	Wooden furniture and fixtures, cement, leather, stone, tailoring, lime-making, bakery, printing, cane and bamboo works, weaving and handloom, handicrafts.
Mizoram	Bamboo, food-processing, handloom & handicraft.
Nagaland	Silk and fabrics.
Sikkim	Silk reeling, weaving and processing, printing, handlooms and handicraft, food processing, tea.
Tripura	Tea, food processing, handloom and handicrafts, rubber and bamboo.

Source: *Directorate of Industries, Assam; Directorate of Industry and Commerce, Manipur; Directorate of Industries, Meghalaya; Department of Industry, Tripura; Department of Economics and Statistics, Mizoram, Department of Sericulture, Nagaland; Department of Commerce and industry, Sikkim; Department of Industry and Textile, Arunachal Pradesh.*

ANNEXURE 5.2

INDUSTRIAL POLICIES: REGIONAL AND STATE

North East Industrial and Investment Promotion Policy (NEIIPP), 2007

- NEIIPP 2007 includes Sikkim along with the other NE states covered under North East Industrial Policy (NEIP) 1997.
- Encourages the expansion of the existing units located any where in the NER through various incentives and also recommends the discontinuation of 'thrust' and 'non-thrust' industries as per NEIP 1997.
- Provides incentives to industrial units on substantial expansion of an increase not less than 25 percent in the value of fixed capital investment in plant and machinery for the purpose of expansion of capacity/modernisation and diversification, which was 33.5 percent earlier (1997 policy).
- Continues 100 percent excise duty exemption and 100 percent income tax exemption in the NER.
- Enhances the capital investment subsidy from 15 percent of investment in plant and machinery to 30 percent, with the limit for automatic approval of subsidy at this rate at Rs 1.5 crore per unit, which was Rs 30 lakh earlier (1997 policy).
- The interest rate subsidy remains at 3 percent.
- Provides for insurance cover. All existing and new industrial units will be eligible for 100 percent insurance premium on their substantial expansion.
- Tobacco and manufactured tobacco substitute industries, panmasala, plastic carry bags of less than 20 microns and petroleum oil or gas refinery industries are not eligible for any benefits under the new industrial policy.
- Provides incentives for service sector in terms of tax concessions.
- Power generating plants up to 10 MW based on both conventional and non-conventional sources are also eligible for incentives under the new policy.
- A high-level committee under the Chairmanship of the Secretary, Department of Industrial Policy and Promotion will be constituted to monitor the implementation of NEIIPP 2007.
- Transport subsidy remains unchanged.
- The North East Industrial Development Finance Corporation will continue as the nodal agency in disbursing the subsidy.

Government of India, New Industrial Policy for NER, 1997

In 1997 the Ministry of Industry announced a new industrial policy for the NER. The policy provides a number of incentives for industrial development in the NER. For development of industrial infrastructure, the policy provides entire expenditure on the growth centers subject to a ceiling of Rs.15.0 cores.¹

The policy also makes provision for 15 percent capital investment subsidy on plant & machinery subject to a maximum of Rs. 30 lakh and 3 percent Interest Subsidy on working capital loan for 10 years. The policy also announces extension of transport subsidy scheme for a period of 7 years and 10 years tax holiday i.e.; exemption of excise duty & income tax for units operating in the growth centers.

For the development of small-scale sector, weavers service centers (WSCs) in NE region and Indian Institute of Handloom Technology at Guwahati would be suitably strengthened to provide technology and

¹ Earlier, Rs. 10 crore was provided as central assistance and the rest of the amount to be raised by the state government.

training support to the weavers. It also makes provision for setting up of market complexes and permanent exhibition facilities in the NER.

Arunachal Pradesh: New Industrial Policy 2001

Due to insignificant industrial activity in Arunachal Pradesh, there was a need for a well-defined industrial policy. The new industrial policy of Arunachal Pradesh came out in 2001, which is the second ever industrial policy of the state to encourage industrial development. According to the new industrial policy, 2001; the government will encourage the establishment of private sector undertakings and co-operative industries for sustainable development and growth. So far as the employment is concerned, priority will be given to the local population of the state. Out side investments will be encouraged. The government will allow the outside entrepreneurs to hold land for 30 years for industrial activity.

The policy emphasises the fact that the government needs to take steps to develop infrastructure facilities like industrial estates, industrial growth centres, export promotion industrial parks, export promotion zones, etc. The policy also makes provision for the easy flow of credit for new industrial projects, village industries and village artisans. Steps will be taken to revive the sick industries in the SSI and tiny sector. The policy makes provision to strengthen the DICs. With a view to empower the women of Arunachal Pradesh, there is a provision of 33 percent reservation of industrial shed, developed plots in industrial areas for women and it also makes provision for special training and education programme for women.

Assam Industrial Policy, 2003

Assam happens to be the most developed state in the NER with relatively better infrastructure facilities. In 2003 Assam came out with its latest industrial policy in order to increase its industrial share in the SDP from around 13 percent to 18 percent by the end of 2008. The industrial policy aims to generate more employment opportunities in the state. At the same time it also aims to encourage private infrastructure in industrial projects, to ensure industrial development in the backward regions of the state, to encourage growth of small scale and tiny sector, to promote large scale and medium industries to create industrial base, to promote export oriented industries and to revive the sick public sector industries.

The policy recognizes some thrust areas that need to be focused like; petroleum and natural gas based industries, food processing industries and industries based on locally available resources.

The policy introduces some provisions in terms of incentives in order to attract more out side investment. It makes provision for power subsidy for a period of five years for eligible industrial units. Special incentives for food processing, electronics, agro based and bio-tech industries. It also makes provision for capital investment subsidy at the rate of 30 percent in investment in plant and machinery subject to a ceiling of Rs. 20 lakh and for export oriented industries at Rs. 25 lakh. Five years income tax holiday for all new industrial units set up in the Assam.

In the NER, the strength of the state is its well developed infrastructure and highest purchasing power in the region.

Manipur: New Industrial Policy, 2002

The new industrial policy of Manipur was announced in 2002. It was announced to achieve rapid and sustainable industrial development through enhanced industrial development and to create an investment friendly environment with provisions for infrastructure and institutional support. It aims at generation of substantial employment and income for its people, maximum utilization of local human and physical resources and emphasis on export oriented industries to exploit the emerging markets of the neighboring countries. It also aims to develop the market facilities.

In order to achieve the above mentioned objectives, the policy emphasizes the need to develop infrastructure like, power, water, communication for industrial use, need to promote industrial culture, easy credit facilities from SIDBI, NABARD and MANIDCO etc. it encourages investment from outside and emphasizes the need of developing export oriented growth centers.

recognizing the development of tourism related industry as an important area, the industrial policy makes provision to develop the tourism related industry in the state. The policy also provides some incentives in terms of exemption from local sales tax, power subsidy, interest subsidy, and transport and capital subsidy.

The investment strengths of the state are, Second-lowest industrial power tariff in the country; most villages are electrified and high degree of irrigation.

Mizoram: New Industrial Policy, 2002

The new industrial policy of Mizoram was announced in 2002 with a view to accelerate the industrial growth of the state with a suitable mechanism to attract more investment for the growth of capital formation. It also aims to make the industrial labor skilled with the help of training programmes. It aims to promote the production of textile industry including sericulture, handloom and handicraft sector with the help of new designs.

The 2002 industrial policy also aims to develop the bamboo industries with the help of optimum utilization of bamboo resources of Mizoram.

The policy recognises following thrust areas for concentrated development, electronics and IT, bamboo based product, food processing industry, handloom and handicraft industries.

In order to attract more investment the policy provides fiscal incentives, provides for development of infrastructure etc. The investment strength of the state is literate and cheap labor force and high proportion of urban population.

Meghalaya: Industrial Policy, 1997

In 1997, Meghalaya came up with a comprehensive industrial policy with a view to generate employment opportunities, balanced growth all over the state through promotion of village and small scale industries, development of infrastructure for setting up of industrial areas, growth centre and export promotion industrial parks. The policy aims to revive the sick units with a comprehensive revival package and also aims to promote export oriented, agro based, mineral based and horticulture based units as thrust areas.

In order to achieve the above objectives, the policy provides subsidy provision for both small scale and large scale industries. It makes provision for state capital investment subsidy, interest subsidy, power subsidy, sales tax exemption and exemption from stamp duty.

Sikkim: Industrial Policy, 1996

In order to achieve faster industrial development and generation of adequate employment opportunities through self-employment, Sikkim announced a comprehensive industrial policy in 1996. The policy aims to create a conducive atmosphere for industrial growth, to maintain the 'Green State' image while promoting industrial activities and revival of sick units. It also aims to promote the agro based industries through proper linkages between agriculture and agro based industries, promotion of traditional handloom, handicrafts with adequate technology, raw materials, marketing network and skill development. In order to ensure balanced regional growth, the policy aims to promote Khadi, Village, cottage, and tiny, small and ancillary industries.

The policy also aims to develop tourism sector, development of basic infrastructure and development of Sikkim as a major centre for manufacture & marketing of tea. Finally the policy aims to simplify the procedures and open up Sikkim with a view to attract both internal and outside investors.

To achieve the above objectives, the policy outlines some important strategies. It identifies some thrust areas like, Agro-based industries, Floriculture, Animal Husbandry and Dairy Products, Handloom, Handicrafts and Village Industries, Tourism, Electronic and Software etc for concentrated development. The policy announces some incentives like, fiscal incentives, development of marketing system, Creation of Single Window Agency, rehabilitation package for the sick industries, establishment of industrial estates and growth centers and special provisions for rural and traditional industries.

Nagaland Industrial Policy 2000

The Industrial Policy 2000 of Nagaland was announced to achieve sustained industrial development and to enable the entrepreneurs to generate substantial income and employment. The policy identifies some thrust areas like food processing industries, tourism industries, agro-forest based industries, mineral based industries, sericulture, bio-tech industries, handloom & handicrafts etc for comprehensive industrial development.

The policy announces some major incentives to attract outside investment in the state. It provides power subsidy, exemption of stamp duty, manpower subsidy, special incentive for 100 percent export oriented units etc. other than this the industrial units are also eligible to get the Central Government incentives as per the new industrial policy for NER.

Tripura: Industrial Policy

The industrial policy recognises some thrust areas that need to be developed: natural gas, food processing, rubber, tea, handicrafts and tourism. The policy recognises that the state's location is a major advantage for industrialisation. It is well connected with Kolkata and Chittogong (Bangladesh). It provides capital investment subsidy, transport cost subsidy, exemption of sales tax, and income tax exemption for five years.

ANNEXURE 5.3

RECOMMENDATIONS OF OTHER COMMITTEES

Recommendations of the LC Jain Committee (1990): Economic Development of Assam: Report of the Committee on Clause Seven of the Assam Accord, Planning Commission, Government of India.

The Jain committee came out with some important recommendations for industrial development of Assam.

The committee recommended for the promotion of petrochemical based downstream units, to strengthen the handloom and sericulture industry through creation of adequate spinning and processing capacity, provision of raw materials and to strengthen R & D activities etc. The committee also recommended improvement and revival of state public enterprises and introduction of special compensatory schemes to attract private investment, entrepreneurial talent and professional managers.

Recommendations of the Shukla Commission Report (1997): Transforming the Northeast-High-level Commission Report, Planning Commission, Government of India.

The Shukla Commission has recommended establishment of a design bureau with the help of the National Institute of Design, Ahmedabad for varieties of textiles and crafts in the NER. It has also recommended steps to promote adequate marketing network for handicraft and handloom products. The commission also recommended promotion of export processing and special economic zones with all necessary infrastructures at suitable location in the NER.

North Eastern Council (NEC) Draft Vision 2020: main suggestions on industrial development.

The vision 2020 for the NER identifies some important measures to build a strong industrial base in the NER. This document is based on the outcome of several seminars and conferences organized by the NEC in different states of the NER. The vision document suggests that both large and small scale industries should be properly linked. The proper linkage between small and large units ensures huge employment opportunities. Vision 2020 lays emphasis on efficient utilization of both human and physical resources of the NER. Infrastructure needs to be improved by utilizing natural resources and secondary sector is to be built up on the foundation of a strong primary sector.

The strength of the NER is availability of huge natural resources and raw materials, relatively more literate population and rich tradition of handicraft, handlooms and sericulture.

The weaknesses of the NER are inadequate physical infrastructure, high project costs, inadequate finance and investment, inadequate skilled labor, underdeveloped market and administrative problems for outside investment

ANNEXURE 5.4

5.4.1 VARIOUS SCHEMES FOR INDUSTRIAL PROGRESS IN THE NORTHEAST

I. Transport Subsidy Scheme

- The scheme is applicable to all industrial units (barring plantation, refineries and power generating units) both in public and private sector irrespective of their sizes in the selected areas.
- The scheme came into effect from July 15, 1971 and is operational till today.
- The scheme is to subsidise the transport cost on raw material and finished goods to and from NE states and interstate movement within the NE region.

Definition

- Industrial Unit: Where a manufacturing program is carried on.
- New industrial unit: Industrial unit that has set up manufacturing capacity and comes into production on or after the date of commencement of the scheme.
- Existing industrial unit: Industrial unit that has set up manufacturing capacity and comes into production before July 15, 1971 and undertaken substantial expansion on or after July 15, 1971.
- Substantial expansion: Increase in production by 25 percent or more of the approved capacity.
- Diversification: Manufacture of new article(s) by 25 percent or more of approved capacity.

Eligibility Norms

- Industrial units located in the NE region in respect of raw material brought into and finished goods taken out of the region.
- Not eligible for internal movements of goods within the states.
- Transport costs comprise the movement from Siliguri to the nearest Railway Station and thereafter by road up to the factory site and vice-versa.
- In the case of raw materials moving entirely by road or other mode of transport, transport cost will be limited to the amount mentioned in the above para.
- Cost of loading and unloading and other handling charges shall not be included in transport cost.

Amount of Admissible Subsidy

- @ 90 percent of the transport cost for the movement of raw materials from one state to another within the NE region as well as outside the NE region.
- @ 90 percent of the transport cost for the movement of finished goods outside the NE region and @ 50 percent of transport cost from one state to another within the NE region.
- @ 90 percent of the transport charges for movement of steel from Guwahati Stockyard of M/s Steel Authority of India Limited (SAIL) to the site of the industrial units in the NE region.

Source: *North Eastern Development Finance Corporation Ltd.*

II. Capital Investment Subsidy

- The scheme came into effect from December 24, 1997 and will remain operational till March 31, 2007 for the NE region.

- Applicable to new and existing industrial units undertaking substantial expansion in growth centres, IIDC, or industrial estates/parks/EPZs approved for the NE region.
- The scheme is also applicable to new and existing industrial units undertaking substantial expansion in [specified industries](#) located outside the above specified locations.

Definitions

- Substantial expansion: Increase in the value of fixed capital investment in plant and machinery of industrial units by not less than 25 percent for the purpose of expansion of capacity/ modernisation, etc. (33.5 percent earlier according to 1997 policy).
- Fixed Capital Investment: Investment in plant & machinery for the purpose of this scheme.
- Effective steps: Means one or more of the following steps: (i) that 10 percent or more of the capital issued for the industrial unit has been paid up. (ii) That any part of the factory building has been constructed. (iii) That a firm order has been placed for any plant & machinery required for the industrial unit.

Amount of Admissible Subsidy

- 30 percent of the capital investment for new units or additional investment related to substantial expansion subject to a maximum ceiling of Rs.1.5 crore (according to NEIIPP, 2007)
- The cost of capital investment includes: (1) plant and machinery as erected at site; (2) productive equipment such as tools, jigs, dies & moulds, insurance premium, etc. (3) goods carriers actually utilised for transport of raw material and finished goods.
- Working capital will be excluded for computing the value of plant and machinery.

Registration

- Eligible industries shall be registered with the concerned state department prior to taking effective steps for setting up new units or undertaking substantial expansion & indicate their assessment of the total additional fixed capital.
- Existing units undertaking substantial expansion prior to the date of announcement of the scheme but after 24.12.1997 will get themselves registered by 31.12.1998.

Source: *North Eastern Development Financial Corporation Ltd.*

III. Working Capital Interest Subsidy Scheme

- The scheme is for interest subsidy on working capital loans for industrial units in the Northeastern Region.
- The scheme is effective from 24.12.1997.
- It is applicable to new industrial units and existing industrial units undertaking substantial expansion in growth centers or integrated industrial development centers or industrial estates, parks, export promotion zones set up by states in the NE region.
- The scheme is also applicable to new industrial units and existing industrial units undertaking substantial expansion in specified industries located outside the above specified locations.

Definitions

- Industrial unit: Industrial undertaking, suitable servicing unit other than that run departmentally by the central or state government.
- Substantial expansion: Increase in the value of fixed capital investment of an industrial unit by not less than 10 percent for the purpose of expansion of capacity/modernisation and diversification.
- Effective steps means one or more of the following steps: (a) that 10 percent or more of the capital issued for the industrial unit has been paid up; (b) that any part of the factory building has been

constructed; (c) that a firm order has been placed for any plant and machinery required for the industrial unit.

- Fixed Capital Investment means investment in land, building and plant and machinery.

Norms for Calculating Working Capital

- The minimum working capital: @ 25 percent of annual turnover.
- Inventory norms may be applied, if necessary, after providing for aforesaid minimum level.
- Working Capital below the minimum level may be justified under special circumstances as in case of ancillary units in small scale sector.
- Working Capital includes physical inventories such as materials, fuel, stores etc., cash deposits in hand, bank, and net balances.
- Working Capital excludes unused overdraft facility, fixed deposits, advances for fixed assets, loans and advances by proprietor, long term loans and investments.

Amount of Admissible Subsidy

- An interest subsidy to the extent of 3 percent of the working capital advanced by scheduled banks or central or state financial institutions.
- It is for a maximum period of 10 years from the date of commencement of production.

Source: *North Eastern Development Financial Corporation Ltd.*

IV. Comprehensive Insurance Scheme

A comprehensive insurance scheme for industrial units located in the specified areas to be designed, in consultation with GIC and 100 percent premium to be borne by Government of India for 10 years.

Source: *North Eastern Development Financial Corporation Ltd.*

5.4.2 National Bamboo Mission²

The Government of India came out with National Bamboo Mission for the development of the bamboo sector in the country. It aims to promote the growth of the sector through an area-based regionally differentiated strategy to increase the coverage of area under bamboo in potential areas with appropriate varieties to enhance yields; to promote marketing of bamboo and bamboo-based handicrafts; to establish convergence and synergy among stake-holders for development of bamboo and to promote; develop and disseminate technologies; and to generate employment opportunities for skilled and unskilled persons, especially unemployed youths.

To achieve the above mentioned objectives, the Mission recognises that some strategies need to be followed. It emphasises a coordinated approach covering production and marketing to assure appropriate returns to growers and producers. The focus would be on research and development (R&D) of varieties and technologies for enhanced production. The productivity of bamboo is to be enhanced through varietals change and improved agriculture practice. The Mission emphasises the need for appropriate cooperatives and self-help groups to ensure support and adequate returns to farmers. To ensure adequate returns to the farmers and to save them from the exploitations of the middle men, national, state and sub-state level structures should be set up.

The policy also recognises the need to develop some thrust areas: wood substitutes and composites, construction and structural applications, agro-processing, machinery & process technologies, propagation & cultivation, bamboo for energy, industrial products and product applications, small enterprise.³

² Based on National Bamboo Mission, Ministry of Agriculture, Government of India

³ Extracted from the website of the National Mission on Bamboo Applications (NMBA).

The National Mission on Bamboo Technology & Trade Development has been mooted by the Planning Commission to promote and develop bamboo sector through proper market linkage and use of optimal technology for manufacturing value added products in the industrial and cottage sector.

Source: *National Mission on Bamboo Applications*

The Bamboo Policy of Mizoram, 2002

Keeping in view the potential of the bamboo sector in the state, Mizoram announced its Bamboo Policy in 2002 for the sustainable development and utilisation of bamboo resources through scientific management. It also emphasises protection and conservation of the rich bio-diversity associated with bamboo forests and growth areas and their future development. The policy highlights the role of private individuals in the promotion of bamboo plantations in the state. Improved management practices need to be followed to make it profitable and an attractive enterprise. The policy advocates for the promotion of bamboo-based industries at all levels – cottage, small scale, medium scale and large scale for generating assured income, and the promotion of local traditional bamboo crafts and art with improved technology and design. The policy projects bamboo sector development as an essential component of rural development strategy. Promotion of bamboo as wood substitute and spread of awareness among farmers about bamboo as “green gold”.

Since a variety of bamboo species grow according to ecology and environment, steps should be taken to protect the mountain ecology and environment. Bamboo rich and potential areas are to be dedicated for bamboo development. Steps should be taken to protect the bamboo resources from the threat of fire. The policy emphasizes the need for regulating bamboo harvest in the state. Steps should be taken for bamboo regeneration in natural bamboo stands. Suitable policy should be formulated to promote bamboo trade with establishment of bamboo industries in the state. The Government should facilitate the growth of entrepreneurship skill through proper training and education. Adequate provisions must be made to provide information regarding existence of markets. To improve the quality of the bamboo, R & D activities should be promoted. Technological parks should be set up to disseminate technology. Adequate trained man power needs to be created for bamboo resource development. Institutional arrangements must be made to provide adequate financial support for the development of bamboo in the state.

A Bamboo Development Agency (BDA) has been established by the Government of Mizoram to encourage, start, organise, develop resources, plantation, utilisation and research and development of bamboo.

Nagaland Bamboo Policy

Keeping in view the economic potential of bamboo in the State, the Nagaland bamboo policy seeks to achieve the following objectives for the development of bamboo in the state. The policy emphasizes the need for Protection and conservation of rich bio-diversity associated with bamboo forests and bamboo growth areas in the State. Promotion of bamboo plantation both by Government and private players. Promotion of bamboo based industries for utilization of the available resources. Promotion of local traditional bamboo craft & art with improved technology & design and value addition for export through industrialized mode of production. To promote bamboo as an essential wood substitute. To create awareness and understanding of bamboo as “Green Gold” among farmers, traders, industry with a view of utilizing its full potential.

The Nagaland Bamboo Policy emphasizes on two broad strategies, development of bamboo as resource and development of bamboo enterprise.

Annexure 6

CHAPTER 6: SERVICES: BUILDING ON THE REGION'S POTENTIAL

ANNEXURE 6.1

Table 6.1A: Share of Services in Net State Domestic Product (NSDP) 1993-2003
(at constant base 1993-94)
(percent)

State	Years	Services
Arunachal Pradesh	1993-94	0.27
	1998-99	0.35
	2002-03	0.39
Assam	1993-94	0.36
	1998-99	0.39
	2002-03	0.42
Manipur	1993-94	0.43
	1998-99	0.43
	2002-03	0.45
Meghalaya	1993-94	0.53
	1998-99	0.51
	2002-03	0.48
Nagaland	1993-94	0.45
	1998-99	0.42
	2002-03	0.34
Sikkim	1993-94	0.42
	1998-99	0.55
	2002-03	0.49
Tripura	1993-94	0.49
	1998-99	0.51
	2002-03	0.48
India	1993-94	0.36
	1998-99	0.39
	2002-03	0.44

Note: 1. Owing to differences in methodology of compilation, data for different states are not strictly comparable.

2. Data for Mizoram are not available at constant prices.

Source: *Central Statistical Organisation (CSO)* website as on 26-11-1999 for old series and as on 23-2-2006 for new series.

Table 6.2A: Components of NSDP at Factor Cost by Industry of Origin
(at constant 1993-94 prices)

(Rs crore)

States	Year	Trade, Hotels & Restaurants	Banking & Insurance	Real Estate, Ownership of Dwellings & Business Services	Public Administration	Other Services	Total
Arunachal Pradesh	1993-94	53.9	9.9	16.2	78.1	58.6	216.7
	1997-98	51.8	16.6	20.9	122.3	98.7	310.3
	2002-03	49.3	32.1	24.0	178.8	111.1	395.3
Assam	1993-94	2,385.1	415.2	400.2	742.8	928.0	4,871.3
	1997-98	2,128.8	742.4	416.6	959.0	1,155.9	5,402.7
	2002-03	2,543.5	992.0	597.4	1,145.5	1,925.2	7,203.6
Manipur	1993-94	139.0	19.1	40.3	155.7	136.4	490.5
	1997-98	168.7	23.9	49.1	198.9	172.5	613.1
	2002-03	202.1	34.2	63.7	323.1	233.2	856.3
Meghalaya	1993-94	192.8	29.1	179.0	178.1	111.9	690.9
	1997-98	253.3	50.8	198.5	223.4	132.9	858.9
	2002-03	372.6	84.2	226.2	278.9	195.6	1,157.5
Nagaland	1993-94	77.2	16.9	155.4	227.2	90.8	567.5
	1997-98	96.7	21.1	197.2	245.1	125.9	686.0
	2002-03	141.9	32.8	241.7	316.2	166.0	898.6
Sikkim	1993-94	27.5	4.9	30.8	48.4	40.2	151.8
	1997-98	34.9	10.0	34.9	64.2	61.8	205.8
	2002-03	32.3	21.9	40.8	113.2	98.8	307.0
Tripura	1993-94	274.9	36.5	34.6	208.5	243.4	797.9
	1997-98	367.2	56.7	40.3	347.6	291.7	1,103.5
	2002-03	427.0	79.2	78.4	507.4	468.9	1,560.9

Note: 1 Owing to differences in methodology of compilation, data for different states are not strictly comparable.

Data for Mizoram are not available at constant prices.

Source: Central Statistical Organisation (CSO) website as on 26-11-1999 for old series and as on 23-2-2006 for new series.

Table 6.3A: Services Sector Components in Total Services*(percent)*

States	Year	Trade, hotels and Restaurants	Banking & Insurance	Real Estate, Ownership of Dwelling & Business Services	Public Administration	Other services
Arunachal Pradesh	1993-94	25	5	7	36	27
	1997-98	17	5	7	39	32
	2002-03	12	8	6	45	28
Assam	1993-94	49	9	8	15	19
	1997-98	39	14	8	18	21
	2002-03	35	14	8	16	27
Manipur	1993-94	28	4	8	32	28
	1997-98	28	4	8	32	28
	2002-03	24	4	7	38	27
Meghalaya	1993-94	28	4	26	26	16
	1997-98	29	6	23	26	15
	2002-03	32	7	20	24	17
Nagaland	1993-94	14	3	27	40	16
	1997-98	14	3	29	36	18
	2002-03	16	4	27	35	18
Sikkim	1993-94	18	3	20	32	26
	1997-98	17	5	17	31	30
	2002-03	11	7	13	37	32
Tripura	1993-94	34	5	4	26	31
	1997-98	33	5	4	31	26
	2002-03	27	5	5	33	30

Note: Figures are calculated.

Source: Reserve Bank of India Bulletin, June 2006.

Table 6.4A: Credit Deposit Ratios, 1997-98 to 2004-05*(percent)*

States	1997-98	2000-01	2004-05
Arunachal Pradesh	13	17	24
Assam	33	32	34
Manipur	59	39	41
Meghalaya	15	17	45
Mizoram	23	26	51
Nagaland	18	14	23
Tripura	34	23	29
Sikkim	21	16	30
NER	30	28	35
India	56	59	66

Source: Reserve Bank of India Bulletin, June 2006.

Table 6.5A: Distribution of Outstanding Advances of Scheduled Commercial Banks to Agriculture, 2004 and 2005*(Rs per capita)*

States	Finance for Distribution of Fertilisers and Other Inputs		Loans to State Electricity Boards		Other Types of Indirect Finance		Direct Finance to Farmers		Total	
	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
NER	13.85	16.16	-	0.26	7.70	10.26	131.33	154.42	152.88	181.10
Assam	2.25	7.88	-	0.38	8.63	9.75	136.56	153.06	147.44	171.07
Manipur	-	-	-	-	4.36	4.36	87.19	122.06	87.19	126.42
Meghalaya	186.46	151.77	-	-	-	8.67	78.05	134.43	264.52	294.87
Nagaland	-	-	-	-	20.10	25.13	100.50	120.60	120.60	145.73
Tripura	15.63	21.88	-	-	6.25	12.50	212.55	259.44	234.43	293.82
Arunachal Pradesh	-	-	-	-	-	9.11	136.62	127.51	136.62	136.62
Mizoram	-	-	-	-	-	11.25	78.78	157.56	78.78	168.81
India	40.03	49.91	34.34	40.58	195.83	251.80	688.04	928.93	958.25	1,271.22

Source: *Half-yearly Returns on Advances to Priority Sectors*, Rural Planning & Credit Department, RBI.**Table 6.6A: Distribution of Outstanding Advances of Scheduled Commercial Banks, 2004 and 2005***(Rs per capita)*

States	Advances to Small-Scale Industries		Loans for Setting up Industrial Estates		Advances to Road and Water Transport Operators		Total	
	2004	2005	2004	2005	2004	2005	2004	2005
NER	117.22	178.79	-	0.51	47.97	44.89	165.19	224.19
Assam	123.80	147.81	-	0.75	46.89	40.89	170.32	189.45
Manipur	104.63	117.70	-	-	17.44	21.80	122.06	139.50
Meghalaya	146.63	625.32	-	-	86.25	112.13	232.88	737.44
Nagaland	115.58	185.93	-	-	30.15	35.18	145.73	221.10
Tripura	93.77	131.28	-	-	68.77	59.39	162.54	190.67
Arunachal Pradesh	63.75	109.29	-	-	45.54	27.32	100.19	136.62
Mizoram	112.54	450.16	-	-	56.27	67.52	168.81	517.68
India	692.20	811.67	1.46	2.91	83.90	95.37	777.55	909.95

Source: *Rural Planning and Credit Department*, RBI.

Table 6.7A: Employment in Hotels and Restaurants*(number)*

States	Own-Account Enterprises	Establishments	Total
Arunachal Pradesh	823	4,740	5,563
Assam	18,186	56,020	74,206
Manipur	4,400	3,169	7,569
Meghalaya	4,430	11,767	16,197
Mizoram	1,635	1,706	3,341
Nagaland	1,301	4,179	5,480
Sikkim	593	1,809	2,402
Tripura	5,172	3,634	8,806
India	1,082,749	1,686,576	2,769,325

Source: *Hotel and Restaurant Enterprises Survey 1999*, Tourism Statistics 1999, Department of Tourism, Government. of India.

Table 6.8A: Tourist Attractions and Tourist Arrivals*(number)*

States	Some Important Attractions	Tourist Arrivals			
		2002		2003	
		Foreign	Domestic	Foreign	Domestic
Arunachal Pradesh	Bomdila, Tawan, Gompa (religious)	187	4372	123	2,195
Assam	Kaziranga National Park, Sibsagar	6,409	1,953,915	6,610	2,156,675
Manipur	War Cemetery, Loktak Lake	221	89,633	257	92,923
Mizoram	Aizwal, Champhai	259	29,417	279	35,129
Meghalaya	Shillong, Umiam Lake	3,146	268,609	6,304	371,953
Nagaland	War Cemetery, Aradura Hills (Religious)	657	14,263	743	5,605
Sikkim	Gangtok, Rumtek Monastery (Religious)	8,566	159,342	11,966	179,661
Tripura	Rock Cuts at Una-Koti and Pilak, Fourteen Goddess Temple (Religious)	2,602	260,586	3,196	257,331

Source: *Tourism Statistics*, Department of Tourism, Government of India

Table 6.9A: Tourists Per Lakh Population*(number)*

States	2002		2003	
	Tourists	Tourist Per Lakh Population	Tourist	Tourist Per Lakh Population
Arunachal Pradesh	4,559	415.2	2,318	211.1
Assam	1,960,324	7,354.3	2,163,285	8115.7
Manipur	89,854	3,917.1	93,180	4,062.1
Mizoram	29,676	3,339.7	35,408	3,984.8
Meghalaya	271,755	11,719.5	378,257	16,312.5
Nagaland	14,920	749.7	6,348	319.0
Sikkim	167,908	31,045.2	191,627	35,430.7
Tripura	263,188	8,226.7	260,527	8,143.5

Source: *Tourism Statistics*, Department of Tourism, Government of India**Table 6.10A: Recognised Travel Agencies and Tour Operators, 2000***(number)*

State	Tourist Transport Operators	Travel Agencies	Tour Operators	Adventure Tour Operators
Arunachal Pradesh	1	0	1	0
Assam	1	0	5	0
Sikkim	0	0	1	0
India	283	306	404	5

Source: *Tourism Statistics* 1999, Department of Tourism, Govt. of India

Table 6.11A: Approved Hotels and Rooms, 2005

(number)

State/Place	Five Star Deluxe	Five Star	Four Star	Three Star	Two Star	One Star	Heritage Classificatio n	Awaite d	Total
Assam									
Guwahati	-	-	-	3	-	-	-	1	4
	-	-	-	130	-	-	-	142	272
No. of Hotels	-	-	-	3	-	-	-	1	4
No. of Rooms	-	-	-	130	-	-	-	142	272
Meghalaya									
Shillong	-	-	1	-	-	-	-	-	1
	-	-	50	-	-	-	-	-	50
No. of Hotels	-	-	1	-	-	-	-	-	1
No. of Rooms	-	-	50	-	-	-	-	-	50
Mizoram									
Aizwal	-	-	-	-	-	-	-	1	1
	-	-	-	-	-	-	-	28	28
No. of Hotels	-	-	-	-	-	-	-	1	1
No. of Rooms	-	-	-	-	-	-	-	28	28
Sikkim									
Gangtok	-	-	-	-	-	-	1	-	1
	-	-	-	-	-	-	28	-	28
No. of Hotels	-	-	-	-	-	-	1	-	1
No. of Rooms	-	-	-	-	-	-	28	-	28
India	-	-	-	-	-	-	-	-	-
No. of Hotels	80	117	80	447	209	54	58	145	1190
No. of Rooms	15739	7367	5483	19985	5673	1629	1970	9767	67613

Source: indiastat.com.

Table 6.12A: Budget Hotels in the Northeast, 2002

States./Districts	3-Star	2-Star	1-Star	Total
Assam				
Dibru Garh		1		1
Guwahati	3	2		5
Jorhat		1		1
Sibsagar		1		1
Silehar		1		1
Tinsukia	1	1		2
Total	4	7	0	11
Meghalaya				
Shillong	2		1	3
Total	2	0	1	3
Sikkim				
Gangtok	1			1
Total	1	0	0	1
India	429	467	190	1086

Source: indiastat.com

Annexure 7

CHAPTER 7: HUMAN DEVELOPMENT: DEVELOPING PEOPLE'S CAPABILITIES

ANNEXURE 7.1

Table 7.1A: Trends in Literacy Rates, 1991-2001

(percent)

State	1991			2001		
	Total	Male	Female	Total	Male	Female
Arunachal Pradesh	42	52	30	54	64	44
Assam	53	62	43	63	71	55
Manipur	60	72	48	71	80	61
Meghalaya	49	53	45	63	65	60
Mizoram	82	86	79	89	91	87
Nagaland	62	68	55	67	71	62
Sikkim	57	66	47	69	76	60
Tripura	60	71	50	73	81	65

Notes: Literacy rate is the proportion of literates in the population aged 7 and above; 2001 data excludes figures for the Paomata, Mao Maran and Pura sub-divisions of Senapati District of Manipur (see Census of India, 2001).

Source: Office of the Registrar General of India.

Table 7.2A Gross Enrolment Ratio in Schools, 2003-04

(percent)

States	Classes I-V (6-11 years)			Classes VI-VIII (11-14 years)			Classes IX-XII (14-18 years)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	103.5	115.3	109.6	59.0	68.0	63.6	44.3	32.8	38.7
Assam	88.1	88.2	88.2	61.2	66.0	63.4	45.7	35.5	40.8
Manipur	135.6	139.3	137.5	81.6	86.9	84.3	47.9	44.6	46.2
Meghalaya	106.9	104.1	105.5	62.0	60.3	61.1	28.0	28.2	28.1
Mizoram	117.7	122.5	120.2	76.7	77.2	77.0	42.5	44.8	43.7
Nagaland	80.0	81.0	80.5	45.8	43.6	44.7	18.3	17.8	18.1
Sikkim	116.5	116.5	116.5	61.6	52.0	56.7	27.0	28.0	27.5
Tripura	119.7	125.7	122.8	70.2	75.3	72.8	40.4	35.8	38.2
India	95.6	100.6	98.2	57.6	66.7	62.4	42.9	34.3	38.9

Source: *Annual Report 2005-06*, Ministry of Human Resource Development, Government of India, p. 277

Table 7.3A: Gross Enrolment Ratio for Scheduled Caste (SC) Students, 2004-05*(percent)*

States	Classes I-V (6-11 Years)			Classes VI-VIII (11-14 Years)			Classes IX-X (14-16 years)			Classes XI-XII (16-18 years)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	-	-	-	-	-	-	-	-	-	-	-	-
Assam	161.9	161.3	161.6	118.2	112.1	115.2	101.2	89.5	95.4	35.4	20.2	28.1
Manipur	147.9	135.1	141.5	137.7	130.2	133.9	150.0	134.1	142.1	42.1	29.5	35.8
Meghalaya	-	-	-	-	-	-	-	-	-	-	-	-
Mizoram	-	-	-	-	-	-	-	-	-	-	-	-
Nagaland	-	-	-	-	-	-	-	-	-	-	-	-
Sikkim	155.2	155.5	155.4	74.7	83.2	79.0	28.7	26.2	27.5	15.9	13.5	14.7
Tripura	152.4	146.1	149.3	81.7	76.0	78.9	84.9	63.2	74.1	19.5	9.3	14.6
India	123.3	106.6	115.3	77.9	61.5	70.2	52.2	37.6	45.4	26.6	19.0	23.1

Source: *Selected Educational Statistics 2004-05*, Ministry of Human Resource Development.**Table 7.4A Gross Enrolment Ratio for Scheduled Tribe (ST) Students, 2004-05***(percent)*

States	Classes I-V (6-11 years)			Classes VI-VIII (11-14 years)			Classes IX-X (14-16 years)			Classes XI-XII (16-18 years)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	139.2	123.9	131.7	86.1	74.7	80.4	60.0	48.3	54.3	37.5	26.5	32.2
Assam	111.1	116.6	113.7	99.2	90.6	95.1	74.8	54.5	64.7	23.0	13.0	17.9
Manipur	149.1	137.1	143.2	71.9	65.8	69.0	51.3	46.3	48.9	13.1	10.4	11.8
Meghalaya	131.9	136.2	134.0	65.8	76.6	71.2	38.5	38.5	38.5	18.8	17.8	18.3
Mizoram	137.4	127.6	132.5	84.5	83.7	84.1	66.2	70.9	68.5	26.3	25.0	25.7
Nagaland	84.1	82.0	83.1	51.9	51.3	51.6	25.2	24.5	24.9	15.6	14.8	15.2
Sikkim	252.9	252.9	252.9	87.9	106.2	97.1	53.7	65.3	59.5	39.4	40.7	40.1
Tripura	134.6	121.2	128.0	62.6	53.3	58.1	45.8	36.9	41.5	13.8	8.8	11.4
India	129.5	118.0	123.9	75.6	61.7	69.0	43.3	30.5	37.2	21.5	12.6	17.2

Source: *Selected Educational Statistics 2004-05*, Ministry of Human Resource Development, Govt of India.

Table 7.5A: Drop-Out Rates in Classes I-X*(percent)*

States	1992-93			1998-99 (Provisional)			2002-03		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	78.1	80.0	78.8	76.1	78.7	77.2	70.2	73.6	71.7
Assam	74.3	78.1	76.0	76.6	75.3	76.0	74.3	75.7	74.9
Manipur	74.6	74.5	74.5	76.4	76.7	76.5	61.9	59.0	60.5
Meghalaya	67.9	68.1	68.0	62.1	63.7	63.0	81.4	80.5	80.9
Mizoram	57.0	54.4	55.7	73.9	71.1	72.6	77.1	74.1	75.7
Nagaland	75.0	78.2	76.5	63.8	61.0	62.6	77.1	77.9	77.5
Sikkim	85.6	85.7	85.7	89.4	89.0	89.2	76.9	73.1	75.1
Tripura	81.7	83.2	82.4	80.0	84.0	81.8	74.2	74.3	74.3
India	70.0	77.3	72.9	65.4	70.2	67.4	60.7	65.0	62.6

Sources: *Education in India, 1992-93*, Vol. 1(5), Department of Education, Ministry of Human Resource Development, p. 145; Annual Report, 1998-99, p. 142 and Annual Report, 2004-05, p. 262, Department of Education, Ministry of Human Resource Development.

Table 7.6A: Reasons for Not Attending any Education Institution by Gender, 2004*(Per 1,000 people between 5 and 29 years)*

State	School too far		Supplement household income		Education not considered necessary		Domestic chores		Others	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Arunachal Pradesh	132	127	317	230	70	76	85	175	396	391
Assam	12	13	480	78	53	134	41	180	414	595
Manipur	23	14	446	290	35	77	73	231	422	389
Meghalaya	41	46	708	479	36	26	18	215	196	234
Mizoram	49	32	483	297	12	20	55	162	403	489
Nagaland	0	0	317	150	17	11	6	125	659	713
Sikkim	4	0	356	100	46	34	18	182	577	682
Tripura	33	23	640	49	42	22	25	633	260	273
India	17	27	547	108	108	201	25	300	303	365

Source: *Employment and Unemployment NSS 61th Round* (July 2004-June 2005); NSS Report No: 517, Status of Education and Vocational Training in India, 2004-05

Table 7.7A: Reasons for not Attending any Educational Institution: Rural-Urban, 2004*(per 1,000 persons aged 5-29 years)*

State	School too far		Supplement household income		Education not considered necessary		Domestic chores		Other	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Arunachal Pradesh	138	38	267	325	67	138	121	269	408	231
Assam	12	17	276	301	91	124	112	92	509	466
Manipur	18	22	354	388	67	12	144	235	416	341
Meghalaya	49	0	599	560	34	8	112	141	206	293
Mizoram	57	2	407	341	15	15	91	154	430	485
Nagaland	0	0	227	207	16	11	83	52	676	730
Sikkim	2	0	220	333	37	73	97	89	644	496
Tripura	30	17	358	228	34	17	327	373	251	365
India	26	8	303	375	170	113	159	194	343	310

Source: *Employment and Unemployment NSS 61th Round* (July 2004-June 2005); NSS Report No: 517, Status of Education and Vocational Training in India, 2004-05

Table 7.8A: Primary and Upper Primary School Performance, 2003-04 and 2004-05*(percent)*

State	Primary				Upper Primary			
	% Passed		% Passes with > 60% scores		% Passed		% Passes with > 60% scores	
	2003-04	2004-05	2003-04	2004-05	2003-04	2004-05	2003-04	2004-05
Arunachal Pradesh	NA	80.4	NA	11.8	NA	79.1	NA	14.4
Assam	93.4	98.6	22.3	24.7	87.6	89.5	12.9	13.6
Manipur [@]	NA	NA	NA	NA	NA	NA	NA	NA
Meghalaya	87.1	88.9	20.6	19.2	84.4	86.5	18.4	16.8
Mizoram	92.1	90.8	18.1	22.7	89.8	89.9	12.7	17.5
Nagaland	78.8	81.0	13.8	17.5	80.7	78.9	13.2	16.0
Sikkim	69.7	70.3	11.8	12.1	63.9	66.6	9.3	9.6
Tripura	79.5	83.1	9.8	12.7	78.1	80.0	6.5	10.2
India	94.4	94.7	41.3	42.8	88.5	88.2	32.4	31.7

Notes: NA: Data not available; @: Manipur was not covered under DISE

Source: *District Information System for Education*, Ministry of Human Resource Development.

Table 7.9A: Performance in Class XII CBSE Examination by Region and Gender*(pass percentage)*

Region	2001			2002			2003			2004			2005		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Ajmer	85.4	89.2	87.0	84.2	89.8	86.5	61.9	71.2	65.6	77.1	83.3	79.6	82.1	87.4	84.3
Chandigarh	74.5	84.7	78.8	76.0	86.4	80.5	74.0	85.5	79.0	72.4	83.7	77.2	na	na	na
Panchkula	Na	na	na	na	na	na	74.0	85.5	79.0	72.4	83.7	77.2	75.5	85.2	79.7
Delhi	66.9	77.4	71.9	64.9	77.7	71.0	68.8	81.2	74.6	69.4	82.6	75.8	72.6	83.0	77.6
Guwahati	57.3	64.0	59.9	56.4	61.9	58.6	58.7	66.4	61.8	60.9	65.5	62.8	58.2	64.5	60.9
Chennai	86.7	88.2	87.3	87.0	89.3	88.0	86.7	90.0	88.2	89.5	91.7	90.5	89.0	91.2	90.0
Allahabad	69.0	79.2	72.7	69.5	80.4	73.5	65.5	78.9	70.3	67.4	80.2	72.1	69.6	81.2	73.8
Total	71.4	80.2	75.2	70.9	80.9	75.2	na	na	na	na	na	na	73.8	83.2	77.8

Note: na: Data not available

Source: www.Indiastat.com.**Table 7.10A: Expansion in the Number of Schools, 1993-2002***(percent)*

States	Primary Schools	Upper Primary	Secondary	Higher Secondary
Arunachal Pradesh	16.7	30.0	67.1	18.0
Assam	4.0	11.0	27.7	32.0
Manipur	-15.8	13.1	14.7	211.1
Meghalaya	41.7	32.1	25.4	822.2
Mizoram	32.8	39.5	34.4	-
Nagaland	10.4	11.0	23.4	600.0
Sikkim	-5.2	9.3	42.4	91.3
Tripura	1.3	0.23	19.6	57.9
India	14.2	50.7	38.4	85.8

Source: *Seventh All-India Education Survey*, National Council for Education Research and Training, 2002.

Table 7.11A: Private vs. Public Schools in the Northeast 2005*(percent)*

States	Primary/Junior Basic Schools		Middle/Senior Basic Schools		High/Post Basic Schools		Higher Sec Schools/Pre-degree/Junior College	
	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.
Arunachal Pradesh	92.2	7.8	89.1	10.9	79.2	20.8	90.5	9.5
Assam	100.0	0.0	75.3	24.8	60.5	39.5	88.4	11.6
Manipur	78.5	21.6	36.9	63.1	34.1	65.9	49.1	50.9
Meghalaya	43.4	56.6	3.59	96.4	14.1	85.9	27.5	72.5
Mizoram	73.5	26.5	69.4	30.6	44.7	36.1	38.0	62.0
Nagaland	87.3	12.7	55.8	44.2	37.8	62.2	50.0	50.0
Sikkim	100.0	0.0	100.0	0.0	97.6	0.0	90.2	9.8
Tripura	98.8	1.2	96.9	3.1	94.9	0.9	87.6	12.4
India	90.7	9.3	72.3	27.7	40.9	59.1	36.1	63.9

Note: Government schools refer to schools managed by the government and local bodies; private schools are an aggregation of private-aided and private-unaided schools.

Source: *Selected Educational Statistics 2006*, Department of Secondary and Higher Education, Ministry of Human Resource Development, Government of India.

Table 7.12A: Access to Rural Schools, 2002*(percent of habitations)*

States	Access to Primary Schools		Access to Upper-Primary Schools	
	Within Habitation	Up to 1 km. and Within Habitation	Within Habitation	Up to 3 km. and Within Habitation
Arunachal Pradesh	39.6	51.6	10.6	31.2
Assam	44.6	84.3	13.5	82.0
Manipur	61.4	79.4	20.9	63.3
Meghalaya	69.1	85.5	15.3	59.5
Mizoram	89.0	90.4	58.0	66.0
Nagaland	88.0	94.6	23.9	61.6
Sikkim	52.9	77.9	18.5	76.3
Tripura	37.5	75.9	12.0	79.9
India	53.0	87.0	18.5	78.1

Source: *Seventh All-India Education Survey 2002*, NCERT.

Table 7.13A: Essential Facilities in Elementary Schools, 2004*(percent)*

State	Schools with Drinking Water	Schools with Common Toilet	Schools with Girls' Toilets	Schools with Playgrounds
Arunachal Pradesh
Assam	61.2	26.1	7.4	49.6
Manipur
Meghalaya	41.4	21.7	7.9	30.1
Mizoram	70.6	44.3	9.1	16.5
Nagaland	45.1	42.0	19.2	38.4
Sikkim	63.5	77.5	35.2	45.9
Tripura	72.1	38.1	10.5	64.1
India	77.9	41.8	28.2	49.6

Note: 'Schools' here refers to all school categories in the NIEPA Survey. Figures for Arunachal Pradesh and Manipur are not available in the Survey.

Source: *Elementary Education in India: Where Do We Stand? Analytical Report 2004*, NIEPA, New Delhi, pp. 189-206.

Table 7.14A: Laboratory and Computer Facilities in Secondary and Higher Secondary Schools, 2002*(percent)*

States	Secondary Schools With				Higher Secondary Schools With			
	Laboratory	Adequate Laboratory Facilities	Computer Education	Adequate Number of Computers	Science Laboratory	Adequate Laboratory Facilities	Computer Education	Adequate Number of Computers
Arunachal Pradesh	56.1	26.5	9.9	6.1	69.4	40.3	20.8	15.3
Assam	8.0	2.7	3.1	1.5	26.7	15.5	20.2	15.2
Manipur	60.0	21.3	20.6	7.8	84.6	55.0	68.1	39.6
Meghalaya	49.8	13.0	17.7	7.4	85.0	38.8	63.8	25.0
Mizoram	50.0	4.1	18.8	3.8	69.8	16.3	53.5	4.7
Nagaland	32.4	9.0	27.7	9.4	59.3	40.7	55.6	29.6
Sikkim	85.2	23.9	21.6	14.8	90.7	53.5	90.7	55.8
Tripura	36.2	9.7	2.5	1.0	59.2	25.0	17.1	12.1

Source: *Seventh Educational Survey, 2002*, NCERT.

Table 7.15A: Proportion of Trained Teachers and Ratio of Female Teachers*(percent)*

State	Primary/Upper Primary		Middle/Senior Basic		High/Post Basic		Higher Secondary	
	Total Trained	Female*	Total Trained	Female*	Total Trained	Female*	Total Trained	Female*
Arunachal Pradesh	28	41	33	40	47	32	64	26
Assam	73	53	36	30	30	36	30	40
Manipur	22	63	19	69	28	60	47	80
Meghalaya	45	38	36	85	36	71	98	110
Mizoram	82	94	80	42	64	34	38	79
Nagaland	37	53	42	42	44	59	24	102
Sikkim	50	89	42	56	44	52	51	44
Tripura	28	95	20	36	25	36	34	54
India	86	66	87	69	89	61	90	63

Source: *Selected Educational Statistics 2003-04*, Department of Secondary and Higher Education, Ministry of Human Resource Development, Government of India.

Note: *Percentage of female teachers per 100 male teachers.

Table 7.16A: Female/Male Teacher Ratio and Pupil-Teacher Ratio, 2003-04*(percent)*

States	Primary/Upper Primary		Middle/Senior Basic		High/Post Basic		Higher Secondary	
	Female/Male Teacher Ratio	Pupil-Teacher Ratio	Female/Male Teacher Ratio	Pupil-Teacher Ratio	Female/Male Teacher Ratio	Pupil-Teacher Ratio	Female/Male Teacher Ratio	Pupil-Teacher Ratio
Arunachal	41	39	40	28	32	27	26	31
Assam	53	40	30	17	36	20	40	24
Manipur	63	28	69	19	66	23	80	22
Meghalaya	88	36	85	14	71	19	110	36
Mizoram	94	18	42	10	34	13	79	16
Nagaland	53	19	42	18	59	23	102	34
Sikkim	89	19	56	22	52	21	44	21
Tripura	95	30	36	16	36	25	54	24
India	66	45	69	35	61	31	63	35

Note: The female/male teacher ratio is the number of female teachers per 100 male teachers.

Source: *Selected Educational Statistics, 2003-04*, Ministry of Human Resource Development, Government of India.

Table
(a):

State	Males	Females	Total
Arunachal Pradesh	7.12	4.50	5.85
Assam	8.17	5.70	6.94
Manipur	14.81	11.77	13.27
Meghalaya	12.67	10.52	11.58
Mizoram	12.85	7.77	10.39
Nagaland	4.96	4.40	4.70
Sikkim	10.88	8.15	9.61
Tripura	7.19	5.14	6.16
India	11.58	8.17	9.97

7.17A

Higher Education: Gross Enrolment Ratio (18-24years),2004-05Source: *Selected Educational Statistics*, 2004-05, Ministry of Human Resource Development**Table 7.17A (b): College Enrolment by Subject Stream (General), 2000-01***(percent of total enrolment)*

State	Arts	Science	Commerce	Education	Others
Arunachal Pradesh	68.0	8.0	5.0	2.0	0.0
Assam	74.0	12.0	6.0	1.0	0.2
Manipur	52.0	35.0	5.0	1.0	0.4
Meghalaya	71.0	14.0	6.0	8.0	0.2
Mizoram	86.0	4.0	2.0	1.0	0.0
Nagaland	77.0	9.0	7.0	2.0	0.0
Sikkim	49.0	16.0	6.0	2.0	0.0
Tripura	70.0	14.0	11.0	0.6	0.8
India	46.0	20.0	18.0	1.0	0.9

Source: *University Development in India*, 1995-96 to 2000-01, University Grants Commission, Information and Statistics Bureau, New Delhi.

**Table 7.18A: Progress on Communitisation of Elementary Education in Nagaland:
Reports from Village Education Committees, 2004**

(percent)

Enrolment	Increased Decreased Same	90 0 10
Academic Performance	Much improvement Little improvement Same	80 15 5
Dropouts	Very few Few Same	75 25 0
Students' Attendance	Much improvement Little improvement Same	90 10 0
Teachers' Attendance	Very regular Regular Same	80 20 0
Staff Meetings	Often Twice a year Once a year	50 40 10
PTA Meetings	Once a year Twice a year No meeting	20 5 75
VEC Meetings	Often Twice a year No meeting	90 10 0
Community Participation	Very active Active Inactive	80 20 0
Community Contribution	Cash Kind Labour	20 30 50

Source: *VEC Speaks*: Feedback from the Village Education Committees, Government of Nagaland, and Directorate of School Education.

Table 7.19A: Supply of Rural Health Infrastructure, 2005*(number)*

State	Sub Centres			PHCs			CHCs		
	R	P	S	R	P	S	R	P	S
Arunachal Pradesh	254	379	*	39	85	*	9	31	*
Assam	5,063	5,109	*	826	610	216	206	100	106
Manipur	412	420	*	64	72	*	16	16	0
Meghalaya	597	401	196	90	101	*	22	24	*
Mizoram	146	366	*	22	57	*	5	9	*
Nagaland	535	394	141	80	87	*	20	21	*
Sikkim	109	147	*	17	24	*	4	4	0
Tripura	659	539	120	104	73	31	26	10	16

Source: *Bulletin on RHS 2006*, Ministry of Health and Family Welfare, Govt of India.

Notes: Population is based on the 2001 Census; the infrastructure position is as on September 2005.

Requirements are calculated on the basis of final total and tribal population of Census, 2001 in rural areas using the prescribed norms.

In Position figures are provisional; R: Required; P: In Position; S: Shortfall; *: Surplus

Table 7.20A: Trends in Infant Mortality Rate, 1992-2006

State	1992-93	1998-99	2005-06
Arunachal Pradesh	40	63	61
Assam	89	70	66
Manipur	42	37	30
Meghalaya	64	89	45
Mizoram	15	37	34
Nagaland	17	42	38
Sikkim		44	34
Tripura	76	44	52
India	79	68	57

Source: NFHS-1, 2 and 3

Note: Infant mortality rate is the number of infant deaths per 1,000 live births

Table 7.21A: Women Availing of Antenatal Care and Institutional Deliveries (1992-2006)*(percent)*

States	Antenatal Care*			Institutional Deliveries		
	NFHS-1	NFHS-2	NFHS-3	NFHS-1	NFHS-2	NFHS-3
Arunachal Pradesh	51	61	59	20	31	31
Assam	53	60	71	12	18	23
Manipur	64	80	88	23	35	39
Meghalaya	55	54	68	31	17	30
Mizoram	90	92	75	49	58	65
Nagaland	39	60	57	6	12	12
Sikkim		67	90		32	49
Tripura	66	70	79	30	45	49
India	65	966	77	26	34	41

Note: Ante-natal care and institutional delivery is based on all births within the last three years.

Source: NHFS Reports 1, 2 and 3.

Table 7.22A: Medical Specialists at Community Health Centres, 2005

State	Required [#]	Sanctioned	In Position	Vacant	Shortfall	Per cent shortfall
	[R]	[S]	[P]	[S-P]	[R-P]	
Arunachal Pradesh	124	4	0	4	124	100
Assam	400	NA	NA	NA	NA	NA
Manipur	64	40	19	21	45	70
Meghalaya	96	1	1	0	95	99
Mizoram	36	0	0	0	36	100
Nagaland	84	0	0	0	84	100
Sikkim	16	16	4	12	12	75
Tripura	40	2	2	0	38	95

Notes: Specialists refers to surgeons, obstetricians, gynaecologists, physicians and paediatricians

Figures are provisional. Totals do not tally as some states have not provided category-wise break up of Specialists; NA: Not Available; Required [#]: One per Community Health Centre

Source: *Bulletin on RHS 2006*, Ministry of Health and Family Welfare, Govt of India.

Table 7.23A: Supply of Equipment and Staff at Primary Health Centres*(percent adequately equipped)*

States	Infrastructure	Staff*	Supplies**	Equipment	Training
Arunachal Pradesh	70.7	53.7	31.7	26.8	19.5
Assam	21.0	35.2	50.0	32.4	29.7
Manipur	12.5	65.6	56.3	28.1	37.5
Meghalaya	56.0	68.0	60.0	68.0	56.0
Mizoram	70.4	40.7	44.4	96.3	59.3
Nagaland	59.5	62.2	59.5	40.5	18.9
Tripura	100.0	90.9	100.0	81.8	100.0

Source: Reproductive and Child Health (RCH) <http://www.rchindia.org/data.htm>

Note: Staff includes medical officers - male, female and paramedical staff; supplies include IUD kits, delivery kits, mounted lamp supply of OP, measles, IFA large and ORS.

Table 7.24A: Public and Household Health Expenditure, 2004-05*(percent of total health expenditure)*

State	Household Expenditure	Public Expenditure	Other Expenditure
Arunachal Pradesh	86.5	13.5	0.0
Assam	80.8	17.8	1.4
Manipur	81.2	17.2	1.6
Meghalaya	36.5	58.4	5.2
Mizoram	39.4	60.6	0.0
Nagaland	91.7	7.6	0.7
Sikkim	56.9	43.1	0.0
Tripura	69.0	27.4	3.7
India	73.5	22.0	4.5

Source: *Background Papers - Report - National Commission on Macroeconomics and Health*, 2005. From the Report of the Task Force on Medical Education for the National Rural Health Mission, Ministry of Health and Family Welfare Government of India.

Table 7.25A: Lifestyle Health-Related Indicators, 1998-99

States	Chew paan masala or Tobacco		Drink Alcohol		Currently Smoke		Ever Smoked	
	Male	Female	Male	Female	Male	Female	Male	Female
Arunachal Pradesh	52	33.2	64.5	48.9	25.1	5.4	34.3	7.2
Assam	48.2	24.9	24.9	11.1	31.7	2.7	34.9	3.1
Manipur	34.4	19.6	30.5	2.0	35.2	12.2	39.2	14.4
Meghalaya	16.7	27.6	28.1	3.1	55.2	6.8	57.6	7.0
Mizoram	60.3	60.7	16.8	0.4	59.4	22.1	67.1	29.3
Nagaland	45.3	16.5	26.8	2.6	38.2	2.5	49.5	3.7
Sikkim	39.6	18.9	31.9	17.1	19.5	8.3	29.0	11.8
Tripura								
India	28.3	12.4	16.7	2.2	29.4	2.5	33.1	2.8

Note: Figures for Tripura are not available

Source: *NHFS Report II*

Table 7.26A: Children's Nutritional Status and Immunisation

(percent of children)

States	Underweight Children aged 3 and Under			Children (12-23 months) Who've Received all Vaccines		
	NFHS-1	NFHS-2	NFHS-3	NFHS-1	NFHS-2	NFHS-3
Arunachal Pradesh	38	24	37	23	21	28
Assam	49	36	40	19	17	32
Manipur	27	28	24	29	42	47
Meghalaya	44	38	46	10	14	33
Mizoram	28	28	22	57	60	46
Nagaland	28	24	30	4	14	21
Sikkim*		21	23		47	70

Tripura	45	43	39	19	41	50
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- Notes: 1. Percentage of children under age 3 who are underweight
 2. Percentage of Children 12-13 months who have received all recommended vaccines.
 3. NHFS-1 figures are unavailable for Sikkim.

Sources: *NHFS-I, 2 and 3*

Table 7.27A: Anaemia in Children (6-35 months)

(percent)

States	NHFS-III	Urban	Rural	NHFS-II	NHFS-I
Arunachal Pradesh	66.3	71.7	64.3	54.5	na
Assam	76.7	70.4	77.4	69.4	63.2
Manipur	52.8	53.6	52.5	50.4	45.2
Meghalaya	68.7	61.1	69.8	65	67.6
Mizoram	51.7	44.4	58.5	39.9	57.2
Nagaland	na	na	na	na	na
Sikkim	56.9	59.2	56.5	76.5	na
Tripura	67.9	68.5	67.8	61.8	na
India	79.2	72.7	81.2	74.2	na

Notes: na = Not Available

Source: *NHFS Reports I, II and III.*

Table 7.28A: Anaemia (Ever-married and Pregnant Women)

(percent)

States	Anaemic Ever-married women (15-49 yrs)					Anaemic Pregnant women (15-49 yrs)				
	NHFS-III	Urban	Rural	NHFS-II	NHFS-I	NHFS-III	Urban	Rural	NHFS-II	NHFS-I
Arunachal Pradesh	48.9	53.8	46.9	62.5	na	49.2		47.3	49.2	na
Assam	69.0	66.3	69.5	68.4	69.7	72.0	67.4	72.7		62.3
Manipur	39.3	40.6	38.7	40	28.9	36.4	37.1	36.1	32.5	36.7
Meghalaya	45.4	36.1	47.9	36.3	36.3	56.1		57.1		58.6
Mizoram	38.2	30.2	47.5	28.1	48	49.3	46.4	50.8		45.7
Nagaland	na	Na	na	na	na	na	na	na	na	na
Sikkim	46.8	37.1	49	61.1	na	53.1	35.7	56.3	47.6	na
Tripura	67.4	68.9	67.1	59	na	57.6		55.6	53.6	na
India	56.2	51.5	58.2	51.8	na	57.9	54.6	59	49.7	na

Note: na = Not Available

Source: *NHFS Reports I, II and III.*

Table 7.29A: Housing Conditions in the Northeast*(percent of households)*

States	1991			2001		
	Pucca	Semi-pucca	Kutcha	Pucca	Semi-pucca	Kutcha
Arunachal	14.94	11.72	73.34	20.68	18.16	61.16
Assam	14.62	15.16	70.22	19.47	31.23	49.12
Manipur	5.4	40.65	53.95	8.39	55.13	36.47
Meghalaya	13.3	33.72	52.98	22.14	37.49	40.37
Mizoram	19.1	42.52	38.38	52.84	25.69	21.47
Nagaland	12.62	36.47	50.91	16.19	50.5	33.3
Sikkim	26.95	39.11	33.94	37.87	46.26	16.07
Tripura	5.5	20.71	73.79	9.81	45.99	44.19
India	41.61	30.95	27.44	51.62	30.13	18.24

Note: All India figures exclude Jammu & Kashmir in the 1991 Census.

Source: *Statistical Abstract India, 2004*, CSO, Ministry of Statistics and Programme Implementation, Government of India.

Table 7.30A: Households with Access to Toilet Facilities*(percent of households)*

States	1991			2001		
	Rural	Urban	Combined	Rural	Urban	Combined
Arunachal Pradesh	42.6	75.1	47.4	47.3	87.0	56.3
Assam	30.5	86.1	37.4	59.6	94.6	64.6
Manipur	33.0	70.2	43.1	77.5	95.3	82.0
Meghalaya	18.1	85.7	31.1	40.1	91.6	51.2
Mizoram	58.4	84.4	70.7	79.7	98.0	89.0
Nagaland	26.9	75.1	37.5	64.6	94.1	70.6
Sikkim	30.3	77.7	35.0	59.4	91.8	63.4
Tripura	62.4	96.3	67.4	77.9	97.0	81.5
India	9.5	63.9	23.7	21.9	73.7	36.4

Source: Census of India 1991 and 2001.

Table 7.31A: Households' Access to Safe Drinking Water: Tap, Handpump, Tubewell*(percent of households)*

States	1981			1991			2001		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Arunachal Pradesh	43.9	40.2	87.9	70.0	66.9	88.2	77.5	73.7	90.7
Assam	NA	NA	NA	45.9	43.3	64.1	58.8	56.8	70.4
Manipur	19.5	12.9	38.7	38.7	33.7	52.1	37.0	29.3	59.4
Meghalaya	25.1	14.3	74.4	36.2	26.8	75.4	39.0	29.5	73.5
Mizoram	4.9	3.6	8.8	16.2	12.9	19.9	36.0	23.8	47.8
Nagaland	45.6	43.4	57.2	53.4	55.6	45.5	46.5	47.5	42.3
Sikkim	30.3	21.7	71.9	73.2	70.8	92.8	70.7	67.0	97.1
Tripura	27.3	22.2	67.9	37.2	30.6	71.1	52.5	45.0	85.8
India	38.2	26.5	75.1	62.3	55.5	81.4	77.9	73.2	90.0

Source: Economic Survey, 2006-07, Office of the Registrar General, India

Note: NA Not available as a census was not conducted in Assam in 1981.

Table 7.32A: Distribution of Households by Deprivation: 2001*(percent of households)*

States	Households fetching water from far away	Households with no drainage	Households with no latrines	Deprivation Index*
1	2	3	4	5
Rural				
Arunachal Pradesh	19.79	73.93	52.66	41.54
Assam	24.47	85.00	40.43	43.59
Manipur	33.58	67.21	22.50	39.22
Meghalaya	32.30	73.69	59.90	49.55
Mizoram	37.92	75.21	20.26	42.55
Nagaland	33.45	61.42	35.36	40.92
Sikkim	20.87	68.40	40.65	37.70
Tripura	31.42	76.30	22.07	40.30
India	19.54	65.82	78.08	45.74
Urban				
Arunachal Pradesh	11.40	36.74	13.05	18.15
Assam	10.54	47.38	5.40	18.47
Manipur	22.58	42.86	4.69	23.18
Meghalaya	17.12	23.34	8.42	16.50
Mizoram	19.38	37.00	1.97	19.43
Nagaland	21.10	27.76	5.88	18.96
Sikkim	2.84	5.81	8.21	4.93
Tripura	9.87	46.94	3.04	17.43
India	9.38	22.13	26.28	16.79

Source: *Twelfth Finance Commission Report*, based on Houses, Household Amenities, and Assets, RGI, 2001, Government of India.

Note: * The Deprivation Index is calculated based on 50 per cent weight to column 2, and 25 per cent weight each to columns 3 and 4. So Deprivation Index = $0.5(2) + 0.25(3+4)$.

Table 7.33A: Households with Electricity Connections

(percent of households)

	1981			1991			2001		
States	Rural	Urban	Combined	Rural	Urban	Combined	Rural	Urban	Combined
Arunachal Pradesh	11.0	64.3	15.2	33.9	81.0	40.9	44.5	89.4	54.7
Assam	—	—	—	12.4	63.2	18.7	16.5	74.3	24.9
Manipur	10.3	48.3	20.1	41.7	75.5	50.9	52.5	82.0	60.0
Meghalaya	7.4	59.6	16.8	16.3	83.0	29.2	30.3	88.2	42.7
Mizoram	5.0	50.1	16.3	35.5	85.5	59.2	44.1	94.4	69.6
Nagaland	20.0	58.4	26.1	47.2	75.6	53.4	56.9	90.3	63.6
Sikkim	13.0	71.8	23.1	57.1	92.4	60.7	75.0	97.1	77.8
Tripura	16.5	92.1	25.1	28.5	80.4	36.9	31.8	86.4	41.8
India	14.7	62.5	26.2	30.5	75.8	42.4	43.5	87.6	55.9

Note: All India figures exclude Assam in 1981 and Jammu & Kashmir in 1991.

Source: *Housing and Amenities, Paper 2 of 1993; Census of India, 1991, 2001.*

Table 7.34A: Per Capita Consumption of Electricity

(KWh)

States	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00
Arunachal Pradesh	68	58	54	67	66	73	80	90.2	109.9	95.5
Assam	94	90	97	95	98	98	104	99.8	122.5	95.5
Manipur	97	107	104	111	107	118	128	138.9	74.7	69.5
Meghalaya	115	125	129	110	140	143	135	143.5	150.3	160.3
Mizoram	69	69	91	101	112	128	128	95.1	114.0	120.8
Nagaland	75	78	73	68	59	79	88	86.6	81.4	84.7
Sikkim	119	20	114	123	143	173	172	177.8	184.9	192.4
Tripura	47	53	59	60	66	73	80	90.2	109.9	95.5
India	253	268	283	299	320	336	334	348.5	359.6	354.7

Source: *Annual Report on the Working of State Electricity Boards & Electricity Departments (2001-02)*, Planning Commission (Power & Energy Division), Govt. of India, May 2002. <http://planningcommission.nic.in/>

Table 7.35A: Change in Urban Population, 1981-2001*(percent)*

States	1981	1991	2001	Change in 2001 over	
				1981	1991
Arunachal Pradesh	6.3	12.2	20.4	14.1	8.2
Assam	9.9	11.1	12.7	2.8	1.6
Manipur	26.4	27.7	23.9	-2.6	-3.8
Meghalaya	18.0	18.7	19.6	1.6	0.9
Mizoram	25.2	46.2	49.5	24.3	3.3
Nagaland	15.5	17.3	17.7	2.2	0.5
Sikkim	16.2	9.1	11.1	-5.1	2.0
Tripura	11.00	15.3	17.0	6.0	1.8
NER	11.8	13.8	15.4	3.6	1.6
India	23.7	25.7	27.8	4.1	2.1

Source: Census of India 1981, 1991, 2001

ANNEXURE 7.2

7.2.1 RECOMMENDATIONS ON HUMAN DEVELOPMENT FROM OTHER REPORTS

Various reports have suggested ways to improve basic services in NER, all based on the accepted view that development in the region will only be possible if there is a vast improvement in the quality of overall infrastructure, and services. A brief description of the main recommendations in these areas follows.

I. The Shukla Commission Report (1997): Transforming the Northeast- High-level Commission Report, Planning Commission, Government of India

Services

- State governments should raise resources up to 15 per cent of the allocations made by the Planning Commission for Basic Minimum Services.
- For ensuring transparency, suitably publish full details about the schemes to be taken up, their location, estimated expenditure, and those responsible for the works so that local communities and beneficiaries become fully aware of the flow of funds as well as the schedule of implementation. Transparency will ensure greater accountability and prevent leakage.
- An effective monitoring system will have to be worked out from the block up to state administration with systematic and periodic reviews. The State Plans Division of the Planning Commission should also help states set up or strengthen similar units.
- A mechanism will have to be found to relate credible assurances of maintenance of assets to the release of funds for new schemes. One way could be to stipulate that absence of proof of maintenance of assets already created will result in a proportionate reduction in the funds to be released for new schemes in the following year.

Urbanisation and Spatial Planning

- Master plans must be prepared/ reviewed for all state capitals, larger towns and potential growth centres with expert assistance. This is all the more necessary in the fragile hills where unregulated construction, high-rises and lack of infrastructure have degraded the urban environment and caused serious traffic and sanitation problems.
- In cases of urban expansion or potential township development around new airports, railheads, industrial centres and other growth poles such as the Shillong satellite town, Lengpui airport (Mizoram), and Nangalbibra (East Garo Hills), the government should freeze land prices and any new

construction within a given radius. This will ensure urban standards and enable the state to retain the capital appreciation of land through betterment. This will provide a source of funding through regulated sales for approved purposes and preclude land speculation designed to fill private coffers.

- The Imphal Capital plan that has been prepared should be carefully evaluated and funded in phases.
- The Assam Rifles are reportedly to evacuate the remaining portion of the Kangla Fort premises in the heart of Imphal. The Fort is a hallowed Meitei heritage site which should be restored as a centre of Meitei culture and history as may be determined by a special committee. This project should be assisted through a core grant from the Centre
- The same should be done for Gargaon, the ancient Ahom capital near Nazira, and Sibsagar in Assam and other heritage/historic sites These places recall the pride and glory of the Northeast.

II. North Eastern Council (NEC) Draft Vision 2020: main suggestions on human development

Education

- Management of primary education by local community.
- Universalisation of education.
- 6% of GSDP be allocated for HRD.
- Taining of all untrained teachers through a crash programme to be jointly implemented by SCERTs, NCERT and IGNOU.
- Development of vocational education in tune with the development needs of the region.
- A comprehensive regional plan and state plans for development of sports, youth activities and culture to be taken up by joint efforts by the centre, states, NEC and the private sector.

Health

- The goal is to attain health for all by 2020.
- Communitisation of primary health care system.
- Integrated programme for water, sanitation, health including health education.
- Medical colleges, para-medical institutions be set up and also a regional medical university.
- Special programme for the treatment of cancer and prevention of HIV/AIDS.
- Increase health sector budget to 6 percent of GDP.

Basic Services

- Minimum road connectivity to all the 40,261 villages.
- Electrification of the remaining 8,400 villages and 45 lakh households by 2020.
- Drinking water facilities to the uncovered 46.54% rural households in the region by 2015.
- Promotion of agro-horti-based and service-related micro-enterprises.
- Cluster approach for the development of both farm and non-farm rural enterprises – at least two rural clusters in each of the 484 blocks in the region by 2020.
- A pool of dedicated and focused SHGs and NGOs be created for project implementation.
- A regional centre for rural studies.
- Promotion and application of appropriate rural technology.
- Establish 16 growth poles by 2020 along the lines suggested by the National Commission for Development of Enterprises in the Unorganised/informal sector.
- Evolve appropriate development model for the rural Northeast based on the experience of Northeastern Region Community Resource Management (NERCRMP) and the village development board (VDB) model in Nagaland.

Women Empowerment

- Formation of self-help groups.
- Strengthening female NGOs to give them 'voice'.
- Budgeting for gender equity.
- Evolving a banking and industrial policy that supports women participation / empowerment.
- Launching movement for mass woman literacy, training and motivation that helps capacity building.

- Capacity building, special entrepreneurship development programmes for women.

III. North East Region's Education Council (NEREC's) Road Map

1. Improve the quality of teaching (especially of mathematics and science) by:
 - Training and motivating teachers from the primary level onwards.
 - NCERT is in overall charge - comprehensive module under preparation.
 - States will select 50 high and higher secondary teachers each to be trained as master trainers by national-level experts.
 - The first step is a motivation-cum-skill upgradation course in chosen institutions. After that, refresher courses and motivation material will be disbursed in open distance learning mode. IGNOU, NIOS and others to help.
 - SCERT and DIETS will be strengthened to sustain the programme as a continuing activity.
2. Cross-fertilise the knowledge-oriented general academic stream with a skill-oriented vocational stream
 - A degree carries higher social prestige than a certificate or diploma in a vocational course, and has far higher employability potential. The higher secondary certificate and graduate degree should offer a choice of one vocational paper to balance education with the needs of community and employability without loss of social prestige.
 - Either the academic or the vocational admission system to be made inclusive depending on the pupil's choice.
3. Upgrade quality through the cluster approach
 - Organise colleges and schools around a centrally located mother institution (which is adequately equipped) to share its upgraded facilities with students and teachers of feeder institutions.
 - Make at least one existing college per district and one higher secondary school per block an Institution of Excellence, and slowly expand this until the most inaccessible school is covered.
4. Teach the languages of our neighbouring eastern countries
5. Develop Centres of Excellence in universities and colleges
6. Extensive use of IT, ITES and telecom and interlinking
 - Interactive virtual classrooms across NER will vastly maximise the reach of talks by scholars and scientists; of model lessons; training and motivational refresher material, etc., for teachers in remote locations.
 - Vast expansion of open and distance learning by IGNOU mainly to reach skills to the vast numbers still unreached, e.g., school dropouts; workers wanting to upgrade skills to enhance income; educated unemployed (to promote entrepreneurship with skills and knowledge inputs for value addition of local produce locally; etc .

IV: SUCCESS: Proposal for Universalisation of Access to and Improvement of Quality at the Secondary Stage

GOAL: To make secondary education of good quality available, accessible and affordable to all young people

- To make all secondary schools conform to prescribed norms
- Availability and access to every one
 - within 5 kms for secondary schools
 - 7 to 10 kms for higher secondary schools
- Equity through removal of gender, socioeconomic and disability barriers
- To ensure good quality education for all students

STRATEGY for improving access for the Eleventh Plan

- Improve or upgrade existing schools to prescribed norms and expand capacity

- Encourage establishment of good quality private schools
- Establish government schools in areas where private sector fails to do so
- Expand facilities for open and distance learning

IMMEDIATE ACTION required by the states

- State-specific strategy and action plan for the new scheme
- School mapping and survey to assess resource gap
- Development of norms for infrastructure and resources for schools
- Identifying geographical areas needing new schools or upgradation of existing schools
- Analysing disparities (rural-urban, gender, SC, ST, minorities, disabled) and taking remedial measures.

ANNEXURE 7.3

PURA: Reducing the Rural-Urban Divide in the NER

A recent scheme, PURA (Providing Urban Amenities in a Rural Areas) aims to promote regionally balanced growth by helping villages develop and exploit their comparative advantages. To be implemented through the Ministry of Rural Development, the strategy will provide physical connectivity among the clusters through good roads and transport; electronic connectivity through tele-communication with high bandwidth fiber-optic cables and wireless and Internet kiosks to link rural and urban environments; and knowledge connectivity through education, vocational training for farmers, artisans and craftsmen and entrepreneurship programmes. These three connectivities will result in economic connectivity through the initiation of enterprises, supported by banks, micro credit organisations and marketing of the products.

- Each PURA cluster will reinforce agriculture; emphasize areas like agro processing, development of rural crafts, dairy, silk production and fishing based on the competitive advantage of the region. to enhance non-farm rural revenue. The rural economy should be driven by renewable energies such as solar, wind, bio-fuel and conversion of municipal waste into power, so development is sustainable.
- Two types of PURA have been proposed for the NER, based on terrain and population. The plains PURA would have 20,000-1,00,000 people and be clustered into economic systems of 20 to 30 villages. Hill PURAs would have smaller populations of 7,500-15,000 people, in a cluster of 30 to 100 villages or hamlets. In Manipur, for example, 15 PURA clusters are envisaged. Each PURA cluster will cost about Rs 100 crore (~\$20 million).
- Employment will initially be created during the initial phases of construction and setting up, but will have to be planned for in a sustainable long-run manner in employment and self-employment opportunities in nationally competitive small enterprises in agro-processing, manufacturing and services. If the industrial/business parks are marketed well, they can generate employment in the supporting sectors for about 10,000 people in the cluster.
- PURA enterprises can also undertake management of schools, health care units, vocational training centres, chilling plants, silos and building a market, banking system and the regional business or industrial units. PURA enterprises should not be based on bureaucratic support, but should focus on raising their efficiency to the extent they are able to compete with others. This new PURA enterprise needs partners from the bank, educational institutions, the government and also the private entrepreneurs. Educational institutions can train the entrepreneurs for managing the PURA in affiliated colleges of Manipur University and the banks can provide loans to the entrepreneurs for creating and running PURAs as a business proposition.

Source: From the *President of India's Vision for 2017 in NE: Address at the Inauguration of the Conference on Development of East and Northeast India – Strategic Issues* in a National Perspective, Kolkata, May 17, 2007; and from his speech at Manipur University.

Annexure 8

CHAPTER 8: MANPOWER PLANNING AND EMPLOYMENT

ANNEXURE 8.1

Table 8.1A: Population by Age Group, 2001

States	All Ages	15-19	20-29	15-29	(15-19)	(20-29)	(15-29)
	Numbers (in thousands)				Percent		
Arunachal Pradesh	1,097.97	110.56	178.94	289.50	10.07	16.30	26.37
Assam	26,655.53	2,610.79	4,631.07	7,241.86	9.79	17.37	27.17
Manipur	2,166.79	222.48	431.86	654.34	10.27	19.93	30.20
Meghalaya	2,318.82	249.78	379.32	629.10	10.77	16.36	27.13
Mizoram	888.57	98.63	172.95	271.58	11.10	19.46	30.56
Nagaland	1,990.04	266.10	373.37	639.48	13.37	18.76	32.13
Sikkim	540.85	63.44	102.72	166.17	11.73	18.99	30.72
Tripura	3,199.20	339.44	553.07	892.51	10.61	17.29	27.90
NER	38,857.77	3,961.24	6,823.30	10,784.54	10.19	17.56	27.75
India	10,28,610.33	1,00,215.89	1,73,186.53	2,73,402.42	9.74	16.84	26.58

Source: Census of India, 2001

Table 8.2A: Public and Private Employment in the Organised Sector, 1981-2002

(in lakh)

States	Public Sector								Private Sector							
	1981	1991	1997	1998	1999@	2000	2001	2002	1981	1991	1997	1998	1999@	2000	2001	2002
Assam	3.58	5.01	5.49	5.35	5.32	5.36	5.37	5.26	4.99	5.49	5.67	5.57	5.50	5.49	5.79	5.38
Manipur	0.36	0.55	0.78	0.78	0.80	0.64	0.80	0.80	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.03
Meghalaya	0.44	0.64	0.69	0.70	0.71	0.73	0.73	0.73	0.04	0.05	0.08	0.08	0.09	0.09	0.09	0.09
Mizoram	0.15	0.33	0.40	0.40	0.40	0.35	0.40	0.4	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01
Nagaland	0.39	0.64	0.69	0.73	0.74	0.74	0.74	0.74	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03
Tripura	0.62	0.88	1.00	1.00	1.00	1.10	1.10	1.10	0.06	0.1	0.11	0.11	0.1	0.13	0.13	0.13
NER	5.54	8.05	9.05	8.96	8.97	8.92	9.14	9.03	5.12	5.68	5.93	5.82	5.75	5.78	6.08	5.67
India	155	191	196	194	194.2	193	191.4	187.7	73.95	76.76	86.9	87.5	86.98	86.46	86.52	84.32

Note: @=Quick estimate figures

Sikkim and Arunachal Pradesh were not covered under the EMI Programme

EMI: Employment Market Information, conducted by the Employment Exchanges

Source: *Employment Review* for various years, Directorate General of Employment and Training.

Table 8.3A: Growth in Employment, 1983-1994 and 1994-2000

State	1983 TO 1993-94			1993-94 to 1999-2000		
	Male	Female	Total	Male	Female	Total
Arunachal				0.5	-0.7	0.0
Assam	1.3	3.2	0.6	2.5	2.3	2.5
Manipur	3.6	2.9	3.3	3.2	-0.3	2.0
Meghalaya	3.1	4.0	3.5	2.3	3	2.6
Mizoram	3.1	20.5	6.3	2.9	5.9	4.0
Nagaland	19.7	34.5	22.4	4.6	15.9	8.6
Sikkim	2.9	0.6	2.3	1.4	9.1	3.4
Tripura	3.3	10.4	4.3	2.7	-5.5	1.4
India	2.2	1.7	2.1	1.9	0.9	1.6

Source: *NSSO, 38th, 50th and 55th Round* on Employment and Unemployment in India; Census of India, 1991 and 2001;

Note: Growth in employment has been estimated as compound annual growth of people employed aged 15 and above in usual principal and sub-status.

Table 8.4A: Labour Force Participation Rates

State	1993-94						1999-2000						2004-05					
	Rural			Urban			Rural			Urban			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Arunachal Pradesh	78.2	16.5	50.5	78.9	63.6	71.6	42.5	31	37.1	40.6	11	27.5	51	41.3	46.2	46.6	15.1	32.3
Assam	76.8	16.2	48.3	84.7	26	57.6	54.6	16.1	36.4	56.5	13.8	36.8	56	21.6	40.1	59.1	12	36.2
Manipur	68.6	32.7	50.3	75.1	48.2	61.8	50.6	25.7	38.7	47.8	22.5	35.3	53	35.4	44.5	48.2	23.6	35.8
Meghalaya	78.9	30.5	55.2	91.6	73.5	82.8	55.9	41.9	48.8	40.7	21.1	31	57	48	52.7	47	31.4	38.7
Mizoram	75.3	39.8	57.6	82.7	48.1	66.3	56.3	44.1	50.3	48.7	26.5	37.4	60	44.1	52.3	49.1	28.8	39
Nagaland	67.1	16.9	45.8	68.3	34.5	52.8	53.2	45.1	49.4	43.3	21.7	33.5	56	51.1	53.7	47.9	27.7	38.5
Sikkim	85.9	21.9	57.7	85	28.5	59.7	51.9	24.5	39.1	55.7	22.5	40.7	57	32.3	45.3	56.4	17.7	38.3
Tripura	77.4	21.6	49.8	82.6	20.3	52.1	50.7	7.6	30.7	52.2	8.1	31.3	61	12.5	37.3	60.5	23	41.4
India	80.1	23.8	53.3	87.6	49	68.6	54	30.2	42.3	54.2	14.7	35.4	56	33.3	44.6	57	17.8	38.2

Source: *Employment and Unemployment Situation in India*, 1993-94, 1999-2000, 2004-2005 (Reports 409, 458 and 515), NSS Rounds 50th, 55th and 61st.

Table 8.5A: Workforce Participation Rates

State	1993-94						1999-2000						2004-2005					
	Rural			Urban			Rural			Urban			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Arunachal Pradesh	49.7	40.9	45.5	51.5	10.1	32.6	42.2	31	36.9	39.9	10	26.7	50	41	45.8	46.1	14.8	31.9
Assam	51.6	15.9	35.3	52.8	9.2	32.1	52.9	15.1	34.9	52.2	11.2	33.2	55	20.9	39.1	55.1	10.9	33.6
Manipur	47.7	30.8	39.3	43.4	22.3	32.9	49.5	25.3	38	44.5	21.1	33	52	35.1	44	45.6	22.1	33.8
Meghalaya	61.9	49.3	55.7	50	18.9	34.8	55.7	41.8	48.6	39.3	19.7	29.6	57	47.8	52.5	45.4	30.3	37.3
Mizoram	52.9	31.7	43	48.4	26.4	37.6	55.5	44	49.9	47.1	25.9	36.3	59	44.1	52.1	48.4	28.1	38.3
Nagaland	43.9	21.6	33.3	37.8	9.9	26.1	51.8	44.1	48.2	39.3	19.9	30.5	55	50.4	52.7	45.7	25.7	36.4
Sikkim	56.3	19.1	39.8	58	13.6	38.2	50.2	24.1	38	51.9	20	37.5	55	31.8	44.3	54.5	16.8	36.9
Tripura	52.2	12.8	33.3	49.7	12.4	31.2	50.4	7.3	30.3	49.4	7.5	29.5	55	8.5	32.3	50.4	10	29.8
India	55.3	32.8	44.4	52.1	15.5	34.7	53.1	29.9	41.7	51.8	13.9	33.7	55	32.7	43.9	54.9	16.6	36.5

Source: *NSSO Rounds 50th, 55th and 61st on Employment and Unemployment Situation in India*, 1993-94, 1999-2000, 2004-2005 (Reports 409, 458 and 515).

Table 8.6A: Changing Composition of Workforce*(% of Total Population)*

State	Main Workers			Marginal Workers			Non-Workers		
	1981	1991	2001	1981	1991	2001	1981	1991	2001
Arunachal Pradesh	49.6	45.2	37.8	3	1	6.2	47.4	53.8	56
Assam	N.A.	31.2	26.7	NA	4.9	9.1	NA	63.9	64.2
Nagaland	47.5	42.3	35.4	0.7	0.4	7.2	51.8	57.3	57.4
Manipur	40.3	38.6	30.4	2.1	3.6	13.2	56.8	57.8	56.4
Meghalaya	43.4	40.3	32.6	2.5	2.4	9.2	54.1	57.3	58.2
Mizoram	41.7	42.1	40.8	3.7	6.8	11.8	54.6	51.1	47.4
Sikkim	46.6	40.4	39.4	1.7	1.1	9.3	51.7	58.5	51.4
Tripura	29.6	29.1	28.5	2.6	2	7.7	67.7	68.9	63.8
India	33.4	34.1	30.4	3.3	3.4	8.7	63.2	62.5	60.9

Source: *Census of India* 2001**Table 8.7A: Ratio of Working Persons Available for Alternative Work to Working People (Rural)**

State	1999-2000			2004-05		
	Male	Female	Total	Male	Female	Total
Arunachal Pradesh	2.7	1.4	2.2	13.2	13.8	13.4
Assam	7.2	4.5	6.9	11.4	5.8	10.5
Manipur	2.8	2.5	2.7	4.2	2.7	3.8
Meghalaya	1.3	1.5	1.4	5.6	2.7	4.3
Mizoram	8.8	1.8	6.1	11.3	4.2	8.5
Nagaland	11.3	1.4	8.3	12.8	10.9	12.1
Sikkim	5.7	3.7	5.1	2.6	1.1	2.2
Tripura	6.4	4.6	6.2	7.5	4.3	7.2
India	9.1	6	8.2	9.2	5.8	8.2

Source: *NSS Report No. 458*, Employment and Unemployment in India, 1999-2000*NSS Report No. 515*, Employment and Unemployment in India, 2004-05

Note: The data refers to the number of usually working (principal) persons (15 years and above) who sought or were available for alternative work per 100 usually working (principal) persons (15 years and above)

Table 8.8A: Ratio of Working Persons Available for Alternative Work to Working People (Urban)

States	1999-2000			2004-05		
	Male	Female	Total	Male	Female	Total
Arunachal Pradesh	2.0	1.6	1.9	8.3	3.0	7.2
Assam	7.1	7.3	7.1	11	14.4	11.4
Manipur	4.7	5.9	5.0	2.2	2.8	2.4
Meghalaya	2.8	1.2	2.3	5.2	9.6	7.0
Mizoram	5.2	6.1	5.5	5.1	3.7	4.7
Nagaland	7.4	11.7	8.4	9.7	15.6	11.4
Sikkim	4.9	4.5	4.8	0.6	0.0	0.5
Tripura	1.7	3.7	1.9	6.8	7.2	7.0
India	6.8	6.0	6.6	5.5	5.2	5.5

Source: *NSS Report No. 458*, Employment and Unemployment in India, 1999-2000*NSS Report No. 515*, Employment and Unemployment in India, 2004-05

Note: The data refers to the number of usually working (principal) persons (15 years and above) who sought or were available for alternative work per 100 usually working (principal) persons (15 years and above)

Table 8.9A: Sectoral Distribution of Workers, 2001*(percent)*

States	Rural			Urban		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Arunachal Pradesh	83.4	7.5	9.0	8.7	13.4	77.9
Assam	67.7	6.2	26.2	6.0	13.5	80.5
Manipur	75.3	8.9	15.8	28.3	15.6	55.9
Meghalaya	86.5	3.0	10.5	1.3	14.6	84.1
Mizoram	88.5	2.4	12.2	30.3	14.7	55.0
Nagaland	79.7	2.2	18.1	8.4	12.1	79.5
Sikkim	60.8	9.9	29.3	2.1	16.1	81.8
Tripura	45.7	12.0	42.3	2.7	8.0	89.3
India	76.3	11.4	12.4	8.8	32.0	59.2

Source: *Census of India*, 2001**Table 8.10A: Distribution of Workers as Cultivators, Agricultural Labourers and Other Workers***(percent of total workers)*

States	Cultivators			Agricultural Labourers			Other Workers		
	1981	1991	2001	1981	1991	2001	1981	1991	2001
Arunachal Pradesh	71.3	60.8	57.8	2.5	5.4	3.9	26.3	33.7	37.0
Assam	NA	54.8	39.1	NA	12.6	13.3	NA	31.7	44.0
Manipur	63.6	59.9	40.2	5.0	10.3	12.0	31.4	23.8	37.6
Meghalaya	62.6	56.3	48.1	10.0	13.0	17.7	27.5	30.4	32.0
Mizoram	70.6	62.3	54.9	2.5	5.4	5.7	26.9	31.2	37.9
Nagaland	72.3	72.7	64.7	0.8	1.6	3.7	26.9	25.3	29.0
Sikkim	60.1	58.0	49.9	3.3	8.2	6.5	36.6	33.1	42.0
Tripura	43.3	38.7	27.0	24.0	24.2	23.8	32.7	35.2	46.1
India	41.5	39.7	31.6	25.1	27.4	26.7	33.4	30.5	37.5

Source: *Census 1991 and 2001*.

Table 8.11A (a): Distribution of Usually Employed by Category of Employment (Rural)*(percent)*

States	1993-94			1999-2000			2004-05		
	Principal and Subs. Status			Principal and Subs. Status			Principal and Subs. Status		
	Self-Employed	Regular Employed	Casual Labour	Self-Employed	Regular Employed	Casual Labour	Self-Employed	Regular Employed	Casual Labour
Arunachal Pradesh	85.4	12.3	2.3	79.3	12.6	8.1	83.3	10.8	5.9
Assam	57.8	14.4	27.8	58.2	16.6	25.2	71.0	9.1	19.9
Manipur	83.0	12.1	4.9	80.0	10.0	10.0	85.1	9.5	5.4
Meghalaya	79.7	6.3	14.0	79.6	4.4	16.0	81.0	5.0	14.1
Mizoram	91.1	7.3	1.4	89.0	8.4	2.6	91.4	6.7	1.8
Nagaland	78.1	19.2	2.7	82.1	16.6	1.3	88.3	11.0	0.7
Sikkim	57.0	27.0	16.0	62.0	26.1	11.9	67.8	25.2	7.0
Tripura	56.9	12.8	30.3	47.2	11.1	41.7	52.8	10.2	37.0
India	58.1	6.6	35.3	55.8	6.8	37.4	60.2	7.1	32.8

Source: *NSS Report No. 409*, Employment and Unemployment in India, 1993-94*NSS Report No. 458*, Employment and Unemployment in India, 1999-2000*NSS Report No. 515*, Employment and Unemployment in India, 2004-05**Table 8.11A (b): Distribution of Usually Employed by Category of Employment (Urban)***(percent)*

States	1993-94			1999-2000			2004-05		
	Principal and Subs. Status			Principal and Subs. Status			Principal and Subs. Status		
	Self-Employed	Regular Employed	Casual Labour	Self-Employed	Regular Employed	Casual Labour	Self-Employed	Regular Employed	Casual Labour
Arunachal Pradesh	22.0	69.5	8.5	24.1	59.0	16.9	42.7	48.8	8.2
Assam	45.3	43.1	11.6	44.7	42.9	12.4	42.3	45.1	12.6
Manipur	63.9	33.3	2.8	60.3	30.6	9.1	65.4	29.9	4.6
Meghalaya	34.1	55.8	10.1	26.3	56.4	17.3	20.1	70.8	9.1
Mizoram	61.0	33.1	5.9	49.5	33.8	16.7	59.0	34.1	6.9
Nagaland	39.1	54.4	6.5	24.2	71.7	4.1	62.2	33.8	4.1
Sikkim	45.3	48.2	6.5	32.7	56.5	10.8	40.4	57.2	2.4
Tripura	38.8	48.3	12.9	31.3	53.0	15.7	40.7	46.0	13.3
India	42.4	39.5	18.1	42.2	40.0	17.8	45.4	39.5	15.0

Source: *NSS Report No. 409*, Employment and Unemployment in India, 1993-94*NSS Report No. 458*, Employment and Unemployment in India, 1999-2000*NSS Report No. 515*, Employment and Unemployment in India, 2004-05

Table 8.12A (a): Unemployment in the Northeast*(percent of labour force)*

	1983			1993-94			1999-2000		
States	Male	Female	Total	Male	Female	Total	Male	Females	Total
Arunachal Pradesh				1.3	0.5	1.0	1.0	0.9	0.9
Assam	2.2	2.4	2.2	4.6	9.5	5.6	3.7	8.0	4.6
Manipur	0.6	0.0	0.4	2.2	1.0	1.8	3.7	3.1	3.5
Meghalaya	1.8	0.9	1.5	0.5	0.3	0.5	0.9	0.9	0.9
Mizoram	0.3	1.0	0.4	0.9	0.5	0.8	2.5	1.3	2.0
Nagaland	0.4	0.0	0.3	3.2	0.6	2.4	4.0	2.9	3.5
Sikkim	2.6	1.3	2.2	0.7	1.9	1.0	3.6	2.7	3.4
Tripura	2.1	17.7	3.9	2.2	8.4	3.4	1.6	4.5	1.9
India	2.3	1.3	2.0	2.1	1.7	2.0	2.5	1.8	2.3

Note: 1983 NSSO survey excludes Arunachal Pradesh and rural Nagaland

Source: NSSO, 38th, 50th and 55th Round on Employment and Unemployment in India; Census of India, 1991 and 2001.

Table 8.12A (b): Usual Principal Status Unemployment Rate among the Youth (15-29 years), Rural

(percent)

States	Unemployment Rate in 1999-2000												Unemployment Rate in 2004-05											
	Male				Female				Total				Male				Female				Total			
	15-19	20-24	25-29	15-29	15-19	20-24	25-29	15-29	15-19	20-24	25-29	15-29	15-19	20-24	25-29	15-29	15-19	20-24	25-29	15-29	15-19	20-24	25-29	15-29
Arunachal Pradesh	4.1	4.3	1.1	2.5	0.9	1.1	0	0.4	1.8	2.6	0.7	1.5	2.1	3.6	3.2	3	0.9	1.3	2.5	1.7	1.3	2.6	2.9	2.5
Assam	10.3	13.8	7.2	10.2	20.3	32.9	19.4	24.5	11.4	17.1	9.3	12.5	10.3	11.1	5.1	8.5	19.1	17.2	10	15.3	12.1	12.3	5.8	9.7
Manipur	6.4	5.6	4.4	5.2	0	10.7	6.2	7.2	4.7	7.2	4.9	5.8	8.2	3	5.6	5.1	0	2.9	2.5	2.3	4.8	3	4.4	3.9
Meghalaya	2.2	1.5	0	1.1	0	1.6	0.4	0.7	1.2	1.6	0.2	1	0	0.6	0.1	0.2	0	2.6	1.1	1.6	0	1.6	0.6	0.8
Mizoram	0.2	2.6	10.3	4.9	0	0	4.1	1.4	0	1.6	8	3.4	0.7	2.4	2.2	2	0	0.4	0	0.3	0.5	1.5	1.4	1.3
Nagaland	2.9	15.3	8.3	9.9	9.2	14.5	5.3	10	5.3	15	7.6	10	8.2	26.9	19.2	20.8	8.1	15	4.1	9.5	7.8	20.1	12.4	14.9
Sikkim	7.4	8.4	13.1	10.2	0	10.3	2.5	5	4.9	8.9	9.5	8.4	10.3	13	3.5	8.6	0	6.4	3.7	4	7.1	10.7	3.6	7
Tripura	3.7	2.2	1.8	2.8	12.7	5.7	18.2	12.8	6.1	2.5	3.9	3.9	33.6	31.2	13.1	25.7	65.7	67.1	45.2	60.8	40.9	39.1	18.5	33
India	6.5	6.2	3.2	5.1	4.1	4.9	2.4	3.7	5.7	5.8	2.8	4.6	7.9	6.2	2.3	5.2	6.7	9.3	5.2	7	7.5	7	3.3	5.7

Source: *Employment and Unemployment Situation in India*, 1999-2000 and 2004-05, Report No. 458 & 515, National Sample Survey Organisation.

Table 8.12A ©: Usual Principal Status Unemployment Rate among the Youth (15-29 years), Urban

(percent)

States	Unemployment Rate in 1999-2000												Unemployment Rate in 2004-05											
	Male				Female				Total				Male				Female				Total			
	15-19	20-24	25-29	15-29	15-19	20-24	25-29	15-29	15-19	20-24	25-29	15-29	15-19	20-24	25-29	15-29	15-19	20-24	25-29	15-29	15-19	20-24	25-29	15-29
Arunachal Pradesh	0	14.2	8.9	9.1	54.1	31.6	2.6	18.5	11.8	21.6	7.1	11.9	12.9	10.7	2.3	5.6	7.1	11.3	3.7	7.4	9.5	10.9	2.7	4.9
Assam	20.5	34.4	15.5	22.2	0.8	70.5	55.7	45	12.7	39	22.8	26.6	12.6	26.9	19.8	20.9	19.7	50	19.4	33.4	14.1	32.8	19.5	23.3
Manipur	8.6	21.4	23.9	22.6	61.1	6.9	29.1	24.2	30.8	17.3	25.4	23.1	5.5	22.6	19.3	19.7	1.2	11.4	28.7	18.5	2.9	19	22.4	19.3
Meghalaya	6.1	14.9	10.2	11.9	19.5	13.1	21.2	17.7	10.4	14.4	15.4	14.3	29.4	3	12.8	12.9	3	14.8	15.3	12	14.6	8.7	14	12.5
Mizoram	4.9	11.3	14.8	12.7	17.1	6.1	3.8	6	6.3	9.1	11.1	10.3	2.8	7.4	2.1	4.4	0	5.9	7.6	6.2	1.8	6.7	4.5	4.9
Nagaland	0	34	30.8	31.1	0	55.5	10.6	23.3	0	41	24.6	28.3	0	33.2	19.7	22.1	0	55.2	23.7	35.5	0	43.4	21.4	27.7
Sikkim	22.1	13.2	15.4	15.6	0	49.5	16.7	29.9	16.7	23.4	15.6	19	21.7	7.9	0	6.7	0	24.6	0	6.3	16.9	10.5	0	8
Tripura	1.1	35.2	23.4	22.1	0	35.3	6.9	17.3	0.9	35.1	21.2	21.4	55.4	54	34	45.4	69.1	94.8	77.6	83.7	60.7	70.3	52.6	61.4
India	15.4	13.9	7.5	11.5	15.5	22.6	11.5	16.6	15.4	15.4	8.2	12.4	14	12.5	5.8	10	15.6	25.8	15.8	19.9	14.5	15.2	7.6	11.9

Source : *Employment and Unemployment Situation in India*, 1999-2000 and 2004-05, Report No. 458 & 515, National Sample Survey Organisation.

**Table 8.13A (a): Average Daily Wages for Rural Casual Workers
Engaged in Public Works**

(Rupees)

States	1999-2000			2004-05		
	Male	Female	Total	Male	Female	Total
Arunachal Pradesh	79.23	121.43	80.66	75.14	64.14	71.12
Assam	67.97	27.14	59.81	70.00	-	70.00
Manipur	60.15	24.74	42.31	86.23	40.00	85.00
Meghalaya	63.31	53.31	57.80	106.98	-	106.98
Mizoram	85.55	71.43	77.14	95.04	81.75	92.58
Nagaland	84.39	109.41	87.67	98.6	68.72	87.65
Sikkim	83.29	0	83.29	89.29	89.29	89.29
Tripura	86.59	123.88	95.64	84.43	40.00	76.71
India	48.14	38.06	45.55	65.33	49.19	56.33

Notes: The age-group of casual workers in NSSO 55th Round (1999-2000) was people of age 5 and above; while the corresponding age-group for 61st Round (2005-05) was between age

Source: *Employment-Unemployment Situation in India*, NSS 55th and 61st Round.

**Table 8.13A (b): Average Daily Wages for Rural Casual Workers in
Non-Public* Works**

States	1999-2000			2004-05		
	Male	Female	Total	Male	Female	Total
Arunachal Pradesh	67.09	42.73	57.64	104.38	50.60	91.41
Assam	48.82	35.55	46.63	62.59	53.29	60.18
Manipur	59.46	47.4	56.88	72.62	64.41	71.33
Meghalaya	57.37	43.06	51.29	73.20	43.35	64.16
Mizoram	97.77	66.24	92.33	111.86	88.89	109.85
Nagaland	71.93	46.67	68.23	146.05	150	146.32
Sikkim	50.71	40.6	49.2	89.16	74.22	86.53
Tripura	49.14	38.66	47.83	64.07	43.40	61.30
India	44.84	29.01	39.64	55.03	34.94	48.89

Notes: * Non-Public works: works other than public works (i.e. NSSO activity status code 41).

The age-group of casual workers in NSSO 55th Round (1999-2000) was people of age 5 and above; while the corresponding age-group for 61st Round (2005-05) was between age 15-59.

Source: *Employment-Unemployment Situation in India*, NSS 55th and 61st Round.

Table 8.14A: Distribution of Usually Working People in the Principal and Subsidiary Status (Urban)

(percent)

	1999-2000									2004-05								
	Agri. Etc	Mining & Quar- ring	Manufac- turing	Electri- city	Construc- tion	Trade, Hotel & Restau- rant	Trans- port etc.	Services		Agri. Etc	Mining & Quar- ring	Manufac- turing	Electri- city	Construc- tion	Trade, Hotel & Restau- rant	Trans- port etc.	Services	
States								Fin., Inter. Busi. etc.	Pub. Admin., Edu. Com. Etc.								Fin. Inter. Busi. etc.	Pub. Admin., Edu. Com. Etc.
Arunachal Pradesh	8.7	0	0.4	1.8	11.2	33.5	1	0.9	42.5	11.2	0	3.6	0.2	8.1	22.7	2.4	1.3	50.4
Assam	6	0.5	7.2	0.6	5.2	30	8.3	5.6	36.6	3.8	1.4	9.2	2.9	5.8	28.6	13.4	2.5	32.5
Manipur	28.3	0.9	10.5	0	4.2	19.9	3.6	1.2	31.2	25.9	0	13.7	0	4.8	19.7	4.4	1.4	30
Meghalaya	1.3	0	3.8	0.3	10.5	22.2	4.8	0.9	56.2	2	0.2	5.5	1.7	4.8	15.3	4.5	1.7	64.3
Mizoram	30.3	1.5	3.8	0	9.4	18.7	2.9	2	31.4	36.2	0.1	5.1	0	4.9	17.1	2.6	1.2	32.8
Nagaland	8.4	0	6.2	0.7	5.2	11.7	0.3	2.1	65.4	9.1	0	5.7	1.5	3.9	40.2	5.5	0.9	33.3
Sikkim	2.1	2.3	9.7	1.8	5.3	33.6	1.9	1.9	41.4	0.2	0	9.3	0.7	9.9	33.5	5.6	4.9	36.1
Tripura	2.7	0	3.7	0.2	4.1	24.6	4.9	2.8	57	4.2	0	7.2	0.5	6.6	27.2	4.4	1.9	48.1
India	8.8	0.8	22.7	0.7	8	26.9	8.7	4.1	19.5	7.6	0.8	23.9	0.7	8.4	25.3	9	5.5	18.8

Source: *Employment and Unemployment Situation in India: 1999-2000 and 2004-05*

Table 8.15A: Distribution of Usually Working Persons in the Principal and Subsidiary Status by Broad Industry Category*(Rural)*

	1999-2000									2004-05								
	Agri. Etc	Mining & Quar- ring	Manufac- turing	Electri- city	Construc- tion	Trade, Hotel & Restau- rant	Trans- port etc.	Services		Agri. Etc.	Mining & Quar- ring	Manufac- turing	Electri- city	Construc- tion	Trade, Hotel & Restau- rant	Trans- port etc.	Services	
States								Fin., Inter. Busi. etc.	Pub. Admin., Edu. Com. Etc.								Fin., Inter. Busi. etc.	Pub. Admin., Edu. Com. Etc.
Arunachal Pradesh	83.4	0	2.8	0.3	4.4	0.6	0.1	0.2	8.1	81.9	0	0.4	0.9	4.1	2.2	0.6	0.6	9.2
Assam	67.7	0.3	4	0.1	1.8	8.1	2.7	0.3	15.1	71.2	0.3	3.1	0.2	2.8	10.2	2.8	0.2	9.3
Manipur	75.3	0.6	7.4	0	0.9	3.7	1.4	0.2	10.5	67.8	0.6	7.7	0	3.5	7	2.4	0.2	10.8
Meghalaya	86.5	0.7	0.7	0	1.6	4.2	1.1	0.2	5	81.9	1.3	3.5	0.4	2.3	5.4	1.1	0	4.2
Mizoram	85.5	0.3	1	0	1.1	3	0.1	0.1	9	87.5	0	0.8	0	1	3.5	0.5	0.2	6.6
Nagaland	79.7	0.1	0.6	0.7	0.8	2.8	1.3	0.1	13.9	77.2	0	2	0.5	1.9	4.7	1.7	0.3	11.5
Sikkim	60.8	0.8	2.5	2.8	3.8	6.3	3.6	0.8	19.6	60.4	0.6	2.6	1.2	8	8.7	3.9	0	14.5
Tripura	45.7	0	4	0	8	11.8	2.3	0.1	28.1	42.8	0	4.9	0	11.6	11.1	3.8	0.1	25.8
India	76.3	0.5	7.4	0.2	3.3	5.1	2.1	0.3	4.9	70.8	0.6	8.2	0.2	5.4	6.7	2.7	0.5	4.9

Source: *Employment and Unemployment Situation in India: 1999-2000 and 2004-05*

Annexure 9

CHAPTER 9: CREATING STRONG SUPPORTING INSTITUTIONS

ANNEXURE 9.1

**Table 9.1A: Detailed Training Content for PRI Officials
(Under the National Capability Building Framework)**

Part	Theme	Description of the manner of interaction	Area covered, in brief	Category covered	Duration	Time line for completion
I	Building the right mindset for implementation of Panchayati Raj and learning basic functions	Course 1(a): Foundation Course	Overview of Panchayati Raj	Elected Panchayat representatives: about 22 lakh Panchayati Raj Officials: about 8 lakh	4 days, in toto	Within 20 weeks of election
		Course 1(b): Basic Functional Course	Internal Housekeeping, including understanding of accounts, Social Audit, Right to information, Panchayat revenues	Elected leaders of Panchayats at all levels and Chairpersons of Standing Committees (5 per Panchayat-about 10 lakh) Panchayati Raj Officials; about 5 lakh	4 days	Within 20 weeks of election. (Including foundational course, each office bearer would undergo 8 days of training)
		Course 1(c): Functional Literacy Course	Give those who need to an exposure to functional literacy	Illiterate of semi-literate elected representatives (about 8 lakh people)	One month, or as required, preferably at the village level itself.	6 months
II	Basic skill building for planning and implementation	Course II(a): Sectorally focused training programme	Coverage of core functions of Panchayats aimed at improving capacities to deliver services and development programmes,	Elected Panchayat representatives: about 22 lakh Officials associated with Panchayati Raj: about 8 lakh	At least 6 days (2 phases of 3 days each)	Within 40 weeks of election

Part	Theme	Description of the manner of interaction	Area covered, in brief	Category covered	Duration	Time line for completion
		Course II(b): Computer Training	Training in basic computer skills and selected software for Panchayat level training	At least 2 persons per Panchayat: about 5 lakh.	At least 6 days, with local handholding from the resource centre	Within 52 weeks.
III	Consolidation through interaction and networking	III(a): Gram Sabha level Campaigns	Awareness creation	Gram Sabhas, NGOs, SHGs and CBOs	At least 3 days a week	Coverage of all Gram Panchayats at least once a year
		III(b): Panchayati Raj TV channel and radio programmes		People at large	At least 3 days a week	All-India coverage
		III(c): Panchayati Raj Newsletter		Panchayati Raj members and individual subscribers	Once a month	All Panchayats
		III(d): Formation of networks of Panchayat elected representatives	Experience sharing	Elected Panchayat representatives: about 22 lakh		Within the first year after election
		III(e): Yearly refresher course		Elected Panchayat representatives: about 22 lakh	At least 4 days	Once a year for remaining 4 years
		III(f): Visits to identified 'beacon' Panchayats	On the site training	At least 10 lakh elected leaders of Panchayats	At least one full day each, excluding travel	At least two exposure visits every year
		III(g): Intermediate Panchayat level Resource Centers	Daily assistance to support Panchayat level planning and implementation	Elected Panchayat representatives: about 22 lakh	Every working day	To commence by 20 weeks, when members have finished Part I training
		III(h): Helplines			16 hours a day, every working day	
		III(i): Certificate courses	More intensive and academic study	Interested stakeholders	6 month course	For about 100 persons per State.

Source: Planning Commission (2006) *Report of the Working Group on Democratic Decentralisation and Panchayati Raj Institutions*, Ministry of Panchayati Raj.

Annexure 10

CHAPTER 10: CONNECTIVITY AND COMMUNICATION: EXPANDING INFRASTRUCTURE NETWORK

ANNEXURE 10.1

Table 10.1A: Share of Infrastructure in the Northeast States

(at constant base 1993-94)

(percent)

States	Years	Infrastructure
Arunachal Pradesh	1993-94	22
	1998-99	26
	2002-03	24
Assam	1993-94	7
	1998-99	7
	2002-03	9
Manipur	1993-94	12
	1998-99	14
	2002-03	17
Meghalaya	1993-94	13
	1998-99	13
	2002-03	17
Nagaland	1993-94	26
	1998-99	26
	2002-03	28
Sikkim	1993-94	15
	1998-99	16
	2002-03	24
Tripura	1993-94	9
	1998-99	16
	2002-03	24
India	1993-94	12
	1998-99	14
	2002-03	16

Note: 1. Owing to differences in methodology of compilation, data for different States/ Union Territories are not strictly comparable.

2. Data for Mizoram are not available at constant prices.

3. Figures are calculated.

Source: *Central Statistical Organisation (CSO)* website as on 26-1 1999 for old series and as on 23-2-2006 for new series.

Table 10.2A: Growth Rates of Infrastructure, 1993-94 to 2002-03**(at constant base 1993-94)***(percent)*

States	Infrastructure
Andhra Pradesh	3
Assam	2
Manipur	10
Meghalaya	11
Nagaland	9
Sikkim	11
Tripura	20
India	8

Note: 1 Owing to differences in methodology of compilation, data for different States / Union Territories are not strictly comparable.

2. Data for Mizoram are not available at constant prices.

3. Figures are calculated.

Source: *Central Statistical Organisation* (CSO) website as 26-11-1999 for old series and as on 23-2-2006 for new series.

Table 10.3A: Roads: Density of Road Length: NER and India*(length in Km)*

States	1996-97		1999-00		2001-02	
	Per 100 Square Kilometres	Per Lakh of Population	Per 100 Square Kilometres	Per Lakh of Population	Per 100 Square Kilometres	Per Lakh of Population
Arunachal Pradesh	16.8	1281.1	21.8	1522.7	21.93	1672.64
Assam	87.2	270.4	109.4	329.9	114.09	335.71
Manipur	49.0	475.7	51.2	457.4	51.21	498.45
Meghalaya	37.8	385.5	40.7	380.3	42.65	412.49
Mizoram	22.9	536.6	23	538.4	24.07	571.14
Nagaland	110.7	1223.7	122.7	1271.1	126.79	1056.31
Sikkim	25.8	366.8	26.1	370.2	28.45	373.30
Tripura	140.5	433.2	148.4	420.7	155.41	509.38
India	74.9	258.2	76.8	256.1	74.73	238.80

Source: indiastat.com

Table 10.4A: Roads: Types of Roads in NER (February 2002)*(length in km.)*

States	National Highways	State Highways	Major District Roads	Village Roads
Arunachal Pradesh	392	-	12,169	4,657
Assam	2,836	1,811	26,416	44,135
Manipur	954	1,118	6,638	2,172
Mizoram	927	354	3,518	NA
Meghalaya	717	991	5,416	604
Nagaland	369	398	13,754	5,137
Sikkim	62	186	1,502	NA
Tripura	400	136	5,569	7,912
India	58,092	1,33,853	19,67,080	4,92,585

Note: Figures are approximations

Source: *indiastat.com***Table 10.5A: Roads: National Highways in NER**

NH No	From	To	Distance
31	Siliguri (WB)	Silcher (Assam)	323
37	Pancharatna	Dangari	680
36	Nagaon	Dimapur	170
39	Numaligarh	More	436
38	Makum	Lekhapani	54
40	Jorabat (Guwahati)	Dwaki	NA
44	Shillong	Agartala	495
53	Badarpur	Imphal	320
54	Silchar	Tuipang	560
51	Krishnai	Dalu	149
52	Baihata-Chariali	Pasighat	580
52A	Banderdea	Itanagar	25
99	Patsala	Namlong	Under Const.

Source: Background paper No. 7, The Inland Water Authority of India, March 2006.

Table 10.6A: Rail: Density of Rail Routes in NER

State	2001 (March 31)		2005 (March 31)
	Route Km. Per Lakh of Population	Route Km. Per ' 000 Sq. Km.	Route Km. Per ' 000 Sq. Km.
Assam	9.5	32.1	32.0
Tripura	1.4	4.3	6.1
Nagaland	0.7	0.8	0.8
Mizoram	0.2	0.1	0.1
Manipur	0.1	0.1	0.1
Arunachal Pradesh	0.1	0.02	0.02
Meghalaya	0.0	0.0	0.0
Sikkim	0.0	0.0	0.0
India	135.6	700.4	709.9

Source: indiastat.com

Table 10.7A: Air Connectivity: Domestic Traffic (Aircraft Movements) at Top 46 Airports in India, 2005 and 2006*(numbers)*

Airport	For the month Oct., 2005	For the period April-Oct., 2005	For the month Oct., 2006	For the period April-Oct., 2006
International Airports				
Guwahati	1,169	8,356	1,806	10,145
Total	40,966	2,60,186	54,992	3,51,904
Domestic Airports				
Agartala	284	2,217	468	2,950
Imphal	146	1,126	260	1,358
Dibrugarh	280	1,998	256	1,937
Silchar	164	1,286	288	1,532
Total	6,778	48,580	9,764	60,614
Other Airports	2,200	14,166	3,021	16,830
India	54,146	3,47,658	73,730	4,65,494

Source: Indiastat.com

Table 10.8A: Waterways: Navigable Length of Main Rivers in NER*(kms)*

State	Rivers	1974	2000-01	
		Navigable Length	Total Length of the River in the state	Navigable Length
Assam	Brahmaputra		724	724
	Buridhing		161	161
	Disang		129	129
	Gangadhar		113	113
	Subansiri		143	143
	Kapali		103	103
	Kolodeye		112	112
	Kolong		121	121
	Katakhali		161	161
	Panchas		105	105
	Others		1967	1967
	Total	1983	3,839	3,839

Source: indiastat.com

Table 10.9A: Waterways: Major Identified Cargo Routes for NW-2

Identified Route	Nature of Cargo
Kolkata – Pandu	Coal, Bitumen, Iron and Steel
Pandu – Kolkata	Gypsum, Tea, Coal
Jogighopa – Kolkata	Coal (Meghalaya)
Tezpur – Kolkata	Tea
Dibrugarh – Kolkata	Tea
Silghat – Budge Budge	POL
Namrup	Urea
Bongaigaon Refinery	RP Coke

Source: Background paper No. 7, The Inland Water Authority of India, March 2006.

Table 10.10A: Waterways: Cargo Moved on Brahmaputra in India*(tonnes)*

River/Stretch	1996-97	1999-00	2003-04	Cargo Generally Moved
A. CIWTC				
Kolkata-Pandu#	9,545	3,031	600	Rice, Cement, GC, ODC, S. Iron, Bitumen, Rice
Pandu-Kolkata#	420	600	2650	Tea, Coal, Jute, GC, Bitumen, Lime Stone
Jogighope-Kolkata	-	-	500	Cement
Assam-Bangladesh#	-	-	2,100	Tea, Coal, Jute, GC
Joghighope-Badarpur	-	-	-	Bamboo
Karimganj-Bangladesh	-	-	-	Coal
Sub Total	29,414	3,631	5,350	
(As indicated by IWT Department, Government of Assam)	-	-	7,86,172	Sugar, Bitumen, ODC, Cement, GC, Coal
B. Other IWT	-	2,700	-	Sugar, Bitumen, ODC, Cement, GC, Coal
Sub Total	-	-	7,86,172	
Total NW-II	29,414	6,331	7,91,522	

Note: IWT: Inland Water Transport; NW-II: National Waterways No. II; CIWTC: Central Inland Water Transport Corporation.

#: Also shown in movement on NW I.

Source: *indiastat.com*

Table 10.11A: Summary of Potential IWT Traffic in NE Region (per year)

Commodity	Brahmaputra Valley			Barak Valley			Total (Tonnes)
	Qty (Tonnes)	Origin	Destination	Qty. (Tonnes)	Origin	Destination	
Fertiliser	90,000	Pandu	Haldia	20,000	Kolkata/ Haldia	Karimganj	1,10,000
Food grains	-	-	-	40000	Kolkata	Karimganj	40,000
Cement	1,00,000	Kolkata	Pandu/ Tezpur/ Neamati/Dib rugarh	50,000	Kolkata	Karimganj/ Badarpur	2,25,000
Iron & Steel	75,000	Kolkata	Pandu/ Jogighopa/Ne amati/ Dibrugarh				
Clinker	25000	Haldia	Pandu	-	-	-	25,000
Coal	-	-	-	45000	Karimganj	Kolkata	45,000
Forest products	1,44,000	Jogighopa	Patna	50,000	Karimganj/ Badarpur	Kolkata/ Haldia	1,94,000
Tea	70,000	Dibrugarh/ Tezpur/ Pandu	Kolkata	-	-	-	70,000
Jute	20,000	Pandu	Haldia	-	-	-	20,000
POL	5,00,000	Dhansiri- mukh	Bangladesh	-	-	-	5,00,000
POL	1,00,000	Jogighopa	Haldia/ Kolkata	-	-	-	1,00,000
Paper products	-	-	-	45000	Badarpur	Kolkata	45,000
Grand Total							13,74,000

Source: The Working Group Report on Shipping and Inland Water Transport for the Eleventh Five Year Plan

Table 10.12A: Waterways: Details of Ferry Service in NER

Name of Ferry Service	Distance Covered
Dhubri - Phoolbari	17
Dhubri - Chunari	65
Goalpara - Ramapara	16
Bagbore - Guwahati - Sialmari	211
Sialmari - Vijaynagar -Guwahati	96
Bohori - Guwahati	82
Guwahati - North Guwahati	4
Guwahati - Rajaduar	4
Guwahati - Karua	10
Kacheri - Umananda	4
Guwahati - Kanchanmari	80
Nemati - Kamalabari	12
Bogibil - Kerangabil	30
Dibrugarh - Kacheri - Oriumghat	100
Sadiya - Saikhowa	12

Source: Background paper No. 7, The Inland Water Authority of India, March 2006

Table 10.13A: Power: Demand and Supply in NER (March, 2005)

(MU net)

States System/Region	Requirement (MU)	Availability (MU)	Surplus/Deficit (-)	
			(MU)	(%)
Arunachal Pradesh	14	14	0	0.0
Assam	313	293	-20	-6.4
Manipur	35	34	-1	-2.9
Meghalaya	117	98	-19	-16.2
Mizoram	20	19	-1	-5.0
Nagaland	29	29	0	0.0
Tripura	57	51	-6	-10.5
NER	585	538	-47	-41.0
India	53,192	49,259	-3,933	-7.4

Source: indiastat.com

Note: Figures for Sikkim is not available.

Table 10.14A: Power: Energy Consumption by End Consumers in NER
(1997-1998 to 2004-2005)

(GWH)

States	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05
Assam	1,871.6	1752.9	1809.0	1911.2	1818.0	1,960.8	1,920.4	1,838.0
Manipur	322.2	179.9	173.1	176.9	168.7	178.6	175.4	177.6
Meghalaya	321.4	348.5	386.4	417.2	550.7	713.0	797.0	855.9
Nagaland	131.9	128.4	138.2	165.5	117.2	126.5	136.2	183.2
Tripura	314.6	396.9	356.1	303.0	348.0	363.0	414.3	380.0
Arunachal Pradesh	111.3	99.6	81.0	102.4	75.2	79.2	125.0	166.5
Mizoram	83.7	103.4	113.8	136.8	132.4	147.7	123.0	125.7
Sikkim	92.5	98.0	105.8	103.2	123.3	73.3	182.2	226.7
NER	3,249.2	3,107.6	3,163.3	3,316.1	3333.5	3,642.0	3,880.4	3,953.5
India	296748.9	309734.1	312841.1	316599.6	322459.3	339598.3	360937.2	386133.7

Source: *Ministry of Power*, Government of India.

Table 10.15A: Power: Electricity Generation and Consumption

(Generation, Gwh)

States	Generation			Consumption		
	1996-97	1999-00	2003-04	1996-97	1999-00	2003-04
Arunachal Pradesh	6.1	55	29	8.7	81.0	125.0
Assam	129.6	945	827	192.1	1,809.0	1,920.4
Manipur	0.3	1	0	28.6	173.1	175.4
Meghalaya	54.1	674	595	29.1	386.4	797.0
Mizoram	1.4	14	11	10.7	113.8	129.9
Nagaland	0.3	3	24	12.9	138.2	126.5
Sikkim	6.1	52	36	9.1	105.8	182.2
Tripura	19.1	308	492	27	356.1	414.3
NER	217.0	2,052	2,014	318.2	3,163.4	3870.7
India	36,708.25	4,48,166	5,25,301	28,483.8	312,841.2	360,937.2

Source: *Statistical Abstract of India*, various issues

Table 10.16A: Power: Installed Capacity in NER

(Mw)

States	1996-97	1999-00	2003-04	Aug. 2006**
Arunachal Pradesh	40 (60)	45 (64.4)	34 (52.94)	60* (55)
Assam	597 (0.33)	622 (0.32)	622 (0.32)	574.4* (47.42)
Manipur	12 (25)	12 (25)	47 (4.25)	157 (52.54)
Meghalaya	189 (98.94)	189 (98.94)	188 (98.93)	288.2 (89.72)
Mizoram	26 (19.23)	37 (21.62)	33 (12.12)	116.8 (32.53)
Nagaland	6 (66.66)	6 (66.66)	27 (92.59)	102.7(76.46)
Sikkim	36 (91.66)	38 (88.84)	37 (86.49)	116.1 (34.45)
Tripura	77 (20.77)	86 (18.60)	127 (12.6)	244.5 (31.90)
NER	983 (27.87)	1035 (24.02)	1115 (25.56)	2404.2 (46.29)
India	87595 (24.72)	97884 (28.97)	112684 (26.18)	126994 (26.09)

* Figures relate to 2005

Note: Figures in parenthesis show the percentage of hydel power in total.

Source: *Statistical Abstract of India*, various issues; **: NEC database**Table 10.17A: Power: Installed Capacity: State, Central and Private Sources, (2006)**

(Mw)

State	State	Central	Private	Total
Arunachal Pradesh	NA	NA	NA	60#
Assam*	597.3	509	24.6	1130.9
Manipur	50.9	107	0	157.9
Meghalaya	189.2	99	0	288.2
Mizoram	66.6	50	0.2	116.8
Nagaland	30.7	72	0	102.7
Sikkim	46.1	70	0	116.1
Tripura	148.4	95	1.1	244.5

Notes: * at the end of the Ninth Plan, # for 2005

Source: *NER Databank*

Table 10.18A: Telecom: Teledensity in NER*(number of phones)*

States	Telephones as 2001 (December 31)	Teledensity	Telephones 2004 (December 31)	Teledensity
Assam	3,90,933	1.55	6,72,160	2.44
Arunachal Pradesh	43,690	4.00	70,056	6.22
Manipur	30,955	1.29	59,460	2.41
Meghalaya	49,639	2.15	88,796	3.73
Mizoram	40,347	4.52	65,600	7.13
Nagaland	35,851	1.80	61,075	2.98
Tripura	64,135	2.00	97,186	2.95
NE Circle	2,64,617	2.23	4,42,173	3.61
NE Region	6,55,550	1.70	11,14,333	2.80
India	3,03,92,608	3.95	6,85,69,249*	7.02

Notes: Teledensity is telephones per hundred population: * till June 2004

Source: *indiastat.com***Table 10.19A: Telecoms: Telephone Exchanges in NER, 1998-99 to 2000-01***(number)*

	1998-99	1999-00	2000-01	Total
Assam	52	54	61	167
Arunachal Pradesh	13	8	5	26
Manipur	3	1	1	5
Meghalaya	9	7	13	29
Mizoram	5	4	12	21
Nagaland	2	7	5	14
Sikkim	9	3	3	15
Tripura	5	5	3	13
NER	98	89	103	290
India	1,718	2,647	4,005	8,370

Source: *indiasta.com*

Table 10.20A: Telecom: Internet Subscribers in NER

State	2002		2003	
	Number	Density (Per Lakh People)	Number	Density (Per Lakh People)
Assam	9,899	36.45	14,440	52.17
Arunachal Pradesh	380	33.70	1,010	87.21
Mizoram	743	81.39	959	102.19
Manipur	630	26.80	1,026	42.59
Meghalaya	1,455	60.56	5,285	212.34
Nagaland	452	21.34	2,536	97.94
Sikkim	928	166.05	965	167.16
Tripura	816	25.11	1,194	36.16
NER	15,303	38.37	27,415	66.64
India	32,39,675	3,082.89	35,00,278	3,260.78

Note: Data is on March 31

Source: *indiasta.com*

ANNEXURE 10.2

10.2.1 Report on Rail Sector Projects in the North East Region

1.0 Review of the status of rail projects in North East Region:

North East Region comprises 7 sister States of Arunachal Pradesh, Assam, Meghalaya, Nagaland, Manipur, Tripura, Mizoram and Sikkim. To meet with the demand of the region, number of Railway projects had been undertaken and completed. Since 1992-93, 1079 Kms of Gauge Conversion and 163 Kms of New Lines have been completed in the region as under:

1. Guwahati-Jogighopa new line (142 Kms)
2. Guwahati-Lumding gauge conversion (GC) including Chaparmukh-Haibargaon (202 Kms)
3. Lumding-Dibrugarh and linked fingers GC (620 Kms)
4. Kumarghat-Manu (21 Kms) of Kumarghat-Agartala new line
5. New Jalpaiguri/Siliguri-New Bongaigaon (280 Kms)

A number of new line and gauge conversion projects are in progress in the NE Region for development of rail infrastructure. There are 7 New Line & 5 Gauge Conversion works which are in progress. The ongoing works can be categorized as under:-

Projects which will provide connectivity to capital cities	(i) Kumarghat-Agartala NL (ii) Harmuti-Itanagar (Alternate alignment Bedati-Itanagar is being surveyed) NL (iii) Jiribam-Imphal (Tupul) NL
Megabridge project connecting North and South bank	(i) Rail-cum-Road bridge at Bogibeel near Dibrugarh.
Other works	(i) Gauge Conversion of New Jalpaiguri/Siliguri-New Bongaigaon (linked branch lines). (ii) Senchoa-Silghat (56 Kms) & Haibargaon-Mairabari of Lumding-Dibrugarh including linked branches. (iii) Gauge Conversion of Lumding-Silchar and extn. From Badarpur to Baraigram. (iv) New line from New Maynaguri-Jogighopa (v) New line from Dudhnoi to Depa (Land not made available so far). (vi) Gauge conversion of Katkhal-Bairabhi (vii) Rangia-Murkongselek GC alongwith linked fingers.

The throwforward of these projects as on 01.04.06 is of the order of Rs. 6000 cr.

2 Approach, strategy and measure for balance and rapid development of rail projects in NER:

2.1 Policy of investment in North East Region:

On 27.10.1996, the then Prime Minister (Shri H.D. Deve Gowda) announced “New Initiatives for the NE Region. The “New Initiatives” envisaged inter-alia that all the Union Ministries and Departments

would earmark 10% of their Budget for the specific programmes in the North Eastern States. Ministry of Railways have ensured earmarking of more than 10% of the budget for the allotment/expenditure in NE Region.

2.2 Non-lapsable pool of funds:

There has been repeated demands from the Hon'ble Members of Parliament and the State Governments for expediting completion of projects in the region. Within the available resources and as per the policy of the Government for investing 10% of budgetary support in the region, it has been feasible to allocate and spent about Rs.400-500 crore per year. Considering the need for expediting implementation of projects, efforts were made in the past to get additional resources from Non-Lapsable Pool of funds through Deptt. of Development of North East Region. However, the funds could not be provided from the Non-Lapsable Pool in view of pressing demands from various states. ***On the request of the Minister for Railways, Lumding-Silchar-Jiribam gauge conversion, Jiribam-Imphal (Tupul) and Kumarghat-Agartala new lines has been declared as National projects and has also decided that funds over and above the normal budgetary support would be provided to complete the Kumarghat-Agartala new line by March'07, Lumding-Silchar-Jiribam gauge conversion by March'09 and Jiribam-Imphal (Tupul) new line by March' 2010.***

2.3 National Projects Development:

Rangia-Murkongselek gauge conversion alongwith linked fingers and a rail cum road bridge at Bogibeel near Dibrugarh were posed to the Cabinet for declaration as National Project so as to provide funds over and above the normal budgetary support which will help completing the project by 2009-10. However, it has been directed that projects should be implemented through a SPV for which funds be located in consultation with Ministry of Finance and Planning Commission. Ministry for Development of NE Region may consider allocation of funds at their disposal for these two very important projects giving good connectivity to Arunachal Pradesh and upper Assam with the rest of the NE Region.

3 Allocation, allotment of Funds, expenditure & outcome during Xth Five Year Plan period:

The details of net capital available and actual / likely expenditures during the 10th Five Year Plan is as under:-

	(Rs. in crores)				
	2002-03	2003-04	2004-05	2005-06 (RE)	2006-07 (BE)
Net capital available	4040	4044	4098	3256	4807
10% mandate for NE Region	404	404	410	326	481
Actual / likely Exp.	441	571	509.59	377.77	570
% age	10.92	14.13	12.43	11.6	11.85

The physical outcome during the 10th Plan Period has been 21 Kms of New Line and 61 Kms of Gauge Conversion as on date and during the balance 10th Plan Period 89 Kms of New Line and 62Kms of Gauge Conversion is targeted for completion during 2006-07.

4 Gaps in infrastructure and the suggestions for filling up of these gaps:-

4.1 Construction of railways in NE Region is costly due to terrain, and the operations are likely to be economically unviable. However, for the development of NER as well as from strategic considerations, it is necessary that a policy for expanding railway network in the NE Region is adopted through declaring the projects as National Projects where funds are provided as an additionality over and above the normal Gross Budgetary Support for Railways.

4.2 The study commissioned by North East Council had suggested the following rail links for major development of NER. The details of rail links with updated status are as follows:-

S. No.	Name of project	Remarks	Status
1	Harmuti-Itanagar – 32 Kms.	This link brings the capital of Arunachal Pradesh on the railway network.	The work has been included in the Budget. However, State Govt. requested for changing the alignment from Bedeti to Itanagar for which survey has been completed.
2	Kumarghat-Agartala – 109 Kms	This links the capital of Tripura	Kumarghat-Manu (21 Kms) completed. The balance section is targeted for completion during 2006-07. An outlay of Rs. 100 crore from normal railway plan and Rs. 30 crore as an additionality being National Project has been provided for the year 2006-07.
3	Agartala-Sabroom – 110 Kms	Sabroom is at State border and provides an opportunity to link with Bangladesh rail network in future.	Updating survey completed in 2004-05 as per which the cost has been assessed Rs. 557 crore with ROR of (-) 28.7 %.
4	Agartala-Akhaura (Bangladesh) – 5.4 Kms	Will connect Bangladesh railway network of NE Region. Akhaura is connected to Dhaka and Chittagong.	Indian portion (5.4 Kms) completed. Bangladesh portion remaining.
5	Rail-cum-road Bridge on river Brahmaputra near Bogibeel	Will provided connectivity to North and South bank	This is a sanctioned work at an approx. cost Rs. 1767 crore. Tender for sub-structure for main bridge is under process. This work will again be proposed as a National Project for additional project specific funding.
6	Dudhnoi-Depa -15.5 Kms	This will bring Meghalaya on railway map	State Govt. is unable to provide land due to stiff local resistance and has proposed an alternative route from Depa to Mendhipather. Railway has been advised to do final location survey for this alignment.
7	Diphu-Karong – 123 Kms	This line is envisaged as the Phase I of rail link to Imphal	In lieu of Diphu-Karong-Imphal, Jiribam-Imphal Road (Tupul) project (97.9 Kms) has been sanctioned at a cost of Rs. 727.56 crore. The project has been declared as National Project. Rs. 470
8	Karong-Imphal – 57 Kms	This would link the capital of Manipur	

9	Jiribam-Imphal – 97.9 Kms	This would link the capital of Manipur	crore is being provided as an additionality over Gross Budgetary Support so as to complete the project by March, 2010.
10	Dimapur-Kohima	This will link the capital of Nagaland	Planning Commission has accorded 'in principle' approval and the appraisal has been received.
11	Bhairabi-Aizwal – 54 Kms	Will connect State capital of Mizoram through rail link.	The survey has been completed and report is under examination.
12	Digar-Byrnihat – 19.8 Kms	Will bring Meghalaya on railway map.	Now a survey has been done from Azra to Byrnihat for which Planning Commission has accorded 'in principle' approval and the memorandum has been submitted for appraisal.
13	Murkongselek-Pasighat – 30 Kms	This links Pasighat an important town in Arunachal Pradesh.	An updating survey has been included in 2006-07. As per survey of 1999-2000, the cost was assessed at Rs. 68 crore with ROR of (-) 18.72 %.

10.2.2 Major Development / Modernization Works Planned / in Progress at Non-Metro Airports (As on 1.2.2006)

(Rupees in Crores)

<i>S.N.</i>	<i>Airport / State</i>	<i>Scheme</i>	<i>Est. Cost</i>	<i>Present status</i>
1	ASSAM Silchar	Strengthening and extension of runway to 7500 ft., ground lighting facilities, ILS etc.	31.00	Work awarded in 1 st week of March, 2005 and was held up for NOC from AHQ, Ministry of Defence. Work commenced in November, 2005 and likely to be completed by November, 2007.
2	Dibrugarh	Strengthening and extension of runway to 8000 ft. and associated works	55.00	Work awarded but could not commence due to land disputes with Defence authorities. State Govt. pursuing matter. Work likely to commence in August, 2006 and completed by August, 2007.
		Construction of new terminal building complex for 500 passengers with two passenger boarding bridges etc.	54.5	Work awarded and likely to be completed by March, 2007.
		Expansion of apron and link taxiway	10.00	Detailed estimated under preparation. Work likely to start during 2006-07.
3	Guwahati	Expansion of apron	1.64	Work completed in December, 2005.
		Construction of additional parking stands for new airlines and isolation bay	20.00	Scope of work / drawings under finalization. Work likely to be taken up during 2006-07.
		Provision of aerobridge including associated works	12.4	Work in progress and likely to be completed during 2006-07.
4	NAGALAND Dimapur	Installation of ILS and development of site	4.1	Work completed. Commissioning of ILS will be considered on removal / reduction of height of high-tension power line by State Govt. and improvement of drainage system.
		Construction of isolation bay, taxiway and associated works	4.4	Tender action in hand.
5	SHILLONG Barapani	Construction of new terminal building complex for 150 passengers	30.00	Drawings have been finalized and estimated under preparation. Work likely to be taken up during 2006-07.
6	TRIPURA Agartala	Construction of new control tower cum technical block	4.00	Drawings finalized and estimates under preparation. Work likely to be taken up during current financial year

Annexure 11

CHAPTER 11: LOOK EAST POLICY

ANNEXURE 11.1

Table 11.1A: India's Trade with ASEAN, China, EU and USA

(million US \$)

	EU Countries (25)		ASEAN		China		USA		India	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
1997-1998	9,311.41	10,806.74	2,464.79	3,396.44	717.95	1,112.05	6,735.40	3,714.18	34,784.99	41,484.49
% Share	26.77	26.05	7.09	8.19	2.06	2.68	19.36	8.95		
1998-1999	9,177.47	10,840.21	1,629.98	4,317.38	427.16	1,096.71	7,199.59	3,640.25	33,218.72	42,388.71
% Share	27.63	25.57	4.91	10.19	1.29	2.59	21.67	8.59		
1999-2000	9,645.95	11,076.37	2,237.50	4,629.16	539.04	1,282.89	8,395.61	3,560.22	36,822.49	49,738.06
% Share	26.20	22.27	6.08	9.31	1.46	2.58	22.80	7.16		
2000-2001	10,670.44	10,640.31	2,913.78	4,147.48	831.30	1,502.20	9,305.12	3,015.00	44,560.29	50,536.46
% Share	23.95	21.05	6.54	8.21	1.87	2.97	20.88	5.97		
2001-2002	10,136.31	10,584.24	3,457.02	4,387.22	951.95	2,036.39	8,513.34	3,149.62	43,826.73	51,413.29
% Share	23.13	20.59	7.89	8.53	2.17	3.96	19.43	6.13		
2002-2003	11,847.87	12,780.42	4,618.54	5,150.17	1,975.48	2,792.04	10,895.76	4,443.58	52,719.43	61,412.13
% Share	22.47	20.81	8.76	8.39	3.75	4.55	20.67	7.24		
2003-2004	14,443.58	14,991.80	5,821.74	7,433.16	2,955.10	4,053.23	11,490.11	5,034.86	63,842.97	78,149.61
%Share	22.62	19.18	9.12	9.51	4.63	5.19	18.00	6.44		
2004-2005	18,118.30	19,115.68	8,425.89	9,114.66	5,615.88	7,097.98	13,765.75	7,001.35	83,535.94	1,11,517.44
% Share	21.69	17.14	10.09	8.17	6.72	6.36	16.48	6.28		
2005-2006	23,120.38	25,704.03	10,411.30	10,883.68	6,759.10	10,868.05	17,353.06	9,454.74	1,03,090.54	1,49,165.73
% Share	22.43	17.23	10.10	7.30	6.56	7.29	16.83	6.34		
2006-2007 (Apr-Dec)	19,102.59	19,838.31	9,462.22	13,306.35	5,589.72	12,640.07	13,939.03	7,701.78	91,361.25	1,34,519.20
%Share	20.91	14.75	10.36	9.89	6.12	9.40	15.26	5.73		

Source: Department of Commerce, Export-Import Data Bank, <http://commerce.nic.in/eidb/ergnent.asp>.

Table 11.2A: Share of Major Regions in India's Total Trade*(percent)*

Year	EU (25)	ASEAN	CHINA	USA
1997-1998	26.38	7.68	2.40	13.70
1998-1999	26.48	7.87	2.02	14.34
1999-2000	23.94	7.93	2.10	13.81
2000-2001	22.41	7.43	2.45	12.96
2001-2002	21.76	8.24	3.14	12.25
2002-2003	21.58	8.56	4.18	13.44
2003-2004	20.73	9.33	4.94	11.64
2004-2005	19.09	8.99	6.52	10.65
2005-2006	19.36	8.44	6.99	10.63
2006-2007 (Apr-Dec)	17.24	10.08	8.07	9.58

Source: Department of Commerce, Export-Import Data Bank, <http://commerce.nic.in/eidb/ergnent.asp>.

Table 11.3A: India's Export to Myanmar During 2005-06, Top 20 Commodities

Sl.No.	Commodity	2005-2006 (US \$ mn)	Share (%)
1	Iron And Steel	37.31	33.70
2	Pharmaceutical Products	25.39	22.94
3	Nuclear Reactors, Boilers, Machinery And Mechanical Appliances; Parts Thereof.	6.07	5.48
4	Electrical Machinery And Equipment And Parts Thereof; Sound Recorders And Reproducers, Television Image And Sound Recorders And Reproducers, And Parts.	4.8	4.34
5	Vehicles Other Than Railway Or Tramway Rolling Stock, And Parts And Accessories Thereof.	4.71	4.25
6	Rubber And Articles Thereof.	4.44	4.01
7	Articles Of Iron Or Steel	4.24	3.83
8	Cereals.	2.41	2.18
9	Plastic And Articles Thereof.	1.85	1.67
10	Mineral Fuels, Mineral Oils And Products Of Their Distillation; Bituminous Substances; Mineral Waxes.	1.74	1.57
11	Tools Implements, Cutlery, Spoons And Forks, Of Base Metal; Parts Thereof Of Base Metal.	1.7	1.54
12	Dairy Produce; Birds' Eggs; Natural Honey; Edible Prod. Of Animal Origin, Not Elsewhere Spec. Or Included.	1.62	1.46
13	Organic Chemicals	1.62	1.46
14	Miscellaneous Chemical Products.	1.6	1.45
15	Optical, Photographic Cinematographic Measuring, Checking Precision, Medical Or Surgical Inst. And Apparatus Parts And Accessories Thereof;	1.24	1.12
16	Miscellaneous Manufactured Articles.	0.89	0.80
17	Essential Oils And Resinoids; Perfumery, Cosmetic Or Toilet Preparations.	0.84	0.76
18	Copper And Articles Thereof.	0.72	0.65
19	Paper And Paperboard; Articles Of Paper Pulp, Of Paper Or Of Paperboard.	0.65	0.59
20	Preparations Of Cereals, Flour, Starch Or Milk; Pastrycooks Products.	0.64	0.58
	Total-Top 20 Products	104.48	94.38
	Total Export	110.7	100.00

Source: *Export-Import Data Bank*, Ministry of Commerce, GOI

Table 11.4A: India's Import from Myanmar During 2005-06, Top 20 Commodities

Sl.No.	Commodity	2005-2006 (US \$ mn)	Share (%)
1	Wood And Articles Of Wood; Wood Charcoal.	265	50.38
2	Edible Vegetables And Certain Roots And Tubers.	252.75	48.05
3	Rubber And Articles Thereof.	3.99	0.76
4	Fish And Crustaceans, Molluscs And Other Aquatic Invertabrates.	1.08	0.21
5	Raw Hides And Skins (Other Than Furskins) And Leather	0.97	0.18
6	Edible Fruit And Nuts; Peel Or Citrus Fruit Or Melons.	0.7	0.13
7	Coffee, Tea, Mate And Spices.	0.54	0.10
8	Furniture; Bedding, Mattresses, Mattress Supports, Cushions And Similar Stuffed Furnishing; Lamps And Lighting Fittings Not Elsewhere Specified Or Inc	0.14	0.03
9	Beverages, Spirits And Vinegar.	0.12	0.02
10	Wool, Fine Or Coarse Animal Hair, Horsehair Yarn And Woven Fabric.	0.11	0.02
11	Natural Or Cultured Pearls,Precious Or Semiprecious Stones,Pre.Metals,Clad With Pre.Metal And Artcls Thereof;Imit.Jewlry;Coin.	0.09	0.02
12	Preparations Of Vegetables, Fruit, Nuts Or Other Parts Of Plants.	0.09	0.02
13	Oil Seeds And Olea. Fruits; Misc. Grains, Seeds And Fruit; Industrial Or Medicinal Plants; Straw And Fodder.	0.08	0.02
14	Preparations Of Meat, Of Fish Or Of Crustaceans, Molluscs Or Other Aquatic Invertebrates	0.08	0.02
15	Pulp Of Wood Or Of Other Fibrous Cellulosic Material; Waste And Scrap Of Paper Or Paperboard.	0.05	0.01
16	Articles Of Apparel And Clothing Accessories, Not Knitted Or Crocheted.	0.03	0.01
17	Animal Or Vegetable Fats And Oils And Their Cleavage Products; Pre. Edible Fats; Animal Or Vegetable Waxex.	0.03	0.01
18	Miscellaneous Manufactured Articles.	0.02	0.00
19	Zinc And Articles Thereof.	0.02	0.00
20	Iron And Steel	0.02	0.00
	Total-Top 20 Products	525.91	99.99
	Total Import	525.96	100.00

Source: *Export-Import Data Bank*, Ministry of Commerce, GOI

Table 11.5A: India's Export to Bangladesh During 2005-06, Top 20 Commodities

Sl.No.	Commodity	2005-2006 (US \$ mn)	Share (%)
1	Cotton.	289.38	17.39
2	Cereals.	269.51	16.19
3	Mineral Fuels, Mineral Oils And Products Of Their Distillation; Bituminous Substances; Mineral Waxes.	144.77	8.70
4	Edible Vegetables And Certain Roots And Tubers.	136.41	8.20
5	Iron And Steel	89.18	5.36
6	Vehicles Other Than Railway Or Tramway Rolling Stock, And Parts And Accessories Thereof.	79.86	4.80
7	Nuclear Reactors, Boilers, Machinery And Mechanical Appliances; Parts Thereof.	57.44	3.45
8	Organic Chemicals	50.43	3.03
9	Electrical Machinery And Equipment And Parts Thereof; Sound Recorders And Reproducers, Television Image And Sound Recorders And Reproducers, And Parts.	42.98	2.58
10	Articles Of Iron Or Steel	40.59	2.44
11	Man-Made Staple Fibres.	40.37	2.43
12	Plastic And Articles Thereof.	32.99	1.98
13	Aluminium And Articles Thereof.	31.43	1.89
14	Residues And Waste From The Food Industries; Prepared Animal Foder.	29.73	1.79
15	Edible Fruit And Nuts; Peel Or Citrus Fruit Or Melons.	29.56	1.78
16	Salt; Sulphur; Earths And Stone; Plastering Materials, Lime And Cement.	28.41	1.71
17	Pharmaceutical Products	23.54	1.41
18	Man-Made Filaments.	23.26	1.40
19	Tanning Or Dyeing Extracts; Tannins And Their Deri. Dyes, Pigments And Other Colouring Matter; Paints And Ver; Putty And Other Mastics; Inks.	22.98	1.38
20	Sugars And Sugar Confectionery.	21.39	1.29
	Total-Top 20 Products	1484.21	89.18
	Total Export	1,664.36	100.00

Source: *Export-Import Data Bank*, Ministry of Commerce, GOI.

Table 11.6A: India's Import from Bangladesh During 2005-06, Top 20 Commodities

Sl.No.	Commodity	2005-2006 (US \$ mn)	Share (%)
1	Inorganic Chemicals; Organic Or Inorganic Compounds Of Precious Metals, Of Rare-Earth Metals, Or Radi. Elem. Or Of Isotopes.	39.19	30.85
2	Other Vegetable Textile Fibres; Paper Yarn And Woven Fabrics Of Paper Yarn.	29.82	23.47
3	Other Made Up Textile Articles; Sets; Worn Clothing And Worn Textile Articles; Rags	14.83	11.67
4	Fish And Crustaceans, Molluscs And Other Aquatic Invertabrates.	10.17	8.01
5	Wadding, Felt And Nonwovens; Spacial Yarns; Twine, Cordage, Ropes And Cables And Articles Thereof.	3.47	2.73
6	Copper And Articles Thereof.	3.09	2.43
7	Edible Fruit And Nuts; Peel Or Citrus Fruit Or Melons.	2.91	2.29
8	Electrical Machinery And Equipment And Parts Thereof; Sound Recorders And Reproducurs, Television Image And Sound Recorders And Reproducurs,And Parts.	2.74	2.16
9	Animal Or Vegetable Fats And Oils And Their Cleavage Products; Pre. Edible Fats; Animal Or Vegetable Waxex.	2.44	1.92
10	Raw Hides And Skins (Other Than Furskins) And Leather	2.21	1.74
11	Cotton.	2.17	1.71
12	Plastic And Articles Thereof.	1.9	1.50
13	Salt; Sulphur; Earths And Stone; Plastering Materials, Lime And Cement.	1.53	1.20
14	Nuclear Reactors, Boilers, Machinery And Mechanical Appliances; Parts Thereof.	1.16	0.91
15	Zinc And Articles Thereof.	1.06	0.83
16	Soap, Organic Surface-Active Agents, Washing Preparations, Lubricating Preparations, Artificial Waxes, Prepared Waxes, Polishing Or Scouring Prep.	1.02	0.80
17	Beverages, Spirits And Vinegar.	0.99	0.78
18	Sugars And Sugar Confectionery.	0.94	0.74
19	Iron And Steel	0.86	0.68
20	Articles Of Apparel And Clothing Accessories, Not Knitted Or Crocheted.	0.58	0.46
	Total-Top 20 Products	123.08	96.89
	Total Import	127.03	100.00

Source: *Export-Import Data Bank*, Ministry of Commerce, GOI.

Table 11.7A: India's Trade with Bangladesh*(million US \$)*

Country	Bangladesh		
	Exports	Imports	Difference
1997-1998	786.46	50.81	735.65
% Share	2.26	0.12	
1998-1999	995.64	62.40	933.24
% Share	3.00	0.15	
1999-2000	636.31	78.15	558.16
% Share	1.73	0.16	
2000-2001	935.04	80.51	854.53
% Share	2.10	0.16	
2001-2002	1,002.18	59.12	943.06
% Share	2.29	0.12	
2002-2003	1,176.00	62.05	1,113.95
% Share	2.23	0.10	
2003-2004	1,740.75	77.63	1,663.12
% Share	2.73	0.10	
2004-2005	1,631.12	59.37	1,571.75
% Share	1.95	0.05	
2005-2006	1,664.36	127.03	1,537.33
% Share	1.61	0.09	
2006-2007(Apr-Dec)	1,193.56	184.48	1,009.08
% Share	1.31	0.14	

Source: Department of Commerce, *Export Import Data Bank*,
<http://commerce.nic.in/eidb/ergnent.asp>

**Table 11.8A: Indian Water Transit and Trade (IWTT) between Bangladesh and India
 (2000-2001 to 2005-2006)**

(million US\$)

Year	India's Exports to Bangladesh	India's Imports from Bangladesh	Total Trade
2000-01	872.98	73.87	946.85
2001-02	1,002.18	59.12	1,061.30
2002-03	1,176.00	62.05	1,238.24
2003-04	1,740.75	77.63	1,818.38
2004-05	1,631.12	59.37	1,690.49
2005-06	1,632.44	118.76	1,751.20

Source: Indiatat.com

11.9A: India's trade with Bangladesh through Land Customs Stations (Value in Indian Rupees)

Name of LCS	2004-05			2005-06			2006-07		
	Import	Export	Total Trade	Import	Export	Total Trade	Import	Export	Total Trade
Petrapole*	2,542,400,000	36,396,000,000	38,938,400,000	5,144,700,000	31,640,500,000	36,785,200,000	4,966,200,000	39,153,800,000	44,120,000,000
Ranaghat* (Rail)		8,736,700,000	8,736,700,000		4,255,000,000	4,255,000,000	8,000,000	6,050,000,000	6,058,000,000
Gede* (Rail)									
Mahadipur*	17,300,000	5,562,200,000	5,579,500,000	3,700,000	4,313,500,000	4,317,200,000	3,300,000	5,150,400,000	5,153,700,000
Gojadanga*	80,700,000	2,274,300,000	2,355,000,000	160,800,000	2,770,400,000	2,931,200,000	480,800,000	3,656,500,000	4,137,300,000
Hilli*	6,200,000	4,746,100,000	4,752,300,000	44,700,000	3,241,400,000	3,286,100,000	33,000,000	3,219,700,000	3,252,700,000
Changrabandha*	107,400,000	2,811,800,000	2,919,200,000	108,400,000	2,114,100,000	2,222,500,000	139,200,000	828,800,000	968,000,000
Borsora**		741,413,017	741,413,017		846,331,379	846,331,379		956,893,667	956,893,667
Sutarkhandi***	67,823,523	213,420,152	281,243,675	150,042,957	322,735,527	472,778,484	304,178,487	510,354,723	814,533,210
Namkhana/T.T. Shed* (River)	84,900,000	58,400,000	143,300,000	22,200,000	83,400,000	105,600,000	111,100,000	431,700,000	542,800,000
Dawki**	87,563	554,931,809	555,019,372	461,823	478,498,110	478,959,933		474,770,962	474,770,962
Agartala@	110,769,387	9,683,915	120,453,302	269,252,991	4,829,539	274,082,530	468,871,464	5,067,600	473,939,064
Ghasuapara**		174,671,501	174,671,501		233,616,121	233,616,121		472,842,048	472,842,048
Singhabad* (Rail)	34,900,000	1,959,500,000	1,994,400,000	54,800,000	1,345,500,000	1,400,300,000		446,100,000	446,100,000
Shellabazar**		15,821,594	15,821,594		30,205,284	30,205,284		190,128,708	190,128,708
Bholaganj**		68,917,102	68,917,102		74,620,658	74,620,658		113,072,434	113,072,434
Dalu**		69,033,158	69,033,158	65,926	114,584,865	114,650,791	711,672	108,243,146	108,954,818
Mahendraganj**	3,290,707	13,065,403	16,356,110	20,224,910	17,213,543	37,438,453	49,249,002	11,648,540	60,897,542
Karimganj*** (River)	763,048	36,435,452	37,198,500	1,161,457	28,473,027	29,634,484	1,483,249	34,440,622	35,923,871
Srimantpur@	11,793,067	3,930,221	15,723,288	13,369,275	2,121,686	15,490,961	18,687,541	5,688,435	24,375,976
Baghmara**								3,678,777	3,678,777
Mankachar***		1,586,302	1,586,302		5,552,589	5,552,589	702,725	2,636,118	3,338,843
Raghnabazar@	1,294,244	1,107,892	2,402,136	1,800,965	303,866	2,104,831	314,338	350,039	664,377
Manu@		221,125	221,125		108,132	108,132	77,875	89,721	167,596
Radhikapur* (Rail)		492,500,000	492,500,000	Not in operation since April 2005 due to conversion on our side of rail track from MG to BG.					
Total Trade	3,069,621,539	64,941,738,643	68,011,360,182	5,995,680,304	51,922,994,326	57,918,674,630	6,585,876,353	61,826,905,540	68,412,781,893

* denotes LCSs in West Bengal; ** denotes LCSs in Meghalaya; *** denotes LCSs in Assam; and @ denotes LCSs in Tripura

Table 11.10A: India's Export to China During 2005-06, Top 20 Commodities

Sl.No.	Commodity	2005-2006 (US \$ mn)	Share (%)
1	Ores, Slag And Ash.	3,465.01	51.26
2	Cotton.	514.71	7.62
3	Organic Chemicals	460.22	6.81
4	Iron And Steel	424.74	6.28
5	Inorganic Chemicals; Organic Or Inorganic Compounds Of Precious Metals, Of Rare-Earth Metals, Or Radi. Elem. Or Of Isotopes.	328.66	4.86
6	Plastic And Articles Thereof.	273.81	4.05
7	Salt; Sulphur; Earths And Stone; Plastering Materials, Lime And Cement.	151.65	2.24
8	Residues And Waste From The Food Industries; Prepared Animal Foder.	144.78	2.14
9	Fish And Crustaceans, Molluscs And Other Aquatic Invertabrates.	138.51	2.05
10	Nuclear Reactors, Boilers, Machinery And Mechanical Appliances; Parts Thereof.	127.11	1.88
11	Copper And Articles Thereof.	117.52	1.74
12	Prepared Feathers And Down And Articles Made Of Feathers Or Of Down; Artificial Flowers; Articles Of Human Hair.	55.73	0.82
13	Rubber And Articles Thereof.	51.05	0.76
14	Electrical Machinery And Equipment And Parts Thereof; Sound Recorders And Reproducers, Television Image And Sound Recorders And Reproducers,And Parts.	50.99	0.75
15	Tanning Or Dyeing Extracts; Tannins And Their Deri. Dyes, Pigments And Other Colouring Matter; Paints And Ver; Putty And Other Mastics; Inks.	40.5	0.60
16	Raw Hides And Skins (Other Than Furskins) And Leather	35.75	0.53
17	Miscellaneous Chemical Products.	32.87	0.49
18	Optical, Photographic Cinematographic Measuring, Checking Precision, Medical Or Surgical Inst. And Apparatus Parts And Accessories Thereof;	32.51	0.48
19	Animal Or Vegetable Fats And Oils And Their Cleavage Products; Pre. Edible Fats; Animal Or Vegetable Waxex.	32.37	0.48
20	Lac; Gums, Resins And Other Vegetable Saps And Extracts.	32.02	0.47
	Total-Top 20 Products	6,510.51	96.32
	Total Export	6,759.10	100.00

Source: *Export-Import Data Bank*, Ministry of Commerce, GOI

Table 11.11A: India's Import from China During 2005-06, Top 20 Commodities

Sl.No.	Commodity	2005-2006 (US \$ mn)	Share (%)
1	Electrical Machinery And Equipment And Parts Thereof; Sound Recorders And Reproducers, Television Image And Sound Recorders And Reproducers,And Parts.	2,773.89	25.52
2	Nuclear Reactors, Boilers, Machinery And Mechanical Appliances; Parts Thereof.	2,162.24	19.90
3	Organic Chemicals	1,310.64	12.06
4	Mineral Fuels, Mineral Oils And Products Of Their Distillation; Bituminous Substances; Mineral Waxes.	720.95	6.63
5	Silk	385.16	3.54
6	Iron And Steel	268.68	2.47
7	Inorganic Chemicals; Organic Or Inorganic Compounds Of Precious Metals, Of Rare-Earth Metals, Or Radi. Elem. Or Of Isotopes.	203.61	1.87
8	Impregnated, Coated, Covered Or Laminated Textile Fabrics; Textile Articles Of A Kind Suitable For Industrial Use.	195.78	1.80
9	Articles Of Iron Or Steel	194.6	1.79
10	Plastic And Articles Thereof.	187.47	1.72
11	Man-Made Filaments.	140.66	1.29
12	Optical, Photographic Cinematographic Measuring, Checking Precision, Medical Or Surgical Inst. And Apparatus Parts And Accessories Thereof;	137.17	1.26
13	Cotton.	131.86	1.21
14	Natural Or Cultured Pearls,Precious Or Semiprecious Stones,Pre.Metals,Clad With Pre.Metal And Artcls Thereof;Imit.Jewlry;Coin.	120.59	1.11
15	Ceramic Products.	117.66	1.08
16	Ships, Boats And Floating Structures.	107.5	0.99
17	Project Goods; Some Special Uses.	106.45	0.98
18	Furniture; Bedding, Mattresses, Mattress Supports, Cushions And Similar Stuffed Furnishing; Lamps And Lighting Fittings Not Elsewhere Specified Or Inc	102.69	0.94
19	Glass And Glassware.	86.78	0.80
20	Vehicles Other Than Railway Or Tramway Rolling Stock, And Parts And Accessories Thereof.	86.66	0.80
	Total-Top 20 Products	9,541.04	87.79
	Total Import	10,868.05	100.00

Source: *Export-Import Data Bank*, Ministry of Commerce, GOI

Table 11.12A: India's Export to ASEAN During 2005-06, Top 20 Commodities

Sl.No.	Commodity	2005-2006 (US \$ mn)	Share (%)
1	Mineral Fuels, Mineral Oils And Products Of Their Distillation; Bituminous Substances; Mineral Waxes.	2,462.94	23.66
2	Natural Or Cultured Pearls,Precious Or Semiprecious Stones,Pre.Metals,Clad With Pre.Metal And Artcls Thereof;Imit.Jewlry;Coin.	1,590.44	15.28
3	Organic Chemicals	834.34	8.01
4	Iron And Steel	537.28	5.16
5	Residues And Waste From The Food Industries; Prepared Animal Foder.	527.06	5.06
6	Ships, Boats And Floating Structures.	453.33	4.35
7	Nuclear Reactors, Boilers, Machinery And Mechanical Appliances; Parts Thereof.	348.58	3.35
8	Copper And Articles Thereof.	290.54	2.79
9	Electrical Machinery And Equipment And Parts Thereof; Sound Recorders And Reproducurs, Television Image And Sound Recorders And Reproducurs,And Parts.	279.8	2.69
10	Vehicles Other Than Railway Or Tramway Rolling Stock, And Parts And Accessories Thereof.	239.94	2.30
11	Meat And Edible Meat Offal.	192.92	1.85
12	Cotton.	165.02	1.59
13	Pharmaceutical Products	163.02	1.57
14	Aluminium And Articles Thereof.	161.73	1.55
15	Miscellaneous Goods.	159.53	1.53
16	Miscellaneous Chemical Products.	152.66	1.47
17	Plastic And Articles Thereof.	148.52	1.43
18	Articles Of Iron Or Steel	137.83	1.32
19	Oil Seeds And Olea. Fruits; Misc. Grains, Seeds And Fruit; Industrial Or Medicinal Plants; Straw And Fodder.	118.7	1.14
20	Fish And Crustaceans, Molluscs And Other Aquatic Invertebrates.	97.45	0.94
	Total-Top 20 Products	9,061.63	87.04
	Total Export	10,411.30	100.00

Source: *Export-Import Data Bank*, Ministry of Commerce, GOI

Table 11.13A: India's Imports from ASEAN During 2005-06, Top 20 Commodities

Sl.No.	Commodity	2005-2006 (US \$ mn)	Share (%)
1	Nuclear Reactors, Boilers, Machinery And Mechanical Appliances; Parts Thereof.	1,989.24	18.28
2	Electrical Machinery And Equipment And Parts Thereof; Sound Recorders And Reproducers, Television Image And Sound Recorders And Reproducers,And Parts.	1,298.24	11.93
3	Animal Or Vegetable Fats And Oils And Their Cleavage Products; Pre. Edible Fats; Animal Or Vegetable Waxex.	1,126.50	10.35
4	Mineral Fuels, Mineral Oils And Products Of Their Distillation; Bituminous Substances; Mineral Waxes.	1,113.86	10.23
5	Organic Chemicals	801.53	7.36
6	Wood And Articles Of Wood; Wood Charcoal.	571.43	5.25
7	Plastic And Articles Thereof.	369.22	3.39
8	Ores, Slag And Ash.	337.08	3.10
9	Ships, Boats And Floating Structures.	293.47	2.70
10	Printed Bookds, Newspapers, Pictures And Other Products Of The Printing Industry; Manuscripts, Typescripts And Plans.	262.47	2.41
11	Edible Vegetables And Certain Roots And Tubers.	254.1	2.33
12	Iron And Steel	247.96	2.28
13	Optical, Photographic Cinematographic Measuring, Checking Precision, Medical Or Surgical Inst. And Apparatus Parts And Accessories Thereof;	199.52	1.83
14	Miscellaneous Chemical Products.	174.81	1.61
15	Aircraft, Spacecraft, And Parts Thereof.	138.75	1.27
16	Rubber And Articles Thereof.	123.25	1.13
17	Man-Made Filaments.	109.11	1.00
18	Articles Of Iron Or Steel	104.89	0.96
19	Coffee, Tea, Mate And Spices.	87.4	0.80
20	Pulp Of Wood Or Of Other Fibrous Cellulosic Material; Waste And Scrap Of Paper Or Paperboard.	86.36	0.79
	Total-Top 20 Products	9,689.19	89.02
	Total Import	10,883.68	100.00

Source: *Export-Import Data Bank*, Ministry of Commerce, GOI

Table 11.14A: Status of LCS in NER

Sl. No.	State	LCS/Other Export point	Status	Counterpart LCS of Neighbors
1	Meghalaya	Dawki	Functional	Tambil, Bangladesh
2	Meghalaya	Bholaganj	Functional	Chattak, do
3	Meghalaya	Borsora	Functional	Borsora, do
4	Meghalaya	Shella Bazar	Functional	Chatak, do
5	Meghalaya	Rynku	Non-functional	
6	Meghalaya	Baghmara	Functional	Bijoypur, do
7	Meghalaya	Dalu	Functional	Nakugoan, do
8	Meghalaya	Ghasuapara	Functional	Karaituli, Gobrakura, do
9	Meghalaya	Mahendraganj	Functional	DhanuaKamalpur, do
10	Tripura	Agartala	Functional	Akhaura, do
11	Tripura	Sabroom	Denotified	
12	Tripura	Srimantapur	Functional	Babirbazar, do
13	Tripura	Muhurighat	Non-functional	
14	Tripura	Khowaighat	Non-functional	
15	Tripura	Dholaighat	Non-functional	Juri-Batuli, do
16	Tripura	Old Raghna Bazar	Functional	
17	Tripura	Manu	Non-functional	Zakiganj, do
18	Assam	Karimganj ferry & S. G.	Functional	Sheola, do
19	Assam	Sutarkandi	Functional	
20	Assam	Mahisasan R. STN	Non-functional	
21	Assam	Silchar RMS office	Non-functional	
22	Assam	Dhubri Steamerghat	Non-functional	
23	Assam	Golakganj	Non-functional	
24	Assam	Guwahati Steamerghat	Functional	
25	Assam	Mankachar	Functional	
26	Assam	Hattisar	Functional	Bhutan
27	Assam	Darranga	Functional	Samdrup, Jongkhar, Bhutan
28	Assam	Ultapani	Non-functional	
29	Assam	ICD Amingoan	Functional	
30	Assam	IGBI Airport	Functional	
31	Arunachal	Nampong	Non-functional	
32	Mizoram	Demagiri	Non-functional	
33	Mizoram	Champai	Non-functional	
34	Manipur	Moreh	Functional	Tamu, Myanmar
35	Sikkim	Sherathang	Functional	Renqinggang, Tibet

Source: Task Force on Connectivity and Promotion of Trade and Investment in the NERs, Planning Commission, GOI, Oct., 2006.

ANNEXURE 11.2

11.2.1 Indo-Myanmar Trade Agreement, 1994

Traditional exchange will consist of items listed in Schedule I below and will have a value limit of up to US \$ 1,000. This exchange will be limited to ethnic or indigenous people residing within 40 km on either side of the international border. Trade will be conducted under a simplified documentation, without GR formalities as prescribed by the Reserve Bank of India.

The barter mechanism, or trade under the barter system of up to US \$ 20,000 with GR formalities, vide the Director General Foreign Trade (DGFT) Public Notice, PN No. 289(PN) 92-97. Under this system traders will have to possess an IEC number allotted by the DGFT (Commerce Ministry). The items that can be traded /bartered has been restricted to the 22 items listed in Schedule I.

Schedule I

1. Mustard/rape seed
2. Pulses and beans
3. Fresh vegetables
4. Fruit
5. Garlic
6. Onions
7. Chillies
8. Spices (excluding nutmeg, mace, cloves and cassia)
9. Bamboo
10. Minor forest products, excluding teak
11. Betel nut and leaves
12. Food items for local consumption
13. Tobacco
14. Tomato
15. Reed broom
16. Sesame
17. Resin
18. Coriander seed
19. Soya bean
20. Roasted sunflower seed
21. Katha
22. Ginger

Trade in the above modes shall take place only by way of head-loads or non-motorised transport. Imports from Myanmar shall precede export from India to Myanmar. There will be no monetary transaction under the barter trade agreement although consignments must be invoiced in US dollars and should not exceed US \$ 20,000 per transaction: Authority: RBI AP (DIR Series) Circular No. 17 dated 16 October 2000.

Normal trade, as envisaged in Article III of the Indo-Myanmar Trade Agreement will be conducted in freely convertible currencies under the Letter of Credit system (L/C) as per the Exim Policy guidelines of the Commerce Ministry. Any item falling under the Open General License (OGL) of the Exim Policy can be traded under this method. Possession of an IEC number is a basic necessity.

Customs duties and cess will be chargeable as per the Customs Tariff Act 1975, read with other Allied Acts. Currently, for imports a rate of duty of 5 percent ad valorem is applicable on all items specified in Schedule I, vide the Ministry of Finance Notifications 9/1995 and 24/2002. For more details the Deputy Commissioner of Customs Aizawl Customs Division may be consulted.

Only cess is currently chargeable on exports from India to Myanmar on some of the items mentioned in Schedule I.

Exchange or barter in items other than the agreed 22 items will be liable to seizure/ confiscation under the Customs Act 1962.

Travel-pass holders (issued by the Government of Mizoram in consultation with the Ministry of Home affairs) eligible for foreign exchange will also be eligible for a baggage allowance along the lines permitted across the Indo-Nepal border, i.e., goods of third country origin will be chargeable to duty at the prevailing rates applicable to baggage items. The General Free allowance will not be available to travel-pass holders. Used personal effects will however be eligible for duty-free clearance as per the prevailing Baggage Rules, 1978, as amended from time to time.

All export and import undertaken in border trade will, as usual, be covered by proper customs documents as prescribed for the purpose of international trade.

11.2.2 Action Plan

11.2.2.1 Action points emerging out of the visit of MOS(C) to Agartala, Tripura on March 17th, 2007 to inaugurate the Single Country Bangladesh Trade Fair

1. MOS(Commerce) visited Agartala, Tripura on March 17th, 2007 to inaugurate the Bangladesh Single Country Trade Trade Fair, which was organized by the Export Promotion Bureau (EPB) of Bangladesh and Bangladesh Deputy High Commission in Kolkata with active support from Government of Tripura.
2. Prior to the inaugural ceremony of the Trade Fair at 5:00 PM, MOS(C) visited
 - i. Pijush Agro Tech food Products Ltd at Nutannagar, Agartala
 - ii. Taranagar farm of Regional Research Station, RR II, Rubber Board, Tripura
 - iii. Rubber Thread unit of Dharampal Satyapal Group and M/s Joyanti Domestic products Ltd – manufacturing Mangaldeep brand agarbathis for ITC located in the Bodhjunnagar Growth Centre.
 - iv. Rubber wood factory of the Tripura Forest Development Plantation Corporation Ltd (TFDPCL) at the Corporations Industrial Estate at Anandanagar, Agartala.

MOS(C) also interacted with the officials of the Commerce and Industry Department of Govt of Tripura and representatives of Chambers of Commerce and Industry.

3. Action points emanating from the field visits and discussions with officials for immediate follow-up:
 1. **Pijush Agro Tech Food Products** at Nutannagar, Agartala is in the food processing business of making jam, jelly, squashes, pickles etc with an annual turnover of Rs.2 Crs in 2005-06, which it had managed in just 2.5 years. The products are sold under the brand-name of Paras. It has an export order from Italy for pine-apple slices. However, the processing unit is unimpressive and the total absence of even rudimentary shop-floor management practices indicates a clear need for hand-holding by an external agency. The unit received financial support from NEC to the tune of about Rs.20 lakhs and for import of machinery from Ministry of Food Processing. MOS felt that this is a success story that can be scaled-up and pointed out that this unit has demonstrated its potential to become the anchor-unit for the AEZ for pineapple in Agartala and a little bit of technical and financial support from APEDA/IL&FS in terms of improving the shop-floor design and backward linkages will go a long way.
(**Action:** APEDA and IL&FS)
 2. Tripura Forest Development and Plantation Corporation Ltd (TFDPCL) was set up by the Govt of Tripura to rehabilitate the degraded forests damaged by the repeated shifting cultivations through plantations of rubber. The Corp has so far raised more than 11,000 ha of rubber plantation on degraded forest lands. The Corp has taken up plantation of over 3784 ha of forest

land along Indo-Bangla border covering about a stretch of 15 kms in the south and south-west of Tripura. MOS was quite impressed with the concept of this “**Rubber-fencing**” which has the potential of not only providing livelihoods to the people living on the border areas but also of serving as a green fence for effective border management. Ball park figures indicate the cost of plantation roughly around Rs.20 lakhs/km. MOS directed the MD, TFDPC and Director (Research), Rubber Board to jointly prepare a project report for extending the rubber-fencing to the entire 850 kms of Tripura-Bangladesh border.

(**Action**: MD, TFDPC and Director (Research), RRII, Kottayam to submit by April 30th)

3. The financial closure for the ONGC Tripura Power Project is programmed to be done by Sept 2007. The 740 MW capacity Generation plant at Pallatana in Tripura with an estimated cost of around Rs.2150 Crs and Rs.1600 Crs for transmission system will be commissioned by Dec 2009. With this MOS felt that Govt of Tripura should embark on an industrialization policy which is infrastructure-driven rather than on the present investments from entrepreneurs solely because of fiscal incentives announced under NEIP 1997.
(**Action**: Govt of Tripura)
4. Tripura produces 20,000 MT of Natural Rubber (NR) of which only 2000 MTs i.e. 10% is consumed within the state. With a potential to expand the acreage under rubber plantation from the existing 35,000 ha to 1 lakh ha and the availability of power from the ONGC Tripura Power Project from 2010 MOS suggested that the Govt of Tripura take strategic decisions to expand the volume of processing of NR within Tripura in the next 5 years by attracting downstream rubber units. He suggested that Govt of Tripura, Rubber Board and IL&FS put together a perspective plan in this regard.
(**Action**: Govt of Tripura, Rubber Board and IL&FS)
5. ITC manufactures “Mangaldeep” brand agarbathis in their unit M/s Joyanti Domestic products Ltd at the Bodhjungnagar Growth Centre. The unit was inaugurated in May 2005 and is producing over 15 million sticks per month meeting the demands of Eastern India. The unit received ISO-9001-2000 certification. It produces ITC’s 10% of Mangaldeep requirements. The unit is providing livelihood for over 1000 people (Raw Batti Rolling). Over 50 billion sticks used in the Industry and more than 60 % are supplied from North east. Bamboo varieties from North east are best suited. But the hand cut sticks do not provide consistent quality and therefore imports from Vietnam has commenced. ITC have represented for
 - a. Subsidized rate for transportation of goods from and to Agartala by air
 - b. Removal of clearance certificate formalities for outgoing and incoming shipments from Tripura
 - c. Removal of transit permit for bamboo purchased from different States.

MOS agreed to look into the proposal for extending the transport subsidy to Minor Forest Produce/Bamboo.

11.2.2.2 Action points emerging out of the visit of MOS(Commerce) to Meghalaya from Sept 23rd to 25th 2007

1. Hon’ble MOS Commerce was in the North Eastern state of Meghalaya from Sept 23rd to 25th 2007. The Principal Secretary, Border, Govt of Meghalaya and Regional Manager, CWC, Guwahati accompanied the MOS. The tour began with the visit to the ICAR Research Complex for NEH Region at Umiam. The Director gave a presentation on the significant achievements of the RC since its establishment in 1975. MOS visited the organic farm where the two varieties of Turmeric and Ginger – Megha and Nadia - developed by the RC are grown.
2. On 24th MOS visited the Dawki Land Customs Station along with the CM, Meghalaya. MOS inaugurated the BSNL’s Mobile Telecom facilities at Dawki and visited the sites for creation of border trade infrastructure and the proposed bridge across River Umgot (Piyang). On return from Dawki to Shillong MOS visited a CIC centre at Amlarem and Sharawn Tea Estate at Sohryngkham, East Khasi Hills Dt.

3. On 25th morning MOS visited the Dewlieh Horticulture Farm in Umsning, Ri Bhoi Dt 30 kms from Shillong which houses the model pilot projects on roses and strawberries set up to demonstrate the viability of commercial cultivation of both the crops as well as serve as a one-stop destination for training and collection center for existing and potential growers. MOS interacted with the Project team and the Farmers.

4. In the afternoon MOS participated as the Chief Guest in the Golden Jubilee celebrations of the Rilbong Sports and Cultural Club and felicitated 21 identified Youth who have excelled in their areas of profession.

a) The Action points emerging out of these interactions for immediate follow-up:

1. Dawki

The Dawki LCS was notified in 1948 and is under Shillong Customs Division and is located in Jaintia Hills Dt. Dawki is one of the 14 LCS in the country identified for upgradation to ICP. The LCS recorded a trade of Rs.47 Crs in 2006-07 which comprises mostly of export of coal from India to Bangladesh. The revenue realization by the Customs was only Rs.16 lakhs in 2006-07 and an estimated Rs.3 Crs loss every year to the State exchequer by way of royalty due to lack of basic minimum infrastructural facilities like electronic weigh-bridges. The CWC Regional Office in Guwahati identified the need for establishing a Truck Terminus along with export/import open yard and small warehouse of 500 MT for proper trucks movement and streamlining the business in the area. The State Govt handed over land admeasuring Acs 7.22 free of cost to CWC in 2004 but work could not commence because of court litigation. MOS after detailed discussions with CM, Prl Sec, Border and the DC, Jaintia Hills Dt decided that on priority basis

4. Establishing an electronic weigh-bridge through CWC immediately in the undisputed site of Acs3.0.

(Action: CWC, Regional Office, Guwahati)

5. The additional land of Acs 6-7 lying adjacent to the existing plot will be acquired by the State Govt for the construction of Truck terminus and other facilities.

(Action: DC, Jaintia Hills Dt)

6. The Writ Appeal filed by Smt Min Gayang is listed for Oct 4th. The AG, Meghalaya will be assisted by Ms.Emily S.Brisohbar, RM, CWC, Guwahati for preparing the counter affidavit in view of her association with the issue since 1998.

(Action: Govt of Meghalaya and CWC, Regional Office, Guwahati)

2. ICAR Research Complex, Umiam

The ICAR RC for NEH Region at Umiam was established in 1975 with 6 Regional Centers to improve and develop sustainable farming systems for different agro-climatic and socio-economic conditions of the region. The Director in his presentation stated that there is a huge deficit for the NER in the meat, milk, eggs and fish sector – 87% in eggs and 50 and above in the other three. The Director identified the need to establish a Quality Control Laboratory for the entire NER and an accredited laboratory for organic certification to tap the huge market opportunities in South and South-East Asian countries. MOS agreed that the NER should move from default to certified organic farming to take advantage of the growing international demand for organic foods. It was decided that

- a) Spices Board will set up within the campus of ICAR RC an accredited laboratory for organic certification. Necessary land would be provided by the ICAR RC.

(Action: Spices Board and ICAR)

- b) Spices Board will set up the Spices Park close to the RC since it has immense research and field experience in organic ginger and turmeric. It had introduced Megha variety of Turmeric (30% area in NE is already under Megha) and Nadia variety of Ginger. ICAR RS and State Government agreed to provide Acs 25 to Spices Board to establish the park.

(Action: Govt of Meghalaya, Spices Board and ICAR)

5. The Dewlieh Horticulture Farm in Umsning, Ri Bhoi Dt houses the model pilot projects on roses and strawberries set up to demonstrate the viability of commercial cultivation of both the crops as well as serve as a one-stop destination for training and collection center for existing and potential growers. The exemplary work done in this experimental farm under the guidance of its highly committed Project Leader Mr.B.K.Sohliya has resulted in emergence of Meghalaya as the **3rd largest producer** of strawberries in the country and a potential player for export of roses to Japan given its strategic geographical location. The state has set a target of moving from present **2 million roses/annum to 20** and from **200 T/season to 500** in case of strawberries. But the biggest bottleneck is the lack of cold chain facilities both within the state and at Guwahati airport, which is the only gateway for Meghalaya state. MOS assured the CM that the Dept of Commerce, GOI would pro-actively collaborate with the State in quickly finding solutions for the long pending logistics gap. MOS assured that APEDA and NABARD would jointly mount a delegation to the state shortly to explore along with the State Government the ways to support these expansion plans.
(**Action:** APEDA, NABARD and Govt of Meghalaya)
6. Given the slow progress of work regarding CPC at Guwahati airport and the fact that the completion of this project will take time, MOS assured setting up a walk-in cold storage at Guwahati airport immediately so as to sustain the immediate requirement of exporters from Meghalaya state like M/s Zopar Exports Pvt Ltd of Bangalore and M/s S.M.Multipro of Shillong who have a 100% buy-back arrangement for the produce of Dewlieh Farm. The proposed CPC at Guwahati airport in collaboration with CONCOR will be pursued for early completion.
(**Action:** APEDA)
7. Spices Board has identified the states of Sikkim, Nagaland and Meghalaya for undertaking cultivation, processing and marketing of Naga chillies, cardamom, ginger and Lakhadong turmeric. In this regard a tripartite agreement involving ITC, Spices Board and respective State Governments is being entered into. The Draft tripartite MOU involving the Govt of Meghalaya was handed over to APC, Govt of Meghalaya for vetting and onward communication to Spices Board within a fortnight.
(**Action:** Govt of Meghalaya)
8. Meghalaya, particularly the Garo Hills region, produced nearly 6000 T of raw cashew in 2006-07. MOS assured that he would direct the Cashew Export Promotion Council (CEPC) to explore the possibilities of establishing processing units in Meghalaya for value-addition.
(**Action:** CEPC)
9. The DC, Jaintia Hills Dt represented to MOS the urgent need to take up the Jowai bye-pass road in order to decongest the narrow roads of the town of Jowai through which all the coal laden trucks to Dawki pass through. MOS personally witnessed the congestion while driving through the narrow lanes of the town. The proposed bye-pass road is estimated to be around Rs.1.5 Crs. MOS assured to take up with Ministry of DoNER.
(**Action:** Ministry of DoNER)
10. The Sharawn tea estate of 5 Acs in Sohryngkham is run by a young entrepreneur Ms.Sharati C. Syiem. This special Khasi Highland Orthodox tea is sold under the brand name Sharawn tea both domestically at around Rs.800 per Kg and to an Australian Buyer at Rs.6800 per kg. This is a non-pesticide tea but not certified. The tea estate has plans to expand from 5 Acs to 35 Acs and is looking forward for some support from external Agencies. MOS assured support from the Tea Board and the Darjeeling Tea Association in all her efforts to expand and move from NPM to organic cultivation. MOS also invited her to be the brand ambassador for the small tea growers at the IITC 2007. Tea Board to extend a formal invitation to Ms.S
(**Action:** Tea Board and Darjeeling Tea Association)

ANNEXURE 11.3

Inland Container Ports (ICPs) in NER by Priority Rating.

Priority I

Sl. No.	Location	State	Border	Estimated cost (Rs. in crores)
1.	Petrapole	West Bengal	India-Bangladesh	87
2.	Moreh	Manipur	India-Myanmar	70
3.	Raxaul	Bihar	India-Nepal	100
4.	Wagah	Punjab	India-Pakistan	85
	Total Project I			342

Priority II

Sl. No.	Location	State	Border	Estimated cost (Rs. in crores)
5.	Hili	West Bengal	India-Bangladesh	78
6.	Chandrabangha	West Bengal	India-Bangladesh	64
7.	Sutarkhandi	Assam	India-Bangladesh	16
8.	Dawki	Meghalaya	India-Bangladesh	50
9.	Akhaura	Tripura	India-Bangladesh	60
10.	Kawarpuchiah	Mizoram	India-Bangladesh	27
11.	Jogbani	Bihar	India-Nepal	34
12.	Sunauli	Uttar Pradesh	India-Nepal	34
13.	Rupaidiha/Nepalganj road	Uttar Pradesh	India-Nepal	29
	Total Priority – II			392
	Total Priority-I and Priority-II			734
	Cost of ICPs on Nepalese side			119
	Grand Total			853

Annexure 12

CHAPTER 12: STRENGTHENING PUBLIC FINANCES FOR DEVELOPMENT

ANNEXURE 12.1

Table 12.1A: State-wise Budgetary Receipts of NER as a Ratio to GSDP

(percent)

<i>Receipt Head</i>	<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
ARUNACHAL PRADESH							
Aggregate Receipts (I+II)	69.51	67.49	67.80	63.19	83.30	89.21	74.85
I Revenue receipts*	65.09	62.50	61.90	55.89	69.67	68.72	68.33
A Own receipts (a+b)	8.33	5.01	4.96	5.24	7.25	9.82	8.55
(a) Own tax revenue	0.65	0.74	0.85	1.59	1.93	2.31	2.15
(b) Own non tax revenue	7.69	4.28	4.11	3.65	5.32	7.52	6.41
Transfers (c+d)	56.76	57.49	56.94	50.65	62.42	58.90	59.78
(c) Share in central taxes	10.51	18.24	20.91	4.68	7.10	10.11	9.35
(d) Grants from the centre	46.24	39.25	36.03	45.97	55.32	48.78	50.43
II Capital Receipts (e+f+g)	4.42	4.99	5.90	7.31	13.63	20.49	6.52
(e) Internal debts	1.04	1.17	1.50	3.66	8.39	12.84	3.23
(f) Loans and Advances from the Centre	3.29	3.72	4.31	3.55	5.14	7.55	3.29
(g) Recoveries of loans etc	0.09	0.10	0.08	0.10	0.10	0.10	0.00
ASSAM							
Aggregate Receipts (I+II)	21.74	22.89	21.93	23.11	25.11	28.86	34.13
I Revenue receipts*	17.39	18.97	16.54	17.37	19.29	25.22	30.61
A Own receipts (a+b)	5.35	5.54	5.71	6.09	7.49	9.82	9.90
(a) Own tax revenue	3.62	3.87	4.19	4.53	5.14	6.77	6.82
(b) Own non tax revenue	1.73	1.67	1.52	1.55	2.35	3.06	3.09
Transfers (c+d)	12.04	13.43	10.84	11.28	11.80	15.40	20.71
(c) Share in central taxes	4.71	6.47	4.95	4.97	5.37	6.40	7.02
(d) Grants from the centre	7.34	6.96	5.89	6.31	6.43	9.00	13.69
II Capital Receipts (e+f+g)	4.35	3.93	5.38	5.75	5.82	3.63	3.52
(e) Internal debts	0.88	0.94	1.61	2.00	2.11	11.76	3.31
(f) Loans and Advances from the Centre	3.43	2.94	3.73	3.66	3.61	-8.20	0.21
(g) Recoveries of loans etc	0.04	0.04	0.05	0.08	0.10	0.08	0.08
MANIPUR							
Aggregate Receipts (I+II)	45.34	48.32	43.38	51.85	56.53	51.53	56.67
I Revenue receipts*	42.49	39.98	38.24	35.18	34.94	47.23	52.49
A Own receipts (a+b)	4.49	3.52	2.93	2.37	2.88	3.35	4.84
(a) Own tax revenue	1.71	1.66	1.43	1.53	1.68	1.86	1.95
(b) Own non tax revenue	2.78	1.87	1.50	0.85	1.20	1.48	2.89
Transfers (c+d)	38.00	36.46	35.31	32.80	32.05	43.89	47.66
(c) Share in central taxes	10.19	14.40	11.37	4.25	5.93	6.71	7.22
(d) Grants from the centre	27.81	22.05	23.94	28.55	26.12	37.18	40.43

<i>Receipt Head</i>		<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
II	Capital Receipts (e+f+g)	2.84	8.34	5.14	16.68	21.59	4.29	4.17
(e)	Internal debts	1.34	2.13	1.80	1.59	8.60	4.18	4.06
(f)	Loans and Advances from the Centre	1.45	6.18	3.32	15.08	12.98	0.10	0.12
(g)	Recoveries of loans etc	0.05	0.03	0.02	0.01	0.01	0.01	0.02
MEGHALAYA								
	Aggregate Receipts (I+II)	37.46	31.18	34.04	31.27	36.04	34.29	41.11
I	Revenue receipts*	34.27	27.89	28.67	27.13	29.04	29.72	37.52
A	Own receipts (a+b)	6.67	4.13	5.67	5.55	6.36	6.78	6.73
(a)	Own tax revenue	3.32	2.95	3.13	3.28	3.69	4.30	4.10
(b)	Own non tax revenue	3.35	1.19	2.54	2.27	2.67	2.48	2.64
	Transfers (c+d)	27.60	23.76	23.00	21.58	22.68	22.94	30.78
(c)	Share in central taxes	8.00	11.48	10.39	3.98	4.67	5.96	6.43
(d)	Grants from the centre	19.60	12.28	12.61	17.60	18.01	16.97	24.35
II	Capital Receipts (e+f+g)	3.19	3.29	5.37	4.14	7.00	4.58	3.59
(e)	Internal debts	1.92	1.51	3.55	2.65	4.90	4.21	3.51
(f)	Loans and Advances from the Centre	1.05	1.58	1.54	1.11	1.73	0.05	0.09
(g)	Recoveries of loans etc	0.23	0.20	0.27	0.38	0.38	0.32	0.31
MIZORAM								
	Aggregate Receipts (I+II)	73.33	74.02	85.97	54.14	67.93	60.20	61.53
I	Revenue receipts*	66.10	60.50	61.05	45.07	55.04	51.58	54.82
A	Own receipts (a+b)	5.01	4.74	3.66	3.30	3.66	5.44	5.01
(a)	Own tax revenue	0.62	0.70	0.76	0.99	1.36	1.72	1.74
(b)	Own non tax revenue	4.39	4.04	2.90	2.30	2.30	3.73	3.27
	Transfers (c+d)	61.10	55.76	57.38	41.77	51.37	46.13	49.81
(c)	Share in central taxes	13.21	18.59	23.06	2.27	5.23	7.05	7.47
(d)	Grants from the centre	47.89	37.17	34.32	39.50	46.14	39.09	42.34
II	Capital Receipts (e+f+g)	7.23	13.52	24.92	9.07	12.89	8.62	6.71
(e)	Internal debts	3.48	3.52	6.52	3.89	8.87	7.60	6.41
(f)	Loans and Advances from the Centre	3.34	9.50	17.75	4.40	3.21	0.31	0.30
(g)	Recoveries of loans etc	0.42	0.50	0.66	0.78	0.81	0.72	0.63
NAGALAND								
	Aggregate Receipts (I+II)	45.73	42.24	58.55	39.11	42.49	39.29	37.28
I	Revenue receipts*	40.42	36.87	44.40	32.01	42.42	30.72	32.11
A	Own receipts (a+b)	3.23	2.36	3.06	2.36	2.32	2.73	2.37
(a)	Own tax revenue	1.28	1.36	1.55	1.32	1.23	1.43	1.39
(b)	Own non tax revenue	1.95	1.00	1.51	1.04	1.08	1.30	0.98
	Transfers (c+d)	37.19	34.51	41.34	29.65	40.11	27.99	29.74
(c)	Share in central taxes	10.26	16.39	20.65	0.75	4.62	3.37	3.50
(d)	Grants from the centre	26.93	18.12	20.69	28.90	35.49	24.62	26.24
II	Capital Receipts (e+f+g)	5.31	5.37	14.14	7.11	0.06	8.57	5.18
(e)	Internal debts	3.39	3.61	6.57	5.42	7.08	7.08	5.18
(f)	Loans and Advances from the Centre	1.45	1.57	6.95	1.50	-7.14	1.42	0.00
(g)	Recoveries of loans etc	0.47	0.19	0.63	0.19	0.12	0.07	0.07
SIKKIM								
	Aggregate Receipts (I+II)	74.45	69.88	80.74	78.01	74.81	71.50	88.55
I	Revenue receipts*	67.12	60.69	63.23	69.44	64.85	63.09	77.39
A	Own receipts (a+b)	10.67	10.36	11.37	11.99	12.72	16.12	14.72
(a)	Own tax revenue	3.98	4.04	3.70	5.40	5.86	9.52	7.91

<i>Receipt Head</i>	<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
(b) Own non tax revenue	6.69	6.33	7.67	6.58	6.86	6.61	6.81
Transfers (c+d)	56.45	50.33	51.86	57.46	52.13	46.96	62.67
(c) Share in central taxes	9.93	13.08	13.90	9.89	10.03	9.58	9.52
(d) Grants from the centre	46.52	37.24	37.96	47.56	42.10	37.39	53.15
II Capital Receipts (e+f+g)	7.33	9.19	17.51	8.57	9.96	8.42	11.16
(e) Internal debts	3.08	3.01	9.80	3.62	5.48	7.08	9.01
(f) Loans and Advances from the Centre	3.86	6.07	7.58	4.84	4.40	1.33	2.15
(g) Recoveries of loans etc	0.39	0.11	0.13	0.11	0.08	0.01	0.04
TRIPURA							
Aggregate Receipts (I+II)	43.79	36.82	38.40	35.06	34.22	30.36	27.82
I Revenue receipts*	40.83	32.81	31.65	31.10	28.79	28.94	26.47
A Own receipts (a+b)	3.77	3.23	3.92	4.27	5.17	3.44	3.07
(a) Own tax revenue	2.09	2.17	2.24	2.64	2.94	2.83	2.57
(b) Own non tax revenue	1.68	1.06	1.68	1.63	2.23	0.61	0.50
Transfers (c+d)	37.06	29.58	27.74	26.83	23.62	25.50	23.40
(c) Share in central taxes	9.94	13.03	11.65	3.87	4.26	3.87	3.54
(d) Grants from the centre	27.12	16.55	16.08	22.96	19.36	21.63	19.86
II Capital Receipts (e+f+g)	2.96	4.01	6.74	3.96	5.43	1.42	1.35
(e) Internal debts	1.49	1.25	3.20	2.32	4.16	1.30	1.35
(f) Loans and Advances from the Centre	1.44	2.72	3.49	1.60	1.23	0.08	0.00
(g) Recoveries of loans etc	0.04	0.03	0.05	0.04	0.05	0.04	0.03

Source: Computation for fiscal analysis has been made by using data from Finance Accounts of all the states for each year. For the year 2006-07(Revised Estimates), data from Budget Papers have been culled out. For Arunachal Pradesh and Tripura figures for their (Budget Estimates) have been used.

Note: * It is negative due to massive adjustment in Assam for this year.

Table 12.2A: State-wise Composition of Budgetary Receipts of the NER
(percent of aggregate receipts)

<i>Receipt Head</i>	<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
ARUNACHAL PRADESH							
I Revenue receipts*	93.64	92.61	91.30	88.44	83.64	77.03	91.29
A Own receipts (a + b)	11.99	7.43	7.32	8.29	8.71	11.01	11.42
(a) Own tax revenue	0.93	1.09	1.26	2.52	2.32	2.58	2.87
(b) Own non tax revenue	11.06	6.34	6.06	5.77	6.39	8.42	8.56
Transfers (c + d)	81.65	85.18	83.98	80.15	74.93	66.02	79.87
(c) Share in central taxes	15.12	27.03	30.84	7.41	8.52	11.34	12.49
(d) Grants from the centre	66.53	58.15	53.14	72.74	66.41	54.68	67.37
II Capital Receipts (e + f + g)	6.36	7.39	8.70	11.56	16.36	22.97	8.71
(e) Internal debts	1.50	1.73	2.22	5.80	10.07	14.39	4.31
(f) Loans and Advances from the Centre	4.73	5.52	6.36	5.61	6.17	8.47	4.40
(g) Recoveries of loans etc	0.13	0.15	0.12	0.15	0.12	0.12	0.00
ASSAM							
I Revenue receipts*	80.00	82.85	75.44	75.14	76.83	87.41	89.70
A Own receipts (a + b)	24.60	24.19	26.02	26.33	29.84	34.04	29.02
(a) Own tax revenue	16.65	16.89	19.09	19.61	20.48	23.45	19.97
(b) Own non tax revenue	7.95	7.30	6.93	6.72	9.36	10.59	9.05
Transfers (c + d)	55.40	58.66	49.42	48.81	46.99	53.37	60.68
(c) Share in central taxes	21.65	28.26	22.58	21.49	21.39	22.19	20.58

<i>Receipt Head</i>	<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
(d) Grants from the centre	33.75	30.40	26.84	27.32	25.59	31.18	40.10
II Capital Receipts (e + f + g)	20.00	17.15	24.56	24.86	23.17	12.59	10.30
(e) Internal debts	4.03	4.11	7.34	8.65	8.41	40.74	9.70
(f) Loans and Advances from the Centre	15.76	12.86	16.99	15.86	14.37	-28.43	0.60
(g) Recoveries of loans etc	0.20	0.17	0.23	0.36	0.40	0.27	0.24
MANIPUR							
I Revenue receipts*	93.73	82.75	88.16	67.84	61.80	91.67	92.63
A Own receipts (a + b)	9.91	7.29	6.76	4.57	5.10	6.50	8.54
(a) Own tax revenue	3.78	3.43	3.29	2.94	2.97	3.61	3.44
(b) Own non tax revenue	6.13	3.87	3.47	1.63	2.13	2.88	5.10
Transfers (c + d)	83.82	75.46	81.39	63.26	56.71	85.18	84.10
(c) Share in central taxes	22.48	29.81	26.21	8.20	10.49	13.02	12.75
(d) Grants from the centre	61.34	45.64	55.19	55.07	46.22	72.15	71.35
II Capital Receipts (e + f + g)	6.27	17.25	11.84	32.16	38.20	8.33	7.37
(e) Internal debts	2.96	4.41	4.14	3.06	15.21	8.11	7.16
(f) Loans and Advances from the Centre	3.20	12.78	7.66	29.08	22.96	0.19	0.21
(g) Recoveries of loans etc	0.12	0.06	0.05	0.03	0.02	0.02	0.04
MEGHALAYA							
I Revenue receipts*	91.48	89.45	84.23	86.77	80.57	86.66	91.26
A Own receipts (a + b)	17.80	13.25	16.67	17.76	17.65	19.76	16.38
(a) Own tax revenue	8.86	9.44	9.19	10.50	10.24	12.54	9.97
(b) Own non tax revenue	8.94	3.81	7.47	7.25	7.41	7.23	6.41
Transfers (c + d)	73.68	76.19	67.57	69.01	62.92	66.89	74.88
(c) Share in central taxes	21.37	36.82	30.51	12.73	12.97	17.39	15.65
(d) Grants from the centre	52.31	39.37	37.06	56.28	49.95	49.50	59.23
II Capital Receipts (e + f + g)	8.52	10.55	15.77	13.23	19.43	13.34	8.74
(e) Internal debts	5.12	4.85	10.44	8.48	13.60	12.27	8.53
(f) Loans and Advances from the Centre	2.79	5.06	4.53	3.55	4.79	0.16	0.21
(g) Recoveries of loans etc	0.61	0.65	0.79	1.20	1.04	0.92	0.74
MIZORAM							
I Revenue receipts*	90.14	81.73	71.01	83.24	81.02	85.68	89.09
A Own receipts (a + b)	6.83	6.40	4.26	6.09	5.39	9.04	8.14
(a) Own tax revenue	0.84	0.95	0.89	1.84	2.00	2.85	2.82
(b) Own non tax revenue	5.98	5.46	3.37	4.25	3.39	6.19	5.32
Transfers (c + d)	83.31	75.33	66.75	77.16	75.63	76.64	80.94
(c) Share in central taxes	18.01	25.12	26.83	4.20	7.71	11.71	12.14
(d) Grants from the centre	65.31	50.21	39.92	72.96	67.92	64.93	68.81
II Capital Receipts (e + f + g)	9.86	18.27	28.99	16.76	18.98	14.32	10.91
(e) Internal debts	4.74	4.75	7.58	7.18	13.06	12.62	10.42
(f) Loans and Advances from the Centre	4.55	12.83	20.64	8.13	4.73	0.51	0.49
(g) Recoveries of loans etc	0.57	0.68	0.77	1.45	1.19	1.19	1.03
NAGALAND							
I Revenue receipts*	88.39	87.28	75.84	81.83	99.85	78.19	86.11
A Own receipts (a + b)	7.07	5.59	5.23	6.03	5.45	6.95	6.36
(a) Own tax revenue	2.81	3.22	2.65	3.38	2.90	3.64	3.73
(b) Own non tax revenue	4.27	2.38	2.58	2.65	2.55	3.31	2.62
Transfers (c + d)	81.31	81.69	70.62	75.80	94.40	71.24	79.75
(c) Share in central taxes	22.44	38.79	35.28	1.91	10.88	8.57	9.38
(d) Grants from the centre	58.88	42.89	35.34	73.89	83.52	62.66	70.37

<i>Receipt Head</i>		<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
II	Capital Receipts (e + f + g)	11.61	12.72	24.16	18.17	0.15	21.81	13.89
(e)	Internal debts	7.41	8.54	11.21	13.86	16.67	18.01	13.89
(f)	Loans and Advances from the Centre	3.17	3.73	11.87	3.83	-16.81	3.61	0.00
(g)	Recoveries of loans etc	1.03	0.45	1.07	0.48	0.29	0.19	0.18
SIKKIM								
I	Revenue receipts*	90.16	86.85	78.32	89.02	86.68	88.23	87.39
A	Own receipts (a + b)	14.33	14.83	14.08	15.37	17.00	22.55	16.62
(a)	Own tax revenue	5.35	5.78	4.58	6.93	7.83	13.31	8.93
(b)	Own non tax revenue	8.98	9.06	9.50	8.44	9.16	9.24	7.69
	Transfers (c + d)	75.82	72.02	64.23	73.65	69.68	65.68	70.77
(c)	Share in central taxes	13.33	18.72	17.22	12.68	13.41	13.39	10.75
(d)	Grants from the centre	62.49	53.30	47.01	60.97	56.27	52.29	60.02
II	Capital Receipts (e + f + g)	9.84	13.15	21.68	10.98	13.32	11.77	12.61
(e)	Internal debts	4.14	4.30	12.14	4.64	7.33	9.90	10.18
(f)	Loans and Advances from the Centre	5.18	8.69	9.38	6.20	5.89	1.86	2.43
(g)	Recoveries of loans etc	0.52	0.15	0.16	0.14	0.10	0.01	0.04
TRIPURA								
I	Revenue receipts*	93.24	89.11	82.44	88.70	84.13	95.31	95.14
A	Own receipts (a + b)	8.61	8.77	10.20	12.17	15.11	11.34	11.04
(a)	Own tax revenue	4.77	5.90	5.83	7.53	8.59	9.33	9.25
(b)	Own non tax revenue	3.83	2.87	4.37	4.64	6.51	2.00	1.79
	Transfers (c + d)	84.63	80.34	72.24	76.53	69.02	83.97	84.10
(c)	Share in central taxes	22.71	35.39	30.35	11.05	12.44	12.75	12.72
(d)	Grants from the centre	61.92	44.95	41.89	65.48	56.58	71.23	71.38
II	Capital Receipts (e + f + g)	6.76	10.89	17.56	11.30	15.87	4.69	4.86
(e)	Internal debts	3.39	3.40	8.33	6.62	12.15	4.29	4.86
(f)	Loans and Advances from the Centre	3.28	7.40	9.10	4.57	3.58	0.28	0.00
(g)	Recoveries of loans etc	0.09	0.09	0.14	0.11	0.14	0.12	0.09

Table 12.3A: State-wise Composition of Expenditure of the NER

(As percent to respective totals)

<i>Expenditure Head</i>		<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
ARUNACHAL PRADESH								
	As percent to total expenditure							
1	Revenue expenditure	63.93	69.36	76.38	77.35	76.26	79.21	83.76
2	Capital expenditure	36.07	30.64	23.62	22.65	23.74	20.79	16.24
I	Total expenditure (A+B)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
A	Non developmental	18.95	22.09	26.09	26.99	24.83	23.97	16.67
B	Developmental (1+2)	81.05	77.91	73.91	73.01	75.17	76.03	83.33
1	Social services, of which	26.09	28.25	28.42	29.61	26.90	28.28	21.87
a.	Education, sports, art and culture	11.67	12.32	12.23	13.77	10.89	10.51	10.61
b.	Medical and public health	4.66	5.04	5.15	5.08	4.18	3.61	3.96
2	Economic services	54.96	49.66	45.48	43.40	48.28	44.61	61.46
II	Revenue expenditure (C+D)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
C	Non developmental, of which*	27.72	29.48	32.33	32.76	31.47	29.30	18.93
a.	Interest payments	8.36	9.07	9.53	10.59	10.20	10.05	11.72
D	Developmental (1+2)	72.28	70.52	67.67	67.24	68.53	70.70	81.07
1	Social services, of which	30.87	33.97	33.50	33.27	31.13	34.25	22.97
a.	Education, sports, art and culture	14.99	15.91	15.43	16.01	13.14	12.96	12.52
b.	Medical and public health	6.41	6.29	6.45	6.00	4.85	4.25	4.25

<i>Expenditure Head</i>		<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
2	Economic services	41.41	36.55	34.17	33.97	37.39	36.45	58.10
III	Capital expenditure (E+F)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
E	Non developmental	3.41	5.35	5.91	7.31	3.48	3.67	5.00
F	Developmental	96.59	94.65	94.09	92.69	96.52	96.33	95.00
1	Social services, of which	17.61	15.30	12.00	17.12	13.29	20.61	16.23
a.	Education, sports, art & culture	5.80	4.19	1.87	6.08	3.64	5.56	0.79
b.	Medical and public health	1.54	2.20	0.95	1.96	2.02	1.16	2.42
2	Economic services	78.98	79.35	82.09	75.57	83.23	75.71	78.77
ASSAM								
	As percent to total expenditure							
1	Revenue expenditure	92.24	92.46	92.38	93.03	93.14	90.66	85.09
2	Capital expenditure	7.76	7.54	7.62	6.97	6.86	9.34	14.91
I	Total expenditure (A+B)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
A	Non developmental	32.16	35.81	39.18	39.94	39.23	36.34	32.99
B	Developmental (1+2)	67.84	64.19	60.82	60.06	60.77	63.66	67.01
1	Social services, of which	38.61	40.60	38.39	37.18	37.49	34.70	35.69
a.	Education, sports, art and culture	25.32	26.75	26.47	25.44	26.06	21.67	19.71
b.	Medical and public health	5.84	5.87	4.90	4.89	4.08	3.54	6.64
2	Economic services	29.23	23.59	22.44	22.89	23.28	28.97	31.32
II	Revenue expenditure (C+D)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
C	Non developmental, of which*	34.42	38.58	42.23	42.79	41.91	39.98	38.52
a.	Interest payments	13.64	15.82	16.35	15.51	17.11	20.29	12.86
D	Developmental (1+2)	65.58	61.42	57.77	57.21	58.09	60.02	61.48
1	Social services, of which	40.74	43.22	40.67	39.46	39.78	37.84	39.86
a.	Education, sports, art and culture	27.25	28.79	28.47	27.33	27.96	23.88	23.15
b.	Medical and public health	6.08	6.26	5.25	5.04	4.14	3.79	6.11
2	Economic services	24.84	18.20	17.10	17.75	18.31	22.18	21.62
III	Capital expenditure (E+F)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
E	Non developmental	5.23	1.84	2.18	1.91	2.83	0.96	1.48
F	Developmental	94.77	98.16	97.82	98.09	97.17	99.04	98.52
1	Social services, of which	13.29	8.50	10.68	6.69	6.35	4.15	11.85
a.	Education, sports, art & culture	2.32	1.74	2.20	0.22	0.21	0.30	0.09
b.	Medical and public health	3.01	1.11	0.64	2.98	3.30	1.09	9.61
2	Economic services	81.48	89.65	87.14	91.40	90.82	94.89	86.67
MANIPUR								
	As percent to total expenditure							
1	Revenue expenditure	77.92	75.68	78.74	88.40	85.89	76.49	70.15
2	Capital expenditure	22.08	24.32	21.26	11.60	14.11	23.51	29.85
I	Total expenditure (A+B)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
A	Non developmental	27.17	26.74	32.89	37.42	37.27	34.60	30.22
B	Developmental (1+2)	72.83	73.26	67.11	62.58	62.73	65.40	69.78
1	Social services, of which	35.61	37.06	33.73	32.95	33.06	31.11	30.45
a.	Education, sports, art and culture	20.18	23.45	19.82	19.21	17.90	16.12	13.38
b.	Medical and public health	4.83	4.48	4.41	4.77	4.36	3.17	3.47
2	Economic services	37.22	36.20	33.38	29.63	29.67	34.29	39.32
II	Revenue expenditure (C+D)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
C	Non developmental, of which*	33.81	34.68	41.38	42.01	42.76	35.86	37.29
a.	Interest payments	9.31	9.96	9.79	14.31	14.72	11.85	12.42
D	Developmental (1+2)	66.19	65.32	58.62	57.99	57.24	64.14	62.71
1	Social services, of which	38.57	38.52	37.54	33.66	31.85	34.17	30.56
a.	Education, sports, art and culture	24.26	25.37	24.87	21.61	19.87	20.56	16.93
b.	Medical and public health	5.93	5.79	5.59	5.17	4.55	3.91	3.52
2	Economic services	27.62	26.80	21.08	24.33	25.39	29.98	32.15
III	Capital expenditure (E+F)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
E	Non developmental	3.73	2.04	1.44	2.45	3.84	30.49	13.60
F	Developmental	96.27	97.96	98.56	97.55	96.16	69.51	86.40

<i>Expenditure Head</i>		<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
1	Social services, of which	25.16	32.53	19.60	27.56	40.47	21.18	30.21
a.	Education, sports, art & culture	5.75	17.49	1.12	0.88	5.90	1.69	5.05
b.	Medical and public health	0.95	0.40	0.02	1.72	3.15	0.74	3.34
2	Economic services	71.11	65.43	78.96	69.99	55.69	48.34	56.19
MEGHALAYA								
	As percent to total expenditure							
1	Revenue expenditure	81.22	84.47	84.89	87.86	84.81	86.59	84.07
2	Capital expenditure	18.78	15.53	15.11	12.14	15.19	13.41	15.93
I	Total expenditure (A+B)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
A	Non developmental	27.20	29.70	31.73	32.99	35.54	32.91	28.54
B	Developmental (1+2)	72.80	70.30	68.27	67.01	64.46	67.09	71.46
1	Social services, of which	34.66	36.52	37.50	38.06	36.35	34.61	34.76
a.	Education, sports, art and culture	16.58	17.67	19.12	19.00	17.37	15.82	14.69
b.	Medical and public health	6.19	6.86	6.87	7.01	6.26	5.75	4.91
2	Economic services	38.14	33.77	30.77	28.95	28.10	32.48	36.70
II	Revenue expenditure (C+D)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
C	Non developmental, of which*	32.10	34.47	36.36	37.05	40.03	37.33	32.36
a.	Interest payments	8.69	8.89	10.32	11.11	12.95	11.90	10.48
D	Developmental (1+2)	67.90	65.53	63.64	62.95	59.97	62.67	67.64
1	Social services, of which	36.56	37.03	38.38	37.69	36.48	33.14	34.89
a.	Education, sports, art and culture	20.08	20.52	22.32	21.51	20.39	18.25	17.37
b.	Medical and public health	6.06	6.71	6.86	7.09	6.29	5.62	4.89
2	Economic services	31.34	28.50	25.26	25.27	23.49	29.53	32.74
III	Capital expenditure (E+F)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
E	Non developmental	6.01	3.79	5.73	3.63	10.52	4.32	8.34
F	Developmental	93.99	96.21	94.27	96.37	89.48	95.68	91.66
1	Social services, of which	26.45	33.75	32.55	40.77	35.63	44.16	34.08
a.	Education, sports, art & culture	1.47	2.15	1.13	0.77	0.54	0.14	0.55
b.	Medical and public health	6.74	7.72	6.92	6.44	6.08	6.64	5.05
2	Economic services	67.54	62.45	61.72	55.60	53.85	51.52	57.58
MIZORAM								
	As percent to total expenditure							
1	Revenue expenditure	80.94	80.00	85.62	89.06	77.59	77.87	79.04
2	Capital expenditure	19.06	20.00	14.38	10.94	22.41	22.13	20.99
I	Total expenditure (A+B)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
A	Non developmental	24.27	26.94	28.97	31.65	28.85	27.22	29.32
B	Developmental (1+2)	75.73	73.06	71.03	68.35	71.15	72.78	70.68
1	Social services, of which	31.82	31.20	35.84	37.46	33.74	31.26	32.44
a.	Education, sports, art and culture	12.18	13.10	15.48	16.89	13.16	14.29	14.44
b.	Medical and public health	4.18	5.07	5.66	5.71	5.53	3.78	3.87
2	Economic services	43.91	41.86	35.19	30.89	37.40	41.52	38.24
II	Revenue expenditure (C+D)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
C	Non developmental, of which*	29.15	32.74	32.94	34.74	35.89	34.11	36.10
a.	Interest payments	6.15	9.96	10.51	12.96	12.95	12.01	12.87
D	Developmental (1+2)	70.85	67.26	67.06	65.26	64.11	65.89	63.86
1	Social services, of which	34.41	36.00	37.72	37.06	33.83	34.48	34.55
a.	Education, sports, art and culture	14.90	16.35	17.97	18.72	16.38	17.52	17.55
b.	Medical and public health	4.92	6.09	6.02	5.47	6.39	4.69	4.86
2	Economic services	36.44	31.26	29.34	28.19	30.28	31.41	29.31
III	Capital expenditure (E+F)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
E	Non developmental	3.56	3.78	5.35	6.44	4.50	2.98	3.75
F	Developmental	96.44	96.22	94.65	93.56	95.50	97.02	96.25
1	Social services, of which	20.80	11.97	24.65	40.72	33.44	19.93	24.44
a.	Education, sports, art & culture	0.61	0.11	0.63	2.03	2.02	2.93	2.67
b.	Medical and public health	1.06	0.96	3.49	7.62	2.54	0.56	0.14
2	Economic services	75.64	84.25	70.00	52.83	62.06	77.09	71.80

<i>Expenditure Head</i>		<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
NAGALAND								
	As percent to total expenditure							
1	Revenue expenditure	89.16	88.07	86.41	85.66	82.25	79.91	74.52
2	Capital expenditure	10.84	11.93	13.59	14.34	17.75	20.09	25.48
I	Total expenditure (A+B)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
A	Non developmental	37.20	37.82	42.13	44.29	41.95	38.83	35.54
B	Developmental (1+2)	62.80	62.18	57.87	55.71	58.05	61.17	64.46
1	Social services, of which	29.82	28.14	30.88	28.59	25.44	27.44	27.79
a.	Education, sports, art and culture	13.09	11.38	12.79	13.26	11.64	12.60	12.42
b.	Medical and public health	5.96	5.69	6.95	4.85	4.30	4.71	4.17
2	Economic services	32.99	34.04	26.99	27.12	32.62	33.73	36.67
II	Revenue expenditure (C+D)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
C	Non developmental, of which*	40.29	41.95	47.72	50.71	48.24	45.59	44.83
a.	Interest payments	10.21	11.42	13.35	14.05	12.95	12.33	12.36
D	Developmental (1+2)	59.71	58.05	52.28	49.29	51.76	54.41	55.17
1	Social services, of which	29.80	26.89	28.97	26.44	23.30	26.81	25.45
a.	Education, sports, art and culture	14.42	12.66	14.31	14.70	13.58	14.85	14.35
b.	Medical and public health	6.05	5.81	6.21	5.50	4.57	5.32	4.59
2	Economic services	29.92	31.16	23.31	22.86	28.46	27.60	29.72
III	Capital expenditure (E+F)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
E	Non developmental	11.77	7.39	6.58	5.97	12.80	11.94	8.38
F	Developmental	88.23	92.61	93.42	94.03	87.20	88.06	91.62
1	Social services, of which	30.01	37.36	43.00	41.42	35.32	29.95	34.63
a.	Education, sports, art & culture	2.15	1.90	3.17	4.71	2.62	3.66	6.75
b.	Medical and public health	5.19	4.81	11.61	0.94	3.04	2.25	2.95
2	Economic services	58.22	55.25	50.42	52.61	51.88	58.11	56.99
SIKKIM								
	As percent to total expenditure							
1	Revenue expenditure	74.09	77.60	84.94	74.23	77.74	72.05	61.83
2	Capital expenditure	25.91	22.40	15.06	25.77	22.26	27.95	38.17
I	Total expenditure (A+B)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
A	Non developmental	20.26	22.29	27.11	25.07	27.32	24.62	21.75
B	Developmental (1+2)	79.74	77.71	72.89	74.93	72.68	75.38	78.25
1	Social services, of which	35.27	36.88	37.11	36.69	37.92	36.11	34.77
a.	Education, sports, art and culture	13.13	13.73	18.17	18.64	18.33	18.02	15.33
b.	Medical and public health	7.04	5.04	5.64	5.06	4.50	4.84	3.55
2	Economic services	44.47	40.83	35.78	38.23	34.76	39.27	43.47
II	Revenue expenditure (C+D)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
C	Non developmental, of which*	25.56	26.95	31.18	32.43	33.41	32.22	33.08
a.	Interest payments	10.02	11.02	12.77	13.86	12.52	12.74	12.16
D	Developmental (1+2)	74.44	73.05	68.82	67.57	66.59	67.78	66.92
1	Social services, of which	36.47	38.63	36.89	37.33	35.58	37.89	36.88
a.	Education, sports, art and culture	16.45	16.20	20.75	20.01	19.31	22.21	20.64
b.	Medical and public health	6.61	5.73	6.33	6.09	5.27	5.82	5.49
2	Economic services	37.97	34.42	31.92	30.23	31.00	29.88	30.04
III	Capital expenditure (E+F)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
E	Non developmental	5.12	6.14	4.10	3.86	6.04	5.02	3.42
F	Developmental	94.88	93.86	95.90	96.14	93.96	94.98	96.58
1	Social services, of which	31.83	30.83	38.35	34.85	46.07	31.52	31.35
a.	Education, sports, art & culture	3.64	5.17	3.61	14.70	14.89	7.22	6.72
b.	Medical and public health	8.25	2.65	1.79	2.09	1.82	2.30	0.41
2	Economic services	63.05	63.03	57.55	61.29	47.89	63.46	65.23
I	Total expenditure (A+B)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
TRIPURA								
	As percent to total expenditure							
1	Revenue expenditure	81.09	83.13	84.54	75.55	82.30	76.28	72.69

<i>Expenditure Head</i>		<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
2	Capital expenditure	18.91	16.87	15.46	24.45	17.70	23.72	27.31
I	Total expenditure (A+B)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
A	Non developmental	28.24	29.02	32.74	33.82	38.24	38.57	44.30
B	Developmental (1+2)	71.76	70.98	67.26	66.18	61.76	61.43	55.70
1	Social services, of which	37.09	37.42	39.28	35.90	35.45	32.82	32.65
a.	Education, sports, art and culture	17.98	18.36	20.68	19.14	20.12	16.14	16.08
b.	Medical and public health	4.38	4.79	4.54	3.85	3.70	4.93	5.54
2	Economic services	34.67	33.55	27.98	30.28	26.32	28.62	23.05
II	Revenue expenditure (C+D)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
C	Non developmental, of which*	32.12	34.57	38.29	40.99	44.35	47.10	49.27
a.	Interest payments	11.27	11.31	12.68	13.97	16.13	17.17	14.43
D	Developmental (1+2)	67.88	65.43	61.71	59.01	55.65	52.90	50.73
1	Social services, of which	39.92	37.51	39.25	37.11	35.46	32.64	35.48
a.	Education, sports, art and culture	21.93	21.90	24.41	23.46	23.27	19.36	20.98
b.	Medical and public health	5.10	5.47	4.87	4.69	4.19	4.11	4.29
2	Economic services	27.96	27.92	22.46	21.90	20.19	20.27	15.26
III	Capital expenditure (E+F)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
E	Non developmental	11.59	1.70	2.37	11.69	9.80	11.14	31.07
F	Developmental	88.41	98.30	97.63	88.31	90.20	88.86	68.93
1	Social services, of which	24.96	37.01	39.47	32.16	35.37	33.40	25.14
a.	Education, sports, art & culture	1.03	0.92	0.29	5.78	5.49	5.80	3.03
b.	Medical and public health	1.29	1.44	2.72	1.25	1.42	7.54	8.87
2	Economic services	63.45	61.30	58.16	56.15	54.83	55.46	43.79

Table 12.4A: State-wise Expenditure of the NER as a Ratio of GSDP

(Percent)

<i>Expenditure Head</i>		<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
ARUNACHAL PRADESH								
I	Total expenditure (A+B)	66.99	71.69	67.26	68.54	80.67	78.22	66.00
A	Non developmental	12.69	15.83	17.55	18.50	20.03	18.75	11.00
B	Developmental (1+2)	54.29	55.85	49.71	50.04	60.65	59.47	55.00
1	Social services, of which	17.48	20.25	19.12	20.30	21.70	22.12	14.44
a.	Education, sports, art and culture	7.82	8.83	8.22	9.44	8.78	8.22	7.00
b.	Medical and public health	3.12	3.61	3.46	3.48	3.37	2.82	2.61
2	Economic services	36.82	35.60	30.59	29.75	38.95	34.90	40.56
II	Revenue expenditure (C+D)	42.82	49.72	51.37	53.02	61.52	61.96	55.28
C	Non developmental, of which*	11.87	14.66	16.61	17.37	19.36	18.16	10.47
a.	Interest payments	3.58	4.51	4.90	5.61	6.27	6.23	6.48
D	Developmental (1+2)	30.95	35.06	34.76	35.65	42.16	43.81	44.81
1	Social services, of which	13.22	16.89	17.21	17.64	19.15	21.22	12.70
a.	Education, sports, art and culture	6.42	7.91	7.93	8.49	8.08	8.03	6.92
b.	Medical and public health	2.75	3.13	3.31	3.18	2.98	2.63	2.35
2	Economic services	17.73	18.17	17.55	18.01	23.00	22.59	32.12
III	Capital expenditure (E+F)	24.16	21.97	15.88	15.53	19.16	16.26	10.72
E	Non developmental	0.83	1.18	0.94	1.13	0.67	0.60	0.54
F	Developmental	23.34	20.79	14.95	14.39	18.49	15.66	10.18
1	Social services, of which	4.25	3.36	1.91	2.66	2.55	3.35	1.74
a.	Education, sports, art & culture	1.40	0.92	0.30	0.94	0.70	0.90	0.08
b.	Medical and public health	0.37	0.48	0.15	0.30	0.39	0.19	0.26
2	Economic services	19.08	17.43	13.04	11.73	15.94	12.31	8.44
ASSAM								
I	Total expenditure (A+B)	19.97	19.15	21.62	21.43	22.54	24.34	37.36
A	Non developmental	6.42	6.86	8.47	8.56	8.84	8.84	12.33
B	Developmental (1+2)	13.55	12.29	13.15	12.87	13.70	15.49	25.03
1	Social services, of which	7.71	7.78	8.30	7.97	8.45	8.44	13.33

<i>Expenditure Head</i>		<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
a.	Education, sports, art and culture	5.06	5.12	5.72	5.45	5.87	5.27	7.36
b.	Medical and public health	1.17	1.12	1.06	1.05	0.92	0.86	2.48
2	Economic services	5.84	4.52	4.85	4.90	5.25	7.05	11.70
II	Revenue expenditure (C+D)	18.42	17.71	19.98	19.93	20.99	22.06	31.79
C	Non developmental, of which*	6.34	6.83	8.44	8.53	8.80	8.82	12.24
a.	Interest payments	2.51	2.80	3.27	3.09	3.59	4.48	4.09
D	Developmental (1+2)	12.08	10.88	11.54	11.40	12.19	13.24	19.54
1	Social services, of which	7.50	7.65	8.12	7.87	8.35	8.35	12.67
a.	Education, sports, art and culture	5.02	5.10	5.69	5.45	5.87	5.27	7.36
b.	Medical and public health	1.12	1.11	1.05	1.00	0.87	0.84	1.94
2	Economic services	4.58	3.22	3.42	3.54	3.84	4.89	6.87
III	Capital expenditure (E+F)	1.55	1.44	1.65	1.49	1.55	2.27	5.57
E	Non developmental	0.08	0.03	0.04	0.03	0.04	0.02	0.08
F	Developmental	1.47	1.42	1.61	1.47	1.50	2.25	5.49
1	Social services, of which	0.21	0.12	0.18	0.10	0.10	0.09	0.66
a.	Education, sports, art & culture	0.04	0.03	0.04	0.00	0.00	0.01	0.01
b.	Medical and public health	0.05	0.02	0.01	0.04	0.05	0.02	0.53
2	Economic services	1.26	1.29	1.44	1.37	1.40	2.16	4.83
MANIPUR								
I	Total expenditure (A+B)	48.78	48.51	61.20	45.24	41.93	51.38	55.38
A	Non developmental	13.25	12.97	20.13	16.93	15.63	17.78	16.74
B	Developmental (1+2)	35.52	35.54	41.07	28.31	26.30	33.61	38.65
1	Social services, of which	17.37	17.98	20.64	14.91	13.86	15.99	16.87
a.	Education, sports, art and culture	9.84	11.38	12.13	8.69	7.51	8.28	7.41
b.	Medical and public health	2.36	2.17	2.70	2.16	1.83	1.63	1.92
2	Economic services	18.16	17.56	20.43	13.40	12.44	17.62	21.78
II	Revenue expenditure (C+D)	38.01	36.71	48.19	40.00	36.01	39.30	38.85
C	Non developmental, of which*	12.85	12.73	19.94	16.80	15.40	14.09	14.49
a.	Interest payments	3.54	3.66	4.72	5.72	5.30	4.66	4.82
D	Developmental (1+2)	25.16	23.98	28.25	23.19	20.61	25.21	24.36
1	Social services, of which	14.66	14.14	18.09	13.46	11.47	13.43	11.87
a.	Education, sports, art and culture	9.22	9.31	11.99	8.64	7.16	8.08	6.58
b.	Medical and public health	2.25	2.12	2.69	2.07	1.64	1.54	1.37
2	Economic services	10.50	9.84	10.16	9.73	9.14	11.78	12.49
III	Capital expenditure (E+F)	10.77	11.80	13.01	5.25	5.92	12.08	16.53
E	Non developmental	0.40	0.24	0.19	0.13	0.23	3.68	2.25
F	Developmental	10.37	11.56	12.82	5.12	5.69	8.40	14.28
1	Social services, of which	2.71	3.84	2.55	1.45	2.39	2.56	4.99
a.	Education, sports, art & culture	0.62	2.06	0.15	0.05	0.35	0.20	0.83
b.	Medical and public health	0.10	0.05	0.00	0.09	0.19	0.09	0.55
2	Economic services	7.66	7.72	10.27	3.67	3.30	5.84	9.29
MEGHALAYA								
I	Total expenditure (A+B)	35.81	32.47	33.21	31.81	32.16	32.90	38.45
A	Non developmental	9.74	9.64	10.54	10.49	11.43	10.82	10.97
B	Developmental (1+2)	26.07	22.82	22.68	21.31	20.73	22.07	27.48
1	Social services, of which	12.41	11.86	12.46	12.11	11.69	11.39	13.37
a.	Education, sports, art and culture	5.94	5.74	6.35	6.04	5.59	5.20	5.65
b.	Medical and public health	2.22	2.23	2.28	2.23	2.01	1.89	1.89
2	Economic services	13.66	10.97	10.22	9.21	9.04	10.68	14.11
II	Revenue expenditure (C+D)	29.08	27.43	28.19	27.95	27.27	28.48	32.33
C	Non developmental, of which*	9.34	9.45	10.25	10.35	10.92	10.63	10.46
a.	Interest payments	2.53	2.44	2.91	3.11	3.53	3.39	3.39
D	Developmental (1+2)	19.75	17.97	17.94	17.59	16.36	17.85	21.86
1	Social services, of which	10.63	10.16	10.82	10.53	9.95	9.44	11.28
a.	Education, sports, art and culture	5.84	5.63	6.29	6.01	5.56	5.20	5.62
b.	Medical and public health	1.76	1.84	1.94	1.98	1.71	1.60	1.58

<i>Expenditure Head</i>		<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
2	Economic services	9.11	7.82	7.12	7.06	6.41	8.41	10.59
III	Capital expenditure (E+F)	6.72	5.04	5.02	3.86	4.89	4.41	6.12
E	Non developmental	0.40	0.19	0.29	0.14	0.51	0.19	0.51
F	Developmental	6.32	4.85	4.73	3.72	4.37	4.22	5.61
1	Social services, of which	1.78	1.70	1.63	1.57	1.74	1.95	2.09
a.	Education, sports, art & culture	0.10	0.11	0.06	0.03	0.03	0.01	0.03
b.	Medical and public health	0.45	0.39	0.35	0.25	0.30	0.29	0.31
2	Economic services	4.54	3.15	3.10	2.15	2.63	2.27	3.53
MIZORAM								
I	Total expenditure (A+B)	74.47	73.49	73.88	65.80	66.62	63.64	63.24
A	Non developmental	18.07	19.80	21.40	20.83	19.22	17.32	18.54
B	Developmental (1+2)	56.40	53.69	52.47	44.98	47.40	46.31	44.70
1	Social services, of which	23.70	22.92	26.48	24.65	22.48	19.89	20.51
a.	Education, sports, art and culture	9.07	9.63	11.43	11.12	8.77	9.09	9.13
b.	Medical and public health	3.12	3.72	4.18	3.76	3.68	2.40	2.45
2	Economic services	32.70	30.76	25.99	20.33	24.92	26.42	24.18
II	Revenue expenditure (C+D)	60.28	58.79	63.25	58.60	51.70	49.55	49.99
C	Non developmental, of which*	17.57	19.25	20.83	20.36	18.55	16.90	18.05
a.	Interest payments	3.71	5.86	6.65	7.60	6.69	5.95	6.43
D	Developmental (1+2)	42.71	39.54	42.42	38.24	33.14	32.65	31.92
1	Social services, of which	20.74	21.17	23.86	21.72	17.49	17.09	17.27
a.	Education, sports, art and culture	8.98	9.61	11.37	10.97	8.47	8.68	8.77
b.	Medical and public health	2.97	3.58	3.81	3.21	3.30	2.32	2.43
2	Economic services	21.96	18.38	18.56	16.52	15.65	15.56	14.65
III	Capital expenditure (E+F)	14.20	14.70	10.62	7.20	14.93	14.08	13.27
E	Non developmental	0.51	0.56	0.57	0.46	0.67	0.42	0.50
F	Developmental	13.69	14.14	10.06	6.73	14.26	13.66	12.77
1	Social services, of which	2.95	1.76	2.62	2.93	4.99	2.81	3.24
a.	Education, sports, art & culture	0.09	0.02	0.07	0.15	0.30	0.41	0.35
b.	Medical and public health	0.15	0.14	0.37	0.55	0.38	0.08	0.02
2	Economic services	10.74	12.38	7.44	3.80	9.27	10.86	9.53
NAGALAND								
I	Total expenditure (A+B)	51.56	48.20	51.81	40.26	39.62	34.93	36.69
A	Non developmental	19.18	18.23	21.83	17.83	16.62	13.57	13.04
B	Developmental (1+2)	32.38	29.97	29.98	22.43	23.00	21.37	23.65
1	Social services, of which	15.38	13.56	16.00	11.51	10.08	9.59	10.20
a.	Education, sports, art and culture	6.75	5.48	6.63	5.34	4.61	4.40	4.56
b.	Medical and public health	3.07	2.74	3.60	1.95	1.70	1.64	1.53
2	Economic services	17.01	16.41	13.99	10.92	12.92	11.78	13.45
II	Revenue expenditure (C+D)	45.97	42.45	44.77	34.49	32.59	27.92	27.34
C	Non developmental, of which*	18.52	17.81	21.36	17.49	15.72	12.73	12.26
a.	Interest payments	4.69	4.85	5.98	4.85	4.22	3.44	3.38
D	Developmental (1+2)	27.45	24.64	23.41	17.00	16.87	15.19	15.09
1	Social services, of which	13.70	11.41	12.97	9.12	7.59	7.48	6.96
a.	Education, sports, art and culture	6.63	5.37	6.41	5.07	4.43	4.15	3.92
b.	Medical and public health	2.78	2.47	2.78	1.90	1.49	1.49	1.26
2	Economic services	13.75	13.23	10.44	7.88	9.27	7.70	8.13
III	Capital expenditure (E+F)	5.59	5.75	7.04	5.77	7.03	7.02	9.35
E	Non developmental	0.66	0.43	0.46	0.34	0.90	0.84	0.78
F	Developmental	4.93	5.33	6.58	5.43	6.13	6.18	8.57
1	Social services, of which	1.68	2.15	3.03	2.39	2.48	2.10	3.24
a.	Education, sports, art & culture	0.12	0.11	0.22	0.27	0.18	0.26	0.63
b.	Medical and public health	0.29	0.28	0.82	0.05	0.21	0.16	0.28
2	Economic services	3.26	3.18	3.55	3.04	3.65	4.08	5.33
SIKKIM								
I	Total expenditure (A+B)	75.03	70.39	74.19	75.72	68.55	71.72	87.79

<i>Expenditure Head</i>		<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
A	Non developmental	15.20	15.69	20.11	18.98	18.73	17.66	19.10
B	Developmental (1+2)	59.82	54.70	54.08	56.74	49.82	54.06	68.69
1	Social services, of which	26.46	25.96	27.53	27.78	25.99	25.90	30.52
a.	Education, sports, art and culture	9.85	9.66	13.48	14.11	12.56	12.93	13.46
b.	Medical and public health	5.28	3.55	4.19	3.83	3.09	3.47	3.12
2	Economic services	33.36	28.74	26.55	28.95	23.83	28.16	38.17
II	Revenue expenditure (C+D)	55.59	54.62	63.01	56.21	53.29	51.68	54.28
C	Non developmental, of which*	14.21	14.72	19.65	18.23	17.80	16.65	17.95
a.	Interest payments	5.57	6.02	8.05	7.79	6.67	6.59	6.60
D	Developmental (1+2)	41.38	39.90	43.36	37.98	35.48	35.03	36.33
1	Social services, of which	20.27	21.10	23.25	20.98	18.96	19.58	20.02
a.	Education, sports, art and culture	9.14	8.85	13.08	11.25	10.29	11.48	11.20
b.	Medical and public health	3.68	3.13	3.99	3.42	2.81	3.01	2.98
2	Economic services	21.10	18.80	20.12	16.99	16.52	15.44	16.31
III	Capital expenditure (E+F)	19.44	15.77	11.17	19.51	15.26	20.04	33.51
E	Non developmental	1.00	0.97	0.46	0.75	0.92	1.01	1.15
F	Developmental	18.45	14.80	10.72	18.76	14.34	19.04	32.37
1	Social services, of which	6.19	4.86	4.28	6.80	7.03	6.32	10.51
a.	Education, sports, art & culture	0.71	0.81	0.40	2.87	2.27	1.45	2.25
b.	Medical and public health	1.60	0.42	0.20	0.41	0.28	0.46	0.14
2	Economic services	12.26	9.94	6.43	11.96	7.31	12.72	21.86
TRIPURA								
I	Total expenditure (A+B)	42.25	38.68	38.04	39.97	33.29	30.01	31.63
A	Non developmental	11.93	11.23	12.45	13.52	12.73	11.57	14.01
B	Developmental (1+2)	30.32	27.45	25.58	26.45	20.56	18.43	17.62
1	Social services, of which	15.67	14.47	14.94	14.35	11.80	9.85	10.33
a.	Education, sports, art and culture	7.59	7.10	7.87	7.65	6.70	4.84	5.08
b.	Medical and public health	1.85	1.85	1.73	1.54	1.23	1.48	1.75
2	Economic services	14.65	12.98	10.64	12.10	8.76	8.59	7.29
II	Revenue expenditure (C+D)	34.26	32.15	32.16	30.19	27.39	22.89	22.99
C	Non developmental, of which*	11.00	11.11	12.31	12.37	12.15	10.78	11.33
a.	Interest payments	3.86	3.64	4.08	4.22	4.42	3.93	3.32
D	Developmental (1+2)	23.26	21.03	19.84	17.82	15.24	12.11	11.66
1	Social services, of which	13.68	12.06	12.62	11.20	9.71	7.47	8.16
a.	Education, sports, art and culture	7.51	7.04	7.85	7.08	6.38	4.43	4.82
b.	Medical and public health	1.75	1.76	1.57	1.42	1.15	0.94	0.99
2	Economic services	9.58	8.98	7.22	6.61	5.53	4.64	3.51
III	Capital expenditure (E+F)	7.99	6.53	5.88	9.77	5.89	7.12	8.64
E	Non developmental	0.93	0.11	0.14	1.14	0.58	0.79	2.68
F	Developmental	7.06	6.42	5.74	8.63	5.32	6.33	5.95
1	Social services, of which	1.99	2.42	2.32	3.14	2.08	2.38	2.17
a.	Education, sports, art & culture	0.08	0.06	0.02	0.57	0.32	0.41	0.26
b.	Medical and public health	0.10	0.09	0.16	0.12	0.08	0.54	0.77
2	Economic services	5.07	4.00	3.42	5.49	3.23	3.95	3.78

Table 12.5A: State-wise Fiscal Balances of the NER

(percent)

<i>Fiscal Balance</i>	<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
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<i>Fiscal Balance</i>		<i>1995-96</i>	<i>1997-98</i>	<i>1999-00</i>	<i>2001-02</i>	<i>2003-04</i>	<i>2005-06</i>	<i>2006-07 (RE)</i>
ARUNACHAL PRADESH								
A	Revenue deficit	-22.27	-12.78	-10.53	-2.87	-8.15	-6.75	-13.05
B	Fiscal deficit	1.94	9.16	5.45	12.81	11.05	9.54	-2.18
C	Primary deficit	-1.64	4.66	0.55	7.20	4.78	3.31	-8.66
ASSAM								
A	Revenue deficit	1.03	-1.26	3.43	2.57	1.70	-3.16	1.17
B	Fiscal deficit	3.36	0.62	5.49	4.22	3.46	-0.74	6.94
C	Primary deficit	0.85	-2.18	2.22	1.12	-0.13	-5.22	2.86
MANIPUR								
A	Revenue deficit	-4.48	-3.27	9.95	4.82	1.08	-7.93	-13.64
B	Fiscal deficit	6.44	8.79	23.03	10.18	7.03	5.32	4.00
C	Primary deficit	2.90	5.14	18.31	4.45	1.73	0.66	-0.82
MEGHALAYA								
A	Revenue deficit	-5.19	-0.47	-0.48	0.81	-1.77	-1.23	-5.19
B	Fiscal deficit	2.60	5.06	6.35	5.34	4.19	3.04	1.31
C	Primary deficit	0.08	2.62	3.45	2.23	0.66	-0.34	-2.08
MIZORAM								
A	Revenue deficit	-5.83	-1.71	2.21	13.53	-3.34	-2.03	-4.83
B	Fiscal deficit	9.32	14.47	15.17	21.95	12.28	12.40	7.93
C	Primary deficit	5.61	8.62	8.52	14.35	5.59	6.45	1.50
NAGALAND								
A	Revenue deficit	5.55	5.58	0.37	2.48	-9.83	-2.80	-4.76
B	Fiscal deficit	11.18	11.50	7.18	8.15	-2.83	4.15	4.59
C	Primary deficit	6.49	6.65	1.20	3.30	-7.05	0.71	1.21
SIKKIM								
A	Revenue deficit	-11.53	-6.07	-0.22	-13.23	-11.56	-11.41	-23.11
B	Fiscal deficit	7.70	9.86	10.96	6.19	3.63	8.63	10.37
C	Primary deficit	2.13	3.84	2.92	-1.60	-3.05	2.04	3.77
TRIPURA								
A	Revenue deficit	-6.57	-0.66	0.50	-0.91	-1.39	-6.05	-3.48
B	Fiscal deficit	1.48	5.94	6.39	8.96	4.53	1.05	5.17
C	Primary deficit	-2.39	2.30	2.32	4.75	0.12	-2.88	1.85

Table 12.6A: Profile of PSUs

(number)

<i>States</i>	<i>Working Companies</i>			<i>Non-Working Companies</i>			<i>Grand Total</i>
	<i>Government Companies</i>	<i>Statutory Corporations</i>	<i>Total Working</i>	<i>Government Companies</i>	<i>Statutory Corporations</i>	<i>Total Non-Working</i>	
Arunachal Pradesh	3	0	3	2	0	2	5
Assam	35	4	39	10	0	10	49
Manipur	7	0	7	8	1	9	16
Meghalaya	10	3	13	0	0	0	13
Mizoram	5	0	5	0	0	0	5
Nagaland	5	0	5	1	0	1	6
Sikkim	9	3	12	3	0	3	15
Tripura	9	1	10	0	0	0	10
Total NER	83	11	94	24	1	25	119

Source: Various Audit Reports of CAG.

Table 12.7A: Activities of PSUs in NER States

<i>Status</i>	<i>Sector</i>
ARUNACHAL PRADESH	
A. Working Government Companies	Financial, Mineral, Forest
B. Non-Working Government Companies	Cement, Agriculture and allied activities.
ASSAM	
A. Working Government Companies	Agriculture and allied activities, Industrial development, Engineering, Electronics, Textile, Handloom and handicrafts, Forest, Mining, Construction, Development of economically weaker section, Tourism, Drugs, Chemicals and pharmaceutical, Power, Miscellaneous.
B. Working Statutory Corporations	Power, Transport, Financial, Agriculture and allied activities
C. Non-Working Government Companies	Industry, Electronics, Textile, Mining, Sugar, Drugs, Chemicals and Pharmaceutical.
MANIPUR	
A. Working Government Companies	Industry, Electronics, Handloom and handicrafts, Construction, Development of economically weaker section, Power, Miscellaneous.
B. Non Working Companies	Industry, Agriculture and allied activities, Textile, Sugar, Cement, Drugs, Chemical & pharmaceuticals.
C. Non-Working Statutory Corporation	Road transport
MEGHALAYA	
A. Working Government Companies	Cement, Industrial development and financial Handloom and handicrafts, Watch assembling, Bamboo products, Electronics, Forest, Tourism, Construction, Mining.
B. Working Statutory Corporations	Power, Transport, Warehousing.
MIZORAM	
A. Working Government Companies	Industrial development and financial, Handloom and handicrafts, Food processing, Electronics development, Agriculture & marketing.
NAGALAND	
A. Working Government Companies	Industries and commerce, Geology and mining.
B. Non-Working Government Companies	Sugar
SIKKIM	
A. Working Government Companies	Consumer industries, General financial and trading institution, Welfare, Tourism, Power, Animal husbandry.
B. Working Statutory Corporation	Financial, Miscellaneous
C. Non Working Government Companies	Consumer industry, Animal husbandry, Transport.
TRIPURA	
A. Working Government Companies	Industry, Agriculture, Forest, Power, Primitive group programme.
B. Working Statutory Corporation	Transport

Source: CAG, Various CAG Reports.

Table 12.8A: Total Investment as on 31 March 2006

(Rs lakh)

<i>States</i>	<i>Working Companies</i>	<i>Non-Working Companies</i>	<i>Total</i>
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	<i>Government Companies</i>	<i>Statutory Corporations</i>	<i>Total Working</i>	<i>Government Companies</i>	<i>Statutory Corporation</i>	<i>Total Non-Working</i>	
Arunachal Pradesh	1,460	0	1,460	315	0	315	1,775
Assam	-	-	198,418	6,826	0	6,826	205,244
Manipur	5,191	0	5,191	11,882	0	11,882	17,073
Meghalaya	-	-	89,264	0	0	0	89,264
Mizoram	7,677	0	7,677	0	0	0	7,677
Nagaland	6,149	0	6,149	0	0	0	6,149
Sikkim	-	-	14,409	127	0	127	14,536
Tripura	19,821	11,135	30,956	4	0	4	30,960
All NER	40,298	11,135	353,524	19,154	0	19,154	372,678

Source: CAG, Various CAG Reports.

Note: For Assam, Meghalaya and Sikkim separate data on equity and loans are not given for working companies.

Table 12.9A: Profile of Employment in PSUs

(Persons)

<i>States</i>	<i>Working Companies</i>			<i>Non-Working Companies</i>			<i>Total</i>
	<i>Government Companies</i>	<i>Statutory Corporations</i>	<i>Total Working</i>	<i>Government Companies</i>	<i>Statutory Corporation</i>	<i>Total Non-Working</i>	
Arunachal Pradesh	563	0	563	0	-	0	563
Assam	20,610	3,501	24,111	712	-	712	24,823
Manipur	181	-	181	3	35	38	219
Meghalaya	1467	4600	6067	-	-	0	6067
Mizoram	261	0	261	-	-	0	261
Nagaland	235	0	235	-	-	0	235
Sikkim	525	441	966	-	-	0	966
Tripura	2,620	740	3,360	-	-	0	3,360
TOTAL NER	24,814	4,682	3,5744	715	35	750	36,494

Source: CAG, Various CAG Reports.

Table 12.10A: Accumulated Profit/ Loss as on 31 March 2006

(Rs lakh)

<i>States</i>	<i>Working Companies</i>	<i>Non-Working Companies</i>	<i>Total</i>
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	<i>Government Companies</i>	<i>Statutory Corporations</i>	<i>Total Working</i>	<i>Government Companies</i>	<i>Statutory Corporation</i>	<i>Total Non-Working</i>	
Arunachal Pradesh	-64.87	0.00	-64.87	-15.40	0.00	-15.40	-80.27
Assam	-21,550.32	-619,532.57	-641,082.89	-5,472.31	0.00	-5,472.31	-646,555.20
Manipur	-0.24	0.00	-0.24	-500.54	-1,870.46	-2,371.00	-2,371.24
Meghalaya	-4,658.35	-35,676.09	-40,334.44	0.00	0.00	0.00	-40,334.44
Mizoram	-2,837.86	0.00	-2,837.86	0.00	0.00	0.00	-2,837.86
Nagaland	-1,226.00	0.00	-1,226.00	-1,470.00	0.00	-1,470.00	-2,696.00
Sikkim	-1,744.78	-3,915.37	-5,660.15	-79.02	0.00	-79.02	-5,739.17
Tripura	-7,973.62	-11,679.07	-19,652.69	0.00	0.00	0.00	-19,652.69
TOTAL NER	-40,056.04	-670,803.10	-710,859.14	-7,537.27	-1,870.46	-9,407.73	-720,266.87

Source: CAG, Various CAG Reports.

Table 12.11A: Investment in NER during the Tenth Five Year Plan

(Rs. Crore)

<i>Source of Funding</i>	<i>2002-03 (RE)</i>	<i>2003-04 (RE)</i>	<i>2004-05 (RE)</i>	<i>2005-06 (BE)</i>	<i>2006-07 (BE)</i>	<i>Total</i>
Amount (Rs crore)						
State Plan	5367.0	5702.0	6833.0	8274.0	9685.0	35861.0
Central Ministries/ Central Sector/ CSS	5460.0	6776.0	6787.0	9150.1	11268.1	39441.3
NEC	540.0	500.0	500.0	461.5	600.0	2511.5
NLCPR	550.0	550.0	650.0	679.2	700.0	3129.2
Total	11827.0	13528.0	14770.0	18564.8	22253.1	80943.0
Composition (Percent)						
State Plan	45.4	42.1	46.3	44.6	43.5	44.3
Central Ministries/ Central Sector/ CSS	46.2	50.1	46.0	49.3	50.6	48.7
NEC	4.6	3.7	3.4	2.5	2.7	3.1
NLCPR	4.7	4.1	4.4	3.7	3.1	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Government of India, MDoNER, Draft Report of the Steering Committee on North Eastern Region for Eleventh Five Year Plan (2007-2012).

ANNEXURE 12.2

I. Non-Lapsable Central Pool of Resources (NLCPR)

The NER has essentially depended on central funding for development works. All the states in the NER are Special Category States whose development plans are centrally financed on the basis of 90 percent grant and 10 percent loan. Further, the special category states are allowed to use up to 20 percent of central assistance for non-plan expenditure.

Despite the fact that the per capita plan outlays of the NER states have over a period of time been considerably higher than the national average, the states still rank significantly below the national average insofar as the development of infrastructure is concerned. In terms of per capita state domestic product or other development indices, such as power, length of roads or hospital beds, the NER ranks well below the national average. Though the literacy levels are higher than the national average, vocational training and entrepreneurial skills remain weak areas.

As the benefits of economic development have yet to steadily accrue to the region, efforts have been initiated in this direction in the recent past through various supportive measures. In October 1996, the then Prime Minister announced "New Initiatives for North Eastern Region" and stipulated that at least 10 percent of the Budget(s) of the Central Ministries/ Department will be earmarked for the development of NER states." A preliminary exercise undertaken by the Planning Commission in consultation with the various Ministries/ Department revealed that the expenditure on the NER by some Union Ministries during 1997-98 fell short of the stipulated 10 percent of the GBS for that year. Planning Commission thereafter explored the possibility of creating a Central Pool of Resources for the

NER out of the unspent amount of stipulated 10 percent of GBS to support infrastructure development projects in the NER.

A proposal was mooted by the Planning Commission to the Cabinet for constitution of such a Central Pool of Resources. The Cabinet approved the approach, in principle, on 15th December 1997, observing that the creation of the Central Resources Pool would require Parliamentary approval and would have to await constitution of the Twelfth Lok Sabha. The Central Pool therefore, could not be constituted in 1997-98.

Following the Lok Sabha elections earlier in the year 1998, the matter relating to creation of the Central Pool of Resources was pursued in consultation with the Ministry of Finance. The Prime Minister convened a Meeting of the Chief Ministers of the NER states on 8th May 1998 when, *inter alia*, it was indicated that a Non-lapsable Central Pool of Resources (NLCPR) for the funding of specific projects in these states would be created. The relevant paragraph from the Prime Minister's speech reads as under:

"We are examining the feasibility of creating a Central Pool of Resources (CPR) which, in turn, will give critical additional support for an accelerated implementation of projects in the entire region. This pool, created from the unspent balance of the allocated expenditure of 10 percent of the budgets of the concerned Central Ministries, could well amount to around Rs.1500 crore annually."

This commitment of the Government was also reflected in the Speech of the Finance Minister while presenting the Union Budget for the year, 1998-99. The relevant paragraphs from the Budget Speech are reproduced below:

"Furthermore, it has been decided that a non-lapsable Central Resources Pool will be created for deposit of funds from all Ministries where the plan expenditure on the North Eastern Region is less than 10 percent of the total plan allocation of the Ministry. The difference between 10 percent of the allocation and the actual expenditure incurred on the North Eastern Region will be transferred to the Central Pool, which will be used for funding specific programmes for economic and social upliftment of the North Eastern States."

Further, as part of the budget proposals 1998-99, it was announced that:

"It has been decided that all Central Ministries/Departments should earmark at least 10 percent of their budget for specific programme of development in the North Eastern Region. To the extent of shortfall in the utilization of this provision by any Ministry/Department (except some exempted ones) according to this norm, the amount would be transferred to a new Reserve Fund in the Public Account titled 'Central Resource Pool for development of North Eastern Region'. Presently, a token provision of Rs.1 crore is being made for transfer to the fund. In Budget 1997-98, such short provision was assessed to be about Rs.1,600 crore. A similar exercise for analyzing the provisions in Central Plan specific to the North Eastern Region in Budget 1998-99 would be carried out and the Resources Pool would be enhanced at Revised Estimates stage to the extent of shortfall from the 10 percent norm."

The Union Budget 1998-99 was voted and passed by Parliament. With that, the Non-lapsable Central Pool of Resources was constituted with approval of Parliament. In the conference of Governors and Chief Ministers of the NER states held in January 2000 at Shillong the Prime Minister stated the objectives of the Non-lapsable Central Pool of Resources. The relevant paragraph from Prime Minister's Speech is:

"My Government has also created a pool of non-lapsable funds for the North-East and Sikkim. This pool, meant for funding development projects in these States, will fill the resource gap in creation of new infrastructure, which is a top priority concern of the Union Government...."

The broad objective of the NLCPR scheme is to ensure speedy development of infrastructure in the NER by increasing the flow of budgetary financing for new infrastructure projects/schemes in the Region. Both physical and social infrastructure sectors such as irrigation and flood control, power, roads and bridges, education, health, water supply and sanitation - are considered for providing support under the said Pool, with projects in physical infrastructure sector receiving priority.

Funds from the NLCPR can be released for state sector as well as Central sector projects/ schemes. However the funds available under this Pool are not meant to supplement the normal Plan programmes either of the state governments or Union Ministries/ Departments/ Agencies.

Institutional Arrangement to Administer the NLCPR Funds

During the year, the institutional arrangements for administering the NLCPR have been streamlined. The guidelines to administer the Pool have been revised. The Committee to administer the NLCPR has been reconstituted. The reconstituted Committee is headed by Secretary, Ministry of Development of NER and has representation from Ministries of Finance, Home Affairs and Planning Commission. Financial Advisor to the Ministry of Development of NER has been included as a member. Representatives of Union Ministry/ Departments, whose proposals are to be considered in a particular sitting for funding under NLCPR, are also invited.

For identification of projects under NLCPR, states are asked to submit a prioritized list of projects. The earlier practice of receiving projects throughout the year directly from the various state departments concerned has been stopped. Now the Planning and Development Department of the state concerned is the nodal department for NLCPR and that department is DoNER's interface with all other departments of the state. The priority accorded by the state to the projects in the 'priority list' is only a suggestive and the Committee scrutinizes the projects in the lists in order to identify and finally retain the suitable projects for detailed examination. In examining the priority, the committee is, *inter-alia*, guided by considerations such as:

- (a) Projects of economic infrastructure is given priority;
- (b) In the social sector, priority to drinking water supply and other health and sanitation projects;
- (c) Projects in Autonomous district Council (VI Schedule of the Constitution) is given priority;
- (d) Past performance of a state in implementing projects in the particular sectors to which the projects belong is also considered;
- (e) The overall utilisation and absorption of funds by a particular state in the past years also guide the overall quantum of projects to be undertaken for that state in a year.

Detailed Project Report(s) for such retained projects are then prepared by the state concerned. These project proposals are thereafter examined in consultation with the concerned Central Ministry/ Department. The recommendations/ views, thus received are place before the Committee to administer the NLCPR, which considers the proposal and accords approval.

After approval of the Committee, funds are sanctioned and released by the Ministry of Development of NER on submission of an implementation schedule. Subsequent releases are made only after receipt of Utilisation Certificate of earlier releases.

Annexure 13

CHAPTER 13: ENABLING PRIVATE INVESTMENT

ANNEXURE 13.1

Table: 13.1A: Public and Private Employment in the Organised Sector, 1981-2002

(lakh)

States	Public Sector								Private Sector							
	1981	1991	1997	1998	1999@	2000	2001	2002	1981	1991	1997	1998	1999@	2000	2001	2002
Assam	3.58	5.01	5.49	5.35	5.32	5.36	5.37	5.26	4.99	5.49	5.67	5.57	5.5	5.49	5.79	5.38
Manipur	0.36	0.55	0.78	0.78	0.8	0.64	0.8	0.8	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.03
Meghalaya	0.44	0.64	0.69	0.7	0.71	0.73	0.73	0.73	0.04	0.05	0.08	0.08	0.09	0.09	0.09	0.09
Mizoram	0.15	0.33	0.4	0.4	0.4	0.35	0.4	0.4	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01
Nagaland	0.39	0.64	0.69	0.73	0.74	0.74	0.74	0.74	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03
Tripura	0.62	0.88	1	1	1	1.1	1.1	1.1	0.06	0.1	0.11	0.11	0.1	0.13	0.13	0.13
NER	5.54	8.05	9.05	8.96	8.97	8.92	9.14	9.03	5.12	5.68	5.93	5.82	5.75	5.78	6.08	5.67
India	155	191	196	194	194.2	193	191.4	187.7	73.95	76.76	86.9	87.5	86.98	86.46	86.52	84.32

Notes: @: quick estimates

Source: *Employment Review* for various years, Directorate General of Employment and Training.

Table 13.2A: Power: Installed Capacity in Public and Private Plants, 2006

(MW)

State	State	Central	Private	Total
Arunachal Pradesh	NA	NA	NA	60.0#
Assam*	597.3	509	24.6	1,130.9
Manipur	50.9	107	0	157.9
Meghalaya	189.2	99	0	288.2
Mizoram	66.6	50	0.2	116.8
Nagaland	30.7	72	0	102.7
Sikkim	46.1	70	0	116.1
Tripura	148.4	95	1.1	244.5

Notes: * at the end of the Ninth Plan; # refers to 2005

Source: *NEC Data Bank*.

Table 13.3A: PPP Projects for Power Infrastructure in Sikkim

S. No.	Project name	Estimated cost (Rs crore)	Date of award/ Likely award	Likely date of completion	Govt. support (Equity/Grant)	Name of private developer
1	Infrastructures for Evacuation of Power from IPP Projects	100	March '06	Mar-08	49%	IL & FS
2	Hee Khola HEP (1 MW)	9	Sept '05	Mar-08	49%	IL & FS
3	Kalej Khola HEP (6 MW)	48	Sept '05	Mar-08	49%	IL & FS
4	Upper Rimbi HEP (7.5 M/W)	59	Sept '05	Mar-08	49%	IL & FS
5	Bermelee Khola HEP: (3 MW)	21	Sept '05	Mar-08	49%	IL & FS
6	Kissim Khola HEP (2 MW)	15	Sept '05	Mar-08	49%	IL & FS
7	Rorathang (25 MW)	150	Sept '05	Mar-09	49%	IL & FS
8	Taramchu (25 MW)	163	Sept '05	Mar-09	49%	IL & FS
9	Ringyang (1 MW)	9	Sept '05	Mar-08	49%	IL & FS
10	Linza HEP (120 MdW)	700	Sept '05	Sept. 2010	49%	IL & FS
11	TalemHEP (75 MW)	684	March '05	Dec. 2010	26%	SMEC, New Delhi
12	Teesta -I (320 MW)	1207	March '05	Mar-11	26%	SMEC, New Delhi
13	Teesta -II(320 MW)	1317	March '05	Mar-11	26%	Him Urja, New Delhi
14	Teesta -III (1200 MW)	5900	March '05	Mar-12	26%	Teesta Urja Ltd. New Delhi
15	Teesta - VI (360 MW)	1561	March '05	Mar-11	26%	LANCO Energy, New Delhi
16	Rangit - II (60 MW)	270	March '05	Mar-11	26%	Gammon India, Mumbai
17	Rangit-IV (90 MW)	405	March '05	Mar-11	26%	Jal Power Corpn. Hyderabad
18	Dikchu (105 MW)	473	March '05	Mar-11	26%	Sneha Kinetic Pvt. Ltd. Hyderabad
19	Panan (200 MW)	900	March '05	Mar-11	26%	Nagarjuna Holdings, Hyderabad
20	Rongnichu Stroage (95	428	March '05	Mar-11	26%	Chatisgarh

S. No.	Project name	Estimated cost (Rs crore)	Date of award/ Likely award	Likely date of completion	Govt. support (Equity/ Grant)	Name of private developer
	MW)					Electricity Company .Ltd.
21	Jorathang Loop (60 MW)	270	March '05	Mar-11	26%	DANS IT System, New Delhi
22	Chujachen (99 MW)	446	Nov '03	Mar-09	10%	GATI Ltd., Secunderabad
23	Bhasmey (32 MW)	145	Nov '03	Mar-09	10%	GATI Ltd., Secunderabad
24	Sada - Mangder (71 MW)	350	Nov '03	Mar-09	10%	GATI Ltd., Secunderabad
24	Total	15,627				

Source: www.infrastructure.gov.in

ANNEXURE - 14

NORTH EASTERN COUNCIL

DRAFT

VISION NER: 2020 DOCUMENT

PREFACE

The Draft of the document Vision **NER-2020**, revised on the lines suggested in the review meeting taken by the Hon'ble Chairman NEC in April 06 is now ready. It gives in a crystallized form the aspirations and priorities indicated by a small sample (2.5 lakh – from 3 Blocks from each of the 8 States) of our Masters - the 3.8 crore people of NER – from the common man of remote village to the elite and thinkers – collected mainly by an NGO of repute, C-NES (Centre for North Eastern Studies) along with its network of local NGO-associates in all the 8 NE States. We sat together many a time to chart our course, with the unassuming Shri T P Khaund (a retired IAS officer with journalistic background, deep knowledge and vast experience) playing the key planning and coordinating role along with the well known Shri Sanjoy Hazarika planning and organising the vast field operations and setting the whole process into motion, besides crystallizing the aspirations, priorities and shortcomings voiced by the respondents from 3 blocks selected on a sample basis in each State. The main objective of this continuing exercise is to make the common man a stake-holder in the entire process of developmental planning, right from formulation through implementation of the plans and up to the stage of monitoring and evaluation.

This massive exercise was taken up on war footing and thanks to the zeal and enthusiasm that orientation-cum-training-cum-brainstorming sessions generated among the volunteers, it carried on through the difficult monsoon season in NER when communications get clogged and activity is largely confined to indoors.

The direction for this novel exercise was contained in the words of wisdom of Hon'ble Prime Minister Dr Manmohan Singh in his inaugural address to the restructured NEC (12 Apr 05). While fully endorsing the initiative taken by Shri P R Kyndiah, Hon'ble Minister of Tribal Affairs & DoNER as the newly nominated Chairman of NEC, for preparation of the Vision Document, he said that he was *“pleased that this Vision Document will be drafted with the involvement of different section of the People”* and emphasized that *“it should be perceived as a **People's Plan**”* which *“approach would also be in tune with the strong traditions of self-governance in the NE Region.”* Adding that *“Intelligent involvement of youth, especially University students and faculty for various items of the Planning exercise, would give them a glimpse of the future being planned for them.”*

Shri P R Kyndiah, Hon'ble Chairman of NEC, on the very day of assuming office initiated preparation of a *“well charted Vision document that defines over a 15 year perspective, our goals, strategies and thrust areas”*. This Document, he said, should be one that *“takes into account the heightened consciousness of the people of the North Eastern region, their aspirations, needs and sensitivities and that touches all sectors of the economy and vast resource potential of the region.”*

We have taken special care to ensure that this Vision Document is seen by the People as their own Plan to be implemented with Government support, and not the other way round.

The exercise started with invitation to a core group of people from various walks of life in all the States including those suggested (in response to our request) by Hon'ble Members of NEC to a brainstorming session in May 05. Extensive discussions and intensive deliberations led to the drafting of an **Open Letter** to the common man on the theme *“Let us Dream: Let us think: Let us plan our future”* and to the course of action to follow. The Open Letter was translated into

all the recognized languages and widely circulated through State Government channels and also otherwise, inviting the people's 'vision about their future' and suggestions. Detailed discussions were also held with Shri Sanjoy Hazarika, Managing Trustee of C-NES and his colleagues drawn from the 8 States and a Questionnaire was drafted to make the responses focused. Orientation and training of the volunteers followed and then they went to the field. The responses received were crystallized by C-NES. The massive exercise of studying, analyzing and compiling volumes of data received in the NEC Secretariat is presently on. Concurrently, a series of discussions were organized in various fora including Universities, academic Institutions with the involvement of faculty, students, alumni (ex-students) to engender a milieu for them to think, debate and respond.

This Draft of the Vision-Document will again be widely circulated among the stakeholders (including the State Governments) and discussed in different fora of academicians, experts, legislators and others. After consideration of the feedback received by outsourced core group, the Draft Vision **NER-2020** will be given the final shape and placed formally before the NEC for their consideration and guidance. It will then be adopted.

An Executive Summary has been added and the Sectoral Perspectives that were then in the process of being firmed up, have been finalized and appended to the Vision **NER-2020**.

NER Vision-2020 is expected to engender a new fervour in the Region which can become a powerful motive force towards its realization in the immediate and also in the long run provided the living interaction generated in the first phase is suitably sustained (and that shall be done). The State Governments, the Central Ministries, the Planning Commission and others will be exhorted to take special note of the aspirations and priorities indicated by the people and incorporate the same in the 11th 5-Yr Plan as well as in their Annual Plans.

The Primary Sector and Education/IT/Science & Technology (as the main inputs for human resource development) are being given the topmost priority. The prioritization is in consonance with the imperatives of development of NER and more importantly, with the wish of the people. Thanks to Dr M S Swaminathan and Dr V L Chopra (Member Planning Commission), Agriculture and Allied Segments are being taken care of by the National Academy of Agricultural Scientists (of which they are the present and former Chairmen), in close association with the scientists of NER.

Education as the main input for Human Resource Development is being given the topmost priority. The newly constituted *NEREC (the North Eastern Regional Education Council)* has already held 3 formal meetings and identified five crucial areas. These are being considered in depth by five Sub-Committees of NEREC, each with one VC as coordinator. The basic objectives include transforming McCaulay's system (of producing clerks to perpetuate the Raj), to providing character-building man-making education through a seamless education system right across '*n*' to '*u*' (Nursery to University) that is based on indigenous values and is relevant to the region; to integrate the vocational and the academic streams in a manner that the student is enabled to stand on his own feet when he starts his own life, having been trained at least in one vocation relevant to the area and of his liking. Other issues addressed include improvement in the teaching standards, especially of mathematics and science right from the primary stage, developing areas of excellence and providing connectivity through IT so that the excellence in one institution could be shared by all.

Formulation of Vision document is not a one-time effort but a continuous process. As progress takes place and things change, peoples' Vision and priorities would also change. This exercise shall therefore have to be carried on and the area of contact expanded several folds by utilising the CICs that are there practically in each Block. Feedback obtained from the people would need to be incorporated in the planning process continually. That should lead to bottoms-up approach in planning, with village-plans coalescing into District Plans, which in turn would subscribe to the State Plans and with gaps filled in by the Regional Plan - all in tune with the directions of the National Planning process of the Planning Commission. The programme for further action to follow in the coming years to carry the Vision-exercise into its phase-2 has been indicated in the Report.

It would be pertinent to reiterate what Mahamahim Rashtrapatiji has so aptly clarified that "***A Vision is not a Project Report or a Plan target. It is an articulation of the desired end results in the broader terms.***" This Vision should therefore be taken as giving the direction and the priorities that the common man has desired to be followed by the Government with his active involvement.

It is with these introductory words that I have the privilege of presenting the Revised Draft **Vision *NER-2020*** before the Hon Chairman and my esteemed colleagues for consideration.

(P P Shrivastav)
Member, NEC
09 June 2006

Chapter-I

THE VISION DOCUMENT - VISION NER: 2020

“Where there is no vision, the people perish”. – The Bible.

Background

1.1 The North Eastern Council (NEC) constituted in 1972 under the North Eastern Council Act, 1971, as an Advisory Body. The Act was amended in 2005 transforming NEC into the statutory Regional Planning Body for the eight States in the North Eastern Region.

1.2 The first thing that the new Chairman of the ‘new-look’ Council, Shri P.R.Kyndiah, did on the very day of assuming office was to direct that a time-bound Action Plan be prepared within a month for drafting a Vision Document over a 15-year perspective that takes *“into account the heightened consciousness of the people of the North Eastern Region, their aspirations, needs and sensitivities and that touches all sectors of the economy and the vast resources potential of the region.”* The Vision Document was to be prepared in a manner that ensures *“that it will be seen by the people as their own Plan to be implemented with Government support, and not the other way round. We shall draw upon the talent and expertise already available in the Region and in the country through outsourcing. Different sections of the people would be involved in the entire planning exercise right from the formulation, through implementation and up to the stage of monitoring and evaluation”*.

1.3 The Action Plan was submitted in time and was later approved in the very first formal inaugural meeting of the restructured NEC held at Delhi on 12th April, 2005. The stipulated time-frame for drafting Document was March end, 2006. The dateline was kept and the draft Document **VISION NER-2020** was submitted to the Hon’ble Chairman in early April 06.

1.4 Dr. Manmohan Singh, Hon’ble Prime Minister referred to the Vision Document in his inaugural address at the first meeting of the restructured NEC in the following words, “I am happy that the Chairman is getting an Action Plan made out for formulating a Vision Document with a 15-year perspective –the **NER-2020**. I am also pleased that the Vision Document will be drafted with the involvement of different sections of the People. It should be perceived as a People’s Plan. This approach would also be in tune with the strong traditions of self-governance in the NE Region. Intelligent involvement of youths, especially University students and faculty for various items of the Planning exercise, would give them a glimpse of the future being planned for them”.

1.5 This was a momentous mandate from the NEC which represents the collective wisdom of the people of NER. It is momentous because carrying out of this mandate would involve a paradigm shift in the planning process and will mean a new approach to the plan formulation process—a bottom-up approach as against the existing somewhat top-down approach. The Vision, which the Council has mandated, will be shared by the people at large and will ensure the communities their rightful place in the democratic planning system. Public perception generally has been that development plans are drafted, finalized and executed as per a system in which the common man has, if at all, insignificant participation. The mandate given by the Council, will therefore, usher in a path-breaking development.

1.6 The Council Secretariat immediately took the first step for undertaking this important assignment. As an initial step towards involving the people in the process of preparation of the vision document, a brain- storming session of economists, academicians, NGO representatives, social activists, journalists and other experts drawn from all the 8 constituent States of NEC was held on 24–25 May, 2005 at Shillong. This representative gathering heartily welcomed the decision of the Council to formulate a popular aspirations-based *Vision* for all round socio-economic development of the North East. The assembly very appropriately called the proposed document **Vision NER:2020**. It suggested two-fold follow up strategy:

(i) to issue an open letter to the people of the North Eastern Region calling upon them to dream as to what should be the future picture of their North Eastern Region, say 15 years hence i.e. by the year 2020, exhorting the people to articulate their views and share their ideas and suggestions and

thus become partners in the preparation of the Vision Document. An open letter addressed to the people of the NE Region was accordingly drafted requesting them to dream, to think and to plan for their future (Annexure-I). It was got translated into all the local recognised languages of the region with the assistance of the State Governments and large number of copies were got distributed up to the village level again through the machinery of the States. Copies were also mailed directly to a large number of NGOs, youth and women associations and higher educational institutions;

(ii) to put into motion an exercise for mass contact to elicit views and suggestions from cross section of the people up to the village level. This massive exercise was conducted through an umbrella NGO with a good track record and having affiliated branches and social activist groups in all the States. The Centre for North East Studies, which was assigned this task, undertook this massive exercise in following four stages:

➤ **1st stage:** Orientation programme of selected NGOs and social activist groups was conducted and detailed work-plan for the field operation finalized. More than 20 NGOs and civil society groups in all the States were partnered in this exercise.

➤ **2nd stage:** State NGOs and social activist groups mobilised local youth, largely the educated unemployed, organized motivational camp for them and circulated a questionnaire, prepared in consultation with the Council Secretariat. They then made personal contact with the *common man* in all walks of life and down to the village level and elicited their views and suggestions.

➤ **3rd stage:** Replies to the questionnaire were listed and analysed and discussed at Block, District and State level seminars/workshops. Close to 1,000 village group discussions, 20 District level and 10 State level workshop/seminars were organised in which all interest groups and State Government representatives were involved.

➤ **4th Stage:** Reports of these workshop/seminars were deliberated upon in fairly high-level meetings with economists, academicians, journalists and various other bodies involved in socio-economic development drawn from all the States. The exercise covered more than 50,000 households with over two and half lakh people in about 200 Blocks throughout the region.

1.7 The final report of C-NES was studied along with large volume of responses to the Questionnaire (around 2.5 lakh from the people besides those addressed directly) which were also studied in the Council Secretariat on a sample basis.

1.6 The academic community and the students in different parts of the region were also involved in deliberations on the Vision Document through seminars organized in almost all the Universities in NER in which, besides the members of the faculties, students from colleges and secondary schools in the vicinity, representatives of local community organizations and voluntary social service groups took part and conveyed their views on **Vision NER:2020**. These also substantially contributed towards formulation of the Vision Document.

1.7 In over 50 years of governmental planning, there has hardly ever been the kind of interface between stakeholders and the people, as was done in the course of this exercise. Civil Society Volunteers fanned out across villages and the countryside, traveling across hills and plains, staying in villages, braving some suspicion but winning people over with their dedication and commitment. It has been an extraordinary effort by the civil society movement as a whole. The definite gains of this exercise include both a heightened awareness among the people reached as well as the development of teams of young people who are prepared to work hard for the cause of collecting the dreams of the common man and his aspirations for a better future and mobilising them to become active stakeholders in the entire process of planning and implementation of plans for their development.

1.8 The response has been overwhelming and indeed revealing. It is true that the coverage of the mass-contact campaign was very limited in terms, of area and population. Two and a half or three lakhs out of thirty nine million is only the tip of the vast canvas. Yet this tip is sufficiently representative of the larger whole—expressively symbolic of the big vision of the large body. The chapters that follow contain, in broad terms, the people's perception, their views and reflections on what has been done for them and what more they expect to be done. The important point is that this was the first innovative exercise in participatory planning in the North East involving a wide range of stakeholders and civil society - farmers, other villagers, academicians, students, professionals, business community etc.

1.9 The draft Vision Document will be circulated among the 8 State Governments for comments. Thereafter, the final **VISION NER: 2020** will be ready for Council's consideration.

1.10 Planning is not a static process – it is dynamic and changes with the change of time and situation. In the next stage formulation of the detailed 15 year perspective plan, on the basis of the thrust areas identified and the priorities and strategies suggested in the Vision Document will be taken up. The plan will be drafted by a core group drawing upon the feed back from the people and the experience of the experts in consultation with all the stakeholders, representatives of social activist groups, NGOs ,media etc. and representatives of State Governments. Simultaneously data collection and obtaining public responses will commence through CICs and the network of motivated youth groups that have come up in the wake of the massive mass contact campaign.

1.11 It may be noted that this Vision Document represents the first stage of formulating a perspective plan for development of the North Eastern Region. It is a general road map or a growth direction indicator and **not a detailed plan**. It is expected to serve just as a launching pad for an actionable perspective development plan.

Chapter – II

NORTH EASTERN REGION

INTRODUCTION

2.1 The North Eastern Region as a distinct socio-cultural entity existed, as part of the larger Indian political entity, centuries before the colonial administration extended its domain to this part. Interactions of the people of NE Region with the rest of the country find mention in ancient scriptures and epics and have been immortalized in the local lore. The British rulers did not discover this region; they only explored, occupied and later exploited it. The golden fabric of this region had, even in the 4th Century AD, entered the market in Egypt and Rome through the historic “Silk Route”. The region opened up to the mainland after the East India Company annexed Assam in 1826. The region has, over the centuries, seen an extra-ordinary mixing of different races, cultures, languages and religions. Nowhere in the country can one see such diversity as in the North East. With an area of about 2.6 lakh sq km and a population of a little over 39 million, the eight States of the North East (viz. Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura) is a conglomeration of around 475 ethnic groups and sub-groups, speaking over 400 languages/dialects. (to quote source). The region accounts for just less than 8 percent of the country’s total geographical area and little less than 4 percent of India’s total population.

2.2 It is a combination of both historical and geographical factors that had made the North East a distant frontier land. The region experienced two big traumas. The first one was in the early forties when the Allied Force in the Second World War opened a front in this region: the Japanese army overran parts of Manipur and came almost to the heart of Nagaland. The Indian National Army (INA) was active in this area. The war disturbed the otherwise placid socio-cultural life of the people and left its impact on the region’s economy. Seven years later the region experienced the biggest trauma. Partition of the country in 1947 practically cut off this region from the mainland and aggravated its geographical isolation. The land-link with the rest of the country was reduced to a narrow corridor around 10 km wide at its narrowest point, called the ‘chicken neck’ at Siliguri. The result? About 98 percent of the region’s border is with foreign countries and only 2 percent with India. As B.G.Vergese puts it: “Partition put back the economy of much of the region by a quarter-century as it lost its markets, transit routes and arteries of communication and entrepot, Chittagong, to become an all but land-locked-cul-de-sac. Costs skyrocketed, especially on account of tortuously elongated transportation leads, and economic opportunity shriveled as a result of market loss”. Most people in the mainland do not know that a large part of what is Bangladesh was a part of North East (undivided Asom) – Jaintia Kings used to be paid tributes by his ‘subjects’ in Sylhet. This man-made demarcation of natural boundary not only snapped social and family links but more importantly the traditional trade links as well throwing the economy of the bordering States like Meghalaya, Asom and Tripura into haywire. Even today the people living in the periphery of the international border have not been able to get out of that trauma fully. It is necessary to appreciate this ground realities while discussing the issue of development of North Eastern Region. And finally decades of insurgency and militancy have put the clock of progress backward and pushed the investment curve downward.

2.3 Certain characteristics peculiar to this region require proper appreciation. The region is predominantly mountainous interspersed with valleys and plains: altitude varies from almost sea-

level to over 7000 m above MSL. The region's high rainfall – the average rainfall being 10,000 mm and above – creates problem of eco system, high seismic activity and flood. At the same time it has given the region a widespread and thick green coverage and abundant natural resources. The population consists of a very large number of tribal communities, their percentage varying between 22 in Sikkim to 94 in Mizoram. The economy remains predominantly agrarian and, at the same time, agriculture base remains weak. Although infrastructure has, over the years, developed, yet the region has to go a long way to catch up with the rest of the country. Recurring annual floods, particularly in the valley, effect 14770 sq km and destroy property worth about Rs 500 crores in Assam alone. Flood retards pace of development activities in the other States of North East because disruption of the transport network in the region's gateway, the Brahmaputra valley, produces ripple effect right across the region. The other nature-created problem peculiar to North East is erosion – serious erosion occurs in about 15 percent of the total geographical area and moderate erosion hazard exists in about 47 percent area.

2.4 An analysis of the inherent strengths and weaknesses of the North Eastern Region is as follows:

Basic Strengths

- ◆ Large natural resources and potential for growth in the agro-forestry sector including expansive and extensive bamboo plantation, exotic flora.
- ◆ Large mineral deposits (particularly in Assam and Meghalaya)
- ◆ A bio-diversity hot spot.
- ◆ Vast water resources including tremendous hydel power potential.
- ◆ Great promise for tourism development
- ◆ Proximity to one of world's fastest – growing economies, the S.E. Asia
- ◆ A literate population
- ◆ Rich heritage of handicrafts
- ◆ Unique community spirit and democratic traditional system of local – self government.

Weaknesses

- ◆ Inadequate development of basic developmental infrastructure
- ◆ Geographical isolation and difficult terrain that reduces mobility : high rainfall and recurring flood in the Brahmaputra valley.
- ◆ Lack of capital formation and proper enterprise-climate
- ◆ Slow technology spread
- ◆ Absence of a supporting market structure and adequate institutional finance structure
- ◆ Low level of private sector investment.

2.5. The table below gives a broad idea of the socio-economic profile of the 8 States of the North Eastern Region:

Socio- Economic Profile-NE Region (including Sikkim)

Sl No		Arunach Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total
1.	Area ('000 Sq Km)	83.74	78.44	22.33	22.43	21.08			10.49	262.19
2.	Population (lakh)	10.98	266.56	23.89	23.19	8.89	19.89	5.41	31.99	390.80
3.	Rural Population (lakh)	8.70	232.16	18.18	18.65	4.48	16.36	4.81	26.53	329.87
4.	Average exponential growth rate(percent) per annum	2.33	1.73	2.63	2.62	2.56	4.97	3.31	1.46	-
5.	Density of population (person/sq km)	13	340	107	103	40	120	76	304	-
6.	Sex Ratio (Female per thousand males)	901	932	972	975	938	909	875	950	-
7.	percent of Forest area to geographical Area	61.55	34.45	78.01	42.34	79.30	52.05	82.31	60.01	-
8.	Reporting area for land utilization ('000 ha)	5,504	7,850	2,211	2,241	2,109	1,560	710	1049	23234
9.	Production of total food grains('000 MT)	241	3,895	392	221	129	389	102	558	5927
10.	Per capita consumption of electricity (KWH)	162.3	105.5	72.9	300.8	162.3	61.4	130.8	111.3	-
11.	Road length per 100 Sq Km of Area (Km)	21.93	114.09	51.21	42.65	24.07	126.79	28.45	155.41	-
12.	Road length per 1000 population (Km)	16.69	3.29	4.76	3.98	5.64	10.51	3.36	5.09	-
13.	Average population per bank branch	15,813	21,906	31,021	12,811	11,424	28,821	11,260	17,928	-
14.	Credit deposit ratio (percent)	17.24	30.77	29.06	36.92	38.28	16.93	23.30	25.36	-
15.	Number of Health Centres functioning	485	5819	508	519	42	502	175	621	9049
16.	Persons served per PHC	41535	274765	125307	105352	46424	91553	143556	336098	-
17.	Birth rate (Per thousand)	20	27	17	26	17	NA	22	15	-
18.	Infant Mortality Rate/'000	37	70	14	61	14	NA	34	34	-
19.	Literacy Rate percent	44.71	53.79	59.85	50.75	74.44	57.65	69.68	63.81	-
20.	Students/Teachers Ratio									
	(a)Hr Secondary Schools	29	21	20	23	22	27	19	23	-
	(b) High schools	27	18	19	18	13	20	18	23	-
21.	Population per post office	3,574	6,672	3,444	4,705	2,208	6,142	2,596	4,468	-
22.	Area served by a post office	274.43	19.63	32.13	45.62	52.36	50.93	34.13	14.57	-
23.	Population BPL (percent)	33.47	36.09	28.54	33.87	19.47	32.67	36.55	34.44	-
24.	Per capita NSDP (State income)current price (Rs)	15,785 (01-02)	11,755	12,230	15,983	18,467 (01-02)	17,629 (00-01)	18,647	17,459 (01-02)	-
25.	X Plan outlay/capita (Rs)	35,413	3,119	11,737	12,975	25,872	11,200	30,605	13270	-

Source:- 1. Statistical Abstract of India- 2003, CSO.

2. Basic Statistics of NER-2002, NEC Secretariat.

3. Tenth Plan Document, Planning Commission.

4. Basic Road Statistics of India, Min. of shipping, Road Transport & Highway.

5. Bulletin on Rural Health Statistics in India-2005, Min of HFW.

6. Sikkim Statistical Profile.

7. Eleventh Finance Commission Report.

Chapter-III

PARTICIPATORY DEVELOPMENT PROCESS

“Tell me and I will forget, show me I may not remember. Involve me and I will understand”
– Native American saying.

3.1. The communities inhabiting the North Eastern Region, particularly the tribal communities, have a rich tradition of local self-governance and of village level community managed institutions which for centuries have been acting not only as agents to overlook social order locally but also as catalysts for local development. While some traditional practices may need to be brought in tune with the change in times and democratized, by and large these traditional institutions can provide useful platforms to secure people's participation in the development process. It is true, however, that a lot has to be planned and done in this regard. Such popular participation would ensure that the common men would no longer remain marginalized. If that happens, and there is no reason why it should not be given the required moral and material support, it would be a great achievement in itself releasing a force that would boost development. Empowering village level traditional institutions and involving them in development process would also result in striking improvement in the quality of development, in better distributive justice generally and reduction of rural poverty in particular. In the words of a journalist: “Capacity building, participatory approach, collective decision-making, micro level monitoring system and mid-course correction can be basic guidelines for execution of projects”. Sustainable development depends on the capability to maximize need-based resource utilization and can be best achieved by participation of the grass-root level motivated stakeholders in entire process of resource utilisation - planning, execution, monitoring and evaluation. The recent successful experiment of ***communatisation*** in Nagaland, of involving the Village Development Boards in the entire process from planning to execution and monitoring and entrusting to them management of village level institutions, bears testimony to the success of the concept. The staff started attending the institutions where they were posted and the quality of service improved dramatically. The earlier phenomenon of *teacher-less schools and absentee teachers* is not to be seen in these villages. Local resource generation has risen, intra and inter-village connectivity has improved, power supply has improved and collection of power consumption charges by the village community is almost hundred per cent. Leakages and fund-diversion are resisted. Most of all the satisfaction level among the people has improved. Another successful model is Tripura's 'Gramoday' and 'Nagaroday' concept of democratic decentralization for local development.

3.2 But for these very few exceptions, the prevailing scenario in the sphere of planned development has been that barring individuals who yield power and influence, the people are left largely untouched in the official development planning process. Most of the programmes are not truly related to the special and peculiar needs of the people and area. The plans, in public perception, are Government's Plans and not theirs. Hence the common man remains largely ignorant, disinterested and unconcerned about their success or otherwise. He has little stake in them. Such a situation is paradoxical in NER where the local communities have age-old traditions of participative democracy and self-governance that are still practiced (though confined largely to the close community-group).

3.3 Should the common man feels himself an active stakeholder in the Government's developmental programmes, he would automatically bring into play all the sterling elements of his traditional cultural ethos, that of equity & equality; human dignity & high regard for labour; and his marvelous value-system of honesty & truthfulness; transparency & trust; community above individual & system of unanimous decision by consensus etc. This moral code is, however, practiced largely within the clan/tribe/community: that in relation with *others* (which includes the Government) is generally quite different. His non-involvement makes him apathetic even to leakages, diversions, poor quality of implementation and time and cost-overruns in the Governmental projects. This way the admirable points of the traditional value system are denied to the Government. Of course, the educated youth have started voicing their concern when cases of blatant corruption and non-performance come to their notice and when they see the widening gap between the common man and *creamy layer*. This development calls for quick remedial measures before it explodes into violence. The best way is to make the common man an active stake-holder and that is the basic objective of this Vision exercise.

3.4 A shift in the planning paradigm has thus become the need of the times. Meaningful involvement of the various sections of society in the entire planning process, right from formulation of plans through their implementation to monitoring & evaluation, is the essential component of such a

paradigm shift. The people's initiative has to be harnessed for bringing about such a transformation. The community at the centre, aided by necessary financial and administrative inputs from the Government, should be able to translate the vision of a better North East into reality.

3.5. The political and administrative leadership, as also the academic community will have a crucial role to play in charting out an appropriate path of development embedded in the rich tradition of the region. It must be a natural process, triggered by systematic, catalytic awareness campaign to motivate the common man. Such a frame will indeed be in keeping with the spirit of the Constitution and in tune with the North East tradition.

3.6. While discussing the subject of people's participation in development process or participatory planning it will be pertinent to underline the crucial role the media and the non-governmental bodies can play in motivating the general public. Both the media as well as NGOs are accepted world over as catalysts to change and development. It is more so in a democratic polity as ours. These two agencies are required to be fully involved in the socio-economic development system for three purposes, viz.,

- (a) monitoring of policies and programmes
 - (b) motivation of the common people and generating awareness among them, and
 - (c) promoting full-scale participation of the community in the whole process of planning.
- They can bring about the much-needed attitudinal transformation of the people, specially in the remote rural areas. An appropriate strategy needs to be worked out in this behalf.

3.7. The important fact that emerged out the campaign is that the people in North East want that they should participate in the planning process. The findings of the mass-contact campaign confirm it. The questionnaire given to the people contained, among others, the following question: "Should people be involved in the planning process?" The answer from about 90 percent of the people across the region has been an emphatic 'Yes'. The common man, whether from Tuipang in the southernmost corner of Mizoram or Shamator village of Tuensang in Nagaland, Halhali village in Tripura, Papumpara in Arunachal Pradesh or in the suburbs of Guwahati, Shillong, Imphal and Gangtok or an interior village of these States, --- says the same. However, their response to another question as to whether they are consulted before implementation of development schemes, in about 70 percent cases, except Nagaland where 70 percent replied in affirmative, is negative. This tells a big story.

3.8. The initial exercise for formulation of NER VISION: 2020 has ignited awareness among a large section of people of North east. This is the first step towards participatory development planning. It will be relevant to quote Shri L.Pudait, a retired diplomat from Mizoram, who took active part in the Aizawl workshop: ***"In the history of planning no attempt, as far as I know, has been made to draw up people's wish list with the express purpose of forming it as the basis of planning. In no country did I see any attempt being made like this one NEC is making - NEC has indeed, taken a bold risk in throwing this challenge before us."***

People's expectations

3.9 The responses received from the people have been at two levels, common man at the village or rural level and a relatively elite, urban level. The mass contact campaign conducted through NGO to elicit views and suggestions from the people has thrown up ideas and suggestions emanating from the rural areas of North East which accounts for more than 86 percent of the region's population. This response has been simple, direct and immediate need-related. The vision, therefore, is limited to their immediate concerns. Analysis of these responses has brought into sharp focus the following-issues across-the-board:

- ♦ Developmental planning so far has failed to keep up with the expectations of the people as it has not been able to address their basic needs;
- ♦ Spatial inequity has grown because, while rural poverty has not gone down appreciably, urban areas have seen considerable prosperity;
- ♦ As regards the PRIs and the traditional institutions like village Councils the people have faith in the intrinsic value and usefulness of these institutions.
- ♦ People would like to be involved in planning for their own future;
- ♦ The primary sector and education (HRD) have to be the core of developmental planning. Popular responses underscored this imperative of growth for the North Eastern Region. The other

predominant view is that rural roads, agricultural produce marketing network, rural electrification, micro-level enterprises for income enhancement deserve more focused attention.

- ♦ Village and traditional community institutions are required to be fully involved in local development activities.

Chapter-IV

THE PERSPECTIVE

Priorities & Thrust Areas

4.1 Priorities and thrust areas of the perspective plan for the North East, as a 'People's Plan' reflecting the expectations and hopes of the people have to be dictated obviously by popular wishes and vision. Viewed from that angle the plan priorities and thrust areas of developmental efforts are clear and distinct. The people as representative of the vast majority of the region have, through their responses to the opinion-eliciting question sheets and the large number of seminars/workshops at district, State and University level, outlined the contours of development and identified the priorities and thrust areas that they would like the future planning to be guided by. Reports of the seminars, workshops etc are placed at Annexure-. These broadly include:

- ♦ Primary sector because it concerns basic security;
- ♦ Education (HRD), for it relates to making of man;
- ♦ Primary Health care as concomitant of holistic development;
- ♦ Rural connectivity as it improves mobility of both men and the local produces;
- ♦ Primary Marketing as development stimulant;
- ♦ Value addition to local produce locally for income enhancement.
- ♦ Employment generation including micro-level enterprises as an answer to rural unemployment;

4.2. If the above proposition is accepted, which it must be, being the people's mandate, it would call for a shift in the existing plan priorities. In the current scheme of things power and transport have been receiving the highest priority (nearly 87 percent of NEC's plan fund during the past 33 years has been earmarked for these two sectors). The primary sector should have higher priority. With about 87 percent of the people being dependent, directly or indirectly, on this sector and in a predominantly rural economy, no holistic and real socio-economic development can be achieved with an under-developed agriculture sector. In fact, development of agriculture (and allied activities) holds the key for betterment in other sectors impacting the region's economy. This is an imperative of socio-economic development of North East which the perspective plan has to recognize as the first postulate of planning for North East. Transformed agriculture must be the leading sector in North East.

4.3. Development of the primary sector will lead to shared prosperity. This will also uphold two of the basic principles of democratic planning viz, distributive justice and distributive growth – there will be equity. The secondary sector cannot be developed with a weak primary sector, as highlighted by the absence of a healthy secondary sector in North East despite incentives, exemption, relaxations and publicity through fares, exhibition, melas, etc. The contribution of the tertiary sector (70 percent) – largely employment by government - to the region's GSDP will never come down if the primary sector doesn't develop faster. Similarly, under-developed primary sector would retard expansion of employment opportunities. **It is, therefore, imperative that there is a mid-course review and reversal of plan priorities.**

4.4. The other priority sector is education or human resource development. Emphasis so far has been on literacy but what is actually needed is education. Successive development plans in the North East promoted building of roads, dams, power houses etc. but not the 'man' – human resource development having been relegated to a lower place of priority in our planning process. This distortion has to be corrected if economic growth and productive employment generation are to be achieved. Development, in the real sense, has to come from within. The primary reason for the North East remaining both intellectually and materially somewhat supplicant to outside is that not enough has been done for growth of 'knowledge' which in the 21st century has become as important a factor of development as capital and labour for production. The NE youths must have the required skills to be

marketable in the world of employment. The perspective plan will be measured on the number of job opportunities it helps create by making the educated people of the region efficient enough to take advantage of the market driven economy. Hon'ble Prime Minister Dr. Manmohan Singh, has suggested that development of human resources available in the North Eastern Region needs to be taken up on the highest priority. As a tool for development, education is the key to progress in all sectors at all levels. North East has, no doubt, developed over the years a network of education that is fairly wide and accessible to the majority of its population. Nevertheless, the perspective task of preparing the young people to face the real challenge, economic, social and political, has remained largely unattended. The present education system is not only dissonant with the local cultural ethos and the moral code of the community, it has also created a crisis of growing dissonance between the dream world of the educated youth and the hard reality of dwindling opportunities in life. The standard and type of education do not enable the youths to be able to find proper place in the highly competitive market. The programmes for 'Vocational' schools and vocational stream do not seem to have succeeded much. Therefore, the education system has failed to promote imparting of skills that are useful for gaining economic self-sustenance.

4.5. The education system is largely, almost exclusively, dedicated to serve the tertiary sector and thus continues to serve Lord Macaulay's objective of creating a class of people fit only to serve the government machinery. There is virtually no direction in terms of man-power planning and training. Priority attention has to be paid to this sector in the perspective plan.

4.6. The other area which the average man in the rural area in the region expect more attention to be paid to is rural development which includes more and better rural roads, better primary health care service, extension of electricity to the villages, provision of marketing channel for local produce and promotion of micro level enterprises which would enhance family income.

Out of the region's total population of about 39 million, more than 32 million are rural. But the rural North East has been plagued by endemic unemployment and under-employment. Percentage of population below poverty line in all the States of North East (except Mizoram) is much higher than the national average of 26.10 percent. This possibly explains the disturbing trend of migration from rural to urban areas. (For example, almost half of the total population of Mizoram have drifted from the rural areas to settle in the 21 notified towns). The remedy lies in 'modernising' the rural life and developing the rural economy in such a way that promotes self employment and self reliance. The rural population of North East has to be assured of sustainable and substantial improvement of quality of life.

4.7. Some of the other thrust areas suggested by academicians, experts, economists, social activists, professionals and journalists in course of State level and University level Seminars/Workshops are noted below:

Agriculture

- ◆ A State and region specific land use policy suitable to different States of the region: the Agro-climatic Zonal planning for agriculture sector prepared by the Planning Commission may be considered for adoption.
- ◆ Efficient extension service. The extension service that is available at present is one of the weakest links in agriculture development programme. The Green Revolution made little impact in the North East due to a number of factors, the chief one being lack of proper extension network. The farmers remain un-informed about new methods and new technologies.
- ◆ Institutions of appropriate level for agricultural education in all the States to train local farmers in knowledge and livelihood.
- ◆ A workable policy for improvement of shifting cultivation through material and technological input support to ensure optimal utilization of jhum lands. Such a policy to be evolved in consultation with the farming community.
- ◆ Big thrust on horticulture
- ◆ Dairying as an option to on-land farming and better animal health care services.
- ◆ Intensive as well as extensive development of pisci culture on scientific basis.

Education

- ♦ Making the society in North East fully educated (not merely literate) and creating facilities for all the children to complete primary and elementary levels by 2020; improvement of teaching standard particularly of science and mathematics. Communitisation of primary education etc.
- ♦ Developing vocational education for relevant skill transfer.
- ♦ Comprehensive programme for IT education.

Health

- ♦ Health for all by 2020.
- ♦ Provision of potable drinking water to all households in the region by 2020.

Communication

- ♦ Providing minimum connectivity to all the villages
- ♦ Better linkage to be provided upto sub-Divisional headquarters.
- ♦ Transformation of NER into a major gateway between SE Asia and South-West China and integration of the road networks for better inter-State connectivity.
- ♦ Community Information Centres may be put to better use for transferring technology to rural communities.

Power

- ♦ Maximum exploitation of hydel and thermal potential: small hydel projects for distant hill areas.
- ♦ Electricity to be taken to all villages.

Self Governance

- ♦ Sensitized administration and better-co-ordination.
- ♦ Full implementation of the Right to Information Act.
- ♦ Better delivery system of services.
- ♦ Transparency and accountability.

Population Growth*

Projected population of NER by 2020 is indicated below:

State	Population ('000s)			Density (persons per sq Km)		
	2001	2011	2020	2001	2011	2020
Arunachal Pradesh	10,98	13,94	17,23	13	17	21
Assam	2,66,56	31,6,43	3,69,25	340	403	471
Manipur	23,89	29,88	36,40	107	134	163
Meghalaya	23,19	30,16	38,28	103	134	171
Mizoram	8,89	11,39	14,24	40	54	68
Nagaland	19,89	32,31	50,02	120	195	302
Sikkim	5,41	7,15	9,19	76	101	129
Tripura	31,99	37,06	42,31	304	353	403
Total	3,90,80	4,7,832	5,76,92	149	182	220

* Growth rate as per RGI's projection

Source: *Statistical Abstract*; CSO/NEC Sectt.

Two facts emerge out of the above table:

(i) NE Region's population figure would touch 57 million marks by 2020. This would naturally be one of the basic facts to be taken into consideration while formulating a 15 year perspective plan for the region

(ii) By 2020 Assam, Tripura and, interestingly, Nagaland too would face a new challenge calling for well-thought-out measures to tackle it. Assam's population density might rise to 471 (as against 340 as of now), and that of Tripura to 403 (from present 304) Nagaland would see a phenomenal rise in population density, from 120 to 302. Land area remaining more or less inelastic, dispersal and settlement of population would be a huge problem. It may adversely affect ecology and environment due to possible intrusion of man into virgin land on a larger scale.

Planners, technologists, social scientists and environment scientists may have to try to find workable solutions.

Chapter–V

VISION OF NORTH EAST BY 2020

“The future is not a result of choices among alternative paths, but is one that is created – created first in mind and will, created next in activity.” John Schaar.

5. At the end of the 1st quarter of this century the North Eastern Region should, as envisioned in this vision document, be:

- a. a prosperous part of India contributing, in some measure, to the growth of the national economy --- the geo- economical disadvantages converted into productive opportunities
- b. a contended rural North East with developed primary sector impacting growth in the secondary sector, with minimum connectivity established and health and education for all ensured .
- c. an important hub of trade and commerce in relation to South East Asia with border trade developed and firmly rooted.
- d. an empowered and informed people through skill development and technology intervention.
- e. a community participating and involving in socio-economic planning, projectising, implementing and monitoring.
- f. A peaceful society with level of unemployment drastically brought down

The Goals

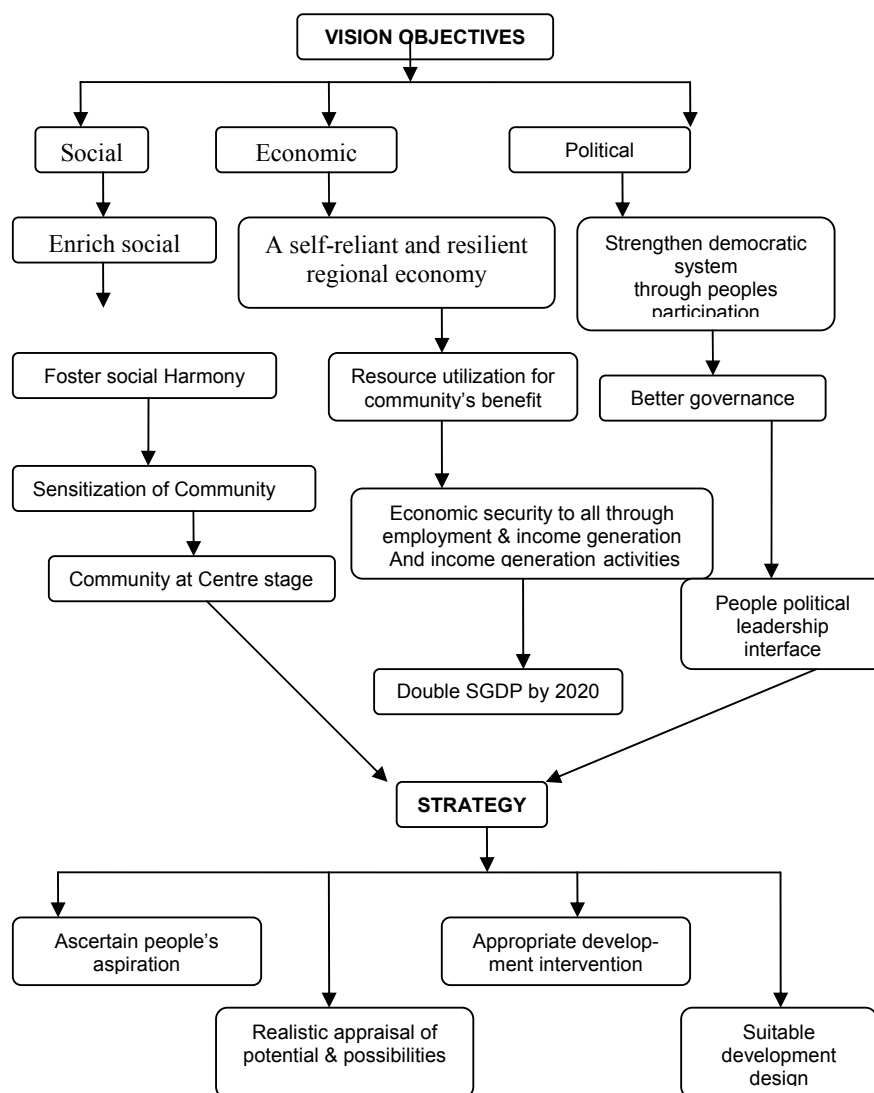
5.1 The goals of the perspective growth plan for the North East are clubbed under two categories ---- the broad and the specific. Broadly, in general terms, the goals are:

- ◆ To make the region self-reliant and its economy self-generating by 2020 so that NER stands out as a vibrant and prosperous part of the country.
- ◆ To give the community its rightful place in the system of economic development and to participate in the development process at all stages--- formulation, execution and monitoring.
- ◆ To evolve a performance oriented system and a new work-culture that would unwind mental-block and inertia.

5.2 The Chief Ministers of North Eastern Region had in a meeting on July 10, 1996 identified the following goals to be achieved within a period of ten years:

- ◆ 100 percent provision of safe drinking water in all rural and urban areas.
- ◆ 100 percent coverage of primary health service facilities in all rural and urban areas
- ◆ Universalization of primary education.
- ◆ Provision of public housing assistance to all shelter less families.
- ◆ Extension of the mid-day meal programme in primary schools to all rural blocks, urban slums and other disadvantaged sections
- ◆ Provision of connectivity to all unconnected villages and habitations
- ◆ Streamlining the Public Distribution System with focus on the poor.

Ten years passed by and these still remain distant goals. These should now be the goals of the 15 year perspective plan to be attained by 2015. The National Common Minimum Programme has set certain targets of crucial importance to North East's socio-economic development too. These may also be taken as goals of the perspective plan.



The strategy

5.4 For any perspective planning, clarity of strategies for attaining the plan objectives is of prime importance because strategy defines the direction of growth and minimise threat of dilution of the vision through adhocism and distortion of priorities. Some important and relevant parameters in this regard have to be noted: (a) the projected population size by the terminal year of the perspective plan, (b) the existing status of the various sectors of the economy and (c) a separate strategy specific to the hills and tribal areas. The launching pad for the perspective plan will have to be prepared on the basis of these parameters.

5.5 The overall strategy for the Action Plan for achieving the goal of development envisioned in the vision document will be:

- ♦ Utilization of the vast potential resources of the region on a sustainable basis;
- ♦ Creation of fresh avenues of employment;
- ♦ Strengthening of traditional institutions making them stake holders in development;

5.6 The biggest handicap in making a reasonably realistic assessment of the sector-wise present status is the non-availability of updated and dependable data. As a result, the physical projections in some sectors made in the document may need modification. It is hoped that up-to-

date data would be available for these sectors well before the formulation of the detailed perspective plan.

Action Plan: Phased out

5.7 An Action Plan on the basis of the three postulations at para 5.4 and the goals and strategies broadly indicated in paras 5.1-5.5 above is being projected sector-wise in 5- year phases in the succeeding notes.

Primary Sector

A. Agriculture

5.8 The bane of socio-economic development in the North East has been the underdeveloped primary sector which does not create surplus to support the secondary sector and has failed to generate demand for goods in the rural areas by not being able to increase disposable income that could enhance purchasing power of some 33 million people. On the other hand, the impact of agricultural growth on farmers' income is evident from the fact that one incremental percentage growth, according to an estimate at the national level, leads to an additional income generation of Rs. 10,000 crores for the farmers. Agriculture has to be transformed into a strong base for growth of the economy. Keeping this in view the Common Minimum Programme (CMP) promises to "give the highest investment, credit and technological priority to the continued growth of agriculture, horticulture, aquaculture, floriculture, afforestation, dairying and agro-processing that will significantly add to the creation of new jobs".

5.9 The current situation in regard to this sector, is not quite encouraging as reflected in the following table about 95 percent of the region's soil is acidic with pH value below 5.6 as shown in the map below. Productivity rate and growth are, therefore, retarded.

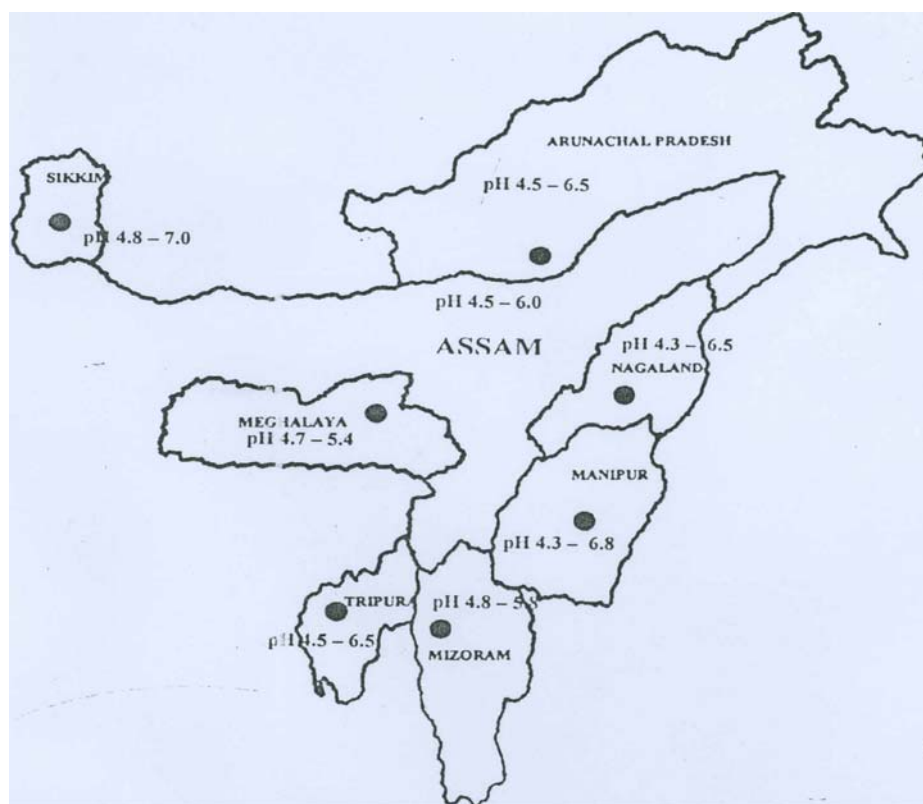
Net Area Sown	Area under Foodgrains	Net Irrigated Area	Yield (Average)	Production	Deficit
39.71 lakh ha Statewise	38.98 lakh ha	8.27 lakh ha	1520 Kg/ha	60 lakh MT	10.05 lakh MT (estimated)

Source: ICAR Research Complexes for NEH Region, Umiam.

5.11 The fifteen year perspective vision for development of the agriculture and allied sector set to three phases of five years each could be as below:

Item	Existing level	Short term (2010)	Medium Term(2015)	Long term(2020)	Remarks
Foodgrains production	60 lakh MT (estimated)	75 lakh MT	87 lakh MT	110 lakh MT	(i) Annual growth rate (projected): 2 percent in first phase; 3 percent in second phase; 4 percent in 3rd phase. (Planning Commission's projected growth rate is 4 percent). (ii) Anticipated foodgrains requirement: 2010 2015 2020 88 98.50 109.6 LMT MT LMT Region is expected to be marginally surplus.
Productivity Rate	1520 kg/ha	1570 kg/ha	1610 kg/ha	1650 kg/ha	Planning Commission projected 1650 kg/ha as national average yield of foodgrains for X plan

Given the back-up services in terms of inputs, extension and appropriate technology application and, most importantly, the required fund including micro-credit, these targets are achievable. Total involvement of the community is the safest guarantee of success.



5.12 The important question, however, is how to achieve the vision goals? The methodology or the work-pattern at the ground level has to be worked out primarily on the basis of the potential that can be gainfully exploited, and availability of basic essential inputs adequately and in time ensured.

- ◆ Both horizontal and vertical development of agriculture: priority on vertical development.
- ◆ 25 percent of valley land area (1.5 million ha) to be brought under double cropping i.e 10 percent by 2010 and 15 percent by 2015 to give an additional production of 1.0 million tones.
- ◆ Provision of HYV seeds, fertilizer, pesticides (organic pesticides to supplement chemical ones); introduction of technology.
- ◆ Breeder seed production for the improved varieties shall be taken up by institute like ICAR, SAU and CAU to facilitate of such seed. Youth groups SHGs shall be constituted for seed production and their involvement in the delivery system.
- ◆ Setting up Regional Warehouse/ Centre for certified seeds, fertilizer, pesticides, agriculture equipment with branches in the States depending on scale of operation, in co-ordination with NSC, NFC, other agencies and the State Governments.
- ◆ Neutralisation of inherent growth- retarding soil characters through application of appropriate chemical/ mineral.
- ◆ Introduction on wider scale the integrated agricultural development model taken up on pilot basis in Tinsukia (Asom) and Bisalgar (Tripura)
- ◆ Increasing present cultivated area (17.78 lakh ha) to about 25 lakh ha by bringing under cultivation about 7.5 lakh ha of cultivable waste and an additional area of about 2 lakh ha as culturable command area that is being developed under the 8 C.A.D projects under execution in NER.
- ◆ Raising irrigation facilities to cover atleast twice the water harvesting area (8.27 lakh ha)- total assessed potential of the region is 42.36 lakh ha.
- ◆ Putting in place in each State an efficient extension service for educating and training farmers by involving motivated NGOs.
- ◆ Introduction of land reforms-States to be persuaded to initiate legislative measures on priority.

- ♦ Promotion of organic farming- linking up with NPOD.

B. Horticulture.

5.13. North Eastern Region particularly the hill areas, has tremendous potential for development of horticulture as a major contributor to the region's economic prosperity. It has to lead the process of diversification of agriculture.

5.14 In view of the climatic and altitudinal advantage and the tradition of fruits and vegetable cultivation among the people it should not be a difficult goal to achieve provided a State-specific package programme with emphasis on selected fruits of package programme with emphasis on selected fruits is taken up. The programme should, among other things, provide for needed inputs, nursery for planting material, processing facilities and marketing network. The following pattern for fruit cultivation is suggested:

5.15 Present position is:

State	Fruits		Vegetables		Total	
	Area (000 ha)	Production (000MT)	Area (000 ha)	Production (000MT)	Area (000 ha)	Production (000MT)
Arunachal Pradesh	41.6	124.9	20.8	83.9	62.4	208.8
Asom	110.8	1,335.1	237.4	2,935.2	348.2	4,270.3
Manipur	26.1	134.0	10.6	66.1	36.7	200.1
Meghalaya	24.0	186.9	35.7	265.9	59.7	452.8
Mizoram	19.0	63.4	6.8	44.1	25.8	107.5
Nagaland	25.0	302.0	26.3	286.0	51.3	588.0
Sikkim	12.3	10.3	14.2	60.0	26.5	70.3
Tripura	28.3	452.1	31.3	353.2	59.6	805.3
Sub-Total (NE)	287.1 (7.16 percent)	2,608.7 (6.06 percent)	383.1 (6.22 percent)	4,094.4 (4.62 percent)	670.2 (6.59)	6,703.1 (5.09)
Total (All India)	4,010.1	43,000.9	6,155.7	88,622.1	10,165.8	1,31,623.0

Source: *National Horticulture Board, GOI (2001-02)*

States	Fruits to be concentrated on
Arunachal Pradesh	Apple, Kiwi fruit, orchid, medicinal and aromatic plants
Asom	Pineapple, Banana, Orange, patchouli.
Manipur	Passion fruit, large cardamom, pineapple
Meghalaya	Strawberry, Ginger, orange floriculture, aromatic plant & turmeric
Mizoram	Passion fruit, Tung oil, Ginger, floriculture.
Nagaland	Passion fruit, Ginger, Geranium, medicinal and aromatic plant
Sikkim	Floriculture, large cardamom, medicinal & aromatic plants
Tripura	Pineapple, Cashewnut, Patchouli

5.16 The Action Plan for horticulture in three phase may be as below:

(a) Fruits.				
Item	Short-term (2010)	Medium-term (2015)	Long-term (2020)	
NER Horticulture Mission	Operationalise NERHM: Draw up plan in 3 Phases and implement Phase I	Implement phase II of Mission	Implement phase III of Mission	Horticulture Mission Document is under preparation to be implemented in three phases covering all aspects from planting to processing & marketing
Area under fruits	4.00 ha (2.87 l ha)	5.00 lha	6.00. lha	About 10 lakh ha can, it is estimated, be brought under horticulture in entire region
Productivity	10.00 t/ha (9.06 t/ha)	11 t/ha	11.50 t/ha	
Production	40.15 lmt (26.00 lmt)	55.00 Lmt	69.00 LMT	

* Figures in brackets indicate present level.

5.17 Creation of Marketing infrastructure has to be an important component of the perspective plan as markets provide the cardinal links so essential for agro-horticulture development. Modern marketing system for horticulture products is almost non-existent in North East. A system that covers post-harvest handling, assembly, storage, transport packing, processing and credit is difficult to establish given the numerous constraints. But it has to be put in place.

Minimum post-harvest facilities as detailed below backed by a private –public participated marketing network have to be provided by 2015.

	2008	2010	2015	Total
Common facility Centre	7 (one in each State except Sikkim)	10 (Arunachal Pradesh-1 Asom-2 Meghalaya-2 Manipur-1 Mizoram-1 Nagaland-1 Sikkim-1 Tripura-1)	13 Arunachal Pradesh-2 Asom-2 Meghalaya-2 Manipur-2 Mizoram-1 Nagaland-2 Sikkim-1 Tripura-1)	30
Collection Centre	7	8	10	25
Secondary Processing Centre	1	1	1	3
Packaging Centre	2	6		8
Cold Storage		8		8
Refrigerated van		8		8
Refill outlets	10	15	15	40

Strategy

- ◆ Raising productivity rate to 11 ton/ha in respect of fruits and 15 t/h in respect of vegetables by 2015-raising annual production to 55 lakh tones and 55 lakh tones respectively.
- ◆ Covering cultivable wasteland under fruits based on suitability available wasteland of this kind is estimated at 7.5 lakh ha of which 50 percent can be brought under fruits by 2015.
- ◆ Setting up 5 nurseries each in Arunachal Pradesh, Meghalaya, Mizoram and Nagaland and two each in Manipur and sikkim for state specific fruits by 2015..
- ◆ Organised farming under National Programme for organic Production (NPOP)
- ◆ Cold storage network in select cluster of villages.
- ◆ Involving private sector to set up about 25 to 30 medium size processing units with 805 exportable products by 2020.

- ◆ Revitalising with adequate financial support the North Eastern Regional Agriculture Marketing Corporation to enable it to act as facilitator for processing and marketing and to open a network of common facility centers throughout the region and a Regional Integrated Agro-horticulture Commercial complex.
- ◆ Promoting floriculture on commercial scale in Arunachal Pradesh, Meghalaya, Mizoram, Nagaland and Sikkim.
- ◆ Most importantly, getting a regional master plan for marketing of agro-horticulture products through the National Institute of Agricultural Marketing, Union Ministry of agriculture.
- ◆ Formation of self help groups(SHG)s of fruit growers their skill upgradation through training and retraining, micro-finance support and formation of Small Farmers Horticulture Estate (SFHE) covering an area of 200-400 ha.

C. Animal Husbandry.

5.19 Animal Husbandry is an important economic activity particularly in the hill areas. Almost all the people in NER being non- vegetarian there exists a vast market for meat and egg. However, production falls for short of demand leading to outflow of huge money on import from outside. Animal husbandry therefore, should be developed into an income and employment generating activity on a sizable scale.

The current scenerio in this sector is as below:

Number, Production and Requirement.

Sl No	Number				Production			Requirement		
	Cattle	Buffaloes	Poultry	Pig	Meat	Milk	Egg	Meat	Milk	Egg
1	115 lakh	8.50 lakh	364.62 lakh	38.17 lakh	0.22 million tonnes	1.06 million tonnes	902 million	0.44 million tonnes	2.14 million tonnes	7027 million

Live stock census-2003

Source: ICAR, Research complex for NEH Region. Umiam.

5.20 It is evident from the table above that the region is deficient by nearly 50 percent in milk and over 87 percent in egg. The net result has been import from outside and subsequent out-go of substantial fund. The anticipated requirement of these items is expected to rise by 2.5 percent annually by 2020.

The perspective Action Plan may be on the lines indicated below:

Sl No		Short-term (2010)	Medium-term (2015)	Long-term (2020)
1.	No. of exotic Cattle	To be raised to 10 percent	To be raised to 15 percent	To be raised to 20 percent
2.	No of exotic pig	To be raised to 40 percent	To be raised to 45 percent	To be raised to 50 percent
3.	Meat production	22350 tonnes	22447 tonnes	22674 tonnes
4.	Milk Production	1.50 million tonnes	1.75 million tonnes	2.00 million tonnes
5.	Egg production	1075 millions	2015 millions	3500 million

Strategy:

- ◆ Professional and scientific development of livestock, piggery and poultry under an area specific programme.
- ◆ Establishment of breeding farms for pig and cattle in each district with tested exotic and selected indigenous breed for production of cross breed for distribution at the block level.
- ◆ Equipping each block with infrastructure for producing cross bred.
- ◆ Establishment of at least one abattoir in each block.
- ◆ Formation of farmers groups for service delivery.
- ◆ Development of stock farms at state level and breeding, animal supply farms at block with improved efficiency level.
- ◆ Promotion of feed industry, feed from local resources.

- ♦ Provision of simple and fast health care at village level.
- ♦ Adequate vaccination covers and disease diagnostic services.
- ♦ Training of farmer groups, selected NGOs for modern management of diary animals.
- ♦ Programme to aim at creation of additional 30,000 direct and 1 lakh indirect employment.

D. Fishery

5.21 Fishery sector occupies a unique place in the socio-economic life of the people of NER it being an income and employment generating activity at primary level. At the same time, in terms of water area and climate, the region has tremendous potential for growth of pisciculture. The present status of inland fishery in the region is as follow:-

River (Km)	Reservoirs (Ha)	Beel, lake & Swamps(Ha)	Ponds/mini barrages (Ha)	Paddycum fish culture (Ha)	Forest fishery (Ha)	Annual Production (Lakh MT)
20,050	1,43,792	146,740	40,809	3,40,100	5,017	2.33

Source: Seminar on *Development of Fisheries in NE Region* on 23rd & 24th September, 2005 Agartala.

5.22 The freshwater species in the region are about 274 which constitute about 34 percent of the country's total stock. Asom and Tripura produce the bulk of fish. The present per capita consumption of fish is around 11Kg against the desired consumption level of 31 Kg as recommended by the Nutrition Advisory Committee on Human Nutrition. On this basis the region is deficient by 55 percent of fish requirements which is met by procuring fish from outside the region at a huge cost of about Rs 16,00 crores per annum.

Action Plan **Targeted Area and Production**

		2010		2015		2020	
	States	Area to be utilized (in ha)	Production target (in MT)	Area to be utilized (in ha)	Production target (in MT)	Area to be utilized (in ha)	Production target (in MT)
1.	Arunachal Pradesh	7870	8238	15843	14547	33314	27746
2.	Asom	268550	417750	460238	596938	855534	914359
3.	Manipur	24110	33300	38048	48075	65357	74606
4.	Meghalaya	12715	13275	23799	21794	47535	38942
5.	Mizoram	5320	8988	10060	14187	20248	24377
6.	Nagaland	11330	17120	21423	27525	43113	48188
7.	Tripura	27052	39275	46667	56019	87251	85605
8.	Sikkim	435	410	544	513	680	641
9.	North East	357382	538355	616619.5	779596.25	1153031.375	1214463.438

Projected Production and per capita availability of Fish

Sl No	States	2010		2015		2020	
		Production target of fish (MT)	Per Capita available (Kg/head/year)	Production target of fish (MT)	Per Capita available (Kg/head/year)	Production target of fish (MT)	Per Capita available (Kg/head/year)
1	2	3	4	6	7	9	10
1.	Arunachal Pradesh	8238	6	14547	10	27746	17
2.	Asom	417750	13	596938	17	914359	23
3.	Manipur	33300	12	48075	15	74606	21
4.	Meghalaya	13275	5	21794	7	38942	12
5.	Mizoram	8988	8	14187	12	24377	19
6.	Nagaland	17120	7	27525	10	48188	17
7.	Sikkim	410	1	513	1	641	1
8.	Tripura	39275	10	56019	13	85605	18
9.	North East	538355	11	779596.3	15	1214463	21

Post-harvest Facilities to be credited

	2010	2015	2020
	Nos	Nos	Nos
Cold Storage	28	21	20
Insulated Van	68	37	25
New market shed and upgrading existing shed	192	40	40
Modern fish marketing center	19	22	24

Strategy

- ◆ Replenishment of stock through appropriate technology.
- ◆ Maximum area of reservoir (1.44 lakh ha) and unregistered beel and swamps to be utilized for fishiery.
- ◆ Promoting the culture of mahseer for achieving the twin objectives of in situ conservation as well as enhancing production.
- ◆ Exploitation of the riverine stretch (of about 2000 Km)for fishery.
- ◆ Strengthen the embankments to protect the beels from flood.
- ◆ Establishment of eco hatcheries at district level for self sufficiency in quality fish seeds .
- ◆ Demonstration and training on carp culture in all fish growing parts of the region.
- ◆ Establishment of fish producers Co-operative society/farmers club for high production and marketing.
- ◆ Horizontal expansion of area and identification of suitable species for paddy-cum-fish culture in a partnership mode.
- ◆ Popularizing raised and sunken bed technology to utilize marshy land areas for paddy-cum-fish culture.
- ◆ Reservoir development – long term lease of reservoirs and their utilization policy.
- ◆ Doubling the area under forest fishery by 2020.
- ◆ Raising productivity level of fish ponds from existing 600 kg/ha/year to about 1500 Kgs/ha/yr by 2020.(National average is 2000 Kg/ha/yr).

E. Water Management.

5.23 The North Eastern Region contains 33 percent of water resources of the country. A vision for comprehensive development of water has become most essential to facilitate formulation of action plan with required funds mobilized and institutional mechanism put in place for realizing that vision. North East's two major river basins viz Brahmaputra & Barak and few other smaller rivers carry water volume of 6478 BCM which is the highest among all the regions of the country. The ground water resource is assessed at 35 BCM. The region receives an annual rainfall ranging from 2480 mm to 6350 mm. The annual water availability per capita and per

hectare is 16,500 cum and 44,180 cum respectively, which is the highest in the country. However, the rate of harnessing of this huge nature's gift has been indeed low. For instance, only 22 percent of the cultivable land in the region are irrigated (it is 78 percent in Krishna river basin and 53.4 percent in Ganga basin). The total live storage created is 11 BCM (375 BCM in Krishna river and 378 BCM in Ganga basin). For propelling growth in primary sector the water resources need to be fully harnessed for providing proper moisture regime for a variety of agricultural, horticultural and plantation crops. In view of high rainfall and fragile top soil, an integrated water and soil management programme assumes great importance. Therefore, these need priority attention and should be important components of the perspective plan.

Action Plan

Sl No		2010	2015	2020	Remarks
1.	Exploitation of Irrigation potential	33 percent (16.50 lha)	44 percent (23.60 lha)	80 percent (42 lha)	Cumulative 42 lakh ha
2.	Creation of live storage	15 BCM	20 BCM	25 BCM	Cumulative 66 BCM
3.	Water harvesting	1 million CM	2.5 million CM	4 million CM	Rainwater harvesting: check down water-tanks for run off along hill slopes etc.
4.	Ground Water Development	4 BCM	6.5 BCM	7 BCM	Total exploitable balance 21.8 BCM
5.	Addl. CADWM Projects	2 nos	2 nos	4 nos	Existing 8 nos covering 1.8 lakh ha to be completed by 2010.
6.	Integrated land & water resource management in inter –State river basin	Detailed survey, social impact and economic studies for 8 projects to be completed: taken up along Arunachal – assam and Meghalaya-Assam border.	3 projects to be taken up along Nagaland-Assam border, manipur – Mizoram border and Mizoram-assam border	3 projects to be taken up along Tripura-Mizoram border, Mizoram-Manipur border and Arunachal assam border	By 2020 about 2000 ha will be covered.

Strategy

- ◆ Coverage of all degraded, rainfed wasteland under watershed project.
- ◆ Promotion of deep irrigation.
- ◆ Formulation of District water management Plans.
- ◆ Water policy by each state.
- ◆ Twenty first century is said to be the century of fresh water. There will be people and nation ready to pay for fresh water they need. The North Eastern Region with such huge water resources may become a source for world thirsty of fresh water.

F. Human Resources Development

5.24 In terms of number of Institutions and enrolment, the present educational scenerio is not quite bad. Following table gives the relevant statistics: What, however, is urgently needed is improvement in the system including the quality of education at various levels. NEC has already taken a bold initiative in this regard by constituting the North Eastern Regional Educational Council (details at Annexure -III) for holistic development of education in the region.

Present Status of Education in NER

Category	Unit	Primary	Middle	Secondary	Higher Secondary	Higher education
2	3	4	5	6	7	8
Schools	Number	44,896	11,780	5,968	1,751	-
Enrolment						
Total	'000s	3,536	1,526	1,502	941	
Boys	'000s	1,820	789	757	536	
Girls	'000s	1,716	737	745	405	
Trained teachers	Percent	58	31	37	42	
Dropped out						
Total	Percent	68	2	37		
Boys	Percent	57	2	29		-
Girls	Percent	57	-	46		-
Student teacher ratio	Number	1:26	1:16	1:19	1:21	
University	Number	-	-	-	-	12 + (1. IIT, NERIST)
General colleges (Arts, Science, Commerce, Law)	Number	-	-	-	-	521
Agriculture & Allied Activities	Number	-	-	-	-	6
Medical Education(including Dental, Nursing, Pharmacy, Para-Medical)	Number	-	-	-	-	10
Engineering Colleges	Number	-	-	-	-	5
Teachers Training college	Number	-	-	-	-	46

Source: 1.NEDFi Data Bank quarterly. Volume 3, Issue III

2.Statistical Abstract of India 2003

Action Plan

(a) Education

- ◆ Being one of the most productive investment for future development, atleast 6 percent of GSDP to be earmarked for Human Resources Development.
- ◆ Universalization of primary education.
- ◆ Creation of minimum infrastructure for education at primary to secondary levels: Over 13400 Kachha, tent and open space schooling accomadation to be improved /built.
- ◆ Transform North Eastern Regional Education Council, into permanent regional regulatory body like a regional Board of Education (for all levels)to plan for comprehensive improvement of the system from 'E' to 'U'(Elementary to University) so as to evolve a system of education having a definite link with the needs of the region and its economy. NEREC is separately drafting a 15 year perspective plan for comprehensive and integrated development of education.
- ◆ Total management of primary education by the local community.
- ◆ Establish at least one model institution at primary level and one at secondary level for each Block like the Kothari Commissions' 'Common School'; one model college at each district and one Centre of excellence in one university in each State by 2015.
- ◆ Training of teachers on crash basis and improvement of standard of education, particularly in science and mathematics: 42 percent of teachers at primary level. 69 percent in middle level, 63 percent in secondary level and 58 percent in higher secondary level to be trained. A crash training programme with following targets to be taken up from 2007.

	2010	2015	2020
Primary	42 percent	-	100 percent
Middle	30 percent	39 percent	100 percent
Secondary	30 percent	33 percent	100 percent
Higher Secondary	30 percent	28 percent	100 percent

- ◆ Taking up of a comprehensive programme for development of vocational education designed to meet the special needs of the region.
- ◆ About 1.25 lakh primary teachers to be trained in general teaching methods with special emphasis on teaching of Science & Maths particularly in the hill areas----50,000 by 2007 and 75,000 by

2008. Programme will be implemented by the SCERTs will fund to be provided by NEC and training module to be prepared by NCERT.

- ♦ To ensure equity for quality education at the secondary level, one existing secondary school in each Block be developed into a Centre of Excellence-(100 by 2010, 184 by 2015 and 200 by 2020 there are 484 Blocks). Similarly, a college of Excellence be developed for each district 11 by 2010, 25 by 2015 and 49 by 2020--- there being 85 Districts in the region.
- ♦ To promote in a big way distance education. Consortium for Educational Communication, Delhi has been persuaded to (a) provide ROT (Receive Only Terminus) at 50 selected colleges in the region, (b) DTH connections to 400 selected colleges and (c) TEF (Training End Facilities) to 9 Universities. All the above facilities to be made available by 2008. Besides CEC's capacity building programme for teachers will be introduced from 2007-08

(b) Entrepreneurial Development:

5.25 It has assumed greater importance in view of the changing scenario in terms of fast economic and social changes including opening of border trade.

Action Plan.

2010	2015	2020
Identification of areas to implement project specific Comprehensive Entrepreneurship Development Programme (CEDP) providing handholding services to Small and Medium Enterprises in North Eastern Region.	Development of cluster in all States of the North East for training of local entrepreneurs relating to enterprises with economic prospect and assured local resources.	Development of High End Entrepreneurs training programme.
A Regional Business Facilitation and Development (BFDC) to be set up	Development of incubation centres across the region to promote potential sectors and equip local entrepreneurs, commercialize them through enterprise.	Development of High End Entrepreneurs training programme.
	Indian Institute of Entrepreneurship, Guwahati to develop networking internationally for development of small and medium enterprises through exchange and transfer of ideas of best management practices.	Setting up of centres of Indian Institute of Entrepreneurship (IIE) at all State capitals

(c) Sports, Culture, Youth Affairs

5.26 Each of the 200 odd ethnic groups in NER has its own indigenous games and sports and traditional culture which have to be promoted and preserved. The people all over the region, particularly the youths, are naturally sports and music loving and they have talents too. Promotion of these activities on a wider scale would involve the mind and body of the youth in creative pursuits and, thus, act as insulator against undesirable pursuits. The region has rich tradition of folk culture---titling folk songs and music and captivating colorful dances. This national treasure has to be preserved.

Action Plan: Sports.

- ♦ Implement the recommendations of the Task Force for Development and Promotion of Sports, Youth Affairs and Culture in NER constituted by Ministry of HRD on priority.

2010	2015	2020
One upgraded Sports training Centre at each State capital with sport-specific facilities	One Special Area Games Centre with sports complex of each district (85).	Playing facilities in each of the 484 Blocks one outdoor stadium in each district.
Most modern sport-specific Coaching Centre at Kohima and Shillong with hostel facilities	Similar Centres at Aizawl, Itanagar, Agartala and Gangtok	Rural Sports Promotion Centres at each Sub-Divisional headquarters (234)

State-specific sports and games to be promoted:

Arunachal Pradesh	Asom	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
Football Track Events, Karate Gymnastics	Swimming Volleyball Football Karate Table Tennis	Hockey Football Wrestling Karate Weightlifting shooting & boxing	Football Archery Karate Gymnastics	Football wrestling weightlifting Boxing Taewondo	Football Judo Athletics Javelin Throw	Football Athletics Boxing	Kabaddi Judo Swimming

- ♦ Set up Regional Coaching Institute on the line of the Patiala National Institute of Sports.
- ♦ Introduce 'Talent Hunt' scheme in entire region
- ♦ Annual regional level competitions in select games and sports.
- ♦ Regional level Biennial Rural Sports Festival

Action Plan: Youth welfare

- ♦ Setting up of one State-level Youth centre at each State capital (8) by 2020.
- ♦ One youth Hostel at each district headquarters (85) by 2020.
- ♦ Recreational Centres at all the 484 Block headquarters by 2020.
- ♦ NE Regional Advantage Centre in Arunachal Pradesh providing mountaineering, ice skiing with sub-centres at Aizawl, Kohima, and Gangtok (for rock climbing and tracking).
- ♦ Annual regional- level Youth Festival (inter-University Youth Festival) and inter-State Youth exchange programme.

Action Plan: Culture

- ♦ Setting up a Regional Documentation for traditional folk and performing arts and State-level Centres at each State capital
- ♦ Construction of a community cultural centre at district headquarters.
- ♦ Inter-State cultural exchange programme.
- ♦ Regional level annual traditional cultural festival.
- ♦ Promotion of NE Regional Culture internationally through ICCR.

G. HEALTH

5.27 The Alma-Ata Declaration (WHO& UNICEF:1978) has identified public health as the sole means to achieve WHO goal of 'Health For All'. It is true of NE Region in particular.

The Present status:

States	Number of hospital	Number of Dispensaries	Doctor population Ratio	Public Health Centre (PHC) (2004)		
				PHCs Func-tioning	Doctors at PHC	Average Rural Area coved (Sq.Km)
Arunachal Pradesh	15 (31.3.02)	NA	1:3755 (31.12.90)	78	78	NA
Asom	268(1.1.91)	325(1.1.91)	1:11980 (1.1.99)	610	610	127.01
Manipur	19 (1.1.01)	42(1.1.01)	1:2820 (31.12.91)	72	95	308.10
Meghalaya	7 (31.3.00)	18(31.3.00)	1:5581 (31.12.90)	95	113	233.68
Mizoram	11 (31.3.01)	NA	1:10360 (1.1.99)	57	47	359.55
Nagaland	17 (31.3.00)	35 (31.3.00)	1:6292 (31.12.91)	87	53	188.87
Sikkim	1(30.3.03)	-	1:3019 (30.3.03)	24	48	NA
Tripura	27(1.1.01)	NA	1:4693 (1.1.99)	73	161	141.73
All India Average						

NB: Reference year is in bracket. NA- Not available.

Source: 1. *Statistical Abstract of India*, 2003

2. *Rural Health Statistics in India* – 2005, Ministry of Health & Family Welfare.

HIV/AIDS concern.

5.28 The situation in regard to HIV/AIDS in the region has been alarming. Because of its proximity to the 'Golden Triangle' volume of drugs smuggled into the region, particularly through Manipur-Myanmar border, is high resulting in the spread of HIV (among the injecting drug users (IDU). Following figures collected from Aids Prevention Society, Assam tell a disturbing story.

(figure for 2005)

State	Total No Screened	HIV+No (Sero+ve/1000)	Aids cases
Arunachal Pradesh	-	-	-
Asom	50,779	1126 (19.43)	372
Manipur	1,20,213	19,033	2,998
Meghalaya	17,664	73	10
Mizoram	18,792	1,019	100
Nagaland	31,391	1,903	718
Sikkim	7,800	34	8
Tripura	-	278	8

Source: *AIDS Prevention society*, Asom.

Action Plan:

- ◆ Communitization of the primary health care system.
- ◆ A special programme for health care including trained 'bare-foot doctors' for rural areas may be put in place
- ◆ Immunization programme to be implemented in the remote and hilly areas of the region by using helicopters to ferry men and material as a special measure
- ◆ Integrated programme for water, sanitation and health to be taken up.
- ◆ Measures for purification of drinking water, as water in most part of the region contains arsenic and fluoride elements injurious to health). Less expensive and simple technologies for defluoridation evolved by various technical institutions like Freundlich Isothoram technology by College of Engineering, Pune to be widely applied.
- ◆ Delivery system under the Primary Health Care Programme to be strengthened and made more efficient.
- ◆ Provision of health service in flood affected/river side population through well equipped boats.
- ◆ Establishment of a Regional Medical University to ensure umbrella coverage of all Medical and Para Medical Institutions and standardization of curricula, examination, etc
- ◆ Setting up of a Regional Institute of Child and Women Health Care
- ◆ The National health policy to be modified to fit into the North Eastern Region's socio economic condition and to be oriented to the poor and vulnerable group
- ◆ Promotion of traditional Indian and holistic system of medicine that includes yoga on a pilot project basis
- ◆ Introduction of innovative health service delivery and training for the endemic area involving NGOs
- ◆ Setting up of one Medical College in each of the State where there is none
- ◆ Raise the doctor population ratio to the present national level.
- ◆ Setting up of 3 more Nursing Colleges in the region
- ◆ One Para-Medical Institute for each state providing for new disciplines in view of technological changes
- ◆ Set up one fully equipped Cancer Hospital in Mizoram.
- ◆ Health Education on massive scale through peripheral Health Workers and schools.
- ◆ Increase health sector budget upto 6 percent of GSDP
- ◆ 80 percent institutional delivery of health services and 100 percent delivery by trained personnel by 2020.
- ◆ Treatment options for HIV/AIDS infection are expensive: some ways have to be evolved to provide affordable treatment which is a necessity
- ◆ Successful prevention efforts to be made to reduce newer infections and thus slow down the epidemic. Also care and support to people who are already infected in the North East have to be provided. HIV treatment and prevention cannot be separated.
- ◆ By 2010 information and means to avoid HIV infection should be available to all citizens through accelerated efforts involving civil society, people living with HIV/AIDS, States Governemnts and multilateral institutions.

- ◆ A credible and inclusive regional AIDS prevention and control plan as part of the national plan may be drawn up by 2007.
- ◆ Risk reduction among HIV positive injecting drug users both for injecting & sex should be highlighted. Adequate support services & enabling environment have to be created urgently
- ◆ In absence of an effective vaccine or life saving drugs, health education forms the major component of the AIDS control programme. A programme for extensive education of the high-risk groups as well as the general public is to be taken up as the only means available to tackle the problem and reduce chances of further spread of the disease. Infrastructure for development of health education and dissemination of knowledge through mass media needs to be developed at the earliest. Counselling centres for HIV infected persons and their associates be established in all States.
- ◆ De-addiction centres to be set up as widely as possible as a secondary preventive measure.

H. Rural Development

Action Plan

- ◆ Road connectivity to all the 42,251 villages (about 28,000 Km of new rural roads to be constructed) by 2020 providing link with (a) nearest primary markets and (b) nearest basic social service centres.
- ◆ Electricity to remaining 11,376 villages and 45 lakh households by 2020.
- ◆ Providing drinking water facilities to the uncovered 46.54 percent rural households in the region by 2015
- ◆ Promoting agro-horti based and service related micro-enterprises and value addition to local resources at village level.
- ◆ Developing a pool of dedicated and focused SHGs and NGOs for project implementation with micro-credit. The service of the fairly good number of motivated unemployed youths can be used as catalyst groups.
- ◆ Setting up a minimum of 5 Village Resources Centres in each State of the region with satellite connectivity to provide regular information/advice on agriculture, education, health, weather etc to the local community in a cluster of villages. ISRO, Department of Space and NEC may jointly sponsor this scheme to facilitate socio-economic development of rural North East.
- ◆ Adoption of cluster approach for development of both farm and non-farm rural enterprises. Rural clusters will help reduce intra-regional disparities and generate employment. These, clusters may be involved in all the 27 subjects earmarked for PRIs like social forestry, khadi and village industries, rural electrification, medicinal and aromatic plants non-formal education, health and sanitation, maintenance of community asset's etc. The Chinese experience will be worth emulation where rural clusters have helped GDP grow by 10 percent and reduce rural poverty by 28 percent over a period of 25 years. Action plan may include opening at least 2 rural clusters in each of the 484 blocks in the region by 2020.
- ◆ Establish, as suggested by the National Commission on Enterprises in Unorganized/Informal Sector, Growth Poles based on economy of inter- dependence and providing urban amenities in rural areas, expanding production and employment in unorganized enterprises and spreading industrial culture to rural areas through small and micro enterprises, in two phases:

2015-8 Growth Poles-one in each State

2020-8 more Growth Poles bringing the total to 16 ie 2 in each State.

Statewise identified activities under the proposed Growth Poles may be:

<u>Arunachal Pradesh</u>	: Fruit and medicinal and aromatic plant processing.
<u>Asom</u>	: Textile and sericulture & handloom.
<u>Manipur</u>	: Fruit processing and handloom
<u>Meghalaya</u>	: Ginger processing and straw berry cultivation.
<u>Mizoram</u>	: Fruit processing and handloom bamboo based units.
<u>Nagaland</u>	: Agro industries and cane and bamboo based units.
<u>Sikkim</u>	: Large cardamom and orchid culture
<u>Tripura</u>	: Rubber production and cane and bamboo based handicrafts.

- ◆ Promote appropriate rural technology (RRL has developed a number of simple technologies in utility item production)
- ◆ Set up a Regional Centre for Rural Studies to bring out new professionals tuned to the process of social and economic transformation of an agrarian society.
- ◆ Evolve a separate development model for rural North East. While a perfect model may be elusive, some projects and interventions are beginning to unfold patterns of true people's developmental models having characteristics of Equity and Sustainability. North Eastern Region Community Resource Management (NERCRMP) is emerging as one such model. The other model is the VDB led integrated rural development in Nagaland. A suitable mix of these two models would provide an answer to our search for a development model which will be in tune with North East's tradition and ensure growth with total people involvement. The system would guarantee flow of fund /resource investment to the grassroot and the poor as also its need-based utilization with maximum transparency and accountability. The projects will be output- oriented and activities generally sustainable in the post-project stage. The pattern will combine the strength of government,
- ◆ NGO, and the local community. It will promote growth of CBOs (community based organizations) like SHGs, NRMGs (Natural Resource Management Groups) and, finally, purposeful income generating activities. A suggested model is placed at Annexure IV. The model may be put into action on pilot basis in 4 identified districts in Asom and 2 each in the other 7 States in consultation with the State Governments and people's groups. Formulation of the detailed project and putting in place the required support services will take about two years. The project may, therefore, be taken up for implementation by 2008. First review may be made in 2010 and monitoring and evaluation by 2012. Thereafter, it is expected to be self-sustaining. Investment requirement will be quite substantial for which Planning Commission may give special central assistance. External aid from agencies like UNIDO, Indo-German Development agency, AUSAID, CIDA, ICEF, ADB etc. may also be sourced.

I. INFRASTRUCTURE

(a). Transport & Communication

5.29 One of the biggest constraints for development of North-Eastern Region has been inadequate and under-developed infrastructure facilities, particularly in terms of roads, railways and power. The total road length in the North-Eastern Region is 173261 Kms. which is 7.15 percent of country's total road length. The average road length per 100 sq.km. area is just about 66 km. For each thousand population road length available is little over 4.43 km.

State/Region	Total Road Length (Km)	Road length per 100 sq km of Area (Km)	Road length per lakh population (Km)
Arunachal Pradesh	18,365	21.93	1669.54
Asom	89,486	114.09	328.99
Manipur	11,434	51.21	398.54
Meghalaya	9,565	42.65	398.54
Mizoram	5,075	24.07	563.89
Nagaland	21,021	126.79	1051.05
Sikkim	2019	28.45	336.50
Tripura	16,296	155.41	509.25
NER	1,73,261	66.08	443.35
All India	24,23,922	74.73	234.58

Source: Basic Road statistics of India, Ministry of Shipping, Road

Transport & Highways.

5.30 The railway network is also equally inadequate and underdeveloped. The British had laid the railway line primarily to serve their colonial interests and not to sub-serve social or economic interests of the region. The total length of railway track in the entire region is 2592.70 km. Almost the entire broad gauge network is in Asom only. Arunachal Pradesh, Manipur and Mizoram has only a nominal rail connection. Meghalaya and Sikkim does not have any rail track.

State	Length of rail line (Km)		
	BG	MG	Total
Arunachal Pradesh	-	1.28	1.28
Asom	1227.7	1278.6	2506.30
Manipur	-	1.35	1.35
Meghalaya	-	-	-
Mizoram	-	1.50	1.50
Nagaland	11.13	1.72	12.85
Sikkim	-	-	-
Tripura	-	69.42	69.42

Source: *NF Railways*, Guwahati

5.31 The biggest water ways on Brahmaputra and smaller ones on river Kolodyne in Mizoram and Barak Valley of Asom became non-functional after the partition.

5.32 Similarly, air connectivity also has been poor. Three of the State capitals do not have an airport. The feeder service from Delhi/Kolkata/Guwahati to the other State capitals (except Tripura and Manipur) has been totally unsatisfactory. All these factors had reduced/restricted the level of connectivity of this region.

5.33 Main objective of the perspective road network development programme should be-(a) upgrade level of inter- State connectivity, (b) support economic and defense needs, (c) connect potential growth Centres, (d) standard road connectivity to border trade points and (e) improve regional roads by providing carriage way width of more than 7 meter (as of now only 1 percent of such roads have this width).

Action Plan.

- ♦ The total length of district roads to increase from present 6900 Km to about 1 lakh Km. by 2020.
- ♦ Road density of 66.07 km. per 100 sq.km. may be raised to the present national average of 75 km.
- ♦ Upgradation of all National Highways in the region to 4 lane.
- ♦ The Central Master Plan for road connectivity in the region may be executed at a faster pace and completed by 2015.
- ♦ Connecting all Sub-Divisional Headquarters with all –weather roads by 2020.
- ♦ A Research Institute to evolve technological solutions to maintenance of road in erosion – prone hill areas may be considered for the North East.
- ♦ Maintenance of roads has been a serious problem due to fund constraints. A dedicated fund – Regional Road Maintenance Fund with substantial revolving capital is required to be created for maintenance of such assets which would otherwise go waste.
- ♦ To provide better air connectivity, 9 old air strips in different parts of the region should be developed and new airport constructed at Itanagar, Kohima, Tuensang, Gangtok, Lunglieh, Tura, Belomia and Churachandpur . Introduction of a designated air service with its base of Guwahati.
- ♦ Master Plan for flood moderation in the region prepared by the Brahmaputra Board as short term measure should be implemented on highest priority.
- ♦ All projects for construction of about 262 Km of new Railway tracks should be completed by 2010.
- ♦ A new Jan Shatabdi from Guwahati to New Jalpaiguri be introduced to provide rail connectivity to Sikkim and Bhutan border. This will assume importance once regular border trade develops. Also the Vaishali express be extended from Barauni to Guwahati which will promote religious tourism both ways.
- ♦ All the State capitals to be connected by BG rail line by 2020.
- ♦ Combined efforts by the Brahmaputra Board, Central Water Commission and Inland Water Authority of India to make the Ganga-Brahmaputra-Barak-Meghna an integrated natural water way by 2020.

Note: Centre should accept the responsibility of improving regional and State highways and necessary Central fund made available. The regional or State Plans must not be inflated with huge outlays on this count.

(b) Power

5.34 Power potential of Northeastern Region is indicated below:

Hydel Power

States	Identified Capacity	Capacity Developed	Capacity under construction	Capacity yet to be developed. [2-(3+4)]	(In MW)
					Per capita electricity consumption (Kwh)
Arunachal Pradesh	50,328	416	2600	47,313	162.5
Asom	680	275	100	305	105.5
Manipur	1,784	105	90	1,589	72.9
Meghalaya	2,394	185	84	2,125	300.8
Mizoram	2,196	-	60	2,136	162.3
Nagaland	1,574	99	-	1,475	61.4
Sikkim	4,286	84	510	3,692	130.8
Tripura	15	15	-	-	
Total	63,257	1,179	3,444	58,634	(all -India 373 Kwh)

Source:- 1. Reassessment Study by *Central Electricity Authority*.

2. *Statistical Abstract of India* –2003.

Action plan.

- ◆ Harnessing at least 40 percent of the hydel potential and 15 percent of thermal potential by 2020
- ◆ Taking up small and mini hydel projects up to 1 MW capacity to exploit the entire small hydel potential of 2112 MW by 2020 (only 267 MW has so far been generated): adopt latest UNIDO assisted small hydel technology.
- ◆ Reverse the trend of negative growth in power sector (growth rate has gone down from 8.75 percent to 8.21 percent between 1997-98 and 2001-02)
- ◆ 16th Electricity Power Survey Report puts peak load power demand for the region at about 2800 MW by 2011-12. Power development programme to aim at generation to that extent.
- ◆ Electrification of all the villages of the region by 2020.
- ◆ Ensure grid management and economic power dispatch reducing transmission loss and minimizing Grid failure

Note: All investments for Power sector should be on central account and the Regional or the State Plans should not be burdened with such huge financial liability.

J. INDUSTRY

5.35 Geo-socio-economic and historical factors have not supported growth of large or medium industries in the region. There are only about 181 large and medium industries with more than 70 percent confined to Asom. Number of SSI units is 25,680 which is about 3 percent of total units in the country. But average productivity is low (these units produce only 1.78 percent of total goods and services produced in SSI sector in the country).

5.36 The growth of industries, both large, medium and small has been uneven. Number of functioning large and medium industries in the NER has been negligible.

Table: large and medium industries in NER.(As in March 2000).

State	No.of units	Percentage
Arunachal Pradesh	17	9.39
Asom	129	71.27
Manipur	12	6.63
Meghalaya	10	5.52
Mizoram	1	0.55
Nagaland	7	3.87
Sikkim	3 (As on 31-03-04)	1.66
Tripura	2	1.10
Total	181	100.00

Source: *Basic Statistics of NER 2002(NEC)*
Sikkim: A Statistical Profile -2004-05

5.37 KVI plays an important role in providing employment opportunities in rural areas and thereby strengthening the rural economy. (Statewise production and employment in the KVI sector during 2001-02 & 2003-03 is given below).

Sl No	State	Production(Rs lakhs)		Employment (nos in lakhs)	
		2001-02	2002-03	2001-02	2002-03
1.	Arunachal Pradesh	217.13	317.88	0.01	0.01
2.	Asom	5443.07	6074.74	1.21	1.22
3.	Manipur	5512.45	59897.52	0.58	0.62
4.	Meghalaya	3330.60	3100.46	0.23	0.25
5.	Mizoram	3150.80	3769.44	0.20	0.23
6.	Nagaland	4229.41	4583.94	0.28	0.30
7.	Tripura	1825.47	2235.29	0.28	0.28
8.	Sikkim	268.14	373.51	0.06	0.06
Total NER		23977.07	26452.78	2.85	2.97
All India		755721.00	856937.00	62.64	66.45

Source: *Annual Report 2003-04*, Ministry of Agro & Rural Industries.

Mineral Resources of NER are substantial as will be seen from the following figures:
(In Million Tonnes)

	Estimated Reserves
Coal	893
Petroleum	876
Limestone	7133
Sillimanite	10.025
Glass Sand	50267
Natural Gas	114 billion cu mtr.

5.38 Meghalaya and Arunachal Pradesh's limestone deposits can support medium cement factories. Huge quantity of natural gas can support gas-based power and industrial projects in Assam and Tripura in the private sector with government acting as facilitator.

Weaknesses.

- ◆ Locational disadvantage-remoteness with difficult terrain
- ◆ Relatively higher project cost-according to a NEITCO survey cost of project in NER is 10 to 15 percent higher.
- ◆ Inadequate infrastructure
- ◆ Inadequate institutional finance
- ◆ The above three factors reduce comparative price competitiveness
- ◆ Slow growth of entrepreneurship.
- ◆ Lack of high level management skill.
- ◆ Absence of proper market linkages
- ◆ Low level of technology intervention
- ◆ Restrictive regime and land tenure system and disturbed law & order in many of the States do not encourage outside investment in industrial projects

Strength

- ◆ Abundant natural resources, both agro-forest and mineral.
- ◆ A reasonably big local market
- ◆ Closeness to world's one of the fastest growing markets-the SE Asian countries.
- ◆ Relatively more literate population
- ◆ Rich tradition of handloom, handicraft and sericulture.

5.39 Handloom & handicraft is the second largest employer after agriculture-276 lakh weavers and artisans: 67500 handloom units and 57500 handicraft units: total value of production- Rs. 20941.08 crores. Large number of skilled weavers, established reputation and large production facilities and availability of raw material are the strength of this sector. Information log, design modernization, absence of direct marketing network and low rate of capital formation are the weakness.

5.40 Handloom is by far the largest unorganized industry next to agriculture in terms of employment generation. Handloom accounts for 27 percent of all textiles production and 21 percent of textiles exports. Handloom industry has been playing an important role in meeting the domestic as well as a source of economy for the people of the region. The North Eastern Region has the highest concentration of handlooms in the country. Out of 25.4 lakh units engaged in handloom activities, 14.6 lakh units (household and non-house hold) are in five States- Arunachal Pradesh, Asom, Manipur, Nagaland and Tripura. Over 53 percent of looms in the country and more than 50 percent of weavers belong to North Eastern States. The share of these five States of North Eastern Region in the domestic looms is 82 percent. However, only 13.4 percent of the commercial looms of the country are in those States and their contribution to those States in total production of handloom fabrics is merely 20 percent.

Action Plan

- ◆ Labour intensive and low capital investment industries to be promoted in NER.
- ◆ Concentrate on SSI Units utilizing such natural resources as agro-horticulture, minor forest produce, medicinal and aromatic plants, bamboo etc. For instance, medicinal and aromatic plants of the region can, it is estimated, support drug manufacturing related investment to the tune of Rs.600 to 800 crores. The estimated run over of bamboo based industries is around Rs.10,000 crores. Nearly 40 small and medium size fruit and vegetable processing units can come up in the region on the basis of projected available produces.
- ◆ RRL Jorhat has so far evolved more than fifty cost effective technologies for commercial use of natural resources in the region which can be taken up by local entrepreneurs. RRL will offer technical assistance and guidance too.
- ◆ A common centre for documentation of all medicinal and herbal plants of NE and a regional demonstrative farm to promote planned cultivation and processing of medicinal and aromatic plants of the region with technical support from RRL.
- ◆ Competitive advantages for plastic based industries to meet growing local demand for products can be exploited (80 percent of plastic good consumed in the region are outsourced). Consumption is expected to rise from 15,000 TPA to over 60,000 TPA during next 10 years.
- ◆ Proposed investment of the order of about Rs.19,000 crores in the oil and gas sector in the region has to be made to create opportunities for industrial growth.
- ◆ Pollution free climate, good literacy percentage and natural hand-skill of the majority of the population make the hill States of the region ideal location for electronic hardware production.
- ◆ Provide appropriate training to local entrepreneurs to enable them to avail of the emerging opportunities.
- ◆ Multi-points collection of taxes within the boundaries of various States of the NER is creating insurmountable problems for industrial units making cost of transportation of raw material and finished and product prohibitively high. There is urgent need to resolve this problem.
- ◆ Transport subsidy scheme for NER to be extended upto 2010.
- ◆ Industries located in the growth centre should be given capital investment subsidy at the rate of 15 percent of their investment in plant and machinery.
- ◆ Direct interaction professionalizing the supply through producer consumer interaction: advertisement & communication assigning elite image to high-priced products: brand promotion through trade marking and quality assurance.
- ◆ North Eastern Region a rich repository of arts and crafts that are both eco-friendly and unique in craftsmanship and utility, has the potential to emerge as a leader in handicraft exports. However, the region's share of country's total export 3.5 billion is less than 1 percent
- ◆ Introduce organized product development programme among the artisians, with producers concentrated not only on ethnic goods that cater largely to the consumption needs of the local populace but also for export.

- ◆ Establish a Fashion Design Centre at Aizawl and Kohima.
- ◆ Create basic financial and infrastructure facilities in the States.
- ◆ Provide logistics support for fully realizing export potential in handicrafts.
- ◆ Exim Bank should conduct workshops on handicrafts in all the 8 States with primary focus on product development, design and export marketing with the objective of generating awareness on international trends in design, colour, pattern, production techniques and marketing strategies amongst entrepreneurs and exporters of handlooms & handicrafts.

(a) Sericulture.

5.41 Since North Eastern Region's agro-climatic conditions are most suitable for development of Sericulture, it can be developed into a major income earning and employment generating sector. North East's contribution towards country's total production of raw silk generally is about 6 percent. However, its contribution in terms of Muga and Eric production is more than 90 percent. Over 3.8 lakh families are engaged in Sericulture farming and annual production recorded is 1063 MT.

5.42 The present status of Sericulture in the North east is indicated in the following table.

Production Under Sericulture in NER 2002 - 2003

	Arunachal Pradesh	Asom	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total
Mulberry reeling cocoons (MT)	18.00	158.16	221.20	18.05	15.00	3.29	-	39.50	473.20
Oak Tassar reeling cocoons(lakh/Nos)	1.08	0.38	8.40	-	3.09	1.32	-	-	14.27
Ericut Cocoons (MT)	15.00	634.77	256.00	360.74	0.93	101.24	-	-	1368.68
Muga reeling Cocoons(lakh/Nos)	12.93	4781.48	1.20	216.96	1.75	1.70	-	-	5016.02
Grand Total									6872.17

Source: *Central Silk Board, Guwahati.*

Action Plan.

Sl No	Activity	Short-term (2010)	Medium-term (2015)	Long-term (2020)	Cumulative
1.	Additional area under sericulture	25,000 ha	75,000 ha	1.50lakh ha	Total area by 2020 3.057 lakh ha
2.	Additional production (all Varieties)	500 MT	1500 MT	2000 MT	5063 MT by 2020
3.	Additional employment likely (Mandays)	0.85 lakh MD	1.65 lakh MD	2.75 lakh MD	5.25 lakh mandays

The strategy may be:

- ◆ Bringing part of the 2.35 lakh ha cultivable wasteland suitable for sericulture
- ◆ Developing cluster- based cultivation @ two clusters of 200 ha/300 farmers in each district of the region by 2020.
- ◆ Introducing inter-cropping –cash crop & mulberry plant.
- ◆ Taking up by Central Silk Board , in collaboration with the States, an NER sericulture Development Mission with special central grant providing support services like technology application, modern grainages, farmers's training and marketing of product etc.
- ◆ With more areas brought under Sericulture and higher level of production and productivity, additional income generation for farmer families is expected to be of the order of more than Rs.580 crores from cultivation of eri and about Rs. 1100 crores from Muga per annum.

K. DEVELOPMENT: MISSION MOD

(a) North Eastern Regional Bamboo Mission :

5.43 The North Eastern Region accounts for nearly 67 percent of the growing stock of bamboo in the entire country. Bamboo plantation extends over an area of about 3.50 lakh ha and sustains 70 percent of the rural labour force of the North East. With the opening of vast horizon for multiple commercial use of bamboo and its tremendous potential for growth, it can turn out to be “Green Gold”. Value addition of bamboo starting with primary processing at the village and community level and moving up to secondary level commercial processing will substantially enhance family income of the rural population. An UNIDO (2002) survey puts the market potential for various bamboo based products as below :

(i)	Bamboo shoots	-	Rs.300 crores
(ii)	Structural material	-	Rs.725 crores
(iii)	Bamboo plywood	-	Rs.300 crores
(iv)	Bamboo mat and bamboo-	Rs.500 crores	based handicrafts.

5.44 The perspective growth plant, therefore, has to include a programme for sustained development of bamboo which should include plantation, training and processing on a large scale through the North Eastern Regional Bamboo Mission. The programme to be implemented by the Cane and Bamboo Technology Centre (CBTC) should aim at :

- ♦ Achieving double digit economic growth.
- ♦ Raising the level of contribution of this sector to GSDP to about 7 percent .
- ♦ Generation of one million job opportunities in bamboo related activities.
- ♦ Enhancement of family and community income with at least one member of a family getting full employment throughout the year in the bamboo growing clusters.
- ♦ Planting of selected species on a large scale.
- ♦ Upgradation of skills of all those engaged at various levels in bamboo related activities.
- ♦ Creation of global export network for bamboo products particularly in relation to South East Asian markets.

Action Plan: (a) Turn over

2010	2015	2020
(i)Intensive plantation and farmers training programme : creation of facilities for primary value addition: (ii) Market development (iii) Achieve turnover of Rs. 1000crores	(i)Plantation extension; Secondary value addition to makee bamboo a major commercial commodity (ii)Achieve turnover of Rs.4000 crore per annum	(i)Consolidation (ii) Sophisticated value addition: branding and new management technique: border trade/export (iii)Achieve 8to10 thousand crores/year
Area to be brought under bamboo plantation – 10,000 ha	18,500 ha	21,000 ha (total-49,500 ha)

(b) Mandays Generation

Sl.No.	Item	2010	2015	2020
1.	New Plantation	40,17,500		
2.	Maintenance	1,22,04,900	2,45,72,300	960750
3.	Harvesting	82,99,900	2,69,82,650	1364300
Total:		2,45,22,300	5,15,54,950	1,23,25,050

Grand total (over 15 years' period) –88392330 Mandays

(b) Border Trade.

5.45 North Eastern Region, which is ideally located physically, culturally and commercially, can grow into a hub of international trade and become a trade-bridge between India and the ASEAN countries to the region's advantage. The 'Look East ' policy and the bilateral agreements with the South East Asian countries provide opportunities for large scale border trade.

5.46 Following table gives an idea of the present volume of trade between NE and the neighboring countries.

(Rs crores)

Year	Total Export	NE-Bangladesh Trade	NE-Myanmar Trade	Other Countries	Total Import	NE-B-Desh Trade	NE-Myanmar Trade	Other Countries
2002-2003	409.36	201.99	4.96	202.41	41.57	6.10	11.83	23.64
2003-2004	434.96	NA	9.41	NA	60.95	11.51	8.85	40.59

Source: *Background papers* (prepared for the Seminars on Export from NE at Shillong on 26th & 27th May, 2005)

Infrastructure	Number
Designated Ports	35
Functional Ports	20
ICD	1
R.M.S	2
Airport	1

5.47 The North Eastern Regional International Trade Mission has been constituted and it should be operational immediately. NERITraM may formulate a 15 year perspective plan for promotion of trade with the region's western neighbors and evolve a new development strategy--'trade-led' strategy by 2015. The most critical requirement for border trade promotion is institutional intervention to ensure co-ordination among all the stake holders viz Central Ministries, State Governments, exporters, entrepreneurs etc., in order to develop infrastructure, production base and training and facilitate smooth transborder traffic. NERITraM will take up this responsibility.

Action Plan

(a) Short term

- ◆ Roads leading to the 17 functional LCSs in the region to be improved and weigh bridges installed. Such a measure would boost export (improvement of Karimganj-Sutarkandi road led to doubling of export---from 22.86 crores to 46.15 crores).
- ◆ Reactivate non-functional LCS by providing required infrastructures. (Nampong in Arunachal Pradesh and Zokhathar & Demagiri LCS in Mizoram) and opening up of new trading point from Nagaland with Myanmar by developing roads in that sector.
- ◆ Setting up of a proper Air Cargo Complex in the LGB International Airport to facilitate export of perishable goods with proper domestic transshipment arrangement in Kolkata/Delhi on priority basis,
- ◆ Set up one plant Quarantine and Fumigation Station with proper facilities of lab and equipment and the institutional arrangement to issue import permit in order to facilitate export/import of plants and planting materials. LGB airport should be declared as the Quarantine entry point.
- ◆ Setting up of product specific Special Export Zones (SEZ) in NE.
- ◆ Improve existing railways, roads, land custom stations and other infrastructure networks and modernize these to make the region a viable international transit/transport base to serve as a bridge head for India for its entry to South- East Asian market.
- ◆ Export potential survey.
- ◆ Organising training facilities for youths of this region in SE Asian languages.
- ◆ NERITraM to take up jointly with States a comprehensive programme to create minimum infrastructural facilities at all the States for a sound production base for exportable goods locally through small enterprises.
- ◆ Introduce a comprehensive transport subsidy package for all items exported from NE both via mainland as well as through L.C.Ss in the region and extended APEDA's transport subsidy scheme to fresh fruits, vegetables, spices etc to provide air, rail and inland transport subsidy from any part of NE upto port of shipment.

- ◆ Normal trade should be operationalised by introducing letter of credit system for trade with Myanmar.
- ◆ Allow all freely exportable items for export under barter mechanism to promote export of manufactured goods to Myanmar which would lead to industrial growth in NER.
- ◆ Promote agro-horticultural development on a commercial scale to increase production and export. As a measure for export product development support and encourage local entrepreneurs to set up processing units/industries which has export potential.
- ◆ Exemption from excise/import duty on capital goods import, particularly agricultural tools and machineries, food and bamboo processing machineries etc, to attract private sector investment in focused sectors.

(b) Long term

- ◆ Setting up 2 more Agri Export Zones in addition to 3 existing ones, one in Meghalaya for ginger and cut flowers, and one in Mizoram for ginger and passion, fruit involving APEDA, NABARD, Ministry of commerce and concerned State Government .
- ◆ Feasibility of opening Trading Point with China from the State of Arunachal Pradesh may be studied, particularly opening up of Tibet China sector from Tawang.
- ◆ Study possibility of establishing air link from Guwahati-Dibrugarh (Asom) to Mandalay (Myanmar) onward to Boushan and Kunming (China) to provide the shortest and cheapest connectivity by Air to mainland China.
- ◆ Developing NE Region into a comprehensive free enclave, i.e transit trade, export processing and tourist resort/service.
- ◆ Development of a strong economic base for the region and to integrate the North East economy with the South East Asian economy.
- ◆ Creation of an NER Export Development fund under NERITraM by pooling central resources available under various schemes like ASIDE, EDF etc for border trade related infrastructure development activities.
- ◆ Development of low cost marketing complexes at 3 designated LCS s along Bhutan to help traders on this side of the border to sell products to neighboring towns in Bhutan.
- ◆ Restoration of Railway Traffic from Mohisashan (Karimganj Dist., Asom) to Shahbazpur (Bangladesh) and of the preparation railway link from Golakganj (Dhubri Dist: Asom) to Chattak LCS in Sunamganj (Bqangladesh) to facilitate export of coal and other products.
- ◆ Bangladesh should be persuaded to provide transit facility from North East to West Bengal as well as to allow North East exporters to tranship their goods from Chittagong Port.

L. Tourism

5.48 North East is often described as a “paradise unexplored”. It is as one of the most promising income and employment generating sectors in North Eastern Region and with climatic, scenic and varied, robust cultural attractions the North East can and must be developed into a list-one tourist destination. Opening up of the trade-routes to South East Asia would give further boost to tourism in the region.

5.49 An idea of tourist inflow into NER may be had from the following table.

States	2003		2004	
	Domestic	Foreign	Domestic	Foreign
Arunachal Pradesh	2195	123	4740	269
Asom	2156675	6610	2288093	7285
Manipur	92923	257	93476	249
Meghalaya	371953	6304	433495	12407
Mizoram	35129	279	38598	326
Nagaland	5605	743	10056	1084
Sikkim	179661	11966	230719	14646
Tripura	257331	3196	260907	3171
Total	3101472	29478	3360084	39168

Source: Ministry of Tourism

The Vision

5.50 The Tourism Vision 2020 is to fully exploit the comparative advantage of the region in tourism resources and attractions so that tourism becomes an important catalyst for economic development in general and for poverty alleviation in particular.

Strategy

5.51 To achieve that vision in tune with the National Tourism policy 2020:

- ◆ Tourism development will be put on a high priority in the economic development planning of the region.
- ◆ The quality of the existing tourism products will be improved to meet the new and emerging demands.
- ◆ Adequate and comprehensive infrastructure of international standards will be created to enable the tourists to have “unique experiences”.
- ◆ The seven key areas around which the vision will evolve are-
 - *Swagat* (welcome)
 - *Soochna* (Information)
 - *Suraksha* (safety)
 - *Sahyog* (Cooperation)
 - *Samrachana* (Infrastructure Development)
 - *Suvidha* (facilitation)
 - *Safai* (Cleanliness).

Action Plan.

- ◆ At least sixteen circuits linking the attractions of the states will be developed. Each of these circuit will cover one state primarily and link one or more states. The approach will be to develop in clusters attractions that can compliment each other though beyond the boundary of one state.
- ◆ These subsidiary regional circuits will target the domestic tourists primarily.
- ◆ In all the circuits, road linkages will be carefully planned. Every 100 Km of the journey will have a modern wayside facility centre. The facilities will be modeled in the pattern of Japanese “michi-no-eki”(are managed by the local communities)
- ◆ Each major tourism destination will have a properly designed souvenir shop. Local entrepreneurs will be encouraged and assisted to develop authentic designs of local art and craft forms in a way that the tourists can easily carry as mementos.
- ◆ The major cultural, heritage and archaeological sites to be developed in a planned manner and made tourism friendly
- ◆ A NE brand in the pattern of the “Incredible India” to be developed, positioning its uniqueness and projecting how it is different from other competing destinations. The entire region to be marketed as one destination.
- ◆ Festival of the NE to be organized in major markets once in every three years.
- ◆ The quality of tourism attraction being largely dependent the quality of service provided, a pool of trained manpower to be created.
- ◆ The hotel management Institute at Guwahati to be upgraded to a regional institute with the assistance of the Government of India.
- ◆ Remove entry restriction regime.
- ◆ World Tourism Organisation in one of its report on Asia observed that many local authorities do not have much experience and training in Planning, development and management of tourism. A NE Regional Tourism Training Institute may be set up to meet all training needs of the sector.
- ◆ A Regional Tourism Development Corporation.
- ◆ One food craft institute to be set up in each States
- ◆ A Programme of infrastructure development to be taken up in collaboration with the private sector in the pattern of PPP.

- ◆ Accessibility to and within the region being a major problem, with the help of the Ministry of Civil aviation. Guwahati to be developed as a major national and international air hub with another regional hub in Imphal in tune with the 'look east' policy of the Government of India.
- ◆ The State PWDs, the Ministry of Road Transport and the Highway Authority of India to ensure that the tourism destinations in the national and regional circuits are adequately connected.
- ◆ Appropriate incentives to be given to the tourism entrepreneurs to invest in tourism infrastructures. For this purpose, NEDFI will be nodal agency.
- ◆ A comprehensive NE Sustainable Tourism Guideline to be formulated taking into consideration the special feature and needs of the region.
- ◆ To enable tourists to enjoy the local environment and to allow the socio-economic benefits of tourism to spread to rural areas, responsible rural tourism to be developed. At least two such centres will be developed each year in each state from 2010 onwards.

M. SCIENCE & TECHNOLOGY

Action Plan

a. Management Information System

- ◆ Augmenting of converged IP networking system by 2010.
- ◆ Strengthening of Local Area Networking with wireless connectivity in difficult terrain by 2015.
- ◆ Setting up of Data Centre at each of the State capitals and in NEC Secretariat at regional level with connectivity with all State Secretariats through converged Networking by 2020 for better management of projects and instant generation of progress reports.

b. Remote Sensing Application System collaboration with NE-SAC (North Eastern Space Application Centre):

- ◆ Setting up of a small Earth Station and studio in each of the State Hqs in NER by 2010 and providing connectivity to District/Block levels to function as digital information network by 2015.

c. R&D Programme:

- ◆ Research based Holistic Cluster Approach at Grass-root level for sustainable development to be introduced by 2015.
- ◆ Collaboration with CSIR for technology application programme developed by them for socio-economic planning and rural upliftment.

d. Disaster Management & Earthquake related programmes

- ◆ S&T Cell, Disaster management unit in NEC and linkage with RRL-Online/Real time Seismic Network System by 2010.
- ◆ Disaster Management Information System with Weather Forecasting data to cover entire NER by 2015.
- ◆ Communication and Disaster Alert System (Broadcasting) in all States of NER and Earthquake warning system in all the States of North East by 2020.

e. IT Application

- ◆ IT & S&T Parks in all State Hqs in the first phase by 2015 and in selected Districts in the second phase by 2020.
- ◆ Captive network for E-Governance up to Block level by 2015 and setting up of kiosks owned by entrepreneurs and various financial institutions as per need and demand (to benefit around 20,000 educated youth by 2020) by 2020.

f. Telemedicine Network

- ◆ Telemedicine network facility to be made available in District Hospitals by 2010 and extended to CHC level by 2020.
- ◆ Training/Orientation of health workers in skills to manage the above.

g. Information Technology in Education.

- ◆ Create computer infrastructure in educational institutions in stages up to primary school level-entire region to be covered by 2020.
- ◆ Training/orientation of teachers to make proper use of the above.
- ◆ Organise mid-level professional courses such as BCA, PDGCA, BSc (Comp) by 2010 and MSc (Comp) and MCA in selected colleges/university/ITIs/Polytechnics by 2015.

h. Integrated E-Education and Tele-health for schools.

- ◆ Creating ISDN-backbone with main server/hub to be located in Schools/ Institution identified on basis of their Central location and availability of infrastructure for outreach of e-Education/ learning, Tele-education and tele-health programmes among schools/institutions located at the periphery.

i Provision of infrastructure support to technical institutes in NER and application oriented programmes for rural development including consultancy.

j. Set up by 2008 Regional Consortium of all R&D institutions in the field of Science & Technology in NER (with NEC providing the platform) to serve as functional committee for regular purposeful and professional interaction and intervention at appropriate levels in close collaboration with the State Governments. RRL could function as the coordinating agency.

k. Set up by 2015 branches of RRL in each State capital –on the lines of ICRA.

- ◆ Local communities to be motivated and involved in effort to introduce appropriate technology to help raise both production and productivity, improve quality and cut cost.
- ◆ New technologies developed by RRL Jorhat in various sectors relevant to NER may be transferred from lab to land.
- ◆ Set up NE Regional Association of Technological and Economic Cooperation (NERATEC) to bring prospective “Growth drivers” together.
- ◆ Support IT Training Centres in all States to facilitate citizen interface over IT network.
- ◆ Introduction of computer education in all colleges and schools by 2020.
- ◆ Identification and promotion of Centres of excellence in the field of engineering, IT, Biodiversity, capacity building, sustainable development, say, at the rate of one per State till 2020.

Chapter VI

A. SPECIAL PROGRAMME FOR HILLS/ TRIBAL AREAS

6.1 The prevailing eco system, geographical limitation and social value would demand a different approach of socio-economic development of hill areas/tribal people. Development planning for these areas, so far, has been dissonant from the ground reality. Social scientists have rightly emphasized the need for appraising developmental project for the hills/tribal areas from the social compatibility angle.

6.2 Following parameters in respect of formulation of development plan for these areas have to be taken note of:

i) ‘Best practices’ approach in place of the current ‘ad hoc responses’ approach. Projects have to be appraised with in-depth understanding of the socio-economic issues aided by the traditional knowledge of the tribal society.

ii) Project should be cost effective, modest in scale and target oriented. For the tribal people seeing is believing and, therefore, utmost care to be taken to ensure success of a project.

iii) Multiplicity of schemes should be avoided.

The national norms should be modified to suit the geo-social conditions in tribal areas.

6.3 The geographical and environmental conditions would not favour large scale industries in almost all the hill areas. At best, medium units utilizing available mineral resources like limestone, coal, etc may be possible. Therefore, the general policy should be to develop small scale industries utilizing local resources like horticulture, minor forest produces, bamboo, floriculture etc. As the local entrepreneur would be the first generation, a programme for motivation and imparting project specific entrepreneurial training with provision for hand-holding, support services like micro-credit, market tie-ups etc may be drawn up in consultation with the local communities.

- ♦ The development projects must not disturb the fragile eco system. Sensitive programme for hill tourism, adventure tourism etc may be promoted.
- ♦ The expected growth of border trade and development of tourism will directly impact the socio-economic conditions of the people in the hill areas. The hill people totally depend on community bonds and ties where change may appear to be a threat to their identity and social values. Therefore, development plan must be sensitive to this important social aspect.
- ♦ The hills of the eastern Himalayas possess rich genetic diversity which calls for conservation and judicious exploitation.
- ♦ The 5th Agricultural Science Congress held at Guwahati in April, 2001 was devoted to the subject: *Sustainable Mountain Agriculture*.

The Congress, under the leadership of Dr. M.S. Swaminathan, made some very important recommendations for development of agriculture in the NE Hill areas which should provide the basic guidelines for the planners.

6.4 Shifting cultivation (jhuming) is considered as a bane of development in hill areas. Nearly 5 lakh families practice jhuming covering about 2.2 million ha 17 percent of which is jhumed at any point of time. In spite of years of extensive efforts, the level of jhuming has not appreciably come down. This is because the crucial social and human aspects of the problem were not properly appreciated and alternatives offered were not found acceptable by the farmers. Horticulture and cash crops programme, evolved in close consultation with the local farming communities, may provide an acceptable alternative. A well- thought- out programme for horticulture development drawn up involving the tribal communities and supported by effective extension and monitoring agency, a proper input delivery system and adequate fund to sustain field efforts including maintenance for initial five years can make a difference. It will be a long-drawn programme estimated to involve an expenditure of about Rs.110 crores (over 15 years) and should be monitored by a regional body representing, besides experts, the farmers and NGOs.

6.5 Besides, tea plantation can also be tried in the following States:

Arunachal Pradesh	3000 ha. (78 registered small Tea growers already existing)
Nagaland	5000 ha (986 small growers)
Meghalaya	3000 ha (250 small tea gardens established)
Mizor'm	2000 ha (3 small tea gardens have already come up.)

6.6 Besides Sikkim, Mizoram and Nagaland have potential for commercial development of big cardamom. Such a comprehensive programme may aim at covering 3 to 3.5 lakh ha of jhum land by 2020.

6.7 Rubber plantation will be an acceptable and effective alternative.

States	Area (ha)	Production (MT)	Projection by 2020	
			Area (ha)	Production (MT)
Tripura	28,853	12,234	55,000	25000
Meghalaya	4,586	2,648	12,000	6000

Source: *Rubber Board*.

6.8 There is a symbiotic relation between forest and the tribal population. Dependence on forest is total, vital and significant. Therefore, the traditional rights of the tribal people on forest have to be honoured. The percentage of land used by the tribal population throughout the country is stated to be below 5 percent. Allowing the tribal to make use of that land would not, it appears, adversely impact the forest coverage or the ecology, but it will have a salutary effect on prosperity

and peace in the tribal areas. A forest management programme with the local communities may be evolved for control and management of forest resources for sustainable development.

6.9 Introduction of Information Technology in a big way to help knowledge based development should receive priority.

B.Women Empowerment

6.10. The Status of women in NER and the population sex ratio are relatively better than their counterparts in many States of the country. However, they cannot be said to be an empowered group. Women in this region take active part in economic activities, particularly in the hill and tribal areas, but their participation in decision-making process and in the service sector is low. Even in many tribal societies social system and certain customary laws smack of gender discrimination. In order to actualize the concept of women empowerment certain issues that can make women really empowered will have to be addressed.

6.11. Market driven economy, as against subsistence economy which they have been used to for generations, has brought in problems. For example, the cloths they use to weave in their home and sold directly in the market have now to compete with cheaper cloths from outside. Their economic pursuits are disturbed. Modern market demands high investments which women can not outsource. Even lending institutions in many cases are found to betray sex discrimination . Except in the matrilineal society, women elsewhere not having right over land and other property, find it difficult to obtain institutional credit.

6.12. Steps to be taken for women empowerment may be:

- (a) Formation of Self- Help Groups (SHG);
- (b) Strengthening women NGO's to make their voice audible;
- (c) Budgeting for gender equity;
- (d) Evolving a banking and industrial policy that supports women participation/ empowerment;
- (e) Launching movement for mass woman literacy, training and motivation that helps capacity building;

6.13 SHGs as a tool for women empowerment economically is a positive step to improve their credit worthiness apart from raising bargaining strength as a group. Through micro-credit availability SHGs can help micro-enterprises of women that would give even the poorer section among them economic strength.

6.14. A gender- just budgeting can make a difference. The 8th Five Year Plan highlighted the need to ensure flow of funds for development of women. The Plan document says "..... the benefits of development from different sectors should not bypass women and special programmes for women should complement the general development programmes. The latter, in turn, should reflect greater gender sensitivity".

6.15 The North East has been a region of conflict. Women, who are even otherwise vulnerable, suffer greatly in such situations. During the decades of violence the number of women heading and managing the households has increased--- they have been pushed into taking on the families' economic burden. They are, thus, indirect victims of violence and, therefore, deserve a special deal.

6.16. Following activities may be promoted for empowerment of women-

- ♦ Formation and Training of Self-Help Groups;
- ♦ Income generation activities, like dairy, weaving, kitchen herbal garden and so on
- ♦ Establishment of credit linkages;
- ♦ Entrepreneur Development Programme;
- ♦ Establishing of Manufacturing units by women groups;
- ♦ Capacity Building;

These activities are likely to help empowering women and improving their economic and social status and enable women to take up various income generating activities as individuals as also as groups.

C. GOVERNANCE

6.17 The taste of the pudding is in its eating. The success of all development endeavours, in the final analysis, depends on the executing authority i.e the administration. Intentions, however, good, remain merely a wishlist on paper unless there is good governance. The need, therefore, is of a responsive and committed administration, transparent and proactive. The people all over the region, as evident from the responses received, want good governance, a performing administration, sensitive to the popular aspirations. As Prof. Paolo Mauro, former Economist with IMF, observed, a country that is able to provide transparent and good governance can quadruple its GDP. The two opposite situations of poverty and prosperity are as much accountable to resources as it is to governance. Singapore's story of progress is a living example.

6.18 National Common Minimum programme lays emphasis on e-governance. The North Eastern States should initiate appropriate action for capacity building for e-governance as per the guidelines formulated by Planning Commission and the Ministry of Communication & Information Technology.

6.19 Many of the North Eastern States do not have experienced expertise for project formulation, execution and evaluation which are so essential for success of development endeavours. Planning Commission may provide adequate resources to the States to enable them to outsource competent hands for such purposes. Some experts/professionals are available within the region and wherever necessary, services may be obtained from outside the region. Also NEC may be assisted in creating a cell of high level professionals in core disciplines which, besides being of great use to the Council Secretariat, can help the State Governments on demand and can also provide training to concerned State Governments officials on a systematic, organized manner.

6.20 Resource availability is no doubt one of the basic prerequisites of development. However, this itself does not help generate a dynamic development process to raise the level of a region's or State's economy. Two essential requirements to achieve faster growth through exploitation of resource endowments are : (a) a facilitating environment or enabling condition through infrastructure development, and (b) availability of financial resources. The Government, both at the Centre as well as in the States has to play a more proactive and purposeful role. Government of India and the eight State Governments must collectively make serious efforts to remove the existing hurdles, inter-State as also intra-State, to create conditions conducive to growth. Administrative efficiency of the States will have to match the big challenge. It, thus, boils down to good governance. Secondly, harnessing of natural resources of the region and development of essential infrastructure would require massive investment. For example, according to an estimate of NHPC, generation of 25,000 MW of hydel power in North East will cost a staggering Rs.128 thousand crores. The High Level Commission in its report titled 'Transforming the North East' has estimated fund requirement of over Rs.93 thousand crores (and that too at 1996-97 prices) for infrastructure development. Centre has to agree to make this level of investment over next 15/20 years either directly or jointly with the private sector. The vision, otherwise, will remain a dream in paper. The focal point again is governance. The promise contained in the CMP that 'all North Eastern States will be given special assistance to upgrade and expand infrastructure' holds high hope for the region.

6.21 Relevance of good governance has been underscored in a recent report of ADB on boosting private investment in North East. In the context of a proposal for Asom, the report mentions 'excessive bureaucratic interference' as a disincentive to private investment. Such regime 'has proved ineffectual in encouraging entrepreneurial responses' in relation to the North East. This regime has to be replaced by an efficient quick responsive and fast-track one through direct policy intervention.

Chapter-VII

EMPLOYMENT

7.1 Employment is the most crucial element of any programme of economic development of the North East. Poverty and unemployment go together. Because of tardy growth of employment poverty ratio in all the NE States is much higher than the national average. The

unemployment scenario in the region is indeed disturbing. The estimated number of unemployed persons in 2002 was 52 lakhs of which more than 50 percent were educated. The current figure is not available, but the poor rate of growth of the economy, does not indicate a better picture. In the Introductory Chapter of its report, the Shukla Commission (1997) noted thus: “The paradox is that there is enormous amount of work to be done but few jobs”. This remark sums up the unemployment situation in the North Eastern Region. Unemployment or lack of it impacts directly the process of economic growth. Moreover, inability to match the rising demand for employment fuels social unrest and the North East has for the past few decades been experiencing such unrest. Sustained employment base can provide a healing touch to the anguish and sense of helplessness of the youths of the region.

7.2 One of the primary causes for somewhat inelastic expansion of the employment base is the utterly undeveloped primary sector, particularly, the agro-horticulture sector. An effective solution to the problem of unemployment can, therefore, be had if the growth rate in the primary sector increases and agro-horticulture diversified and made more productive. The model integrated agriculture development project being implemented on pilot basis in one location in Asom and another in Tripura, for example, would lead to a number of micro-enterprises like lime production, transport services, processing units etc as its ripple effect and would provide gainful job to the local youths. Since avenues of employment in the Govt. sector has been drastically reduced over the years, the only other alternative left is to create self-employment and there is scope for growth of such opportunities.

Strategy

- ◆ Development project must not only be output oriented, but also employment oriented.
- ◆ Faster development of the agriculture sector shall generate large employment as spin-off.
- ◆ The unorganized or informal sector generates more than 90 percent of employment. NE Region, according to one estimate, has over 5000 small and micro enterprises in the unorganized sector which may be developed through Growth Poles as envisaged by the National Commission for Development of Unorganized/Informal Sector. The commission may be persuaded to earmark atleast 30 Growth Poles for NER over the next 15 years.

States	By 2010	By 2015	By 2020
Arunachal Pradesh	1	1	1
Asom	2	1	2
Manipur	1	2	1
Meghalaya	1	2	1
Mizoram	1	1	1
Nagaland	1	1	1
Sikkim	1	1	1
Tripura	2	1	2

- ◆ Global herbal market is Rs150 million and North East with 50 percent of the sub-continent's total medicinal and aromatic plants can have a share of this huge market if plantation and processing of these plants are taken up in a planned manner. It will generate substantial income and employment. Appropriate technologies have been developed by CSIR.
- ◆ NERBaM's 15 year three-phase action plan be implemented from 2007 so that the target of generating/one million jobs and achieving a turnover of Rs.8,000 crores by 2020 can be achieved.
- ◆ A crash programme to train NE youths in relevant petroleum/oil technology so that they can fully take advantage of the upcoming job market that would be created by the promised investment of Rs.19,000 crores by the oil giants in this region.
- ◆ Opening of border trade would lead to development of processing units at the small and micro scale that would create considerable job opportunity.
- ◆ Khadi & Village Industries sector produces articles worth more than Rs. 264 crores and provides employment to 2.97 lakh person (figure for 2002-03). Extensive package programme to be taken up to double both production and employment by 2020.
- ◆ About 75 lakh skilled personnel is the estimated requirement in the IT Sector by 2020 in the developed world. A share of it will surely be secured by India and some of the youths from the NE

Region can derive benefit provided they are made employable through proper training at appropriate levels.

- ◆ With the expansion of consumption and production, the plastic based industries can become a good source of employment in all the States of the North East.
- ◆ Dr. Jayanta Madhab's scheme for employment generation in Asom may be a model with State-specific modification.
- ◆ As the Hon'ble Prime Minister in his inaugural address to the first meeting of the restructured NEC observed, peace and development must go together. A positive step in that direction is to have carefully designed special projects to generate income and employment based on local resources and involving local youths in selected (sensitive) areas. Action has been initiated to implement such a project on pilot basis in Tripura. This may be replicated in selected areas of the other States.
- ◆ Proper planning, extensive training in relevant disciplines and an effective extension service for motivating the youths of this region is needed to change the mind set of local youths. The concept of employment in this region has generally been a white collar job. The youths will have to be made to understand that employment also includes self-employment. Of course, policy intervention is needed at the government level to create the necessary basic facilities and opportunities.

Chapter-VIII

GROWTH, INVESTMENT AND FINANCE

8.1 Growth of the regional economy and generation of employment opportunities, which alone can alleviate poverty and backwardness, depend as much on proper planning, including strategy identification, project formulation etc., as on financial factors like availability of institutional fund for productive investment. The picture as prevailing in the North Eastern Region in this regard is far from satisfactory.

(a) Financial Institution

The All India Financial Institutions which, in other advanced parts of the country have been playing a crucial role in economic, industrial and agricultural development, have not played the role in North East which they are expected to do. The following table would give an idea of the performance of the banking sector in this region:

State	No. of bank branches as on 31.3.05	Deposit (Rs in Crores)	Credit (Rs in crores)	Credit deposit ratio(percent)	Priority sector lending(Rs in Crores)	Per capita credit (Rs)
Arunachal Pradesh	67	1269.76	501.61	39.50	57.48	1937
Asom	1256	18311.10	6508.88	35.55	866.06	2225
Manipur	79	1047.74	495.30	47.27	187.14	1386
Meghalaya	149	2960.69	1069.57	36.13	146.94	4741
Mizoram	81	909.40	460.25	50.61	138.16	3379
Nagaland	67	1479.12	344.55	23.29	54.30	1519
Sikkim	49	1253.40	352.46	28.11	218.33	-
Tripura	180	2719.68	938.39	34.50	171.48	1822
North East Region	1928 (One Bank Branch for nearly 17000 people)	29950.89	10671.01	35.63 (all - India 58.5)	1839.89	2,280 (all-India 10,752)

Source: RBI

Disadvantages

- ♦ Availability of bank branches is low
- ♦ Credit- deposit ratio (35.63 percent as against all India average of over 58 percent) has been poor
- ♦ Priority sector lending by FIs remains very low at mere 17 percent
- ♦ Big gap between per capita loans sanctioned and actually disbursed as indicated below:

State	(Rupees)	
	Sanctioned	Disbursed
Arunachal Pradesh	852	595
Asom	1059	706
Manipur	649	344
Meghalaya	862	628
Mizoram	853	662
Nagaland	434	418
Tripura	313	288

(b) Micro Credit

8.3 Thirty five million poor farming families around the world have been benefited from micro credit. Contribution of micro credit to development of both farm and non-farm sectors has been convincingly documented by Prof Md. Yunus, father of micro credit movement in Bangladesh. “Poor people”, Prof Yunus observes, “work out their way out of poverty with micro credit.” Micro-credit assumes added importance in NE context as more than 70 percent of the farming community are marginal farmers who have little access to credit. The present situation in regard to availability of micro-credit in North East is anything but encouraging.

- ♦ Average availability of credit for farming sector has been between 6.85 percent and 86.49 percent as against the all India average of 421.46 percent.
- ♦ Share of total disbursement of loans by scheduled banks as direct finance to farm sector is only 0.26 percent as against national average of 11 percent.
- ♦ SHG Bank linked credit is just 0.29 percent of the total loan disbursed in the region.
- ♦ As suggested in the Common Minimum Programme major expansion in schemes for micro-finance through SHGs, particularly in the backward and ecologically fragile areas should be effected.
- ♦ Cumulative micro-credit flow in the region (excluding Sikkim) upto 2004-05 was Rs.450.65 crores with 9935- SHGs as receiptants.

Action Plan

- ♦ Coverage of the entire region under NABARD’s Potential Linked Credit Plan (PLCP) by 2015.
- ♦ Expansion and strengthening of the SHG-Bank Linked Credit System. Number of linkage units should be raised to atleast 50,000 by 2015 and to one lakh by 2020 from existing 5000 units.
- ♦ Number of SHGs engaged in farming and non-farming micro-level enterprises should be increased to reach a figure of about 1 lakh by 2015 and 2 lakh by 2020 for which a special drive may be launched.
- ♦ NEDFI and SIDBI should create a separate micro-credit fund of Rs.1000 crores only for North East.
- ♦ All India Financial Institutions should set up more branches – numbers of Bank branches should be doubled by 2015.
- ♦ Credit-deposit ratio should go up to: 45 percent (2010), 50 percent (2015) and 60 percent (2020).
- ♦ States should make special efforts to strengthen the structural base to ensure efficient performance of rural micro-enterprises and coming up larger number of SHG-led enterprises.
- ♦ Level of priority sector lending by banks should be raised to at least 40 percent by 2020 by creating local competitive entrepreneurship on a wider scale.
- ♦ Foot note: Micro credit availability is a necessary condition for development of rural micro enterprise but not a sufficient condition for success of such enterprise. Pre-requisites of success is an enabling environment which includes a motivated people, an absorbing market and a sound

infrastructural footing. The State administrations and SHGs/ NGOs have to join hands to create this conducive environment.

(e) States' Finance

8.4 A look into the financial health of the States in the North Eastern Region will be relevant to any discussion about planning for economic development of the region because the States' economy has a direct bearing on development of the region. Growth of the economy and rise in its productive capacity depend on the volume of investment made both in the Governmental and private sectors as well as the manner in which such funds are actually utilized. A disturbing fact that comes to ones notice in this regard has been the gradual increase of the level of fiscal deficit of the NE States. The total gross fiscal deficit of all the NE States was of the order of Rs.3751 crores in 2002-03. Efforts to meet the growing fiscal deficit have led to increased debt liabilities. Consequently, volume of developmental expenditure has declined while non-developmental expenditure has gone up. During 2002-03 development expenditure totalled Rs.7719.4 crores and non-developmental expenditure was Rs.8585.2 crores. The inflow of plan fund has, however, been increasing and the per capita plan outlay for the North Eastern Region has been quite high.

8.5 The following facts have, however, to be noted in this context:

- (a) The newly created States of the North-Eastern Region are not expected to be totally financially sound and viable because these States were created not on economic consideration but on socio-political-ethnic grounds.
- (b) Although in terms of pure statistics the approved plan outlay for these States may appear flattering, in real terms, however, it is not so. For one thing, compared to the other developed parts of the country the rupee in the NE region stands slightly devalued as cost of all inputs for development project is relatively much higher in this region. A NEITCO survey suggested that cost of setting up of a project in NE is about 15 percent higher than in the other developed States. Secondly, there is hardly any public/private sector investment (except a little in Asom) in the region which runs into thousands of crore in other parts of the country. Therefore, Central plan fund is the only investment for development in this region.

8.6 Even so the apparent financial imbalances of the States have to be corrected through appropriate policy intervention and effective measures by the State Governments. Some of the measures may be:

- ◆ Setting fiscal targets on the basis of long term macro economic forecast.
- ◆ Constitution of State level Fiscal Advisory Boards
- ◆ Introduction of fiscal reform programmes.
- ◆ Reduction in administrative over-head.
- ◆ Evolving new and innovative measures for revenue augmentation.
- ◆ Reforming State PSUs: disinvest in non-critical units.
- ◆ Making tax system efficient.
- ◆ Effective control over departmental inventory.
- ◆ Ensuring better project implementation and monitoring.

Chapter- IX

CONCLUSION

This is the documented dream or vision -- a vision shared by all (representatives) the stake holders, a vision that tries to encapsulate, as best and practical as possible, the hopes and aspirations of that large segment of the region's population whose voice has so far never received due attention. It is dreaming big. It should perhaps be so, because a society which does not dream big achieves little. It is

true that the people of North Eastern Region began dreaming big. The region is, as it were, at the cross-road of change. It needs direction and thrust for growth. Hon'ble Chairman NEC took a path-breaking step to get a vision document drafted. It is for planners and administrators to see that this historic step is transformed into a reality.

It is difficult to formulate a wholly accurate and realistic vision document or a perspective plan, and more so when relevant up-dated data is hard to come by. Attempt has been made to formulate as workable a vision document as possible. Even if 50 percent of it is found workable/practicable, it may be regarded as successful.

Annexure

SUMMARY OF SECTOR-WISE SUGGESTIONS

Priorities Suggested

- Primary sector.
- Education (HRD).
- Primary healthcare.
- Rural connectivity.
- Primary marketing.
- Value addition to local produce locally for income enhancement.
- Employment generation incl. micro level enterprises for rural unemployment.
- Basic parameters for formulating perspective plan
 - Projected population size by terminal year of plan.
 - Existing status of various sectors of economy.
 - Separate strategy for hilly and tribal areas.

Agriculture and Primary Sectors

- Objective to make region marginally surplus in food production by introducing integrated modern agricultural methods and develop agriculture horizontally and vertically.
- Create efficient service centers for farming.
- Land reforms.
- Horticulture on massive scale, more area under horticulture.
- Create efficient market infrastructure thru a regional master plan.
- Self help groups used as tools of change in this sector.
- By 2020 production of meat, milk and egg be raised to 2.26lakh MT, 2 MT and 3500 millions respectively.

Fishery

- Raise production of fish to 12.14 lakh MT to ensure per capita availability of 21 KG/person /year by 2020.
- Increase area to 11.53 ha of water under fishery by 2020.
- Maximum area of reservoir and unregistered beels and swamps be utilized for fishery.
- Promote culture of MAHSEER for insitu conservation as well as enhanced production.
- Exploit riverine stretch (about 2000 KM) for fishery.
- Eco hatcheries at district level.
- Est. fish producers Co-operative society/ farmers club for high production and marketing.
- Double area under forest fishery by 2020.

Sericulture:

- 2.35 lakh ha. Wasteland suitable for seri be brought under it.
- Two clusters of 200ha. /300m farmers be set up in each district by 2020.
- Sericulture development mission with special central grant.

- Raise production level of seri to 5063 MT.
- Generation of family income of Rs. 580 crores under Eri and and about Rs. 1100 crores under Muga per annum by 2020.

Mission Mode:

- Immediately launch Northeastern regional Bamboo Mission and Northeastern Regional International Trade Mission. Bamboo mission to create one lakh additional job opportunities, lead to double digit rise in economic growth and enhancement of community and family income.
- Global export network for bamboo products particularly in relation to South East Asian markets.
- Promotion of border trade infrastructure roads for connecting 17 functional LCS in the region be developed.
- Proper air cargo complex in LGB airport be opened with domestic transshipment arrangement in Kolkata/ Delhi.
- Three product specific SEZ in NER.
- NERITraM and concerned states jointly take up programme for creating minimum infrastructure facilities in all states for sound production base for exportable goods locally thru small enterprises.
- New transport subsidy package for all items exported from NER to provide air, rail and inland transport subsidy from any part of NE up to port of transshipment be introduced.
- Incentives to local entrepreneurs for setting up agro horticultural processing units having export potential.
- Excise/ import duty waivers on capital goods import esp agri tools and machinery food and bamboo processing machinery.
- Two more agriculture export zones in NER be developed into comprehensive free enclave.
- North eastern regional export development fund under NERETRAMM be created for border trade and related infrastructure.

Industry and Employment

- Output and employment oriented development projects.
- Proper planning, extensive training in relevant disciplines. An expansion service backed by policy intervention state governments to motivate and attract youth for self employment as against white collar job.
- Development of small and micro enterprises in unorganized sector thru growth poles to generate employment.
- Put into action 15 year bamboo development plan under North eastern regional bamboo mission likely to generate 1 million jobs by 2020.
- Crash programme to train NE youths in relevant petroleum/oil technologies to take advantage of big employment market likely to develop as a result of huge investments by oil giants in the region.
- Package programme for extensive development of Khadi and Village industries, may create about 5 lakh job opportunities by 2020.
- Large training facilities in IT.
- Wide scale IT application for knowledge based development.
- Forest management programmes with local communities.

Infrastructure

- Faster execution and completion by 2015 of Central Master Plan for road connectivity.
- Increase road length of district roads to about 1 lakh km by 2020.
- road density may be raised to the present national average of 75 Km.
- Up gradation of national highway to 4- lane.
- Separate regional road maintenance fund.

- Develop ten old airstrips in the region be developed and new airports at Itanagar, Kohima, Gangtok, Lungleh, Tura and Belonia and introduce separate designated air service with base at Guwahati.
- All projects for construction of about 262 km of new railway tracks in the region should be completed by 2010 and all capitals be connected by BG rail line by 2020.
- Programme to make Ganga-barhmaputra-Barak-Meghana into an integrated natural waterway by 2020.
- At least 305 of hydel potential and 155 of thermal potential to be harnessed by 2020.
- Small and mini hydel projects to exploit the small hydel potential of 2112MW by 2020.
- Generation of at least 2800MW by 2011-12 be taken up to meet projected peak load.
- Ensuring grid management and economic power dispatch.

Water Management, by 2020

- Exploitation of 80 percent irrigation potential (to benefit 42 lakh hec)
- Creation of additional live storage of 25 BCM.
- Rain water harvesting of 4 MCM.
- Groundwater development to achieve 7 bcm.
- Integrated land and water resource management projects in inter state river basins.
- Coverage of all degraded, rainfed wasteland under watershed project.
- Drip irrigation
- Water policy by each state.
- Make NER destination for fresh water for various parts of world.

SERVICES: Tourism:

- Tourism to become important catalyst for economic development in general and poverty alleviation in particular.
- Put on high priority in economic development planning of the region.
- Adequate and comprehensive infrastructure of international standards.
- seven key areas around which vision will evolve:
 - Swagat.
 - Soochna.
 - Suraksha.
 - sahyog.
 - Samrachana (infrastructure).
 - Suvidha.
 - Safai.
- The NE brand in the pattern of the Incredible India be created, the entire region be marketed as one destination.
- A pool of trained manpower to improve quality of tourist attraction.
- Hotel management institute at Guwahati be upgraded to a regional institute with assistance from GOI.
- Removal of entry restriction regime.
- A regional Tourism Training Institute may be set up to meet all training needs of the sector.
- One food craft institute to be set up in each state.
- A programme for infrastructure development to be taken up in collaboration with the private sector in the pattern of the PPP.
- With help from ministry of civil aviation Guwahati to be developed as a major national and international air hub with another regional hub in Imphal in tune with Look East policy of the GOI.

- State PWDs, ministry of road transport and highways authority of India to ensure that tourism destinations are adequately connected.
- Incentives to tourism entrepreneurs to invest in tourism infrastructure. NEDFI may be the nodal agency.

Human DEVELOPMENT AND BASIC NEEDS

Education

- Management of primary education by local community.
- Universalisation of education.
- 6 percent of GSDP be allocated for HRD.
- Training of all untrained teachers through a crash programme to be jointly implemented by SCERTs, NCERT and IGNOU.
- Development of vocational education in tune with the development needs of the region.
- A comprehensive regional plan and state plans for development of sports, youth activities and culture to be taken up by joint efforts by the centre, states, NEC and the private sector.

Health

- Goal to attain health for all by 2020.
- Communitization of primary health care system.
- Integrated programme for water, sanitation, health including health education.
- Medical colleges, para medical institutions be set up and also a regional Medical University.
- Special programme for treatment of cancer and prevention of HIV/AIDS.
- Increase health sector budget to 6 percent of GDP.

Rural Development

- Minimum road connectivity to all the 40261 villages.
- Electrification of the remaining 8400 villages and 45 lakh households by 2020.
- Drinking water facilities to the uncovered 46.54 percent rural households in the region by 2015.
- Promotion of agro-horti based and service related micro enterprises.
- Cluster approach for development of both farm and non farm rural enterprises – at least two rural clusters in each of the 484 blocks in the region by 2020.
- A pool of dedicated and focused SHGs and NGOs be brought about for project implementation.
- Set up a regional centre for rural studies.
- Promotion and application of appropriate rural technology.
- Est 16 growth poles by 2020 in the pattern suggested by the National Commission For Development of enterprises in unorganized/informal sector.
- Evolve appropriate development model for rural North East based on the experience of North eastern region community resource management (NERCRMP) and village development board (VDB) model in Nagaland.

Women Empowerment

- Formation of self help groups.
- Strengthening women NGOs to make their voice edible.
- Budgeting for gender equity.
- Evolving a banking and industrial policy that supports women participation / empowerment.
- Launching movement for mass woman literacy, training and motivation that helps capacity building.

- Capacity building special entrepreneurship development programmes for women.

Financing Development

- Micro credit is of special importance as more than 70 percent of the farming communities are marginal farmers with little access to credit.
- Coverage of entire region under NABARD. Potential Linked Credit Plan by 2015.
- Expansion and strengthening of the SHG-bank linked credit system. Number of linkage units be raised to at least 50,000 by 2015 and to one lakh by 2020 from existing 5000 units.
- SHGs engaged in farming and non farming micro level enterprises should be increased to reach 1 lakh by 2015 and 2 lakh by 2020 for which special drive may be launched.
- NEDFI and SIDBI should create a separate micro credit fund of Rs. 1000 crores only for the North east.
- All India financial institutions to set up more branches and number of bank branches should be doubled by 2015.
- Credit deposit ratio should go up to: 2010 - 45 percent, 2015 – 50 percent, 2020 – 60 percent.
- Special efforts by states are needed to strengthen the structural base to ensure efficient performance of rural micro enterprises and coming up of larger number of SHG led enterprises.
- Level of priority sector lending by banks should be increased to at least 40 percent by 2020 by creating local competitive entrepreneurship on a wider scale.
- State administrations join hands to create conducive environment for success of rural micro enterprises eg. By motivating people, an absorbing market and a sound infrastructural footing.

Measures to Correct Financial Imbalances

- Set fiscal targets on basis of long term macro economic forecast.
- Constitution of state level fiscal advisory boards.
- Introduction of fiscal reform programmes.
- Reduction in administrative overhead.
- Evolving new and innovative measures for revenue augmentation.
- Making tax system efficient.
- Better project implementation and monitoring.

Governance and Decentralisation

- Need is of a responsive, committed, transparent and efficient administration.
- Capacity building for e-governance as mentioned in the CMP.
- Planning commission to provide special assistance to the states of NER to enable them to strengthen / improve project formulation, execution, evaluation and monitoring system.
- NEC to have a cell of expert professionals in core sector through outsourcing to assist the states in developing an efficient system.
- Excessive bureaucratic interference which inhibits flow of private investment should be avoided.
- Centre to provide adequate financial resources for development in the core sectors of the region's economy. CMP promises that "all North Eastern states will be given special assistance to upgrade and expand infrastructure".

Science and Technology

- Augmenting of converged IP networking system by 2010.
- Strengthening of local area networking with wireless connectivity in difficult terrain by 2015.
- Setting up of data centre at each state capital and in NEC secretariat at regional level with connectivity with all State secretariats thru converged networking by 2020.

- Set up small earth station and studio in each of the state HQ in NER by 2010 and providing connectivity to district and block levels to function as digital information network by 2015.
- S and T cell, Disaster management unit in NEC and linkage with RRL- Online /Real time Seismic network system by 2010.
- Disaster management information system with weather forecasting data to cover entire NER by 2015.
- Communication and disaster alert system (broadcasting) in all states of NER and earthquake warning system in NER states by 2020.
- IT and S and T parks in all state HQ in the first phase by 2015 and in selected districts in second phase by 2020.
- Captive network for E-governance up to block level by 2015 and setting up of kiosks owned by entrepreneurs and various financial institutions as per need and demand by 2020.
- Telemedicine network facility to be made available in district hospitals by 2010 and extended to CHC level by 2020.
- Computer infrastructure in educational institutions in stages up to primary school level – entire region to be covered by 2020.
- Infrastructure support to technical institutions in NER and application oriented programmes for rural development including consultancy.
- Set up by 2008 Regional consortium of all R and D institutions in the field of S and T in the NER to serve as functional committee for regular, purposeful and professional interaction and intervention at appropriate levels in close collaboration with state govt. RRL could function as the coordinating agency.
- By 2015 branches of RRL in each state capital to be set up on the lines of ICRA.
- Motivate and involve local communities in efforts to introduce appropriate technology to help raise both production and productivity, improve quality and cost.
- Set up NE regional association of technological and economic cooperation to bring prospective growth drivers together.
- Introduce computer education in all colleges and schools by 2020.
- Identify and promote centers of excellence in fields of engineering, IT, Biodiversity, capacity building, sustainable development, say, at the rate of one per state.

Miscellaneous

- A Different approach to hill areas.
- Special approach for development initiatives in relation to hill and tribal areas : best practices approach instead of ad hoc responses.
- Appraisal of all development projects from social compatibility angle.
- Modification of national norms to fit into the social values and conditions of life peculiar to tribal areas of northeast.
- Special programmes with proper appreciation of social and human aspects of jhumming to be taken up in consultation with tribal communities to make alternatives to jhum acceptable to farmers. Horticulture and cash crop to be promoted to bring down incidence of jhumming.

ANNEXURE - 15

CONCLUSIONS AND RECOMMENDATIONS OF SECTORAL SUMMITS OF NORTH EAST COUNCIL (NEC)

1. FIRST SECTORAL SUMMIT OF NEC TO REVIEW POWER SECTOR PROGRAMMES IN THE NORTH EASTERN REGION, PASIGHAT (16 – 17) JANUARY, 2007)

- (i) A two pronged strategy to be adopted for power generation with focus on
 - a) Small/Localised Hydel & Thermal and NRE projects for catering to local needs.
 - b) High capacity Hydel & Thermal Power Projects with associated Transmission lines for first meeting the demand for power of the North Eastern Region and thereafter that of the rest of the country.
- (ii) Ministry of Power to develop a clear, coherent and sustainable Power Policy for the NER which takes into account the special characteristics and needs of the Region
- (iii) Ministry of Power has set-up a Task Force for preparing a Master Plan for Power Development in the North East Region. The Task Force should take note of the issues raised and conclusions arrived at this Sectoral Summit. The report should be finalized expeditiously and inputs included in the Ministry's XIth Plan proposals.
- (iv) CEA to undertake feasibility studies for utilizing considerable shale deposits in Arunachal Pradesh and coal deposits in Assam and Meghalaya with the objective of increasing the share of thermal power.
- (v) ONGC & ILFS are in the process of setting up the 750 MW Palatana Gas Power Project in Tripura. Only Tripura and Assam have entered into MOU with ONGC / ILFS for purchase of power. Other power deficient States may also approach ONGC / ILFS for accessing power from the Palatana project.
- (vi) PGCIL to invest more in the trunk transmission lines for improving inter and intra-region connectivity. Adequate transmission system for evacuating power generated by public and private sector hydro projects in Sikkim to be developed. Priority to be accorded for creating a grid to meet power shortages in the North Eastern States. The issue of funding and recovery would be addressed by Sub-Group II.
- (vii) Transmission, sub-transmission and distribution system improvement to be one of the thrust areas for NEC during 11th Plan. In order to build up a shelf of priority projects, NEC to support intensive survey and investigation work relating to such projects by the State Governments.
- (viii) State Governments to prepare perspective plans for Transmission, Sub transmission and Distribution Systems in their respective States within the next six months to cover the XIth Plan period (2007-12).
- (ix) The issue of Gas availability and pricing is a matter of concern and needs to be appropriately addressed for exploiting the substantial Gas reserves in the Region for Power generation. The Ministry of Petroleum & Natural Gas to accord due consideration to the suggestions of the NE States and to resolve the issue of pricing of gas expeditiously.
- (x) The issue of high transmission charges (35 paise / unit), presently under reference to CERC, needs to be followed up by the Ministry of Power and resolved at the earliest.

(xi) Recognizing the need for continuing assistance to the States for improving their Distribution systems, the Ministry of Power to continue the APDRP with the existing norms, guidelines and funding pattern (90:10) for the NE States during the XIth Plan.

2. SECOND SECTORAL SUMMIT OF NEC TO REVIEW ROAD SECTOR PROGRAMMES IN THE NORTH EASTERN REGION HELD AT SHILLONG.

(i) The BOT (Toll)/BOT (Annuity) funding pattern for roads allotted to NHAI to under SARDP-NE/NHDP-III B is not considered suitable/feasible. Lack of response has delayed implementation. DORTH to consider budgetary support as has been done for roads entrusted to BRO and Assam PWD.

(ii) Capacity building of State PWDs for better planning & management of road assets is critical. ADBs assistance should be expanded. DoRTH may also seriously consider including an institution development and capacity building component in SARDP-NE and other road programmes with the objective to improve capacities of State PWDs.

(iii) Maintenance of road assets is important. All States to consider enactment of legislation on the lines of the Mizoram Road Fund Bill. Mizoram to expedite enactment and implementation.

(iv) DoRTH to consider the demand for extension of the East-West Corridor or, in the alternative to upgrade road linking all State capital cities and district HQs with four/two lane roads.

(v) States to utilize funds awarded by 12th Finance Commission for maintenance of assets. Sikkim has suffered because of inadequacy of award.

(vi) Ministry of DONER to accord priority to funding of conversion of timber bridges to RCC bridges. DoNER may consider funding porter tracks for connectivity to remote hamlets in hill areas.

(vii) A Master Plan encompassing all categories of roads to be developed by Ministry of DoNER, in consultation with the Ministries of Shipping, Road Transport & Highways, Rural Development, Planning Commission, NEC and the State Governments. The multiplier benefits of road sector programmes in promoting socio-economic growth should be factored in the proposed Master Plan. Priority be accorded to roads providing connectivity to hydro-project sites, important LCS and other economic and commercial growth centres. Consultants or a consortium of Consultants to be identified for implementing this proposal.

(viii) Ministry of DONER to continue funding roads which are not included under other Central and State sector programmes. NEC to continue to focus on roads which provide inter-state road connectivity.

(ix) DORTH to make all efforts to complete implementation of selected roads under NHDP-II, NHDP- III and SARDP-NE within the targeted dates. Milestones be spelt out in separate Action Plans under each

(x) States to rationalize royalty rates being imposed on construction materials. Local quarries be allowed to be exploited for sourcing materials by road construction agencies.

(xi) States to streamline/ simplify procedures for Environment and Forest clearance for felling of trees, shifting of public utilities, removing encroachments etc

(xii) BRO to consider setting-up Chief Engineer's office in Tripura and Sikkim.

(xiii) Ministry of DONER, in consultation with the DEA, to request ADB to take up special training of Manipur State PWD within a time bound framework. Special attention to be paid to improvement of roads in hill areas of the State.

(xiv) DORTH, NHA and BRO to consider freezing of alignments so as to reduce delays in implementation.

(xv) Ministry of DONER to request MEA to take the initiative to improve bilateral relations with Bangladesh to provide transit facilities to the North Eastern States, particularly to Tripura.

(xvi) Ministry of DONER/ NEC to examine the proposal to create a pool of road construction equipment which can be leased/rented out to registered contractors.

(xvii) Adequate provision be included in the original cost of construction of roads for maintenance during construction phase.

(xviii) States to provide complete details of land along the NHs to the construction agencies, as envisaged in National Highways, Land and Traffic Control Act, 2002. As per this Act the management of road land lies with the highway construction/ maintenance agency.

(xix) To address the transportation needs of major hydro power projects in Arunachal Pradesh and Sikkim and major Land Customs Stations (LCS) in the NER, the DoRTH may consider according priority to such NH projects under SARDP-NE.

(xx) NEC and NLCP funds should not be included under State Plans. They should continue to be utilized for projectised assistance for Inter- State Projects and Intra-State Projects respectively in NER.

(xxi) Ministry of Defence to consider nominating a Nodal Officer for NER related issues.

(xxii) It was observed from the presentation made by the Ministry of Rural Dept. That the States are slow in preparing proposals and awarding contracts under PMGSY. States advised to put the institutional arrangements as suggested in PMGSY in place.

(xxiii) The quality of roads under the PMGSY leaves much to be desired. Ministry of Rural Dept to devise suitable and effective strategies for improvement of quality.

(xxiv) Ministry of Rural Development to assist States to enhance capacities in respect of documentation and accounting under PMGSY.

(xxv) States to control high cost of construction under the PMGSY scheme.

(xxvi) To address issues relating to PMGSY, a Committee chaired by Shri P.P. Shrivastav, Member, NEC be constituted. It will include representative of Ministries DoNER and Rural Development, National Rural Roads Development Agency (NRRDA), Planning Commission, State PWD/RD/RWD as the case may be. Planning Adviser, NEC will be the Member-Secretary. Report to be submitted within three months.

(xxvii) To address issues relating to implementation of NHDP-II, NHDP-IIIB and SARDP-NE, a Committee chaired by Dr. (Smt.) I.K. Barthakur, Member and NEC is constituted. It will include representatives from the Ministries of DORTH, Planning Commission and State PWD Ministers. Adviser (Transport), NEC will be the Member-Secretary. Report to be submitted within three months.

(xxviii) Secretary, DONER in consultation with DORTH, will constitute a third Committee to address technical and research related issues with the primary objective to reduce the cost of construction of roads in the NER. CRRI may be associated.

3. THIRD SECTORAL SUMMIT OF NEC TO REVIEW COMMODITY BOARDS AND APEDA, INLAND WATER TRANSPORT, FLOOD & EROSION CONTROL AND IRRIGATION SECTOR PROGRAMMES IN THE NORTH EASTERN REGION.

Tea Board

- i) Tea Board to introduce incentives for orthodox tea planting and set-up Village Resource Centers to assist small tea growers during 11th Plan. More mini factories are set up.
- ii) Tea Board to announce a separate logo and GI for Assam Orthodox Tea within three months.
- iii) Assam Government to issue “possession certificates” to all small tea growers within one month to enable them to register with Tea Board.
- iv) Indian Institute of Plantation Management is set up at Jorhat by June, 2007 with mandate to undertake training programmes.
- v) Transport subsidy for tea exported directly from ICD, Amingaon, Assam @ Rs.1.50 per kg to be introduced.
- vi) Tea Board to support promotional activities in association with the industry.
- vii) Tea Board to streamline electronic auction system for online trading of tea.
- viii) Tea Board to support Tea Research Association (TRA) and Tea Research Foundation (TRF).
- ix) Tea Board to support labour welfare measures including capital grants for extension of school buildings and construction of hostels, medical facilities and purchase of equipment, sports activities, sanitation and drinking water for tea garden labour.
- x) Tea Board to support diversification/multi-cropping and intensify marketing support.

Rubber Board

- (i) Rubber should be the major thrust area during the 11th Plan, with active collaboration among the stakeholders – Department of Commerce, Rubber Board, Ministry of DONER/NEC and the North Eastern States.
- (ii) Rubber Board to fund for area expansion and rejuvenation of sick plantations and introduce technology for increasing productivity.
- (iii) Rubber Board to address locations specific agro-management and processing problems.
- (iv) Rubber Board to upgrade quality at primary process level for better price to farmers and support formation and empowerment of farmer groups.
- (v) Rubber Board to maintain and support nurseries by Gram Panchayats and SHGs.
- (vi) Department of Commerce to strengthen all Commodity Boards including Rubber Board to enable intensification of their activities in the NER.
- (vii) States to earmark and allot land for rubber plantations and emulate the Tripura model. State Governments to designate department and officer as nodal agency in the respective States for coordination with the Rubber Board.

(viii) A Task Force chaired by Shri P.P. Shrivastav, Member, NEC with representatives from the Rubber Board, DONER/NEC and Department of Commerce and the NE States as members be constituted to prepare a detailed Action Plan for taking up Rubber Plantation in the identified areas of the NE States. Dr. Binay Singh, Adviser (Agriculture), NEC shall be the convenor. The Task Force should examine existing Central programmes, identify gaps and recommend specific measures for promoting rubber plantations in the NER. The Tripura model of rubber cultivation to be considered by the Task Force. Report to be submitted by 15.4.2007 to the Chairman, NEC.

Spices Board

(i) Spices Board to be strengthened and to intensify its activities in the NER to promote spices production and productivity particularly that of organic spices. Investments by Spices Board to be increased commensurate with the proposed intensified programmes in the Region.

(ii) The tripartite agreement between ITC, State Governments and the Spices Board be signed during the 3rd N.E. Business Summit being organized jointly by M/o DONER and ICC, Kolkata at New Delhi from 10-11 April 2007.

(iii) An MOU has been signed between Cochin University of Science and Technology (CUSAT) and the Spices Board for research on spices. Dr. C.S. Paulose of CUSAT be invited to the 3rd N.E. Business Summit.

Coffee Board

(i) Coffee Board to facilitate consolidation of holdings in NER and also provide financial support for expansion and quality up-gradation. Inter cropping in the coffee plantation also to be promoted.

(ii) States to cooperate with Coffee Board for raising coffee plantations in clusters particularly in the States of Nagaland and Mizoram which hold maximum potential.

(iii) Coffee Board to provide technical support and build capacity of coffee growers and State Govt. staff for improving production and productivity and facilitate marketing – Village Development Boards in Nagaland and credible NGOs like YMA in Mizoram be mobilised for community participation. NERAMAC to be involved for collection and transportation of produce to a central location for processing and marketing.

(iv) Coffee Board to promote mixed cropping and provides infrastructure support for processing of the produce – presently there is only one coffee processing unit at Bualpui in Mizoram.

(v) Coffee Board to focus on promoting coffee cultivation in agro-climatically suitable areas of the NER.

APEDA

(i) APEDA to operationalise four Agriculture Export Zones (AEZs) in Tripura (1) for Pineapples, Sikkim for Ginger, Orchids and Cherry Pepper and in Assam (1) for Fresh & Processed Ginger by 12/ 2007.

(ii) APEDA to submit a report to the Department of Commerce on the status of Cold Storages at the Guwahati, Aizawl, Imphal, Dimapur, Agartala and Bagdogra Airports with time lines for their completion.

(iii) APEDA to expedite conclusions of negotiation with cargo companies to provide complete cold chains in the NER..

(iv) APEDA to coordinate consultations with CONCOR and NERAMAC to work-out the logistics for a complete cold chain from the field to the point of export.

General

- (i) Rubber plantations were identified as the top priority thrust sector among the Commodity Boards followed by the Spices Board and APEDA.
- (ii) It was recognized that considerable work has already been initiated by the Tea Board. This may be carried forward.
- (iii) Coffee Board will pay focused attention for development of coffee plantations in Nagaland and Mizoram through clusters.
- (iv) State Governments to assist the Commodity Boards and APEDA in matters relating to land acquisition, organization of farmers, awareness programmes and identification of clusters, etc.
- (v) APEDA to ensure operationalisation of the five AEZs within 01 December, 2007.
- (vi) All for Commodity Boards and APEDA to be invited to the North East Business Summit (New Delhi: 10-11 April, 2007).

Inland Water Transport:

- (i) Ministry of Shipping/IWAI to follow up with the Ministry of External Affairs the renewal of Indo-Bangladesh IWT protocol on long term basis and expeditious approval of the Kaladan River multi-modal transport route from Mizoram to Sittwe port.
- (ii) IWAI to ensure that NW-II is made fully operational within March, 2009 and expedite necessary approval for declaration of Barak River (Lakhipur to Bhanga) as NW-VI and take up development of the waterway on priority.
- (iii) IWAI to develop credible night navigation facilities on NW-II to reduce travel time. Ministry of Shipping/IWAI to consider deputing a delegation abroad for studying effective methodology for providing night navigation facilities.
- (iv) To reduce manual handling of cargo, IWAI to consider providing mechanical handling of cargo.
- (v) IWAI to consider proposal from the Govt. of Mizoram to link the Tlawng and Barak Rivers to enable transport of cargo from Mizoram into the Barak Valley and further through the proposed NW-VI.
- (vi) Ministry of Shipping/IWAI to take up the Tripura Government proposal for declaring Ashuganj as Port-of-Call during the next meeting with Bangladesh.
- (vii) The existing CSS needs to be revisited and funding under the new Central Sector Scheme, to be administered by M/O DONER, to be raised substantially with components on capacity building and assistance to the States to carryout survey and investigation and preparation of DPRs.
- (viii) IWAI to carry out awareness campaigns on the possibility of developing navigation facilities on rivers in Arunachal Pradesh. State Govt. advised to submit proposals for accessing funds available under the 100% CSS.
- (ix) Government of Tripura to send a formal proposal to IWAI for carrying out feasibility survey of the Gumti River.
- (x) IWAI to expedite EFC for procuring four cutter suction dredger and other equipment for carrying out dredging operations on NW-II.

(xi) DONER to work out details of the new Central Scheme in consultation with the Planning Commission, Ministry of Shipping/IWAI and the NE States for implementation WEF 2007-08.

Flood & Erosion Control & Irrigation

(i) Ministry of Water Resources (MOWR) and Brahmaputra Board to take up immediate and short term measures in consultation with the States for flood and erosion control on priority.

(ii) The Ministry of Water Resources (MOWR) is consulting the States on the proposal to constitute NEWRA. The Govt. of Arunachal Pradesh expressed their reservations about the constitution of this authority.

(iii) The Brahmaputra Board to play a more active role in taking up flood control schemes in all NE States and should not confine its activities to any one State as it appears to have happened so far.

(iv) Brahmaputra Board to expedite preparation of DPRs in respect of eight proposals of the State of Tripura.

(v) CWC to expedite preparation of DPR by 12/2007 in respect of Mizoram Govt's revised proposal for a 450MW Kolodyne project.

(vi) NEC would provide funding to the States for engaging Consultants for preparation of project reports for micro/minor irrigation projects.

(vii) Planning Commission to examine the pattern of release of installments so that the loss of working period can be avoided.

(viii) CWC to ensure early release of funds for implementation of various projects.

(ix) MOWR to examine the possibility of modification in the AIBP scheme, like increasing the limit of project cost per ha, providing for maintenance etc. for minor irrigation schemes, reducing the area of irrigation potential to five ha per scheme etc.

(x) MOWR to examine the possibility of taking up ground water irrigation scheme under AIBP including construction of check dams.

(xi) MOWR to take up the matter with the Central Ground Water Board (CGWB) to explore the possibility and desirability of exploitation of ground water in the NER in view of the possibility of hazardous elements.

4. FOURTH SECTORAL SUMMIT OF THE NORTH EASTERN COUNCIL TO REVIEW THE TOURISM AND THE HOSPITALITY SECTOR IN THE NORTH-EAST 27-28 APRIL 2007.

Gangtok Declaration on Tourism and the Hospitality Sector.

The Tourism sector holds the highest promise for generating large employment and income-augmentation opportunities spreading and reaching down to all segments of society in all States of the North-East Region (NER).

Capital costs are modest compared to large industrial investments and gestation periods are short. Moreover, as is being recognized by the hospitality industry all over India, the people of North-East are

exceptionally well-endowed, in terms of personal and social characteristics and a long tradition of hospitality in their homes and communities, for employment in the hospitality industry. Therefore, the tourism sector should be a thrust area for NEC intervention during the Eleventh Plan Period. State governments in NER must take full advantage of Ministry of Tourism schemes and NEC/NLCPR funding for tourism development and promotion, especially for infrastructure related to the tourism and the hospitality sector. To this end, State governments must prioritize tourism, including addressing priority issues such as making land available, upgrading expertise to prepare project proposals, and minimizing delays in implementing projects. The involvement of communities through panchayats and village development boards, as also of the private sector, is of the essence for the development of the tourism and the hospitality industry.

3. The single most inhibiting factor is the perception of NER as being ridden with insurgency, militancy and terrorism. This perception is so much at variance with ground realities that projecting a true and nuanced picture of the vast swathes in NER of total peace and tranquility, impeccable law and order, and iron-clad security for the tourist is as essential for the development and promotion of tourism in NER as for investment in other sectors of development.

4. Poor connectivity has been a major impediment to the development of tourism in NER. But there is now a concerted drive to rapidly augment all kinds of connectivity within NER and between NER and the rest of India, as well as the world at large, particularly South-East Asia. The Government of India will be investing about Rs. 50,000 crore on the construction of road and highways in the North-East in the next five years. The rail network is being substantially augmented. National waterway-II (the Brahmaputra River) will shortly be made fully operational from Sadiya to Dhubri and the Barak River is expected to be shortly declared as National Waterway-VI. The Kolodyne River through Mizoram and up to Sittwe in Myanmar is being developed. Already, the density of civil airports in NER is the highest in India and recent GOI policies had led to about 226 flights a week between NER and the rest of the country. Intra-region connectivity is now the watchword and plans are in hand to reach a target of nearly 600 flights a week within the region during the first half of the Eleventh Plan period. There is, moreover, a new emphasis on power generation which is expected to render NER surplus in power during the current Eleventh Plan period. Every effort will be made to ensure that transmission and distribution systems are directed toward 'Power to the People'.

5. It is particularly significant to note that hotels(two-star category and above), and adventure and leisure sports, including ropeways, have been included in the new North-East Industrial and Investment Promotion Policy, 2007 (NEIIPP) effective 1.4.2007 which has extended fiscal incentives to the service sector. Not only has the hospitality sector thus been rendered virtually tax-free but also eligible for generous capital subsidies and interest subsidies. Detailed notifications under the NEIIPP, 2007 would be notified by the Department of Industrial Promotion and Policy, hopefully within the next few weeks.

6. The major issues that emerged and conclusions arrived at during the Fourth Sectoral Summit are detailed below:

Issues:

i) The target groups for tourism promotion are both domestic and foreign tourist, with the highest priority being accorded to the domestic sector and particularly targeted at States like Gujarat and West Bengal which generate a high proportion of domestic tourism. It is also important to target potential segments of society such as government servants holidaying on Leave Travel Concessions (LTC).

ii) Tourism in NER should be constructed around four concentric circles:- (a) State-based, that is, intra-State tourism (b) Multi-State tourism, based on clearly identified multi-State tourism circuits.(Given the geographical location of Sikkim, it may develop, in the first instance, multi-State links with West Bengal, particularly the Darjeeling Gorkha Hills Area).

(c) Pan regional tourism involving the development of linkages within NER and between NER and other regions of the country, particularly the eastern region.

(d) International tourism with connectivity from within NER to neighboring and other foreign countries. For the promotion of international tourism, it has to be recognized and promoted that South-East Asia begins in North-East India.

(iii) At an all India level, the small domestic tourist traffic has increased from 250 million to 400 million, of which foreign tourist traffic is estimated at no more than 2 to 3 million per annum. This requires that the thrust of NER tourism development should be on domestic tourist, while, of course, also tapping into the international traffic

(iv) Bengalese and Gujaratis are known to be great travelers; hence they should be the target of promotional efforts.

(v) To promote tourism, relaxation and liberalization of the ILP/RAP/PAP regimes should be undertaken on a State-wise basis in consultation with the States concerned.

(vi) For attracting domestic tourists, the emphasis should be on developing Dharamshalas, one room accommodation; low costs/low budget hotels, youth hostels and accommodations along rivers and near centuries.

7. It was agreed that each State would draw up annual and perspective State Plans for Tourism related to (a) and (b) above. On the basis of these State Plans, and in consultations with the States and the Ministry of Tourism, NEC and the Ministry of DoNER will attempt to draw up annual and perspective plans for the development and promotion of (c) and (d).

8. It was further agreed that the Ministry of DoNER will initiate a broad-spectrum dialogue with the Ministry of External Affairs (and other Ministries concerned) to address both the opportunities and challenges of international tourism to NER. The specific priorities in these areas are:

(i) Tourism cooperation with government agencies and corporate tour operators in the five countries having land frontiers with NER and South-East Asia.

(ii) Training of tourist office personnel in India and abroad, as also Indian Foreign Service and other Civil Servants on tourism promotion to the North-East.

5. FIFTH SECTORAL SUMMIT OF THE NORTH EASTERN COUNCIL TO REVIEW AIR CONNECTIVITY SECTOR PROGRAMMES IN THE NER HELD AT AIZAWL, MIZORAM (18-19 MAY 2007)

(i) The Report submitted by the Committee Chaired by Dr. S.S. Sidhu, H.E. Governor of Manipur on a 'Dedicated Airline for the North Eastern Region' was endorsed/accepted by the members present at the sectoral summit.

(ii) Specific milestones were tentatively decided for implementing the basic recommendation of the Sidhu Committee for selection of an operator for the proposed dedicated airline:

- 25th May 2007 – Issue of Public Notice inviting Expressions of Interest.
- 25th June 2007 – Last date for receipt of Expressions of Interest.
- 15th July 2007 – Evaluation of technical and financial bids.
- 15th August 2007 – Awarding of contract to the party and announcement by Hon'ble P.M. about dedicated airlines in the North East.

(iii) Guwahati to be developed as an airline hub in North part of NER and Agartala/Imphal to be developed as hubs in the Southern region of NER.

(iv) Night landing facility to be provided at Imphal by the end of 2007.

(v) Pending finalization and implementation of a dedicated airline in the Region, the interim period has to be serviced by Alliance Air. M/s Alliance Air to workout an agreement for extending the existing MOU for another year.

(vi) M/s Alliance Air was advised to increase flights in the Category-II routes pertaining to the North Eastern Region.

6. SIXTH SECTORAL SUMMIT OF NORTH EASTERN COUNCIL ON 'RAIL CONNECTIVITY' PROGRAMMES IN THE NEC, 19TH JUNE 2007 AT NEW DELHI.

Delhi Statement on Rail Connectivity in the North-East Region

The 6th North-East Sectoral Summit on Rail Connectivity noted that only 4% of India's railway network is located in the North-East. At the same time, the Summit also noted that the Ministry of Railways has not only consistently spent over 10% of its Gross Budgetary Support (GBS) in the North-East but it has been increasing year over year and it has reached almost 15% of GBS. Notwithstanding this performance on the GBS front, the historical gap that needs to be made up is so large that a much accelerated programme of rail connectivity is required to provide the basic infrastructure capacity for the North East to realize its economic potential. To this end, the Summit agreed that the 14 major railway projects listed in the annex will be sought to be completed within the 11th plan period with an investment of around Rs. 10,000 cr. However, the provision of the required funds is but the beginning; what is required to be able to ensure that the availability of funds is matched by performance on the ground is the packaging of the following key action points, all of which were found to be feasible and practical by the Summit participants:

i) A long-term plan which clearly indicates the phases in which identified projects will be completed in five year time frame of the 11th plan period.

ii) The release of the annual installments by the Ministry of Finance at the BE stage and not at the RE stage as at present.

iii) The determination by the Ministry of Railways, in association with the State governments concerned, of the availability of capacity to undertake the physical work implied in the financial estimates with a view to augmenting the capacity to the required extent to fulfill the physical target. In this connection, particular note was taken of the willingness of the Ministry of Railways to enter into partnership with domestic and foreign partners to attain the specified targets within accelerated time frame.

IV) Pari passu with determining the availability of financial resources and construction capacity, the need to estimate security requirements and ensure that security considerations do not stand in the way of meeting financial or physical targets.

v) The establishment of a comprehensive monitoring mechanism, with representatives from all the stakeholders concerned, to keep under regular and frequently review the progress of works and the removal of road blocks.

With a view to approaching the question of railway construction in this comprehensive manner, it was underlined that the stakeholders' ministries, agencies and State government concerned should adopt the Mission Mode so that all problems of coordination are resolved within the Mission Mode and the agencies concerned work together towards a common objective.

The Summit recognized that if the 14 projects annexed are in fact completed within the 11th Plan period through the Mission Mode, as agreed, it will transform the face of the transport infrastructure in the North-East and unleash the enormous development potential of the region. Over and above the 14 major projects

identified in the annex, it was agreed to further explore with the next few months the following innovative ideas put forward by different state delegations.

i) Arunachal Pradesh: A concept paper on the 'India-China Friendship Railway' to bring railway to those parts of the North-East that border China and possibly link up with the Chinese rail network which now extends into Tibet up to Lhasa and beyond. Further, another concept paper will be prepared by the Government of Arunachal Pradesh highlighting the railway construction requirements which will be indispensable to the full utilization by the North East and the country as a whole of the power generation potential of 30,000-50,000 MW from Arunachal Pradesh alone.

ii) Meghalaya: A concept paper linking Jogighopa through the plains of West Garo District and the southern plains bordering Bangladesh all the way through the East Khasi and Jaintia Districts to link up with the Lumding-Silchar railway line so as to exploit the potential for horticulture products such as cashew nuts and anthuriums as also the vast mineral deposits, including coal, limestone and uranium, of Meghalaya.

iii) Tripura: A concept paper on extending railways to connect with all the Land Custom Stations, planned and proposed, on the frontiers of the North-Eastern Region with neighboring countries. The Tripura delegation will also prepare a concept paper on the steps required to rejuvenate Bangladesh interest in trade and transit relations with India in general and North-Eastern Region in particular, especially with reference to a possible linkage from Sabroom to Chittagong.

iv) Mizoram: The Ministry of Railways, in association with the Government of Mizoram, to prepare a concept paper on extending the proposed Bairabi to Sairang broad gauge line to a river port on the Kolodyne River with a view to linking up with the proposal to established riverine transport to Sittwe port in Myanmar.

v) Nagaland: The Ministry of Railway, in association with State Government of Nagaland, to explore the possibility of marginal adjustments in the route alignment to touch locations of economic significance in the hill states of the North-East, including Nagaland. The Government of Nagaland will give a concept paper on railway lines along the foothills of Nagaland. As and when the concept papers are ready, discussions will be organized by the Ministry of DoNER between stakeholders at the capital of the States or in Delhi, as appropriate. State delegations made a number of State-specific suggestions for improving Rail Connectivity. These are listed in the section 'Issues & Conclusions' and will be further pursued with the authorities concerned. There was general agreement that every effort should be made to extend and modify proposed railway alignment to connect up with State capitals wherever present proposals fall short of reaching the State capital. In this connection, special emphasis was laid on the following proposed extensions/modifications:

i) Mizoram: Bairabi- Sairang to be extended to Aizawl.

ii) Manipur: Jiribam-Tupul line to be extended to Imphal

iii) Nagaland: Dimapur-Zubza to be extended to Kohima

iv) Meghalaya: Azra – Byrnihat to be extended to Shillong.

v) Sikkim: Siliguri to Rangpo to be extended to as near to Gangtok as feasible.

The Summit agreed that Ministry of DoNER and NEC should be associated on a continuing basis and as a matter of right in the interministerial issues relating to the railway network of the North-East.

Conclusions

1. There is an immediate need to identify source of funding for the 'National Projects' by the Planning Commission and the Ministry of Finance.

2. The Ministry of Railways has the capacity to implement projects in a given time-frame, provided funds are available. The allocation of funds to the Railways for these projects should be made at the B.E. stage which is more appropriate and is a distinct advantage to the Railways who are planning implementation of projects.

3. A Mission Mode needs to be adopted so as to ensure timely implementation of projects. Therefore, monitoring mechanism needs to be in place. The Ministry of DoNER and NEC should be involved at all levels of decision making with regard to planning of rail projects in the North Eastern Region.
4. Given the progress of the ongoing projects and the commitment of the Government of India to provide necessary funds for the ongoing projects, it is expected that the Ministry of Railways will implement 14 approved projects in the 11th Five Year Plan.
5. To cut down delays, it must be ensured that alignments for rail projects which are once firmed up should not be altered. Issues such as land acquisition and environment & forest clearances should be sorted out at the beginning of the project.
6. Security concerns at project sites should be addressed by State Governments and the Ministry of Home Affairs. The security protection provided by Tripura Government at rail project sites is exemplary and worth emulating. Issues of providing security, forest clearances, and land acquisition are leading to 'wastage of capacity'. Therefore, the State Government would resolve these issues expeditiously.
7. A special Meeting on rail projects in Meghalaya and Nagaland will be organized in Shillong/ Kohima.
8. All State capitals need to be connected by rail. In cases where the rail links are being terminated short of the capital such as Jiribam to Tupul (Imphal), Dimapur to Zubza (Kohima), Sivok to Rangpo (Gangtok) the Railways should conduct feasibility studies for extending the railway links upto the State capitals.
9. A special session on 'Look East Policy' needs to be organized by Ministry of DoNER.

7. SEVENTH SPECIAL SECTORAL SUMMIT OF THE NORTH EASTERN COUNCIL HELD IN KOHIMA ON 31ST JULY-1ST AUGUST 2007

Telecom Sector

- i) Minister DoNER to take up the matter of restriction on mobile telephony within 0-500 meters of the international border with the Ministries of Home and Defence in the light of the peculiar situation of the Region.
- ii) Regarding stringent requirements for verification of customers, the suggestion to use the electoral photo identity card as proof of identity may be examined by the Department of Telecommunication in consultation with the MHA. Other similar ideas may also be explored to enable the people of the North-East to have hassle free and quick connection.
- iii) BSNL will take steps to introduce online billing facility in the Region and quick incorporation of payments made to overcome multiple billing and settlement disputes concepts of easy-billing centers being operated in many cities need to be introduced in the NE States as well.
- iv) To address the lack of adequate skilled manpower in the NER for meeting the requirement of telecom sector, the North Eastern Council in consultation with BSNL and other service providers will consider setting up of a Regional Institute for Training of Telecom Personnel, preferably at Dimapur. Dr. (Mrs.) I.K. Barthakur will coordinate.
- v) The Department of Road Transport and Highways as well as the State Governments should examine and give effect to the proposal for providing service ducts in all new roads and existing roads where widening work is undertaken to facilitate and economize the laying up and maintenance of cables and to minimize disruption.

vi) The large number of check posts and long procedures lead to avoidable delays and increase the cost of transportation. The States should streamline the system which should be made uniform for the whole Region.

vii) The states should have a single window, time bound and efficient system for according clearances for laying of cables. Restoration charges should be rationalized so as to not become deterrent.

viii) The pros and cons of underground cable network *vis-à-vis* other alternatives like PGCIL Cable, submarine cable and a cable through Brahmaputra should be clearly studied by the BSNL in view of the peculiar conditions in the Region. Ministry of DoNER should ask the PGCIL to include in their proposed study of the transmission needs of the Region, the utility of the network from the point of view of providing alternate connectivity on their cables.

ix) State Electricity Boards should give priority to ensure regular, uninterrupted and quality power for running the telecom and IT network.

x) DoNER should constitute a Committee under the Chairmanship of. Shri P.P.Shrivastav, Member, NEC, for better coordination and synergy among various stakeholders with a view to achieve optimum results at accelerated pace by identifying problems, integrating networks and resolution of conflicts.

xi) The States should facilitate acquisition of land for setting up of telecom infrastructure and also provide security for the officials wherever required.

Information Technology

xii) The North-East States should endeavor to develop themselves into preferred IT destinations by creating an enabling environment with appropriate policy intervention and PPP models.

xiii) The IT industry should not be misled by the false portrayal of the North-East as a Region beset with terrorism and insurgency. The fact is that large swathes of the Region have impeccable law and order situation. Ministry of DoNER and the NE States should take appropriate measures to dispel such a notion from the minds of potential investors.

xiv) Quality infrastructure should be created to position the Region as an attractive and viable destination for the IT industry.

xv) The states should give highest importance to use IT to lift the quality of life of their people, particularly in the rural areas.

xvi) The States should take appropriate measures for promotion of local entrepreneurship in IT. A scholarship based system of identifying; nurturing and promoting IT talent should be introduced.

xvii) The North-East Region should position itself to become the back office for the Southeast Asian and Far East Asian countries.

xviii) The IT industry is likely to have much lower attrition rate in the Region as the people are generally attached to their heritage. The States and the NASSCOM may highlight this crucial aspect which is becoming a major concern of the industry.

xix) The state Governments are unable to find resources for running the CICs and are requesting for the extension of status-quo for a few more years. Further, questions were raised regarding the viability of converting the CICs into CSCs at many places. The Department of Information Technology should take into account the concerns of the states before taking a final decision.

xx) The DoEACC, an autonomous society of the Department of Information Technology, has centers at Aizawl, Imphal, and Tezpur (with extension centres at Guwahati and Kohima). The centers should be established in all the States of the Region.

xxi) The Government should work towards a One India Plan for Bandwidth so that the North-East States do not suffer from this handicap.

xxii) The IT and Higher Education Departments in the NE States should extend requisite support to NASSCOM for the NASSCOM Assessment of Competence in IT Skills. They should remain fully involved with the whole process since it has long term implications for employment, training and modification of curriculum. NEC and North Eastern Regional Educational Council should sensitize the Vice-chancellors of Universities and College Principals for sensitizing the eligible students for taking NAC.

E-Governance

xxiii) Many of the NE States do not provide IT enabled citizen centric services at present. National Informatics Centre has to upgrade existing technical support to the North-East States for e-Governance. The States should provide content as well as update it regularly.

xxiv) The States should undertake Capacity Building programmes for employees at all levels.

xxv) For optimum utilization of the CICs (CSCs afterwards), awareness campaigns should be organized in remote and interior areas.

xxvi) DIT should expeditiously resolve the issue of State Wide Area Network with the Government of Arunachal Pradesh and the network should be in place for all the NE states by 31.03.08.

Annexure 16

REPORTS ON THE PUBIC HEARINGS ON THE DRAFT VISION DOCUMENT

We have received many of the suggestions made in the public hearings. The summary of the observations and suggestions made in public hearings at 12 different locations in the region are given in this Annexure.

These Public Hearings were scheduled as follows:

Sr No.	Name of the Place	Name of the Person Conducting Public Hearings	Date
1	Itanagar (Arunachal Pradesh)	Dr I.K. Barthakur, Member, NEC	November 7, 2007
2	Bomdi La (Arunachal Pradesh)	Dr Gautam Naresh, NPFPF	November 6, 2007
3	Passighat (Arunachal Pradesh)	Mrs Mehfuza Rehman, Member, Steering Committee	November 6, 2007
4	Guwahati (Assam)	Mr B. G. Verghese, Chairman Steering Committee	November 1, 2007
5	Dibrugarh (Assam)	Dr C. J. Thomas, Member, Steering Committee	November 6, 2007
6	Silchar (Assam)	Ms Anuradha Bhasin, NIPFP	October 29, 2007
7	Imphal (Manipur)	Dr Gautam Naresh, NIPFP	November 2, 2007
8	Shillong (Meghalaya)	Mr Falguni Rajkumar, Secretary (NEC) and Member Steering Committee	November 2, 2007
9	Aizawl (Mizoram)	Mr H.V. Lalinga, Member, Steering Committee / Dr Alokesh Barua, NIPFP	November 7, 2007
10	Kohima (Nagaland)	Mr P.P. Shrivastava, Member, NEC	November 5, 2007
11	Gangtok (Sikkim)	Mr Sushma Singh, Secretary (DoNER) and Member Steering Committee	November 17, 2007
12	Agartala (Tripura)	Dr M Govinda Rao, Director (NIPFP)	November 7, 2007

REPORTS ON THE PUBLIC HEARINGS ON THE DRAFT VISION DOCUMENT

Report on the Public Hearing at Silchar, Assam on October 29, 2007 At Gandhi Bhavan

The public hearing was attended by around 110 people, and of those who spoke several were journalists, NGO workers active in the field, retired government officials, academicians and an MLA. Ms Anuradha Bhasin, Consultant with NIPFP presented a brief summary of the genesis of the project, the main focus areas of a people-centric vision of development, and the main recommendations of the draft document. Several points were made on the summary of the draft vision document prepared by NIPFP, the gist of the points pertaining to the draft document follows:

General

- It is important before articulating the vision to account for the fact that the crores of rupees pumped into the region for years have yielded little development. The region accounts for 3% of the population 7% of the geographic area, but receives 10% of the funds. Yet, if you look at a district like Cachar, it is as poor as ever. Need to make sure that this is addressed.
- **Insurgency:** The main constraint to development is insurgency, but this is not a result of unemployment – there is unemployment in several other states, but this has not led to insurgency. Insurgency has to be put down with a bold hand as has been done in Punjab and West Bengal, only then can we have development.
- IT and computers need to have primary focus to introduce transparency and accountability into the system.
- **Look East policy** – in Nathula this has only meant an increase in Chinese exports to India, little benefit for Indian traders.

Region-Specific Issues

- **Macro-planning** as in the vision document will leave out important pockets that are underdeveloped; within the region, there are several sub-regions – within Assam, the south Assam area is separated by the North Cachar hills, which restricts the movement of goods and manpower. Thus, Tripura, Manipur, Mizoram and the Barak Valley need to be considered a single economic unit for planning, only then will they get their due. The lack of connectivity has disadvantaged them vis-à-vis the rest of India.
- **For tribals**, especially in Assam, there is a need for a special focus so that they are connected to the mainstream. Set up model villages, with model facilities, a community centre so people can come to share their problems which will help increase connection, and reduce insurgency.

Rural Development, Floods and Agriculture

- Rural development is at the basis of all development, but agriculture and livelihoods are affected every year by floods. The document talks of floods in the Brahmaputra valley, but in the document there is no mention of floods in the Barak Valley (which is where the Silchar District is located) which is as devastating to the people living in the area. Any plan for the region has to make recommendations on tackling floods in this valley too and for the Barak river and all the various tributaries.
- The floods that occurred this year have devastated agriculture to such an extent that people are considering other livelihoods.
- Need irrigation for the months when there are no rains, so that the number of cropping seasons can be increased
- Need emphasis on watershed development in agriculture.

Road and rail infrastructure

- It takes three days by train to go from Silchar to Kolkata, which is why those who can afford it travel by air. Need to improve this.

- Roads have been built only for fair weather – need roads with drainage systems specially constructed to withstand the floods in the area.
- Given its relative isolation, important for this region to establish a train and road route through Bangladesh to Kolkata.
- Myanmar should also be linked to the Barak Valley through Mizoram.
- Broad gauge connectivity needs to be accelerated, at the moment, only metre-gauge to Silchar.
- Schemes especially for roads take years to complete, people have lost faith in them.

No mention in the document of:

- Micro finance at the village level
- Animal husbandry, fisheries, etc

The meeting ran from 10:30 am to 3:30 pm. At the conclusion, Anuradha Bhasin thanked all the people present for their constructive suggestions and requested that if there are any further suggestions for improvement they should send it by e-mail.

Report on the Public Hearing at Guwahati on November 1, 2007

The public hearing on the NE Vision-2020 was held at the Jyoti Chitran Auditorium and hosted by the DC, Guwahati, Mr Jain on November 1, 2007. The audience of around 150-175 at its peak consisted of a cross-section of professionals, academics, officials, media and NGO representatives, local body functionaries and an MLA. The meeting lasted from 10 a.m until 3 p.m with a short break for a packed lunch. Participation was good and the interaction lively and well focused.

B.G. Verghese, Chairman of the Steering Committee made a broad presentation of the purpose and methodology followed in preparing the vision document, starting with a very large household survey and a first draft by the NEC to the present draft by the NIPFP after field visits, consultations with NE states, the NEC, Central Ministries and the Steering Committee. It has also benefited from the series of sectoral summits organised by the NEC. It was pointed out that the draft document is posted on the NEC website and that, even after this meeting, comments can be mailed to the NEC and NIPFP and that specific points, where necessary, or the broad sense of the ideas and opinions mooted, will be taken note of in the final draft, to be submitted and adopted at a full meeting of the NEC within the next month.

Verghese drew attention to the per capita and HDI decline in much of the NE, most especially in Assam, and said the Vision Document was of the view that Assam, the backbone and dynamo of the NE, must ensure accelerated growth. With the country poised to grow at 9 % per annum, the NE overall will need to develop exponentially over the next three Plans to reach a growth of 13.5 % per annum (with Assam growing at 14.5 % per annum) to attain national living standards and eliminate poverty and unemployment by 2020. This poses a tremendous challenge but is feasible with strong Central support and redoubled regional efforts. This order of effort will require far better infrastructure, greater local resource mobilisation and prevention of leakages with strong evaluation and monitoring and social audit systems in place. A recent World Bank report has traced the inter-connection between peace and development by showing rising unrest and militancy in areas with growing rural unemployment in particular.

Two further points were made. Regional institutions are being restructured and the NEC is being upgraded to a Regional Planning Authority. Second, strong emphasis is being placed on planning from below, from the gram sabha upwards through the Panchayati Raj, Sixth Schedule or Autonomous Council routes, on the principle of subsidiarity, with each level doing what it can through activity mapping and corresponding financial devolution, leaving larger projects and inter-linkages to be undertaken at the next higher level.

It was agreed that a summary of points made at the Guwahati PH should be posted on the NEC website along with the summary conclusions of the other 11 PHs being conducted throughout the region, for general information.

Against this background and following Mr Jain's introductory remarks in which he cited floods and their impact on agricultural productivity and the quality of education as the two foremost problems confronting Assam in particular, the meeting agreed to start with these two items and proceed sectorally.

Points made

Floods: Embankments had failed as they breached, blocked drainage and had built up the river bed. Sub-standard construction and corrupt contractors were at the root of the problem. One way out would be to link long term embankment contracts with tied responsibility for their long term maintenance. Upper riparian deforestation had aggravated matters, including improvident jhumming with a narrowing jhum cycle. What was needed was watershed management, tree cropping, horticulture and plantations in place of jhumming in the hills and the creation of deep water channels in the major rivers to flush the silt. Flood management and not flood control should be the aim and regular hydrological data must be sought from China.

How all this was to be done was less clear, but it was felt that inter-state cooperation and detention reservoirs that moderated floods, generated power and improved navigation would be desirable. It was suggested from the podium that such programmes being mutually advantageous should be based on cost and benefit-sharing and merited inter-state cooperation. Everybody had something to gain apart from garnering the considerable savings from preventing the physical and human dis-benefits of annual flooding. The idea that disputed border areas between Assam, Arunachal and other states, presently a haunt for lawless elements, could be used to develop infrastructure, industry and employment through appropriate arrangements was seen as a possible strategy.

Occupation and cultivation of and building on flood plains was cited as a serious problem. Char lands are being grabbed and new char lands are being created by cutting hills to promote erosion for land-building. Nevertheless, it was noted that char lands maintain significant populations.

Agriculture: Many speakers said that agriculture in Assam had "collapsed" in terms of productivity, extension, R&D/seeds, credit, storage and marketing. The Agriculture Department had no funds. Agricultural pricing in the region must be reviewed and costed in line with regional norms and not in accordance with all-India parameters. Horticulture would require market access and cold storage. There was unbalanced fertilization with too little P and K and there was need for a "different concept of irrigation" in Assam. Shallow tube wells had failed because of high diesel prices. Instead of liming the soil to reduce acidity everywhere, cropping patterns should suit varied soil conditions. Some favoured 150-day *sali* paddy instead of going in for short duration crops. There would still be scope for multiple cropping during the flood-free season.

One speaker said that jhumming could not be ended as it was a "way of life" and was legal under the extant Assam Forest Regulations, 1891. It was even more important to conserve the region's biodiversity wealth, "a gold mine" which was in danger of being looted for lack of adequate IPR safeguards to protect traditional product rights against those claiming "scientific development".

Karbi Anglong had developed integrated jhum farming and taken to rubber growing.

Agro-processing requires electricity. Now there is constant load shedding and there are no cold storages.

The Social Sector: It was suggested that universalisation of school education could be promoted by getting university students to go to the villages for six months in some form of national social service. The importance of mobilizing youth as in the case of the Mizo Youth Association was cited. Assam too had its Sadom Ahom Maina Parijot which should be revived.

Traditional wisdom should be tapped and emphasis placed on appropriate technology. Manpower planning could indicate the educational and vocational sectors that need strengthening.

Concern was expressed over the fact that some 40,000 students from the Northeast go to universities outside the region every year and most do not return. This brain drain must be reversed. Applied learning is needed through new courses. But the sanctioning of new courses or curricula takes up to 18 months. Good teachers are needed too, especially in the rural areas, but salaries are poor. More Central Universities are welcome but existing state universities should not be allowed to languish. They require more funding. Education must be linked to employment and industry but there are few industries in the Region. The Sarva Shiksha Abhiyan is being poorly implemented and school environments are not conducive to improved learning or mid-day meals in unhygienic surroundings.

Education is a basic need but dedicated officials and funds are lacking, unlike in Kerala. Officials and teachers are constantly being transferred in Assam. Teaching quality is low because a B Ed is not necessary for teaching in the State and there are few opportunities for in-service training. There is little monitoring of quality and no emphasis on group learning.

Assam and the NE need IRMAs. Education is being privatized and becoming elite. English teaching could enhance employability.

In the **health area**, another sector of falling standards, a mission approach to safe drinking water was advocated through micro-treatment plants of which there are prototypes.

Connectivity was stressed, including mobile telephony and IT services. Communications are vital for building awareness and purveying information.

Guwahati should be a regional aviation hub and there should be an open skies policy. The Guwahati International Airport must be activated. Tourism required many linkages and suitable packages and Charter tours linked to festivals might be promoted. No-frills air taxi services as of yore were favoured to open up the region in interior areas to tourism and development by using small aircraft as in Nepal.

One speaker felt there was “too much India and too little Bharat” in the Vision. This impression as sought to be dispelled in view of the emphasis on basic needs, agriculture and grassroots planning in the detailed Vision documents. .

The need for a responsive and accountable, corruption free administration was noted. Sales tax were not being rigorously collected and funds were being siphoned away.

Industrialisation was lagging in the absence of infrastructure and markets. There was also a vested interest in keeping insurgencies alive and this is not conducive to investment. There was agreement that Assam and the NE generally could seek to exploit the region’s “military market” for canned foods, clothing, simple medical stores and other supplies to which the handloom sector and modern manufacturing units could cater.

Plentiful and cheap **hydro power** could be a motor for industrialization and power should be converted into products, generating incomes and employment, rather than be exported outside the region as a raw material. Suitable agreements would need to be negotiated with upper riparian.

The logic of a **Look East Policy** was recognized and there was no dispute about the need for regional cooperation to cure transit, markets, outlets to the sea and promote tourism. Some interest was expressed in the reopening of the Stilwell Road.

The **tourist potential** of the region was mentioned but some voices urged caution in doing away too readily with inner line permits though these should be granted quickly and without too many formalities.

There was apprehension that the Vision was “aggregative”. How would sectoral funding be determined? What would be the division of labour between the NEC and DoNER? It was said in reply that many answers are to be found in the detailed documents but lacunae pointed out would surely be filled as the Vision is implemented.

More emphasis was urged on the environment and sustainability.

The Public Hearing concluded with the demand that the summary proceedings be posted on the web and that a continuing dialogue be facilitated.

Report of the Public Hearing at Imphal on November 2, 2007

The public hearing on the vision document for the NER prepared by the NIPFP was held on November 2, 2007 at the State Guest House, Imphal. The function was inaugurated by Shri O. Ibobi Singh, Hon'ble Chief Minister, Manipur. The inaugural session was followed by three sessions. The first and second sessions were chaired by Shri Th. Debendra Singh, Hon'ble Minister (Forests and Environment, Law) and the third session was chaired by Shri D.S. Poonia, Principal Secretary, Government of Manipur. The participants in the programme included elected representatives, officers from the State and Central Governments, universities, NGOs and media.

Shri O. Ibobi Singh, Chief Minister, Manipur in his inaugural speech lauded the initiative made by the NEC, Shillong and National Institute of Public Finance Policy (NIPFP) for the preparation of Vision 2020 document for ensuring peace and prosperity in the North Eastern Region. He observed that M/o DoNER has initiated a series of development measures and the present document Vision 2020 is one of such initiatives. He appealed to the participating officials, academicians and citizens to give constructive suggestions and recommendations for the improvement of the report leading to better implementation.

In his address, the Minister (Forests & Environment and Law) lauded the Ministry of DoNER for the preparation of Vision 2020 aimed at speedy development of the region. He suggested that realistic planning required a sound and practicable vision document. He observed that the immediate task for speedy development would be the translation of the development vision into action to achieve the development goals. He emphasised the need to translate good theories into practice and observed that the lack of an integrated approach in development planning results in a wastage of resources and that bridging the development gap by 2020 (thirteen years from now) is not an easy task. However, collective determination and effort of the people will be able to achieve it. He requested all section of people to work together for development.

Giving his vote of thanks of the Inaugural Session, Dy Financial Adviser, Link Officer (Manipur) NEC, Shillong, thanked all the participants of the hearing, particularly the Chief Minister, Manipur for his valuable observations and comments.

Participants

A total of 200 participants attended the Public Hearing, and they included representatives from: The Departments of Public Health Engineering, Power, IFCD, MI, Forests, Ecology & Environment, Agriculture, Horticulture, Education, Works, Financial Institutes, LDA, and Planning;

- Manipur University, Central Agriculture University.
- Districts of Manipur.
- Invited experts from departments and universities, and civil society organizations.
- Audio visual and print media.

Opening Session

The technical session was chaired by D.S. Poonia, Principal Secretary, Government of Manipur and Dr. Gautam Naresh made the presentation on the draft Vision 2020 document. Slide wise explanation was made for the benefit of the participants. He welcomed comments and suggestions on the report. The comments and observation are given below:

Prof. Ch. Priyoranjan, Economics Department, Manipur University

- The document is a sincere document covering different issues and problems, aimed at improving the NE region by 2020. It contains a straightforward, simple strategy for development of the region.

- It however lacks practical advice to initiate the change needed from the present status to the desired level of development by 2020. The operative part of the document, i.e., the transformation of infrastructure, flow of funds to the grassroots levels needs to be more specific, and also the flow of funds to the productive sectors, and mechanism of the flow.
- It also needs to elaborate on the long-term Vision vis-à-vis short-term Vision in the agriculture and industrial sectors.
- A corruption-free government is necessary to achieve Vision 2020.
- There are different ecological zones in the NER. The ecological behaviour of the hill districts is similar to each other and the valley regions are similar. Need a long-term development strategy for such homogeneous regions.
- The document needs to have state-specific recommendations, and there is a need to dovetail it into the State Plans.

Dr. Ch. Jamini Devi, Chairperson Manipur State Women Commission

- No mention has been made about women's empowerment in the report. Vision for women's empowerment should be included in the final version.
- There are general concerns related to human trafficking and a separate chapter relating to this issue and its prevention should be inserted in the vision.
- Trade policy mechanisms for ensuring gains by local people may be included in the report.

Dr. Manoranjan, Manipur University

- The report is appreciated. Achieving the goals of Vision 2020 needs as a pre-requisite a favourable atmosphere - i.e., an insurgency-free situation.
- It is necessary to bring all the insurgent groups to the negotiating table.

Second Technical Session

Dr. Ng. Bijoy Singh, MLA

- It is necessary to reflect a realistic target for agricultural production.
- Health tourism should be included in the final report.
- Clear targets and requirement in power sector be included.
- A clear health target - a preventive target, public health target and curative target should be indicated.
- The requirement of water by 2020 should be included in the final report.
- A comprehensive note on the concept of river water harvesting be inserted. Flood water during rainy season may be properly tapped and stored for use in the lean season.
- Need for expansion of central universities located in the states of NE region to meet the demand expected by 2020.
- The example of Manipal Trustee cited in the book should be removed as there are many such trustees working in similar and other fields.
- Need for coverage of areas specific expansion in the final report.
- Implementation of communitisation wherever applicable.

Dr Krishnamangol Singh, Lecturer (Economics Department, Imphal College)

- A note on democratic participation should be included in the final report.
- Creation of a State Planning Commission for Manipur to promote participatory planning.
- Full-fledged participatory management in planning
- Modification of existing District Planning Committees.
- A note on measures for the protection of common property rights is needed for improvement in common property rights.
- A review of the performance of the banking sector using indicators such as the CD ratio and magnitude of non-performing assets may be included.
- Introduction of cash schemes for employment is necessary.

Shri R.S. Jassal, Retd Comdt

- The document is a responsible document.
- Mechanisms to control extortion should be included in the final report.

- In view of the alarming situation in National Highway Security a comprehensive note should be included in the final report.
- Stringent action should be taken against those involved in felling and exporting of teak wood despite the Supreme Court ban.

Shri Akham Birdhaja Singh submitted written suggestions (enclosed herewith)

Miss Gije Jajo was for the conferring of land right to hill people

Dr. Ibohal Meitei, Asst Prof. Manipur Institute of Management Studies

- Report should give adequate coverage to social security.
- Priority should be given to the service sector for attaining development in 2020.
- Abolition of restricted area permit (RAP) is needed its enforcement has affected the growth of tourism in the region.
- No multinational companies operating in the state and no foreign direct investment (FDI). A note on measures to attract FDI should be included.
- Emphasis should be given to human resource development. Improvement of IT enabling services in the region is necessary. Institutions of national importance such as IIT and IIM should be established.
- Careful and proper wording in identification of community vis-à-vis insurgent group is required.
- In the light of Look East Policy, there is a need for cultural integration with South East Asian countries, and for establishing a University of Culture in Manipur.

Central Agricultural University, Iroisemba

- There should be coverage of the Central Agricultural University in the final Vision document 2020.
- Need to increase student intake capacity in different disciplines.
- Post-graduate programmes in different locations in the NER should be brought under the umbrella of this University.
- Introduction of Ph.D. programmes in most subjects.
- More emphasis on integrated farming as in the long run this is the only viable option for better and improved agriculture.
- Mixed farming system for easy pest management (i.e. to avoid insects, pesticide) leading to a better harvest.
- Expansion of eco-tourism in the region.

Dr. Iboyaima Singh, Selection Grade lecturer, DMC

- Insurgent problem is due to unemployment. Need to include various programmes for generating more employment.

Shri Yumnamcha Dilipkumar

Appreciative of the document. Recommendations included:

- Need the Inner Line Permit to safeguard minor communities of Manipur.
- Concerned about the influx of people in the region.
- Removal of Restricted Area Permits for foreigners.
- Upgradation of infrastructure in Moreh.
- Increase in the number of tradable items in border trade at Moreh.
- Upgradation of the Imphal Airport to international airport.
- Conversion of inorganic farms to organic farms.
- Special subsidy for the region.
- Inclusion of a clear path in the operative part of the Vision document in the final report.
- Political dialogue between insurgent groups operating in the region with the government for solving the insurgency problem.

T. Vunglallian, Teacher

- Introduction of the Sixth Schedules in Manipur.
- Operationalisation of grass roots planning in Manipur.

- Participation of representatives from all districts in the brainstorming session for a grassroots Vision 2020.
- Training of Panchayat members, village chiefs and village authority members outside the state to motivate them to better understand and participate in grassroots planning.
- For meaningful administration, the existing classification of hills into urban and rural is not adequate. Need to be classified into Hill Metro, Hill Urban, Hill Rural and Hill Remote.
- India should adopt the policy of looking to the East and for the NER to look to the West.

Miss Kim Gangte, Ex. MP

- If the present trend in Manipur continues for another 10 years, then there will be no development. While the government may change, issues remain unchanged. Suggested conducting the public hearing on Vision 2020 in the hills and remote areas for better understanding for the rural masses.
- Difficult to improve the condition of roads in the hills if the existing trend continues.
- This can be achieved only if there is proper governance in the system.
- Need to establish a National Institute of Technology (NIT) at a suitable location without affecting poor people.
- Balanced approach of development needed irrespective of hills or plains in the region.

Third Technical Session

Ms Moi, Churachandpur Govt. College.

- A note on democratic deficiencies in the hill areas (i.e. tribal areas) should be included in the final report.
- The development mantra should be “small is beautiful”. A village with 20 houses may be considered as a model village for development.
- Creation of more storage facilities in the remote hill areas.
- For the Kuki inhabited area, tribal chiefs are the owners of the land. There is no individual ownership system. This may be reviewed for individual ownership in the hills for speedy agriculture and land development.

Ms Nandini Thokchom

- Gender component has been neglected.
- Social and economic development for gender.
- If the collective visions of the different ethnic groups are not protected then implementation of the goals will be difficult.

Prof. M. Iboton Singh (MU, Department of Economics)

- The participatory development approach has been adequately given importance in the report. Panchayats should be allowed to function properly with proper delegation of powers. For Manipur, panchayati power has been built in the District Council Act 2002, so there is parity in the decentralization of power irrespective of the hills or valleys, since the time the District Council Act 2002 came into operational.
- No outside private investor will come in the region, so the source of financing is a strategic issue till 2020. The only alternative for growth is through central funding. There will be no shortage of funding from the Centre; shortages will be in the administrative capacity of the State.
- Once basic infrastructure and law and order are improved, a baseline can be prepared for development and growth. Therefore, it is necessary to secure law and order in the region and in Manipur in particular.
- Water and forest resources can be well canalized for sustained development.
- Existing land ownership system in the hills is not conducive for accelerated development. He, therefore, suggested for the introduction of individual ownership system in the hills of Manipur. He argued that individual land ownership right is the pre-condition for taking up faster development programmes in the hills.

Ms Aching, IFAD group

- A vision building exercise is needed at the grass root level.
- Need to consider the State as the economic unit and district as the sub-economic unit.

Shri Hangkhomang Haokip, NGO

- Thanks for the report.
- Expected suggestion for improvement of the report.

Ms Valley Rose

- Vision 2020 is the first report of its kind in the last 60 years of economic planning.
- Suggested the inclusion of an Employment Assurance Programme (like SREGP) in the final report.
- Expressed that Vision 2020 needs to be made applicable not just theoretical.

Mr. Lokendro Singh

- Imphal should be developed as an industrial hub to facilitate wider trade expansion including border trade.
- Improvement of Tourism.
- The issues of insurgency and development need to be tackled simultaneously.
- Instead of integrating the NER economy with the mainland economy, the mainland should integrate with the NER economy.
- Include study of NE states in the syllabus of mainland schools.

Mr. Manibabu Sharma (NGO) (in Manipuri)

- Vision 2020 should be published in local languages.
- Set up Foreign Permanent Offices at Imphal and all the capitals of NE States.
- Need to improve transport and communication in the region.
- Need to review the MLR Act in the hills.
- Need to take up eco-friendly activities in the state.
- Establish State Oriental Institutions.
- Revitalize sick units
- Suggested that an anti-India tone should not be used in such workshop.
- Need to include a representative from the State in the foreign export council.
- Establish an International Transport Agency in Imphal which will help in the integration of local businesses with foreign countries.
- Desire that Vision 2020 be a lively document.

Shri H. Deeep Singh, Managing Director (MSCB)

- Poor status of repayment of bank loans – need to address this in final report.
- The present land law system in the hills restricts loans to hill dwellers because of the absence of collateral. The existing MLR Act needs to be reviewed.

Shri L. B Singh, SE (LDA)

- No mention of water bodies in the Report or about the Loktak Lake, which a very important water body, playing a major role in the economy of the State. Need to include various issues relating to preservation of Loktak Lake.

Shri M. Sanaton Singh, Chief Engineer (Power)

- Power is most important ingredient for achieving development, without power the pace of development will remain low. There is scope for the expansion of the power sector in the region, which can be productively channelised into development. Per capita consumption of power in the state is low and there is a need to bring up to the national average.
- The development of thermal power stations in the eastern region will increase the availability of power to the region and the state.
- Development of hydro-power stations in hill districts, improvement of inter-state transmission systems and development of 220 KV and 400 KV Transmission line and sub stations at Imphal will improve power supply in the state; even for the remotest villages and households.

Shri Subrata Singh

- Expansion of existing trade by opening markets through Chittagong.
- Continued deforestation in spite of the Supreme Court ruling.

Shri N. Biren Singh (Senior Scientist Agriculture)

- Use the term ‘Improved Modified Technology High Breed Variety (HBV)’ in place of ‘High Yielding Variety (HYV)’ wherever applicable.
- Use ‘fertile, young, and virgin soil of the NE hill region’ in agriculture sector wherever applicable.
- Need to have policy mechanisms to protect agricultural land.

Shri K. Saratkunar Singh, Director (Fisheries)

- National Water Conservation in Manipur is completely missing.
- In the absence of timely and appropriate intervention in Loktak Lake, there will be extensive reduction in fish production. Need to include a comprehensive section about the prospects of Loktak Lake in Vision 2020 Document.

Dr Ram Singh, CAU

- Expressed concern about ecological imbalance in the region - need for reflection on climate security in the Vision 2020 document.

Shri K. Mangi Singh, Director (Planning)

- On the developmental front, the NER lags behind the rest of the country. In the late 1990s infrastructure gaps in the region were identified by Government of India through the Shukla Commission Report. Thereafter, the DoNER was responsible for funding to bridge the infrastructure gap.
- This document is an economic bible dealing with various issues for economic development in the NE States. Development issues have been rightly identified, but the report lacks a strategic route to reach the development goals.
- Need to have a report in the form of Shukla Commission Report which identifies state-specific infrastructure gaps, etc.
- Issues relating to culture and sports are missing in the report.
- The occurrence of floods affects development; suggested having a clear vision on floods in the State.

Miscellaneous comments

- The document has not been prepared by the experts from the region.
- “Dushera” is not the festival of Manipur - “Ningol Chakouba” and “Yaoshang” are more prominent festivals.

Closing remarks by Prof N. Mohendro Singh, Rtd Professor, MU and member of the Steering Committee

- The four pillars for well-documented vision document are i) where we stands, ii) where to go, iii) how to go and iv) how should we go.
- The central government is going to make a political and national commitment for the NE states.
- Appreciated the Ministry of DONER for the preparation of the vision document.
- Two vital variables for speedy development in the region are globalization and the look east policy.
- For speedy development of the region, the economies of the NE states need to be integrated with south-eastern countries like Singapore, etc.
- India is in a faster development path and is expected to rank fourth in development by 2020 from its existing eleventh position.
- The vision document should be people’s document, so it is important that participants make known their views and comments for reflection in the final report. Suggestions from participants will be documented

Shri. P.B.O. Warjri, Principal Secretary (Planning), thanked all the participants in the Public Hearing for their valuable contributions for revising the report. The Vision 2020 document is for the development of the region and it makes a sincere attempt at identifying different issues

affecting development. According to the report, the per capita income of undivided Assam was higher than the all-India average by 4% at the time of independence. However, today per capita income of the region is less than the all India average by 31%. Therefore, it is important to identify the core issues leading to this disparity in the pace of development. There has been an outflow of resources from the region in the form of purchasing all kinds of goods, capital goods to consumer goods, though bank deposit (the CD ratio being low). Policy mechanisms and others steps to check this needs to be properly examined. Echoing the view that participatory planning is the next alternative for speedy development in this millennium, improved law and order situation is essentially necessary in translating development Vision into reality.

Report on the Public Hearing in Shillong on November 2, 2007 at 11.00 a.m.

The Shillong session of the Public Hearing was held at the auditorium of the NEC Secretariat and chaired by Shri Falguni Rajkumar, Secretary, North Eastern Council. He welcomed all the participants and gave a brief background to the exercise for preparation of the Vision document. The two full-time Members of the Council, Shri P. P. Shrivastav and Dr. (Mrs) I. K. Barthakur, also were present. The Secretary invited Shri P. P. Shrivastav to give the background to the preparation of the Vision document.

Shri P. P. Shrivastav, Hon'ble member of NEC observed that the preparation of the Vision Document was basically a planning exercise. At the first instance, the NEC commissioned an NGO called the Centre for North Eastern Studies (CNES) to interact with common people for field-level data collection. This was done keeping in view that common people do not normally open up before government officials. The response was very good and about 50,000 households from across the entire North Eastern Region responded to the survey. To give a proper shape to the findings in the form of a Vision Document on the basis of the data collected from the field survey, the NEC commissioned the National Institute of Public Finance & Policy (NIPFP), New Delhi to prepare the draft report. The Draft Report has been prepared and public hearings on the report are now underway across the NER.

The Chairman then invited Dr. (Mrs) I. K. Barthakur, Hon'ble Member, NEC to give her views. Mrs. Barthakur observed that the purpose of this exercise was to take the region as a whole onto the path of uniform and planned development. The region, she observed, has a vast reserve of natural resources which needs to be exploited to take the entire region towards prosperity. The planning exercise is a continuous process and steps for development have to be improved with the passage of time.

The Chairman observed that given the diversity of the region, CNES had done a really commendable job in its survey of 50,000 households which yielded the field level data. These data have been compiled and brought out in the form of the draft Vision Document by the NIPFP, New Delhi which is not the end but a new beginning. The document would be strengthened through public interaction. Feedback received during the public hearings would be incorporated in the final document. He informed the house that public hearings are being held at 12 places across the North East to get feed back from the public on the draft report. Those who would like to give their feed back in writing can submit their write ups within 10 days from this day. Feedbacks can be submitted to NEC or sent directly to NIPFP. He invited reactions of participants to the draft report, which are given as under:

Shri K. Kamaljit Singh, Senior Lecturer, Meghalaya Economic Association, Shillong

- The East West Corridor may be developed urgently and linked with other important roads of the region.
- The document is silent about high-value crops which can have 2 or 3 croppings based on organic farming in a year.
- The traditional Jhum cultivation of the tribes should not be ignored.

Shri Yousuf Ali

- The procedure of a successful planning process should incorporate lessons from the past, understand the present and plan the future. People need dedication we should not merely criticise one another.
- A BG line from Rangia to Murkokseng should be planned.
- An overview of all approved projects should be put on the website for public knowledge.
- A Human Development Index should be developed to indicate availability of manpower in different services and categories.

Prof. A. K. Misra, Department of Botany, NEHU

- Educated youth are not getting gainful employment. A training institute could be set up to train unemployed youth in different industrial activities till they establish their own enterprises. During the training period they would receive a stipend for sustenance. This type of institute exists in the University of Pune and youths have benefited from this.
- After successful strawberry cultivation, other horticulture crops should be given similar support for sustained and sustainable development.
- A sense of pride should be developed amongst the masses by involving them in the development process and an IT holiday should be extended for industrial development.

Shri B. Kharkhongor, Ka Lypung Ki Seng Kynthai

- Planning is important, but follow-up of approved and implemented projects is even more so. Ideas are good but implementation of the same has to be ensured.

Shri S. D. Tynsong, Meghalaya Economic Association

- Under the NEC scheme for Rejuvenation of Plantation crops, a few projects were given to farmers, but financial support was withdrawn after the first year before the plants were fully grown. These projects have now become a burden for the farmers, and need to be reviewed.

Shri H. Jhunjhunwala, Executive Editor, Eastern Panorama

- The names of tribes in the context of militancy in Volume I, Section I of the draft document should be eliminated.
- To develop tourism along a circuit (say, from Cherrapunji to Tawang), a few rural households could be given a one-time grant of Rs 1.00 lakh each to develop rural tourism.
- Needs to be an increase in opportunities for imparting professional education in the region to stop the outflow of meritorious students from the region.

Shri K. M. Deb, Retd. Deputy Registrar, North Eastern Hill University

- Since the region has substantial reserve of natural resources, relevant industries should be set up in the region itself and instead of exporting raw materials; finished products should be exported from the region.
- The region possesses tremendous potential to earn foreign exchange – this should be harnessed.
- The need for a proper development of culture and literature of the region should be addressed so as to establish connectivity with the other parts of the country.
- A regional training institute may be established by a reputed autonomous body to equip unemployed youth.
- Income generated through the implementation of the projects under Vision 2020 may get IT exemption for at least 2 years.

Mr. Starfing Pdhkasiej, Ub Photos News Agency

- NEC should commission a study to find out the root cause of militancy.
- Planning should be done from the grassroots level.

Mr. Sanjeeb Kakoty, Freelance Researcher, Motinagar

- There should be a mandatory social audit of all the projects under Vision 2020 for accountability.

Mr. R. J. Nongbri, Meghalaya Economic Association

- Tourism is the key industry in any modern economy. Rural tourism has been mentioned, but there is a lack of informative booklets and brochures on tourism – this needs to be addressed.
- Development and production of citrus and other horticulture crops should be supported.

Dr. B. Francis Kulkarni, Anthropological Survey of India, NERC

- Several central government research organisations have their offices in Shillong. The research findings of these organisations should have found place in the draft Vision Document. Perhaps, a co-ordination committee of these research organisations should be constituted to exchange research findings for a proper development vision of the region on the basis of such findings.
- The total number of communities and their names should be mentioned in the Vision Document. Communities are the real custodians of natural resources, and hence should be the direct beneficiaries of projects.
- The linguistic and cultural heritage of the tribes of the region may be documented. The Central Board of Languages may be invited to prepare a document highlighting the linguistic and cultural heritage of people of the region.
- Diversities have to be bridged through the planning process. In the education system, this important point has been totally overlooked. Heritage cannot be preserved if English language is practised. Vernaculars should be taught.
- NETDC is a totally wrong approach. Different festivities of the region could be the nodal points for tourism promotion. Capacity development in tourism industry should be focused.
- The issue of development of children should be addressed.

Mr. D. D. Laloo, Joint Secretary, Meghalaya Tourism Development Forum

- The entire North Eastern Region should be highlighted as one tourism destination. The RAP and ILP are highly distorting in nature and, hence, should be abolished. Linkages and transport facilities between tourism destinations are extremely poor, and small aircrafts could help. The sensibility of a community for developing rural tourism is very important and should be encouraged and developed.
- While addressing eco-tourism, it is important to study mechanisms to restore eco-fragile environments to their original shape.
- Heritage sites in the North East are not maintained properly, and this should be focused on.
- The cluster development approach may be deployed for popularising rural tourism.
- Lab-to-land transfer by the ICAR has not been very successful and needs further development.
- There should be some proper authority for certification of organic products.
- The project for strawberry cultivation, though successful, is incomplete as the development of seedlings is not taught to farmers, but seeds are supplied by the government department. Similarly, adequate training needs to be given to farmers in nurturing and packaging.

Mr. R. L. Tariatang, MLA

- Meghalaya has the capacity to develop about 4,000 to 5,000 MW of power but only 4 to 5 MW is generated. The NE should announce an active programme in this regard. Power so developed may be contributed to the National Grid and a National Highway for Power formed.
- A horticultural link road may also be developed.
- Subsidies may be provided to the educated unemployed for forming SHGs.
- To address the problem of poverty alleviation, instead of popularizing family planning, planned family should be the focus. That is, only those who can afford may go in for expanding family size.
- To give a boost to trade and commerce, the Dawki LCS should be speedily implemented and more such LCSs set up.
- For Meghalaya, the Look East should mean Look South as well.
- Meghalaya should develop SEZs to promote trade.
- Quality manpower should be deployed in the government sector and the bureaucracy should be strengthened.

Mr. C. Shangpliang, Journalist, Nogsain Hima

- The document has no provision for traditional methods of agricultural farming.
- Agricultural marketing strategy should be such that the farmers should benefit from farming activities.
- Veterinary activities should be developed.
- International trade routes should be legalized.
- Corruption free administration should be advocated.

Dr. B. Dhar, Anthropological Survey of India, Shillong

- As suggested in the draft Vision Document, the Chittagong port should be opened for trade. The Government of India has also opened trade points from Myanmar to Mizoram.
- The development of education in pastoral communities in Arunachal Pradesh should be firmed up.

Mr. Toki Blah, ICARE, Shillong

- Communities are ill prepared to take part in the developing process, and they need some platform. Traditional platforms like local durbars in Meghalaya can perform the task. The NEC can enlist the help of the state governments on this issue.
- Mushroom cultivation through jhumming should be encouraged.
- The problems of manufacturing industry and small village enterprises have not been addressed.
- Look East Policy has not been dealt with.
- The Vision document can at best be termed as a collection of some high-sounding words and is not really a meaningful document.
- It would be better not to hurry through the process of finalising the Document for implementation. The NEC should take time.

Dr. N. Vijaylakshmi Brara, NERCRMP/IFAD

- The participatory role of the common people in implementation of projects has been effectively highlighted by the NERCRMP.
- Traditional vibrant institutions and active organisations should be involved in the planning process
- The Vision document has totally ignored the participation of females in the planning process. Gender inequality should not be promoted.

Ms Patricia Mukhim

- How is 'expert' or 'expertise' defined while undertaking the task of preparation of a Vision document? Priorities would be better understood by participants at the grassroots level.
- Women's health has not been taken into consideration at all. MMR (the Maternal Mortality Rate) is very high amongst the tribes.
- For popularising tourism, the involvement of people's institutions is extremely important.
- The question of who would protect the rights of tribal people has not been addressed.
- Cold storage linkages should be established closer to farms.
- Capacity building should get adequate importance.
- The North East should have its own yardstick of development. The aim should not be to catch up with the developed states in the rest of the country.
- There should be a policy for women in the NEC.

Mrs. T. Phanbuh, President, Ka Lynpung Ki Seng Kynthai

- Women do not have any role in the village durbars in Meghalaya except in a few very special cases. The rights of women have to be ensured. Problems of women could be solved only through imparting education. NEHU can start a department in the form of a Women's Study Centre and the NEC could provide financial support towards infrastructure development.
- Border trade should be given due importance.
- The education system should compulsorily include vocational training courses. This can generate income also
- Rural-urban migration should be addressed by creating opportunities for rural people such as road linkages, health care in the rural areas, and so on.

- A common schooling system as highlighted in the National Policy for Education needs to be translated into action.

Prof S. K. Panigrahi, Lecturer, Sankadev College & Director, VIDYA

- The deployment of human resources should have a practical approach. The pressure of work for earning vis-à-vis income generation should have a proper balance.
- Teachers' training and infrastructure development should get due emphasis in the education system.
- Vision document only deals with materialistic development. Simultaneously, human values related to peace, etc., should be discussed. Immorality has to be addressed right at the school level along with value education.
- Vision Document has to be imaginative and creative.

Mr. H. D. O'Flynn Dohling, General Secretary, Synjuk Ki Rogbah Shnong

- Communication through Bangladesh for North East should be emphasized.
- Rural electrification needs priority.
- Corruption free administration should be advocated.
- Environmental pollution should be addressed.
- Traditional institutes existing in Meghalaya, Nagaland and Mizoram should be preserved and they should get the status of Village Panchayats. This was also advocated by the late Prime Minister Rajiv Gandhi as appeared in the Press on 15th May, 1989. These institutions should be involved in the developmental process.

After hearing all the participants who spoke on the occasion, the Chairman welcomed the positive criticisms made on the Vision Document and said that the views expressed by the participants would be suitably incorporated in the document. He, however, reminded the participants that as per the mandate given by the Union Govt., NEC cannot deal with the State specific projects. Projects which have regional implication and character are normally considered by NEC. Projects which can bridge the gap existing in developmental needs are also carried out by NEC. He acknowledged the important points raised about NE are to be judged with the NE as yardstick and the other developed States should not be considered as its yardstick. He emphasized that the word Panchayat would be contextualized in the Vision 2020 Document which is a region specific plan. He also emphasized that the Vision Document would effectively address the external threats like globalization. Finally he thanked everybody for actively contributing in the public hearing.

The hearing session concluded with vote of thanks to the chair.

Report on the Public Hearing held on November 5, 2007 at Kohima, Nagaland

A public hearing on the Vision Document 2020 of North Eastern Council for Nagaland was held on November 5, 2007 at the Zonal Council Hall in Kohima. The hearing was from 10 am to 4 pm. Around 120 persons participated in the hearing. Participants included academicians from Nagaland University and local colleges, representatives of civil societies and NGOs like Naga HOHO, Naga Students Federation, Naga Mothers Association, Naga Peoples Movement for Human Rights, church leaders, ex-MPs, journalists, writers and senior officials from the state government and central government agencies.

The Chief Secretary, Government of Nagaland, Shri Lalhuma gave the inaugural address. He congratulated NEC for preparing the document and also mentioned that Hon'ble Member, Shri P. P. Shrivastav was instrumental in doing the groundwork for this document. He briefly dwelt upon the five-pronged strategy mentioned in the Summary and in this connection, mentioned that Nagaland is a pioneer in grassroots planning, involving people in every stage of development. He appreciated the fact that participatory development is the first prong of the strategy. Some crucial developmental issues of Nagaland include expanding the four-lane road and rail line to Kohima, establishment of a greenfield airport at Chithu near Kohima; and the assurance given by the former Prime Minister, Shri

A. B. Vajpayee regarding generation of 25,000 jobs in Nagaland remains to be fulfilled. The public-private partnership (PPP) model can be applied in Nagaland particularly in power and tourism projects. Nagaland has 82% of forest coverage, which is maintained by not allowing felling of any trees, so the state should be suitably compensated for maintaining their forest cover.

Shri Lalthara, Additional Chief Secretary and Development Commissioner gave the formal welcome address and mentioned that Vision 2020 should be complimentary to the Look East Policy and he also dwelt on the people's consultation process in preparing the Vision Document.

Member NEC Shri P. P. Shrivastav mentioned his long association with the state of Nagaland and appreciated the lead given by Nagaland to the country through its unique communitisation programme, but he was constrained to say that this has not been properly reflected in the Vision Document. The Vision document is a guide map for direction and not a detailed action plan. Participants were requested to express their views freely so that these could be incorporated in the final Vision document to make the common man stakeholder in the development process. Participants were also invited to send in written submission if necessary. It was only through peoples' participation, that the Vision exercise would be practical. He explained the current role of NEC as a Regional Planning Body after amendment in 2002. The chronology of the vision exercise undertaken by NEC is as follows:

- The idea of a Vision 2020 for the North Eastern Region originated in the Prime Minister's speech in the first meeting of the restructured NEC in 2005. Member NEC Shri P. P. Shrivastav took the lead in this exercise.
- To carry out the Prime Minister's wish an open letter to the common person was drafted
- A mass contact exercise with the common man was taken up with the help of CNES, a reputed NGO. C-NES prepared the questionnaire for the people.
- The C-NES questionnaire was sent to 50,000 people in the North Eastern Region including Nagaland, and a people's wish list was prepared.
- A draft Vision document was drawn up in slim volumes. These volumes contained inputs from the reputed agricultural scientist Shri M. S Swaminathan and from vice-chancellors from the NER. This draft Vision document could not be circulated to the public.
- Around June 2006 the document was given to the scholarly body NIPFP to give it a shape that would be acceptable to the Central Government, Planning Commission, etc.
- NIPFP/ NEC constituted a Steering Committee headed by Shri B. G. Verghese for advice.
- In the draft prepared by NIPFP, the views expressed in the public hearing will be incorporated and then it will be put to NEC plenary meeting for approval.
- Only after formal approval of the Council, this document will be an official Vision document.

Mr Shrivastav felt there should be a mechanism for continued dialogue with the common man, so that the latter could develop a stakeholdership in the development process. He also expressed that natural disaster management should be a part of the planning exercise because of vulnerability of NE Region. The floor was opened for comments from the public.

Ms Rosemary Dzuvichu, President, Nagaland University Teachers' Association: Academicians in general in the NER have not been properly consulted in preparing the document. She found the document to be patronizing. The aspirations of the people should not be put in the appendix but should form the core of the document. That there is a need for engendering the document, so that the role of women in the region and their participation in the decision-making process should be properly incorporated in the document. The reluctance of youth in the region to enter into self-employment ventures is a misconception. An enabling environment and infrastructure is needed for entrepreneurship. The issue of emotional integration with the rest of the region should be handled properly taking into account the sentiments of the NE people and the attitude of the mainland should not be patronizing.

Mr. Venguta of NEPED: had some observations regarding the term 'wean away' from jhum cultivation. Jhum cultivation does not have low productivity, and it is a way of life for hill people. So rather than 'wean away' from jhum cultivation the strategy should be to improve productivity scientifically, to cut down soil erosion, etc. Benefit sharing of natural resources should be ensured through suitable mechanism. He wanted to know how the area under agriculture is sought to be increased in the NER as mentioned in the Vision Document. If it is increased at the cost of the forest

land then it will be a disaster for the region. In the last, he mentioned that NEPED experiment in Nagaland is worthy of emulation and it could also be incorporated in the Vision Document.

Mr. Khemo Lotha (Ex-MP): The peace process with the different groups should be given due recognition rather than referring to the problem in the generic phrases like the 'people are tired of insurgency'. The extension of the railway line in Nagaland was taken up by him in Parliament around 30 years ago, but nothing has happened up till now. For effective emotional integration with the mainland, the attitude of the mainland people should also be changed for the better. The communitisation exercise in Nagaland has been very successful.

Dr. N. Venuh, Nagaland Peoples Movement for Human Rights. The Vision Document does not reflect peoples' aspiration, so it needs to be restructured; the Vision should not be based on any hearsay, but on inputs from the grass roots.

Rev. Dr. V. K. NUH, Baptist Church. He lamented the lack of economic growth in the NER in spite of having 40% of the country's hydro-electric power potential, 53% of tea product and 26% of forest product. Peace and development in the NE should go hand in hand.

Dr. Kannan, Vice Chancellor, Nagaland University. The Vision for the NER should be a one-line statement, followed by a mission statement and a programme of action. As 40% of the people of the NER consist of youth, human resources development for the youth is an important issue. It is important to have an Action Plan for higher education in the region to cater to the capacity building exercise of youths in the region.

Prof. A. K. Mishra, Nagaland University. Need a SWOT analysis of each state in the document and also a state-specific vision. Much importance in the Vision document has been given to secondary sources like the Jain Commission and Shukla Commission reports. Operational linkages should be established between micro-level and macro-level players. Private investment will come to the region in the near future and that should be well accounted for in the Vision Document.

Mr Alemeteshi Jamir, Principal Secretary (Commerce and Industries) and Agricultural Production Commissioner. The Vision document is too bulky and much has been written on weak governance without taking into account the situation prevailing in the NER, including the scenery of insurgency and the ongoing peace process. Sociological conditions in the NER like adapting tribal society to the modern economy have not been analyzed properly in the Document. Development achieved in the region since independence should be properly documented and analysed. He cautioned about the danger of making the Vision document if it is not followed with a practical action plan.

Director of Science and Technology, Govt. of Nagaland, Shri Zavei Hiese. It is not sufficient for the NER to catch up with the rest of the country, it has to go further. For this, the critical sectors are human resource development, power and industries based on local raw materials. Development of science and technology and establishment of higher educational institutions in the NER will take the region further ahead.

Mr. Charles Chase, prominent writer of Nagaland. The Look East Policy should be suitably incorporated in the Vision Document. Also, the year 2020 should not be sacrosanct and we should think beyond 2020.

Mr Neingulo Krome, General Secretary, Naga Hoho. The political settlement of the Naga issue is of primary concern for the Naga people currently, and this should be reflected in the Vision document. However, he appreciated the exercise of the public hearing for preparing the Vision document.

Shri Thepfulhoura Solo, Retd. Principal Chief Conservator of Forests Nagaland and a prominent citizen. He dwelt on environment issues and mentioned that the issue of carbon credit should be properly reflected in the Vision Document so that states like Nagaland receive due recognition for maintaining their forests. He also emphasized on development of road and air links in the NER latest by 2012 for which an Action Plan should be incorporated in the Vision Document. There should be a separate plan for the hills and the plain areas of the NER because the plains are over-stressed with

population growth and lack of land for agricultural expansion while the hills have vast vacant land but there is a lack of manpower and technology for development. It is important to preserve forests in Nagaland which will eventually control the rivers flowing into the valleys of Assam.

Shri Dilli Solomon, a local NGO leader. The contribution of the NGO sector in the NER has been more or less ignored in the Vision Document. The problems of illegal immigrants into the region, drug trafficking etc should be highlighted. It is important to remove the RAP/PAP in the region.

Mr K. H. Pou, Lecturer, St Joseph College: Vision 2020 is a mere economic development document, with no strategy for peace in the region. Bio-diversity of the region should be properly documented. Prospects of commercialization of agriculture and the pharmaceutical industry in the region should be properly covered in the document

Mr. Joshua Shaqi from a local NGO, Youth Net. The present status of the political problem in the state should not be ignored. The issue of emotional integration with the mainland should be handled sensitively as the NE people do not need piety. The NER has a superior social set up and a positive attitude towards life. The youth in the NER are not averse to self-employment ventures; at the moment these may not be very popular because of the lack of infrastructure, political interference and confusion regarding the outcome of the peace process.

Mr Lanu Toy (Retd.) Chief Engineer, Power. He mentioned the importance of people's active participation and contribution in development projects in the NER based on his experience in the rural electrification process in Nagaland where people contributed through labour and material. Stressed the importance of keeping a proper balance between environmental constraints and development in up-coming mega-power projects in the region. He also cautioned about the universal applicability of the renewable energy projects like micro-hydel project in the region as the per capita cost of power generated by these projects are very high compared to grid power. He also stressed the importance of the human factor for development since the NER has a very young population, and needs a proper human resource development policy along with adequate opportunity for self-employment for the youth.

Ms. Nini Meru, Chairperson, Nagaland Board of School Education. She also expressed strong opinion about the development of education sector in the region so that the youths get better opportunity for higher education in the region.

Dr (Mrs) Rongsenla (Retd) Director, Higher and Technical Education, Nagaland. She also stressed on the importance of teachers' training as well as job-oriented training for self-employment of youth.

Mr. Imchatoba Imchen, President Naga Students Federation. He also stressed the importance of an early political settlement of the Naga problem so that young people in the region are more secure about their future. Not enough importance has been given to public health issues in the Vision document. The administrative centre for the Look East Policy should be in the NER only. He stressed the importance of de-militarisation of the Naga areas and a policy for youth so that educated unemployed youth have access to opportunities to develop themselves. He stressed the importance of involving grassroots people in the Vision exercise.

Mr. Khulu, Commissioner and Secretary (Finance), Govt. of Nagaland: Public-private-partnerships are important in the developmental projects, but the ceiling of 20% imposed by the Finance Ministry for viability gap funding for these projects should be increased. The issue of maintenance of assets created through Plan funds should be looked into properly. He also stressed the importance of development of banking sector in Nagaland. Hon'ble Member, Sri P. P Shrivastav mentioned the creation of a maintenance fund for PMGSY roads and asked the Finance Commissioner to give the needs of the Nagaland Government.

Shri. Hekani Jakhalu, Director, Youth Net an NGO. He stressed the importance of developing special schemes of capacity building for youth in the NER which constitute about 40% of the total population. Consultations with youth across the state indicate that they are no longer interested in government jobs, but enthusiastic to do something on their own; what they need is proper education and an enabling environment.

Ms. Vanu Jamir, Principal Secretary, Education: She stressed the importance of training the huge number of untrained teachers. The IGNOU's distance education programme is inadequate in this regard. The Hon'ble Member (P) spoke about initiatives taken by NEREC in NEC for improvements in the education sector and teachers' training.

Shri. C.J. Ponraj, Principal Secretary, Personnel and Administrative Reforms: The vision document is basically an intellectual exercise and does not reflect ground reality. Individual state plans prepared by the Planning Commission and reports prepared by IIPA, etc., should be incorporated in the document. It is important to make separate plans for the plains and hills. He questioned the availability of funds for Rs 11 lakh crore investment to enable the NER to catch up with the rest of the country. With full involvement of the people, capital costs of projects can come down and projects can fructify.

Mr. Y.P. Chillio of Eastern Naga Students Federation (ENSF): He stressed the importance of proper education for the youth and development of international trade through which region can prosper.

S. Keppen, Additional Director of Craftsmen Training: He stressed the importance of having a Central Institute for Craftsmen Trainers Training in the NER, without which aspirants from the region have to go to places like Kanpur and Kolkata. Member, P.P. Shrivastav requested Mr. Keppen to forward a list of crafts relevant to the requirements of youth today.

Mrs. Rano Shaija, Ex-M.P.: She stressed the importance of having communications and links with common people working in every stage of our development strategy.

Dr. Kezhalezo Angami, Health Entrepreneur: He stressed the importance of availability of modern and adequate health facilities within the region. The North East is a hot spot for HIV/AIDS, which needs to be brought to the fore. Public-private-partnerships (PPPs) as well as proper use of medical insurance are important to manage health care systems in the NER.

M. Zhasa, Secretary, Agriculture: Development in the NER requires peace, human resource development, infrastructure and adequate funds.

Mr. Imkong Lemba, Secretary, Transport Development: He stressed the importance of people's participation in the development process and identified human capital, i.e., people's power, as the main force behind the success of any planning strategy. Despite several talks for the development of Sittway Port to connect the NER, nothing concrete has happened so far.

Mr. P. Norman, Secretary, Land Resource & State Mission Director for National Bamboo Mission: Importance of bamboo sector for the development of the NER. He also proposed for establishment of one Bamboo Board in the region along the lines of the Rubber Board.

Ms. Nawala Chubba, Nagaland University: She stressed the importance of having plans and programmes for the handicapped children of the region as they can also be useful members of the society. This point was well taken note of by the Hon'ble Member, Shri. P.P. Shrivastav.

Shri. Imcha Naga, Director, Technical Education: The vision document could be re-written in the following sequence: Vision Statement; Mission Statement; Strategy; SWOT Analysis; and Statewise Report.

Shri. P.P. Shrivastav summed up the session, thanked the participants for their contribution and promised to give proper importance to the suggestions put forward by participants. He also mentioned that NEC will be working with the objective of universalisation of employment, education and health care. The thrust area will always be youth and children.

The meeting ended with a vote of thanks proposed by Shri. Temsuwati, Joint Development Commissioner, Govt. of Nagaland.

Report on the Public Hearing at Bomdila, Arunachal Pradesh on November 6, 2007

The meeting began at 10:30 am with the Deputy Commissioner of West Kameng District Smt. Padma Jaiswal, IAS in the chair. Altogether about 80 delegates were present. After a welcome of the public by Shri Rinchin Tashi, S.D.O. (Dev.), West Kameng District, Dr. Gautam Naresh, Senior Economist, NIPFP made a power point presentation on the vision document and invited comments and suggestions. The Deputy Commissioner invited the public to place their views.

- Shri P. Misra, District Planning Officer, West Kameng District pointed out that the guidelines imposed for implementing certain schemes create problems while dealing with certain epidemics in the health sector. He also wanted to know the method of calculating the GDP. More subsidies could be offered to airlines companies for the north east; and it is important to develop rail connectivity and water ways to Arunachal Pradesh.
- Shri Rinchin Tashi, the SDO (Dev.), West Kameng District wanted to know how the government visualises the problem of insurgency in the North East, particularly in Arunachal Pradesh and what the vision document recommends. He also wondered why poverty in the region is yet to be removed even after launching a number of poverty elimination programmes.
- Shri Sang Dijrie Siden, a Zila Parishad Member, expressed his dissatisfaction for not giving full powers to PRIs even after five years in Arunachal Pradesh.
- Shri Lob Sing Minto, a Block Chairperson, pointed out that the implementation of various schemes in Arunachal Pradesh is not up to the mark. Health and education are lagging far behind in Arunachal Pradesh and a practical approach is needed rather than a theoretical approach. He wanted to know about the government's plan to explore the mineral resources in Arunachal Pradesh. Poverty and unemployment should be removed to solve the insurgency problem; inner corruption at the government level also need to be removed for speedy development of the state.
- One Superintending Engineer, PWD then spoke about the vision 2020 in the context of road connectivity, hydropower generation and tourism in Arunachal Pradesh and wanted to know if any priority is given in the document or any guidelines are provided in this sector.
- A teacher in the local higher secondary school voiced her problems about not receiving the NCERT textbooks in Arunachal Pradesh in time, which hampers both the students and teacher in completing the course.
- District Manager, SBI: The state has abundant natural resources, and a special team needs to be constituted to tap these resources. Priority should be given to communications, power and education. Removal of poverty is the only solution to tackle insurgency.
- Chairperson of ARCS: Development in Bomdila, Sepa and Tawang area are low. The absence of a good road communication system means that produce has to be carried as headloads to the market. The region is backward in education as students and teachers face problems from bad road communications. The vision document should take care of shortages of medicine supply to the health centres in villages.
- Shri T Game, District Agriculture Officer: Need for guidelines for farmers in implementing various projects in the agricultural sector.
- District Medical Officer of West Kameng District suggested that longevity of life of the people should be enhanced, first, through good health care facilities and then, by taking up developmental works.
- Smt. Y.W. Ringu, the Additional Deputy Commissioner, West Kameng District, wanted to know what has been visualized for the empowerment of women and development of the girl child in the vision document.
- A teacher in the local college wanted to know what steps have been taken for the preservation of culture and monuments of Arunachal Pradesh to ensure better access to education.
- Shri M Tayeng, DACO suggested that plans should be made according to the demographic, topographic or geographic situation of the state and according to the needs of the people. So far plans are not made from the grassroots level.
- An officer in the Geology & Mining Department spoke about the need for preserving environment and wild life which has not been mentioned in the document. He suggested developing some mechanism for conflict management such as the border dispute between China and Arunachal Pradesh. Without policies like an industrial policy, tourism policy, etc., the vision document will remain incomplete.

- The Chairperson of the meeting Smt. Padma Jaiswal presented her views on the vision document by stating that there must be some strategies to implement various schemes. She termed the vision document a very ambitious one and the basic challenge is how to bring this isolated area into the mainstream of the country. She suggested to all to think locally and act globally. She stated that the attitude and mindset of the people need to be changed to develop a scientific temperament. Large amounts of money earmarked for planning may not yield the desired results if capacity building is not taken up on a large scale. A powerful cooperative and strong PRI is necessary for all-round development of the state. Implementation of the vision document should be done in stages, with a proper mechanism for monitoring. Important stakeholders should be identified before implementation of a scheme. In Arunachal Pradesh, women's empowerment through skill development training should be taken up first before implementation through NGOs, cooperative societies, etc.

After the concluding remarks by the Chairperson, the Dr. Gautam Naresh rounded up the discussion by replying to the queries made and assured that views and suggestions will be incorporated in the vision document as far as possible. The meeting ended at around 1-30 pm after the vote of thanks were offered by the District Planning Officer, Shri P Mishra to the Chair and the public present in the hearing meeting.

Submitted by

N. J. Sharma
Adviser (IFC & WSM)
Nodal Officer for Bomdila Meeting.

Report on the Public Hearing at Pasighat, Arunachal Pradesh on November 6, 2007

A public hearing was held at Pasighat Town Club on November 6, 2007 at 10 am. The programme was attended by various heads of local bodies, government officials, public leaders, Panchayat members, local NGOs and academicians, etc.

The meeting was chaired by Shri Marnya Ete, IAS, Deputy Commissioner, East Siang District, Pasighat, who welcomed the gathering and presented the Draft Vision – 2020 in detail. Dr. (Mrs.) Mahfuza Rahman made a power point presentation on the Draft Vision – 2020, which was followed by an interactive session.

There was elaborate discussion and exchange of views on various aspects of Vision 2020. Some attendees sought clarification on various aspects of the Vision document. Mrs. Rahman clarified that the efforts are being made for the economic growth of the NER. She also asked people to send in their suggestions for making the document a people-centric programme.

The following points were highlighted at the hearing:

The Deputy Commissioner, East Siang District: Large amounts of government funds have been used for growth and development in the region. The government should take the initiative to solve the problem of insurgency on a priority basis to pave the way for peace and overall development of the region. Other areas that need emphasis are:

- Participatory development articulated through grass-roots planning.
- Augmenting the capacity of the people to participate productively in economic activities and developing the capacity of the institutions to design and implement developmental programmes.
- Augmenting infrastructure facilities like road connectivity, power, public health, water supply - sanitation and irrigation systems.
- Ensuring adequate flow of resources for public development
- Transforming governance by providing a secure, responsive and market-friendly environment.

- Catching up with the rest of the country on growth rates, human development particularly education and health, productivity and incomes.
- The new development strategy regarding infrastructure, connectivity, communication and investment under public-private partnerships, etc.
- A clear-cut policy or guideline for taking up power generation projects through NEC, NLCP, and Ministry of Power as Arunachal has high growth on power potential without proper guidelines, the state is unable to take up power projects, etc.
- Setting up sports infrastructure like stadia, community halls, and other facilities for water sports and adventure sports.
- Facilitating infrastructure for eco-tourism in every district of Arunachal Pradesh.

Dr. Tarik Talom, DMO emphasised the need to improve the health infrastructure within the state, as currently the Arunachal Government Health Department has only two general hospitals, at Itanagar and Pasighat, which is insufficient. He suggested greater emphasis on health, with the setting up of a super-speciality hospital in every district.

Shri Kaling Rutcho, President (ESCDA) noted the lack of proper marketing facilities for farmers which gave the middle-man maximum advantage. The Vision document could include a proposal for suitable marketing hubs with proper road connectivity to facilitate farmers.

Shri A.K. Rana, PO (APEDA) emphasised the need to develop renewable energy resources, with more attention to this in the Vision document-2020.

Shri I. Ering, Retd. IAS said that the insurgency problem in the NER should be tackled on a priority basis. The development of sports and cultural activities within the NER needed to be given emphasis. The younger generation may be encouraged to expose their talents in sports and culture through the electronic media. He suggested developing a corruption-free society which will bring overall development to the entire region. Basic infrastructure facilities like roads, power and man-power, horticulture, sports infrastructure, etc., would to be given priority. He suggested giving more emphasis on the points mentioned in the Draft Vision – 2020.

The hearing ended with the vote of thanks by Shri Rajeev Takur, Additional Deputy Commissioner, East Siang District, Pasighat.

(G.K. Roy)
Assistant Engineer (T&C)

Adviser (T&C)

Report on the Public Hearing at Dibrugarh (Assam) on November 6, 2007

A public hearing on the Vision NER – 2020 draft document was held at the Dibrugarh (Assam) on November 6, 2007 from 10 am to 1.30 pm. The programme was inaugurated by the Deputy Commissioner of Dibrugarh District who mentioned three important aspects the vision document should look into: marketing agriculture, spreading information technology, and promoting border trade through links with southeast Asia. Changing the mindset of the people to produce surpluses is important. Dr C J Thomas, Director, ICSSR-NERC, Shillong, gave the historical background to the Vision-2020, and the highlights of the draft document prepared by the NIPFP. He also mentioned the importance of the implementation of the document for the NER. The floor was opened for public hearing. Shri M.S. Sodhi, Advisor (T & C) North Eastern Council too was in the dais and assisted in the public hearing.

About 225 concerned citizens of Dibrugarh representing academics, officials, research scholars, student union leaders, NGOs, social workers, activists, journalists, retired government officials and a

large number of women attended the public hearing. The programme was a huge success as some came from distant places like, Doom Dooma, Tinsukia, Sibsagar, etc. Altogether 34 people expressed their opinions, views, comments and suggestion on the vision document. A few of them gave written comments and a professor from Dibrugarh University gave their department journal which had an article on Look East Policy for the consideration of NIPFP.

Professor Kulendra, Vice-Chancellor, Dibrugarh University, said that “security matters” related to the NE region should be included in the report. He further said that planning must be integrated with education also.

Professor J K Gogoi, Department of Economics, Dibrugarh University, said that the vision document should give special emphasis to higher education as Assam is lagging behind with a mere 5% at the all-India level. RTI, knowledge and awareness are not enough and wide publicity is needed. The draft vision document talks about emotional integration but needs to include economic integration also. Connectivity should be given emphasis and in this regard the Stillwell road should be opened. The Assam Gas Cracker Project, jobs for local entrepreneurs, rural tourism and issues related to immigration needs to be addressed in the document.

Shri Aswini Dowerah, Secretary, Salt Brook Academy said, that the vision should be a project and it should be achieved at the earliest. Proper roads and storage facilities should be extended to all the block level.

Shri Lohi Deka, a state government official said that vision-2020 should have a focus on wildlife and cultural tourism and also support projects which are sustainable. Rain forest areas need to be surveyed and protected.

Professor Horen Gogoi, Department of Economics, Dibrugarh University said that the vision document should give importance to good governance; efforts need to be made for the Assamese people to learn to work. The Bramaputra River is the third most powerful river after the Mississippi and Nile, and its potential for hydroelectricity power should be fully tapped. Floods should be dealt with as a national problem. Assam’s sericulture techniques should be patented for global marketing. The ULFA problem should be solved politically and the problem of infiltration should be addressed properly in the document.

Shri Subash Dutta, State Joint Secretary of All India Youth Federation felt that vision 2020 should address the problem of unemployment in the state. Floods and erosion should be treated as a national problem. In the East-West Corridor project Upper Assam is not included but the vision-2020 should include it; the Stillwell road should be reopened for international marketing. Since Dibrugarh and Tinsukia districts are coal, gas and oil-rich areas, they should be declared as industrial districts in Assam. Bio-diversity hotspots should not be touched while encouraging industrial development in the state.

Mrs Lakshmi Nisha, journalist: The Vision should look into the two main problems of the state: corruption of officials and overturning the law. Polluted environment towns should be surrounded with greenery. Health matters should be properly addressed in the vision document.

Professor K C Bora, Department of Economics, Dibrugarh University said that the per capita land available for the farmers in the state is much lower than the national average because of the migration of people from neighbouring countries and states. The question of migration and infiltration needs to be addressed in the vision document. The Stillwell road should be opened at the earliest and Tinsukia should be made a marketing hub. Demand-based education for capacity-building should be introduced in schools and colleges. In agriculture, crop sequences need to be emphasized in addition to crop intensity.

Shri Binoy Goswami, Lecturer, Department of Economics, Dibrugarh University felt that in agriculture, the benefits of the first green revolution should be extended for Assam; and infrastructure should be built to reduce the intensity of flood.

Professor H N Dutta, Department of Statistics, Dibrugarh University, in the vision document Assam should be declared a tribal state. Labourers from outside Assam should be discouraged and all the MLA and MP seats should be reserved to the local people.

Abdul Rahim, Engineer, DRDA, rural health need to be taken care of and sanitation facilities in the state should be improved.

Shri Nivon Gogoi, Assam is deficient in edible oils and a sunflower extraction plant if set up at the village/block level will be successful. Buimkol, the local banana should be encouraged both for domestic consumption and for export to other states. Three principles of self-employed, self-produced and self-consumed should be incorporated in the vision document.

Mrs B Phukon, Chamber of Commerce, the tea industry and economically efficient water transport should be included in the vision document. National highways should be maintained properly in the state.

Mrs Kiran Bora, Principal, Tinsukia College, Bogibeel Bridge to be completed soon. The water course should be well-studied for the construction of various roads and bridges. RTI needs wide publicity for common people's awareness. Roads and drainage in districts should be improved. Prospects of the small tea growers should be encouraged which could arrest the unemployment problem in the state.

Shri Amrit Borgohain: The document should list three things which needs to be controlled: the Bramaputra, insurgency and corruption at all levels.

Pranjal Pratim Boragohain, Dibrugarh University felt that the public hearing of the vision-2020 should have been translated in the local language for the benefit of the rural people to understand the vision and respond to it properly. The vision should emphasize the development of rural infrastructure for the rural development of the state. The various developmental schemes of the government should reach the common people in the village. Connectivity and communication systems should improve.

Dr A Mahanta, Centre for Women Studies, Dibrugarh University felt that vision-2020 failed to reflect the role of women in the economic and social development of NER. Women's role in capacity building and skill development should be incorporated. The presence of women in traditional institutions is very low and the vision document should emphasize the increasing participation of women in PRIs, traditional institutions and SHGs.

Shri H Choudhury, research scholar, Dibrugarh University: Asked how it would be possible to have such high growth rates when in the last 10 years the state was not able to achieve 10% growth.

Mrs Kalpana Khound: Border disputes between the states should be settled and people living in the border areas should live in peace. There should be transference in government schemes and proper disaster management for controlling flood. The Majuli protection plan should be implemented. The role of women also should be incorporated. Organic farming and eco-tourism should be encouraged. Special economic zones both in Dibrugarh and Tinsukhia should be established.

Shri N Joy: The entire NER consists of 200 tribal groups and the programmes and policies should be relevant to these ethnic groups. A community approach should be included in the vision document. Nearly 76% of the land in the state is with outsiders and only 24% is with local people, an aspect that the document should look into.

Ms. Mousumi Das, APO, Dibrugarh, felt that this public hearing should be held in all districts of the state. Natural resources available in the state particularly herbs and medicinal plants should be properly patented and processed. Skilled personnel will be required for the gas cracker project; local youths should be trained instead of appointing people from outside.

S. Dutta Saikia, for the implementation of the vision 2020 labourers and workers are needed; locals and youths of the state should be given preference in appointments. Depriving local youth will bring only frustration in the minds of the youth.

J N Chakravarty, Joint Secretary, Brahmaputra Development Society: inland water transport and river tourism should find a place in the vision-2020 document.

Dr B K Sen, Principal, Tinsukia Govt. College, Under education in the vision document, the problem of dropouts and left out from school should be addressed.

Shri S N Kar, DIPRO: the public hearing should be taken to the grassroots level to get a correct perspective from the people. The erosion at Rahmoria should be addressed. Cold storage facilities should be provided at the production site; historical monuments at Sibsagar should be preserved; the Nazira oil town should be developed.

Shri Mirudu Pawan Phugon, wildlife activist: Eco-tourism and industrial development will affect wildlife and the vision document should address the protection of wildlife in the region.

Mrs S N Gohain: Piped water supply should be extended to all villages in the district; project delays cause problems, therefore the vision must emphasize that the project which take off should keep to a time limit. The public hearing should be held in Dhemaji district to get the opinion of the people there. To check the erosion in Rahmoria, three spikes were raised but sank under water; proper planning is needed for the erection of spikes over the water surface. No official visited during the floods during the affected time. The people of Dhemaji are suffering: the SSA is corrupted and Bigibet Bridge is delayed, so it is important that a public hearing be held at Dhemaji to get the opinion of the people.

Shri Jaganath Chetia, Dumduma: The vision document should address the insurgency problem, to check corruption and provide transparent administration and political and economic safeguards to the NE people.

Dr S N Choudhury, former Advisor, NEC: Sericulture should find a place in the vision document. (He has given his report to the team).

Ms Kunja Hazarika, Flood control of Brahmaputra should be given importance in the vision document as this will allow the people live peacefully. Harnessing water in Brahmaputra involves discussion with China and Bangladesh and the GOI needs to take the matter with both countries.

The public were requested to send their comments, views and suggestions to the NIPFP or NEC within 10 days, that is, on or before November 17, 2007. The public hearing ended with a vote of thanks from Shri M S Sodhi. (Prepared by Dr C J Thomas, Director, ICSSR-NERC, Shillong 793 014)

Report on the Public Hearing at Itanagar on November 7, 2007

Introductory remarks made by Hon'ble Member(I), NEC, Dr. (Mrs) I.K. Barthakur during the Public Hearing on Vision – 2020 document

- Today, the effort is to visualize what standard and quality of life 'our' people of the States of NE India will want to have by the year 2020. In order to have the desired quality of life by that year what needs to be done, and how that should be done.
- The task of finding out what is wanted by the people and how that should be done was assigned to an NGO in Assam by NEC. They involved several groups of people and inquired from about 40 thousand households spread over in the eight States of NE India. The overwhelming response was in favour of developing Agriculture & its Allied sectors.
- Thereafter, the task was assigned to a specialized agency, the National Institute of Public Finance and Policy. NIPFP, for short. Their teams took views from several group in

different parts of North East. A summary of their draft Report recommendations has already been made available through Press, Computer Network, and the thrust points have also been circulated in the public notice issued by the Government of Arunachal Pradesh on 25th October, 2007.

- I take it that all of us, are therefore, familiar with the issues and approach.
- To get the views of the people of the eight North Eastern States of India on the draft Vision – 2020 document, different teams have gone out to state headquarters, a few other places like Pasighat, Tawang, Silchar and Dibrugarh. Today, your views, suggestions or any changes that you might like to suggest or advance any new ideas or approach are being sought.
- After getting your suggestions and your views, the same would be considered for inclusion in the report of the NIPFP.
- Therefore, my request to you, my friends is, that in the light of your past experiences and known natural resources of the State and NE Region, you may suggest “what” advances need to be made and “How” such progress be realised.
- The objective is to enhance the wellbeing of the people of the NE States, and speed-up Socio-Economic growth in a sustainable manner.
- Arunachal Pradesh has already made spectacular advances in the last ½ a century.
- I had come here during 1956, i.e., more than 50 years ago and left the State during the last part of 1978. I had walked to several places. Those are now well connected by good roads that go far beyond.
- I had seen and lived those times, and I can see the advances you have already made since then.
- After partition of the country, there were 3 primary schools having less than 100 students, and now, we have about 2000 schools and nearly 3 lakh students. We had, at Partition of the country, about 100 Km of roads, but now we are nearing the mark of 20,000 Km of roads. Several large townships have sprung up.
- The very appearance, attire, confidence and wellbeing of the people has totally changed. The lag of centuries has been abridged in a matter of couple of decades.
- We may now plan to add greater speed to reach the development goals that, we, the people of the states of the North East India, wish to attain and set for ourselves and work hard for attaining the targets.
- However, one of the major problems of Arunachal Pradesh, as I see it, is the smallness of several villages that are situated at long distances. How do we bring the people of those small villages into the ambit of overall development that have attained, we are striving to reach? Can such small scattered villages be grouped per their wishes so that they too could also share the fruits of development, and above all, be equal partners in the efforts to achieve the goal of attaining higher quality of life?
- This meeting today as I said earlier, is one of the several meetings being held in the States of NE Region where, our dreams and our aspirations have to set goals in the light of our experience, knowledge, information and the availability of resources like – land, minerals, water, climate, the human resources and the technological advances that have been made. We may visualize as to what, and how, we can reach the objective of having greater degree of well being. We have to think together, and prepare to work hard.

Main Points Made by the Public at the Public Hearing at Itanagar on November 7, 2007*¹

Vision – 2020

- The availability of the Vision document on a website does not reach the common people. They do not yet have knowledge or access to computers as the well-to-do people have. The “well to do people are not the main public”.
- The North Eastern Region Vision – 2020 ought to be done separately for each state. The states have different geographic and topographic situation and ethnic milieu. The document should deal with state-specific issues and needs.
- The participants should have been given 2-3 months time to go through the NIPFP Report.
- The Panchayati members ought to participate in such discussions. The discussions should have been fixed at Zila-Parishad level.
- Since the region is having different type of geographical, agro-climatic condition, and ethnic milieu. Vision document should be prepared for each State to address the State specific needs.
- In Vision paper ought to clearly identify different agro-ecological zones and accordingly diversified crops should to be planned so that both productivity and production could be enhanced.
- The Vision – 2020 should give separate chapters for Sectoral Vision – 2020.

Plan funds: Usually, there is a big gap between implementing agency and the funding agency which causes delays and distort projects. Something needs to be done to overcome this lag.

Agriculture

- Food security must be given top most priority so that it could lend support to all the other economic activities and enable North East to enter global markets. “Food security must not be compromised”.
- Development of rural masses is the true development. Rural development needs top most priority. Real development can be judged only from rural areas.
- Agriculture and allied sectors to be given special attention for eradicating poverty from the rural area. This will help 86% of the people of the region who reside in the villages and are totally dependent upon agriculture and its allied sectors, like poultry, piggy, dairy etc.
- Soil acidity amelioration schemes should be made.
- Scientific development of animal husbandry and associated sectors be given high importance. It will improve income and health standards of the people.
- The region abounds in water bodies including cold waters. Every one takes fish, but no systematic effort has been made for developing large scale fisheries. Suitable institutional and other arrangements need be made for development of pisciculture.
- Agro-Eco tourism to be encouraged.
- Transfer of appropriate technology evolved through research and is available in the country need to come to the agriculture sector.
- An agronomist of the ICAR felt that jhum cultivation was labelled by Dr. M.S. Swaminathan “an evil practice”. It should be stopped immediately.
- Another speaker said that the Jhum cultivation has to continue as it is the only available source of food for people who practice jhum. However, they should be informed about the scientific way of doing jhum.
- The contrary view was that Jhum cultivation was the most scientific way of cultivation for areas like Arunachal Pradesh. In jhum fields, multiple crops are produced that give livelihood to those people for a long period. Higher productivity technology be given.
- Vision – 2020 should stress the speedy development of agriculture and its allied sectors with prevention of degradation of natural resources.

Infrastructure

- More infrastructure facilities along with social amenities may be provided for the development of urban area.
- Rural connectivity needs to be provided so that the surpluses produced in the villages can reach the market.

*¹ Chairperson: Dr. (Mrs) I.K. Barthakur, Hon’ble Member (I), NEC, Shillong.

- Road connectivity and quality of roads especially in rural areas should be enhanced.
- Road connectivity to be given top priority along with roads that connect the adjacent states.
- Water transport to be encouraged in the states for improving connectivity.
- Marketing infrastructure in the rural areas need to be given attention.

Social Services: Social sectors like rural development programme, sanitation, health facilities etc., to be strengthened so that rural people can benefit from the programme.

Cultural Heritage: The cultural heritage needs to be preserved and documented for the future. Arunachal Pradesh is very rich in cultural heritage. The need to document and preserve these sites for the future generations is urgent.

Human Resources and Education

- Human resources be appropriately developed to suit emerging employment opportunities.
- Adult literacy, skill enhancement and leadership building at the grass-root level need to be given attention.
- The state should open a counselling centre for training the criminals and the drug addicts in the State.

Look East Policy:

- The Look East Policy needs to move beyond a 'slogan'. Older border trade routes with Myanmar, Bhutan and China can be reopened.
- Appropriate infrastructure to facilitate border trade need to be set up.

Urban: Policy for urban development should not be based only on population criteria but also take into consideration the backwardness index and geographical scenario of the area.

Medical and Health

- The establishment of a medical college in Arunachal Pradesh is needed, as a large number of patients go outside for treatment.
- Malaria eradication needs to be speeded up.
- Health tourism to be increased along with tele-medicine facilities in remote areas.
- Potable water supplies should be assured, as a very high percentage of diseases are due to polluted and contaminated water.

Investment

- The schemes that are segments of all-India schemes and programme should be funded according to the specific needs of each area and not on a uniform scale as applicable to other states.
- The NEC should fix a plan share for each state and transfer the funds to states that set their own priorities.

Overall

- Corruption, nepotism and sectoral approach will drown all good thoughts and plans. Systematically and firmly, these evils have to be eradicated.
- In spite of so much effort put under several plan programmes, why have development efforts not brought the expected level of development? This needs to be analysed, and the constraints clearly identified and systematically removed.
- The Vision document should assess the national investment opportunities in the region.
- The document should examine various options for reaching the objective of development. It should show the alternative visions and routes that could be followed and the magnitude of investment funds required for each path to achieve the objectives by 2020.
- Unless the people of NE Region are sincere, honest and work with commitment, preparation of such documents is a waste of effort.

Governance: The administration should be free from all mal-practices especially, corruption. Good governance is the main need. The region can develop if the NER high-ups are free of corruption, sincere, honest and hard working, and really strive hard to achieve progress.

Slaughter house: The people are mostly non-vegetarian but the conditions of slaughter areas are appalling. Hygienic slaughter houses should be established in high population areas.

Non-Governmental Organisations (NGOs): NGOs are to be motivated and strengthened to play their role for the development of the State.

Miscellaneous: Rain water is the purest water and should be collected for drinking purposes.

Small villages: In the interiors of Arunachal Pradesh, even two families could make a village. In certain places only one house is a village. For all these small, scattered villages, life will not change for many years and something needs to be done.

Law and order: There should be peace and tranquillity so that the development of programmes the area can take a front seat. Militancy in the region needs to be tackled with a strong hand.

Corruption: Schemes fail to show results because of the high level of corruption.

Boundary: Boundary disputes with the adjacent states is one of the greatest problems and should be settled soon, especially between Arunachal Pradesh and Assam.

Tourism: Tourism development should be given importance. The region has so much to attract tourists.

Transportation

- A few more bridges need to be constructed over the river Brahmaputra in a phased manner to ease transport difficulties.
- Air connectivity be given due importance. Earlier, Arunachal Pradesh had several landing grounds. With little effort, the old landing grounds could be renovated and made operational.
- Two green-fields airports need to be constructed at Itanagar and Tawang.

Cadastral Survey: A cadastral survey should be carried out at least in urban areas, as without such a survey, developmental projects and settlements get into difficulties.

Disaster Management: In Vision – 2020 document, disaster management should be included because the region is prone to natural calamities.

Urban: There should be local bodies to take care of urban programmes, given the scale of urbanisation in the region.

Sports: The sports sector should be given importance because the youth of NER has great potential to excel.

NEC: The NEC should provide full funding for selected projects so that these can be completed soon.

Miscellaneous: The Vision – 2020 should have been prepared with local talents. What was the need of giving it to a National Institute of Public Finance and Policy (NIPFP).

Points mentioned by Hon'ble Member (I), NEC, Dr. (Mrs) I.K. Barthakur in her concluding remarks

- The Chairperson expressed her thanks to all who had come to participate in the public hearing. It showed the interest of the people to bring development in the state and the NER to bring these on par with the rest of the country.
- All the 12 public hearing teams had fanned out to state headquarters and other places to get the views and ideas from the people relating to the Vision – 2020 document. These ideas will be put together and incorporated in the main document.
- Road connectivity both rural and urban has been given a very high priority. All the state capitals will be connected with 4-lane roads, and the district headquarters will be connected by 2-lane roads to the respective state capital. The state capitals will also be connected to the East-West Corridor that terminates at Silchar. A four-lane road will also be extended to Dibrugarh, in Assam.
- The railway network will be converted to uni-gauge system. All meter-gauge lines will be converted to broad-gauge lines.
- Meghalaya will be connected by rail from Azara (Assam) to Byrnihat (Meghalaya).
- In due course Itanagar will also be connected by a rail link.
- There used to be 11 landing grounds in Arunachal Pradesh during 1960-70, but these are defunct.
- The matter of operationalising some of these is under serious planning. A few greenfield airports like Kohima, Itanagar, Tawang and Gangtok, are under active consideration.
- Baljek airport in Tura (Meghalaya) will soon be operationalised and thus there would be 12 operating airports in NE Region.
- Identification of specific projects is not the main objective of the Vision -2020. It goes beyond the project are bits and pieces that will go towards fulfilling the Vision -2020 document.
- Food security is very essential to NER. Mostly, the farmers grow only one paddy crop in a year and keep the lands vacant for about 7 months or so. NEC has already taken up a proactive plot project to demonstrate that the cultivation of short-duration HYV paddy, will advance paddy harvest, which will enable farmers to sow 'rabi' crops during October – the optimum sowing season and take them to much higher level of income generation.
- Jhum cultivation is the "survival" system for people living in tiny isolated villages. At one time or the other, it was practised throughout the world, but with advancement alternative ways of generating incomes has made people to other methods and avenues.

- The Ministry of Environment and Forests has approved afforestation by planting fruit trees that are suited to the climatic conditions of different areas.
- The Vision – 2020 document is expected to give direction to the State’s Five Year Plans and the Annual Plans.
- Under human resource development, science and technical education is accorded high priority. Employability is given high priority. It could be mentioned that a few technical institutions are being set up in the NE Region like, Air Pilots Training Academy at Lilabari, several nursing colleges and schools wherever there is a 100-bedded hospital. M.Sc (Nursing) degree holders are to be the faculty personnel to start a nursing college. Otherwise, nursing schools will be started. As soon as M.Sc (Nursing) personnel become available, nursing schools could get upgraded into a nursing college; RIPAN, Mizoram, is being upgraded to M.Sc (Nursing) degree level so that nursing faculty becomes available. An Indian Institute of Information Technology (IIIT) is coming up with its first session expected to begin during 2008-09 at Dimapur (Nagaland).
- The points expressed by the participants will be put together and considered for inclusion in the Vision 2020 document, provided the same are already not included.

Report on the Public Hearing in Agartala on November 7, 2007

Public hearing on the document, “Peace, Progress and Prosperity to the Northeastern Region: Vision 2020” prepared by the National Institute of Public Finance and Policy (NIPFP) was held on November 7, 2007 in Agartala. The hearing was held from 11am to 2.30 pm and was attended by 80 persons at various times. The prominent people who attended the hearing included Prof. A. Saha, the Vice-Chancellor of Tripura University, Dr. Sanjay Kumar Panda, Acting Chief Secretary, Government of Tripura, President of the Chamber of Commerce, Mangal Debbarma, Advocate, Guwahati High Court Ram Pada Jamatia, a spokesperson for Jamatia Hoda, Dr. N. P. Singh, teachers from various departments of Tripura University, persons from print and audio-visual media. Mr. Dey attended on behalf of the NEC as an observer.

The public hearing began with a welcome remarks and introduction by Mr. Jagdish Singh, Special Secretary and Director, Planning (P&C) Department of Government of Tripura, followed by a brief presentation of the vision document by Dr. M. Govinda Rao, Director, NIPFP. This was followed by observations on the draft report and discussions.

Mr. Panda, who made initial observations, stated that the report has rightly diagnosed the problems, assessed strengths and weaknesses of the system and recommended remedial measures. He emphasised the need to adopt a positive attitude in the vision because, nothing is impossible to achieve. He stated that the Government has recently completed the Human Development Report with the help of UNDP. He, however indicated the difficulties of constituting the District Planning Committee to facilitate grassroots planning due to the fact that the jurisdiction of Tripura Autonomous Council spans over six districts making it difficult to combine areas under the jurisdiction of Part IX and IX-A of the Constitution and areas under Schedule VI of the Constitution.

Prof. Saha states that the region is rich in resources, but inhabited by poor people. He complimented the NIPFP for preparing a comprehensive vision document. He also stated that the vision should be in terms of complete elimination of illiteracy, targeting the dropout to zero, complete elimination of unemployment so on and so forth.

The president of the Chamber of Commerce stated that the “Look East” policy should start by looking at its neighbours. In the case of Tripura, for example, the focus should be to develop trade, commerce and industry with Bangladesh. Development of railways to link with Bangladesh Railways, and extending the railways to the Chittagong port, introduction of bus travel facilities from Agartala to Kolkata via Dacca, development of inland waterways were other important suggestions. He suggested that the “big brother” attitude of the Indian bureaucracy should go. The vision

document should also focus on providing and promoting education to tribal population by measures such as establishing residential schools in tribal areas and providing them tutors. As the contiguity with Bangladesh is large, Tripura should have some of the best facilities which can be availed of by the Bangladesh nationals as well. Establishing the state of the art hospital (like Vellore), and educational institutions where the Bangladesh nationals can also get specialised treatment were some of the suggestions. The government of India should take the initiative of providing assistance to the Government of Bangladesh to develop Chittagong as a modern port. The Government of India should also help to develop other smaller ports. Railway line should be developed up to Chittagong port from the Northeastern side. There should be integrated transport and communication system to connect all ports.

The written submission by the Jamatia Hoda which was read out by Mr. Ram Pada Jamatia called for a number of measures namely: (i) Elimination of extremism through involvement of apolitical social organisations and various community forces; (ii) giving weightage and recognition to various community and social bodies by codifying their customary laws; (iii) ensuring proper representation of the people of Northeast in government/ semi-government services and undertakings through special recruitment drive; (iv) providing quality education by opening central schools in tribal dominated areas through Hindi medium; (v) Reservation of seats for the students of Northeastern states in the Universities in all major cities of the country; (vi) bridging the gap between tribal and non-tribal areas in development; (vii) responsive and impractical governance to restore the faith of people on the administration; (viii) Early completion of border fencing to arrest the movement of extremists and infiltration of foreign nationals; (ix) Representation for community chiefs in policy making bodies of government and semi-government bodies and undertakings and a special fund/ package by the Government of India for promoting entrepreneurship and businesses to the tribal youths of the Northeastern States.

Mr. Mangal Debbarma in a detailed note submitted stated that highlighted that substantial proportion of the region is within the ambit of Sixth Schedule which provides for the administration and control of tribal areas which confers wide range of judicial, legislative, executive and financial powers to the Autonomous Councils. He made the following suggestions: (i) Revamping institutions in tribal areas and overhauling to improve governance and delivery systems; (ii) Preparation of a tribal centric strategy of the development of social and economic sectors based on the economic, social, economic and geographical requirements of the people; (iii) Development of composite indicators of development for different tribal areas to bring them on par with the national level by 2020; (iv) Strengthening the administration under Sixth Schedule of the Constitution various wings of tribal welfare departments, DRDAs and other agencies to make them the focal point for development and regulatory functions by meeting administrative cost from TSP and CSS funds; (v) Effective implementation of TSP and SCP through effective and proportionate fund flow based on the proportion of ST population through a single budget head in a non-lapsable and non-divertible manner.; (vi) Adopting area planning approach in tribal areas and encourage economies of scale; (vii) encouraging academic, anthropological and policy research to study various aspects of development; and (viii) fair spread of unconditional financial resources in the tribal areas.

The objective of all these should be to eliminate gap in the human development index of tribal population by 2020, reducing the drop out ratio in primary and secondary school level and ensuring food security to BPL families. It is also important to increase the participation of tribal in sports and cultural at local, district, state, national and international events. It is also important to promote the development of tribal handicrafts, organic and ethnic products through specialisation, standardisation and design support and examination and codification customary law and practices. It is also important to conserve and protect intellectual property rights of tribals. In initiating these changes, it is necessary to take into account of tenurial insecurity, use of common property resources, tribal forest interface, rehabilitation and resettlement, conservation and development of particularly vulnerable tribal groups.

A number of others made interventions on various aspects of the vision document. There was a comment that the report is too academic. It was also mentioned that the vision document should dream – dream of ensuring that every single tribal population is fed well and has access to education and healthcare and the region has a state of the art hospital and educational institutions. The important suggestions include:

- Develop bio -fertilizers in the animal sector with the help of NABARD.
- Attention should be given to soil conservation and water management;
- Need to supply good quality and high yielding seeds and development of orchards and processing units;
- Expand non-agricultural activities in rural areas.
- Strengthen communitisation in governance and development;
- The elected representatives in the PRIs should be paid monthly emoluments and the present honorarium (Rs. 600/month) is not adequate.
- A Management Institution should be set up for the development and effective utilisation of human resources of the region
- Air connectivity within the region should be significantly strengthened and a regional airline should be set up;
- There should be an academy for training pilots;
- There is a need to strengthen social security in the region;
- Marriage age for the girls in many places is as low as 13. Measures should be taken to increase this.
- Instead of encouraging cultivation of rubber, bamboo cultivation should be encouraged. Rubber cultivation increases soil infertility.
- There must be a focus on providing preventative rather than curative healthcare to the people;
- Improved governance and better delivery systems through reorientation of institutional arrangements;
- Infrastructure development is the key to progress;
- The traditional approach of developing basic and heavy industries should not be given up in the quest for developing sectors with comparative advantage.

Dr. Govinda Rao thanked all the persons for their constructive suggestions and requested that if there are any further suggestions for improvement that comes to their mind, they should send it by e-mail.

Report on the Public Hearing in Aizawl, Mizoram, 7 November 2007

A public hearing on “Northeast vision 2020” was held at Information and Public Relation Auditorium in Aizawl on 7 November 2007 at 10:30 AM. More than 150 persons from various walks of life attended the meeting and spoke on the subject. The people in general welcomed the vision 2020 document and drew the attention of the government on many issues relating to the Mizoram state. They demanded its speedy implementation and sincerely hoped that the present document would not lie under the dust like various other documents previously concluded on the northeast development. The meeting came to an end by 5 PM.

I attach below a detailed report prepared by the organizers of the meeting.

Discussion conducted by: Shri H.V.Lalringa IAS (Rtd), Former Secretary N.E.C

Lalhmingliana Saiawi IAS (Rtd): asked why Panchayati Raj should be introduced in Mizoram when the state already has Village Councils which are endowed with some magisterial power? Proper rapport needs to be established with the Centre so that the state can get more funds from the central government. The massive land acquisition by private land owners specially in rural areas is a matter of concern as it hampers developmental processes as the land owners expect compensations. The government should find a means to re-acquire these lands without compensation.

F. Malsawma, Former Minister, Government of Mizoram submitted the following points for considerations:

- In the summary of the NER Vision 2020, it is desirable to insert “Disproportionate population growth in the Post- Independent era”, besides “a sense of alienation” in the third paragraph of the Introduction.

- While taking into consideration a proposed population for the various purposes, the floating population (for instance, in Mizoram at least 50,000-1,00,000) has to be reckoned with as consumers. The size of these populations may vary from state to state. The NER's extensive international boundaries means that the influence of foreigners has to be reckoned with especially from countries with political turmoil.
- Within the NER location and topography are not the same, hence generalisations cannot be applied as a rule.
- In order to augment and accelerate production and achieve economic productivity, agriculture and its allied sectors and forest-based industrial products should be given top priority. To enhance production, the following measures are proposed:
 - (i) Price support
 - (ii) Transport subsidy up to marketing centres
 - (iii) Crop insurance
 - (iv) Minimum prices for major cash crops
 - (v) Good marketing facilities
 - (vi) General incentives for successful farmers

These investments can be considered as developmental investment in the first stage.

- In the NER region, sector-wise implementation and monitoring is essential for proper utilization of funds and adjustment of schemes to fit situations in different areas.
- Introduction of vocationalisation in the +2 stage or degree course in the college to combat unemployment problem.
- Power generation is the most important sector and needs to be focussed on.
- For the 'Look East' policy, and international airport needs to be operationalised as soon as possible in the North East.
- In an era of privatization, prospective and enterprising units belonging to NGOs and individuals need to be encouraged and supported.
- Air cargo transport facilities should be made available in the region.
- Essential common medicines should be provided free to rural and farming populations.
- Special committees be constituted to chalk out immediate and long-term plans for youth welfare activities.
- The overall approach to the development of NER be need-based.

Rualzakhuma, IAS (Rtd).

- After partition, the NER and especially Mizoram, was cut off from the rest of the country. The only communication route that remained was the dust track made by tea planters via Silchar. Due to the underground movement in Mizoram, no communication routes were properly constructed for 20 years and the state could not develop as it should have. Thus, top priority must be given to the construction of communication infrastructure such as roads, railways, airways and inland waterways. Electronic communications needs to be further improved. Emotional and cultural identification with the rest of India needs to be enhanced.
- Though an industrial policy is in existence, factories must be assured of at least eight working hours, which is possible only if there is sufficient power supply. The Government of India should look into the potential of the NER in the generation of power.
- Agricultural schemes have been developed at the grassroots level, but in their implementation, the government has been reluctant to involve the public. Members of the public must be involved in developmental processes
- Good governance is the key to development. Good projects have been undertaken on paper but they have not been fruitful due to corruption. Thus, an independent group must ensure the proper utilisation of funds. The commitment of government officials is essential.

Lalkhama, IAS (Rtd): Though the essence of the NER vision 2020 is paradigm shift, there is not much change or shift in the development of strategies. The Village Council Act needs drastic amendment. Development must be participatory and cooperation between different NER states is required.

Commenting on the need for capacity development, a change in the pattern of education is needed, with greater emphasis on technical education, equipping schools with workshops for learning skills related to hairdressing, machinery and other liberal arts. Need a centre for South Asian studies where students from all parts of Asia can interact.

Since augmentation of power is crucial for development, a time frame must be provided for every project. There must also be a synchronization of developmental work in the NER. Industrialisation should not be for its own sake, and while attempts need to be made to attract foreign investors, the interests of local people need to be protected especially against assimilation.

A large labour force is wasted in the practice of jhumming cultivation in Mizoram, which has also destroyed land without creating any assets. The scientific use of land must be devised and the productivity of this labour force must be increased.

The concept of government needs to change where the duty is not to govern alone but to serve the people. All ministers, legislators and government officials should undergo capacity training. Peace is an essential requisite for development. Insurgency is a result of frustration among the youth. Thus, conditions and environment must be created to facilitate young entrepreneurs.

L.T. Pudaite IFS (Rtd): expressed displeasure that the draft NER Vision 2020 document did not acknowledge the studies made by them. The paper on NER vision 2020 should be made public, and specific time-bound practical recommendation must be made. Whenever the Government of India negotiates with neighbouring countries like Bangladesh, it must give priority to the interests of the NER. There must be active participation and consultation of stakeholders in development. Within the state government, everyone, from ministers to officers must be made accountable from the planning, monetary and implementation stages.

M. Manzuala, IAS (Rtd)

- It is necessary to have laws, rules and good systems for the proper functioning of government organisations. Mizos lacked good leadership, a suitable work culture and ethics, thus they require a leader who puts the interest of people before self and the interests of the political party.
- Self-sufficiency in food grains has been the number one priority of every government. Though the schemes are good, they have failed and the region still gets most of its food supply from Punjab and Haryana through the Food Corporation of India. The Mizos need to be self-sufficient in food production as they were earlier. Globally, there is a world of difference between India under PL 480 and India after the green revolution and with a liberalized economy. Mizos who are perpetually depending on outside help for everything have plenty to learn if they want to raise their heads high in the Indian community.
- Mizoram is still not an economy in the real sense of the term. The only economy it has is the annual plan allocation from the Planning Commission. Whatever development has taken place seems to be in the form of individual development and is non-capital in nature. Whatever money is spent is recurring non-productive expenditure. The state needs people of integrity, courage and selflessness at the helm of government, which can be achieved through a system which functions like an ombudsman which will publicise all relevant information about all candidates for Assembly elections so that electors are better informed.
- For the success of any joint venture good understanding and mutual confidence between the parties concerned is essential. There should be mutual confidence between the Centre and State Government as development works are joint ventures.
- It is of utmost importance for the central government and the Mizos to make sincere and earnest efforts to eradicate the gap between the Mizos and mainstream Indians on matters of political understandings and genuine development. The quality of men in power is more important than

making good plans.

Lalsawta, General Secretary, MPCC felt that the 12.95% growth of GSDP in the NER projected in the NER Vision 2020 is too ambitious and impractical, and the Rs 1.5 million crore investment from the private sectors may be difficult to realise. However, investment from the private sector is important as the state cannot depend on government money alone. Thus, multinational companies should be invited to invest in projects in the region. The people of the North East have to be mentally prepared to receive foreign investors. There are no underdeveloped countries, only under-managed countries. Insurgency problems come from weak and ineffective government and bad management. Therefore, good management in every field is important. To progress, Mizoram cannot live in isolation, but there should be more legislation to guard against assimilation. It is time to liberalize Mizo society and let go of prohibition as the absence of vice does not make saints.

L. Colney, IAS (Rtd) expressed his doubts about achieving the 12.95 % GSDP growth rate in the NER Vision 2020. From experience, it is clear that proper monitoring of funds is important for achievement of goals. The State Planning Board did not function effectively (he was a former member) and suggested that subsidies should be offered to airlines that operate in the NER until it is economically viable for them. Even though experts have condemned jhum cultivation no alternative has been offered to farmers.

Denghnuna, IAS (Rtd): asked for time to react to the draft of the NER Vision 2020. The perception of the Look East Policy in the North East is that it is merely an attempt to extract gas from Myanmar. It necessary to convince the people of the region that the policy is for the benefit of the masses. Simultaneous effort must be made to address infrastructure needs of states in the region.

Serious problems exist in the entire North East in project implementation. Bridging the gap between ambitious plans and poor implementation is a must. Since the government is the prime mover, good implementation can be ensured by involving stakeholders. Without their involvement, there will be price over run, time over, run etc. Thus a detailed mechanism must be worked out with the people.

None of the provisions of the NLCPR have been followed; all states should implement the provisions of the NLCPR according to the guidelines.

The existing road-gauge project from Lumding to Silchar rail station is adversely affected by passing through the Barail range where there are 39 tunnels and 179 bridges which are vulnerable to earthquakes and other vagaries of nature. The NER Vision 2020 may take up the already surveyed railway line from Chapaimukh to Hailakandi via Kalaigh Cherra.

F. Lalremsiama, IPS (Rtd), Ex- MLA: felt that a public hearing for studies made by the L.Pudait group should be initiated. The hydro-electric power potential has been over projected; except for Tipaimukh the rivers are not powerful enough.

- Thermal and gas generation needs to be included in the draft of NER Vision 2020.
- Exploration of gas and petroleum must be intensified in Mizoram.
- The North East Region has been referred to as “The Balkan of the East’ as it is in continual strife. The narrow ethnic community extremism has resulted in the Mizos losing their national identity thereby hindering progress.
- Maladministration has resulted in corruption, failure of law and order, increase of crime. Peace, security, law and order are the prerequisite to improve the quality of life.
- Disaster management must be included in the NER Vision 2020 as the North East Region lies in the tectonic zone five which is most susceptible to earthquakes.
- Anti-corruption measures must be taken by monitoring public finances and providing time frames for projects.

R.Thansanga, Director of Agriculture (Rtd): For spices such as ginger, turmeric and chillies, there should be spice-drying units with one lakh tones capacity for one season (i.e. January to April) for each district of Mizoram.

Prof. R. Tlanglawma, Dept. of Economics, Mizoram University: Development in the North East cannot occur in isolation as the whole of the region is a single unit. Human resource development is of utmost importance and improvement in the quality of people is vital.

- Unemployment is increasing among educated youth due to a lack of language skills, thus proper education needs to be imparted to enable them to perform simple tasks for which they are qualified.
- People are cooperative but have to be told what to do by good leaders.
- Garbage disposal exists but are not properly managed.
- Reformation of health, education and sanitation must be included.
- The roads are in bad condition and they were hurriedly repaired for the visit of the Vice President of India. Such practices must be done away with and the roads should be kept in good condition permanently.
- Supply of sufficient drinking water is also required.

J. Lalsangzuala, Former Minister: Fifteen years ago, in a meeting with experts of the Planning Commission (when he was Planning Minister) they had expressed his belief that with sufficient funding from the centre Government, Mizoram will catch up with the rest of India in twenty years. In his paper "Mizoram - Land of Promise" (written 33 years ago) he said that with politicians with a sincere desire to do good, the state would be a land of promise. It is not too late for Mizoram to have a clean state. The first steps need to be taken by the politicians, then the officers will follow suit. Public property and money must be treated with respect.

C.L. Ruala, Former Minister: Was grateful that this Vision 2020 has been drafted and hopes that the NER will be a region of contented and peaceful people once this vision is implemented. Need to tap Mizoram's resources of petroleum and gas. In the field of hydro-electricity almost all hydro-projects have been abandoned due to high compensation rates. The government needs to find a way to re-acquire lands owned by individual land owners which have not been developed.

Lalthangfala Sailo, President, Mizo Academy of Literature: As Mizoram is isolated from the rest of the country, when there is a road block on the Silchar road the state is cut off from the rest of the country. There should be a railway link not only up to Bairabi but till Akhyap. Also, oranges which can be grown all over Mizoram are commercially viable. Lately the trees have become diseased, and thus productivity has fallen. The NEC should carry out research on the disease and find ways to combat it.

Lalmuanpuia Poonte, Ex President, Mizo Zirlai Pawl; Vice, Chairman, North East Students Union: Jhum cultivation must be done away with but no better alternative has been provided to the farmers. The facilities for cultivating anthuriums have not yet reached rural people.

- In all important projects taken on by the state government in collaboration with private companies, for example NEEPCO, the agreement signed by other states should be studied so that the state finally becomes the final owner.
- No concrete progress can be made in tourism until prohibition (MLTP Act) is lifted in Mizoram.
- In the field of agriculture no disease control procedures are offered by professionals.

Lalchhuanawma, Lecturer, Pachhunga University College

- The youth are eager for change.
- People's participation at all levels must be ensured. There is no mechanism for participation of the people in the planning stage, thus it should be mandatory that all important projects have the consensus of stake holders, for example: people are not consulted in the construction of railways.
- An Agriculture University in Mizoram or Agriculture Research Centre should be set up under Mizoram University.
- This Vision statement should be tabled in the Parliament as well as the Legislative Assembly of North East Region.

Pastor Biakthansanga, Joint Secretary, MKHC

- The Restricted Area Permit (RAP/PAP) for foreigners should be lifted to promote tourism in Mizoram.
- There is a practice of parallel tax and random extortion of drivers and passengers in the highways of the NER. Extortionists, who are often government personnel must be checked to ensure

freedom of trade, commerce and intercourse throughout the country. This is important because even if production is boosted, without security in transportation of goods, it will not go very far.

- Humans are the only exportable raw materials from Mizoram. If human resources in the NER are given the same environment to excel, as in mainland India, the states can do well in many fields. This will generate employments in the fields of medicine, agriculture and Information technology.

D.R Zirliana, Editor, Mizo Aw: The public must know what their government is doing through the Right To Information Act (RTI). Big projects undertaken by the government must be publicised. Electronic media is not fully utilised by the government for this purpose. All information regarding projects, for example, budgets, name of contractors, etc., should be made available to the public.

Dr.J.V.Hluna, Lecturer, Pachhunga University College:

- Need for a good railhead to be developed for easier transportation of goods, petrol and gases. A broad-gauge and not meter-gauge was required at Bairabi railhead..
- Instrument landing facilities are required for Lengpui airport.
- Big projects should be introduced to create job opportunities so that insurgency can be nipped in the bud. For rehabilitating youth, NER Vision 2020 must be implemented.
- To complete the Bairabi Hydel project, clearance has been obtained by the Chief Minister of Mizoram, but funding must be continued by the central government. Whatever agreement has been made must be remedied so that the state can finally own the project.

Lallianchhunga, Lecturer of Political Science, Mizoram University

- There is a need to restore public faith in the state mechanism, which can be done through increased people's participation in developmental work. Deepening of democracy at the grassroots level is a must. Structural reformation of Village Councils is required. The state must imbibe the elements of the Eleventh Schedule and strengthen Village Councils (as suggested by the Honourable Union Minister Mani Shankar Aiyer).
- Vast tourist potential but need to change the mindset of the tribal people, which can be done through extensive public awareness campaigns.
- On the construction of the railhead up to Sairang/Kawlchaw, the future generation should decide on this. Unless there is fencing on both sides, it is not practical to construct the railhead. Lifting of the RAP/PAP may ultimately result in the liberalisation of the Inner Line Permit (ILP) which in turn will lead to assimilation.
- Need to institutionalization of Jhum cultivation; the central government must formulate guidelines and measures for jhum control. (JNURM)
- Need to formulate youth policies to contain unrest amongst the young people of the NER. Recreational activities must be given importance.
- Transparency in state government activities is also important. For this, proper implementation of the RTI Act is mandatory.

Report of the Public Hearing at Gangtok On November 17 2007

The meeting started at 12 pm with the registration of delegates invited for the meeting. A welcome address was given by the Development Commissioner, Shri A Rawat who also spoke about the requirement of Sikkim in the context of the Vision Document prepared by NIPFP. He mentioned that the recommendations of the Government of Sikkim on this document came out of the discussion between line ministries of the state government which have already been communicated to the Ministry of DONER and NEC. He emphasized that incentive-based policy should not be done away with as suggested in the document. Similarly low-cost tourism should not be at the cost of high-end tourism. The Government of Sikkim totally disagreed with the creation of NETDC. He suggested that the NEC take note of the high dropout rate in schools in Sikkim. Solid waste disposal should be taken care of in the vision document. Sikkim does not have 3-tier system, it has only 2-tier system of administration. Women empowerment has been increased in Sikkim up to 40%.

It was then requested by the Nodal Officer of Sikkim for the public hearing, Shri M G Kiran, Secretary, IPR, Government of Sikkim to the Adviser, NEC to give presentation on the Vision Document.

After completion of the presentation, Ms Sushma Singh, Secretary, DONER then gave an overview of the draft document, the process by which it evolved. In addition to the work done by the Centre for NE Studies and Policies and NIPFP, a group of intellectuals having fair knowledge of North East who were the members of the Steering Committee guided the preparation of this document. Inputs and comments on specific points given by the public will be incorporated in the final document. Many of the points mentioned in the document may not be relevant to the state of Sikkim, which does fairly well in the matter of per capita income. She invited the public to offer their comments by requesting first the Hon'ble Ministers present.

The Secretary, Animal Husbandry stated that various sectors have been covered in the document in a broad ways but the issue of livestock development has not been focused on. About 80% of farmers depend on livestock, and 80% livestock products come from outside the state. Ministry of DONER and NEC should support marginal farmers for their rapid income generation.

The Principal Secretary, Health then stated that high rate of return is at loggerheads if fiscal incentives take a back seat. In the list of development of nine airports, Sikkim has not been mentioned. Need to improve rail and air connectivity to Sikkim.

Sri P.D. Rai, from an NGO called ECCOS, suggested that the term “catching up” for per capita income levels should be changed to “raising” the level of income, otherwise it would mean that Sikkim is a backward state. Include externalities such as climate change, clean development mechanisms, etc., in the vision document as Sikkim is a hot spot on biodiversity. Heritage and agriculture should figure in the document as a priority sector. Eco-tourism has not figured in the document – much more needs to be done in the eco-tourism sector and Sikkim should be treated as the ultimate goal.

The Principal Secretary, Social Empowerment, Justice and Welfare Department touched upon two basic issues: organisations and creation of infrastructure. Housing is a critical factor, but is missing in the document. Intervention is required for both public and government housing for economically backward sections. Public transport like mass transport also needs intervention. Solid waste development and storm water management are other important issues to be taken care of.

Sr. Scientist, Science and Technology Department: land slides in Sikkim have become a major concern and proper rehabilitation of affected people is required. Climate change studies on melting glaciers need to be conducted in Sikkim. Capacity-building through establishment of a Centre of Excellence institute like IIT would be very useful for the state.

D. Chakravarty, Principal, Government College, Rhenock, East Sikkim: need to focus on the eradication of poverty, scarcity of livestock fodder, studies in national calamity and disaster management in Sikkim, bad road communication during rainy seasons, problems faced by farmers during cold months, etc. Public hearings such as these need to be organized in the rural areas and copies of the document need to be circulated to rural people and college libraries for better interaction.

Shri K.T. Gyaltsen, Principal Secretary to the Chief Minister: need for greater political rights at the Centre as there is not sufficient members of Parliament or ministers representing Sikkim in New Delhi. Bagdogra airport should be an international airport and chartered flights from SAARC countries and Buddhist countries should be increased. Unless road communication is improved there will be no development in the tourism and floriculture sector. National media should give more coverage on tourism in Sikkim.

Secretary Transport who is also looking after the power sector stressed cross-border road communications for the development of trade. Sikkim should also have multiple access to the rest of the country like Darjeeling. In the power sector, need to develop micro hydel projects in Sikkim as it has the potential.

Shri S.K. Sarda from the Sikkim Chamber of Commerce: the Vision document should be supplied to all Panchayat units. International status should be given to Bagdogra Airport. A trade list should be prepared at the earliest to improve border trade with China through the Nathula trade route. Peace bonus should be given to Sikkim as it is the most peaceful state in this region.

Shri Jiwan Rai, of NGO named Educational Development Trust of Sikkim, expressed dissatisfaction at the lack of focus on education in the document. Counselling teachers will help improve education in institutions; Sikkim needs better hospitals so that patients need not go outside the state for medical treatment.

Mrs Devika Chettri, Deputy Chief Town Planner, UDHD Dep't.: need long-term sustainable schemes for solid waste management. Also need rapid training programmes on preparation of DPRs.

The Secretary, DoNER replies to most of the queries and thanked the public for their comments to be incorporated in the final document. The meeting then ended by a vote of thanks to the Chair and the public present by the Advisor, NEC.