



REVISED PERSPECTIVE PLAN FOR ATTAINING SELF SUFFICIENCY IN ANIMAL ORIGIN FOOD IN TRIPURA

(2004-05 TO 2011-12)



ANIMAL RESOURCES DEVELOPMENT DEPARTMENT

GOVERNMENT OF TRIPURA

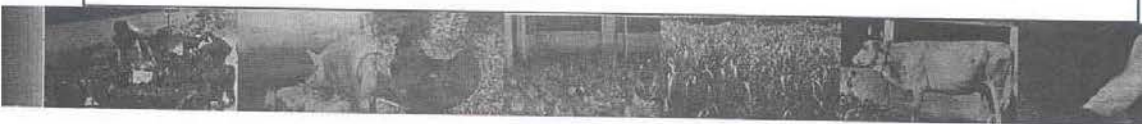
P. N. COMPLEX : AGARTALA



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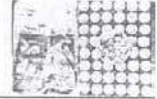
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सत्यमेव जयते



PREFACE

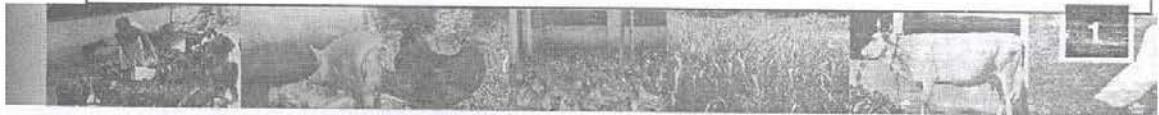
Food security has been given the top priority in the state for its people. Food grains alone cannot meet the nutritional requirement of human being for their growth, maintenance and health. For proper nutrition, a balanced diet containing all essential nutrients i. e. carbohydrate, protein and fat in the ratio of 4 :1:1 is needed. In case of protein, 50% of total requirement should come from animal origin food. Animal resources sector provides milk, meat and egg to meet the protein requirement of large human population.

Tripura is deficient in animal origin food and a wide gap exists between demand and supply of these feed items. To fill up such gap between demand and supply and to make the State self sufficient within a definite time bound State Govt. had launched a 10 years perspective plan (2002-03 to 2011-12) w. e. f. 1st April' 02.

During first two years of perspective plan (2002-03 to 2003-04) Deptt. had to concentrate itself in tapping resources from various sources for strengthening infrastructure of Govt. farms including introduction of high yielding variety of germ plasm to upgrade the genetic make up of existing livestock and birds. The age group wise requirement of milk, meat & egg and contribution of fish in substantiating total animal origin protein requirement of non vegetarian population of the State was not considered in the original Perspective Plan document. Considering all these factors and to over come specific problems as identified during review meetings, the Perspective Plan of ARDD has been revised and approved by Council of Ministers on 20th September'04.

The present per capita availability of milk, meat and egg in Tripura is 68.49 gm./day, 2.55 kg/year and 42.58 nos./year respectively against ICMR recommended requirement of 700-1000 gms. of milk/day, 7.5 kg of meat/year and 182 nos. of eggs/year. Considering such a wide gap between requirement and actual State production, the targets of animal origin food i.e. milk, meat and egg has been revised and planned to produce 2,07,540 MT of milk, 2,75,200 MT meat and 2943.33 lakh nos. of eggs by 2011-12 which will in turn increase per capita availability of milk to a level of 152.11 gm/head/day, meat 7.36 kg/head/year and egg 78.74 nos./head/ year.

To supplement total protein requirement of animal origin, Deptt. has calculated the same, leaving due share of Fish component for which Fishery Deptt. is implementing a perspective Plan of their own. To achieve set targets of milk






production special emphasis has been given over up gradation of genetic make up of local poor yielding cows through Artificial Insemination by trained un-employed youths on self employment basis. For augmentation of meat production it has been planned to set up private level pig breeding farms and goat breeding units in all the blocks of the State with formation of SHG's. Setting up of block level brooder houses has been planned in all 40 blocks of the state for supply of one-month-old chicks and ducklings to farmers for their better survivability.

During perspective plan period, it has also been planned to provide full time gainful employment to 24,000 un-employed youths on different A.H. based farming/ practices after necessary training for skill up gradation.

This document is a compilation of all programme relating to comprehensive time bound development of A.H. sector for making the State self-sufficient in animal origin food and to create scope of employment for un-employed youths and farmers.

Despite our best effort to incorporate latest available information, strategies and plan for sustained development of A. H. sector, there may still be some scope for improvement. I trust that animal husbandry farmers, entrepreneurs, professionals and other related agencies would find the book a useful document.

Dated, Agartala,
the 2nd January, 2005


(B. K. RAY)
Commissioner and Secretary
Animal Res. Dev. Deptt.
Govt. of Tripura





REVISED PERSPECTIVE PLAN FOR ATTAINING SELF SUFFICIENCY IN ANIMAL ORIGIN FOOD BY 2011- 2012 A. D.

1. INTRODUCTION

The Perspective plan of ARDD had been approved by Council of Ministers during August, 2001 and Department launched the same w.e.f 1st April, 2003 for attaining self-sufficiency in Animal origin food i.e, milk, meat and egg by 2012 A.D.

During the first two years of Perspective Plan (2002-03 and 2003-04) necessary infrastructure development at Govt. breeding farms and introduction of high yielding layer chicks, quail, meat variety rabbit, imported variety of pigs from USA etc. have been made with a view to bring about increased production of milk, meat and egg substantially. The Government sector will produce and supply requisite number of A.H. inputs as seed materials and the actual production process will be made at private sector through strengthening of house hold production and entrepreneurship development through organized farming. The original document was prepared as per requirement of total population of the State (as per population Census, 2001). Requirement of the people of different age group was not considered. Requirement of milk, meat and egg was calculated on the basis of average requirement of non-vegetarian adult population as per ICMR recommendation. The achievement during 2002 - 03 in production of milk, meat & egg was 99.31 %, 101.43 % , 82.98 % respectively during 2002-03 and 93.89 %, 100.56 % and 78.27 % respectively during 2003-04 against the set target.

On the basis of state level review meetings it has become felt essential to consider age wise actual requirement (ICMR recommendation) of milk, meat and egg as per Human census Report, 2001. During assessment of such requirement, the annual growth rate of population of the State has been taken into consideration as 1.57% as recommended by Census Deptt. Govt. of Tripura.

Considering all these factors the targets as laid down in original Perspective Plan document have been revised with due importance on the market demand and production potentiality of the state. During revision of set targets relating to egg and meat due share of fish sector has been taken into account as the total requirement of animal origin food (excluding milk) should come combined from fish, meat and egg. To commensurate with the revised target of production of milk, meat and egg, it has become also necessary to modify the strategies of achieving the goal within the set time frame. Accordingly special emphasis has been given over SHG approach, delivery of one month old chicks and ducklings in lieu of day





old, organization of small/ medium scale dairy farms in all blocks of the State and massive cultivation of fodder in farmers' land. It has also become necessary to lay emphasis on large scale goat farming by involving weaker section of the society especially the women, to fulfill the high demand of goat meat. Total protein requirement of non-vegetarian population of the State was initially calculated on consumption of meat and egg only. The fact that a substantial portion of non-veg requirement of protein comes from fish also, was not considered while preparing the original document.

It was, therefore, decided that requirement of different age groups of people based on the recommendation of ICMR (age group-wise) should be calculated afresh keeping in mind that non-vegetarian population consume substantial amount of fish. The non-vegetarian population in the State may also be assumed to be 95% of the total population.

Thus, taking all aspects in consideration, the perspective plan document has been revised to make it a realistic one and also to march towards producing the need of animal origin food i.e, milk, meat & egg from the State itself within the stipulated period.

2. PRESENT STATUS

2.1 HUMAN POPULATION

As per 2001 Census, the population of Tripura was 31.99 lakh. The population growth rate is 1.57 % (Source- Directorate of Economics & Statistics, Govt. of Tripura). On the basis of 2001 Census, the estimated population during 2001-02 to 2011- 2012 is presented in the following table.

TABLE – 1

(figures in lakh)

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total population	31.99	32.49	33.00	33.52	34.04	34.56	35.12	35.67	36.23	36.79	37.37	37.96

2.2 AGE GROUP WISE POPULATION OF TRIPURA (In lakh)

As per human census publication, 2001, the projected population of Tripura in different age group up to 2011-12 is calculated and presented in table - 2.



TABLE - 2
AGE GROUP WISE POPULATION OF TRIPURA (figures in lakh)

Age group	2004	2005	2006	2007	2008	2009	2010	2011	2012
0-9 years	8.75	8.88	9.02	9.17	9.31	9.46	9.60	9.75	9.91
10-19 years	7.27	7.38	7.50	7.62	7.74	7.86	7.98	8.11	8.24
20 yrs & above	17.49	17.77	18.04	18.33	18.62	18.91	19.21	19.51	19.81
TOTAL	33.52	34.03	34.56	35.12	35.67	36.23	36.79	37.37	37.96

**2.3 DAILY REQUIREMENT OF MILK, MEAT & EGG
(AS PER ICMR RECOMMENDATION)**

TABLE - 3

Sl. No.	Age group	Milk (In Gm.)		Meat (In Gm.)		Egg (In Gm, considering 30 gm/egg)	
		Vegetarian	Non-veg	Vegetarian	Non-veg	Vegetarian	Non-veg
1	0 - 9 years	1000	700	—	13.5	—	10.00 (1/3rd egg)
2	10 - 19 years	1000	700	—	22.5	—	15.00 (1/2 egg)
3	20 yrs and above	400	250	—	18.0	—	15.00 (1/2 egg)

**2.4 YEAR WISE REQUIREMENT OF MILK, MEAT & EGG
INCLUDING FISH (AS PER ICMR RECOMMENDATION)**

Requirement of milk, meat and egg has been estimated taking into consideration the requirement of different age groups, recommendation of ICMR and intake of other food items of protein like fish, etc. Year wise population of the state has been estimated taking into consideration the Census figure of 2001 and 1.57% annual growth rate.

TABLE - 4

Item	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Milk (000 MT)	582.691	591.839	601.131	610.569	620.155	629.891	639.780	649.825
Meat (000 MT)	24.08	24.46	24.84	25.23	25.62	26.03	26.43	26.85
Egg (Lakh in Nos.)	5306	5389	5474	5550	5647	5785	5825	5917
Fish (000 MT)	43.47	44.15	44.85	45.55	46.27	47.00	47.72	48.48



2.5 ANIMAL POPULATION

Livestock census is conducted at every five years interval. The present animal population as presented below is the provisional figure of last 17th livestock census (2003).

TABLE – 5

(Figure in lakh)

2003 Census (Provisional)	Cattle	Buffalo	Sheep	Goat	Pig	Poultry	Duck
	7.59	0.14	0.34	4.72	2.09	22.71	7.01

2.6 ANIMAL ORIGIN FOOD PRODUCTION AND PER CAPITA AVAILABILITY

TABLE – 6

Item	All India level (1998 -99)		Tripura (2003- 04)	
	Total production	Per capita availability	Total production	Per capita availability
Milk	74.4 million MT	211 gm./ day	82500 MT	68.49 gm./ day
Meat	4.4 million MT	4.5 kg / year	8400 MT	2.55 kg / year
Egg	32.2 billion nos.	31 nos./year	1005 lakh nos.	42.58 nos./year

3. OBJECTIVES OF PERSPECTIVE PLAN

- To march towards self-sufficiency in animal origin food i.e, Milk, Meat & Egg.
- Creation of avenues for self-employment generation for unemployed youths as well as to bring about additional income of farmers.



4. ESTIMATED DEMAND AND TARGETED PRODUCTION OF MILK, MEAT & EGG DURING THE YEAR 2004- 05 TO 2011- 12

TABLE - 7

(In '000 MT)

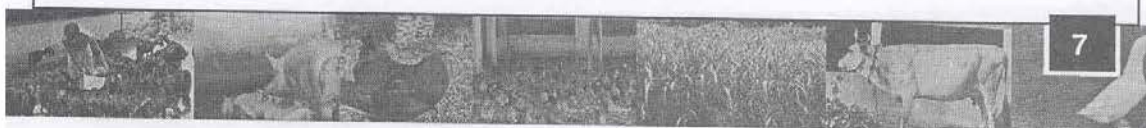
Year	Demand of milk	Targeted production of milk	% of deficit (-) & surplus(+) production of milk over the demand	Demand of Meat	Targeted production of Meat	% of deficit (-) & surplus (+) production of meat over the demand	Demand of Egg in '000 MT, (considering value of an egg as 30gm) & Nos. in lakh		Targeted production of Egg in '000 MT, (considering value of an egg as 30gm) & Nos. in lakh		% of deficit (-) & surplus(+) production of egg over the demand
							MT	Lakh nos.	MT	Lakh nos.	
1	2	3	4	5	6	7	8		9		10
04 - 05	122.28	85.00	(-) 30.49	22.76	20.69	(-) 9.09	4.37	1456	3.17	1056	(-) 27.16
05 - 06	127.09	95.00	(-) 25.25	23.12	22.07	(-) 4.54	4.70	1566	3.79	1263	(-) 19.36
06 - 07	132.17	110.00	(-) 16.78	23.49	22.84	(-) 2.77	5.07	1690	5.42	1806	(+) 6.90
07 - 08	137.46	135.00	(-) 1.79	23.85	23.63	(-) 0.92	5.49	1830	6.16	2053	(+) 12.20
08 - 09	142.96	160.00	(+) 11.91	24.23	24.67	(-) 1.82	6.61	2203	7.36	208	(+) 11.35
09 - 10	148.67	185.00	(+) 24.43	24.60	25.95	(+) 5.48	7.17	2390	7.74	2453	(+) 8.00
10 - 11	151.62	200.00	(+) 31.90	24.97	26.79	(+) 7.29	7.80	2600	8.20	2733	(+) 5.25
11 - 12	160.81	207.54	(+) 29.05	25.22	27.52	(+) 9.12	8.49	2830	8.83	2943	(+) 4.00

5. PERSPECTIVE PLAN FOR AUGMENTATION OF MILK PRODUCTION

5.1 AVAILABLE ANIMAL RESOURCES

Milk producing animals (Nos.)

Female Cattle	4,34,569
(i) Local (Deshi)	3,87,949
(ii) Cross Bred /Upgraded	46,620
Female Buffalo (Local/ Deshi)	8,235
Female Goat (Local/ Deshi)	3,30,690



5.2 AVAILABLE HUMAN RESOURCES (NOS.)

Farmers	3,05,523
Agri. Labourers	1,87,538
Marginal Labourers	56,454
Unemployed youth	3,18,369

5.3 INFRASTRUCTURE AVAILABLE FOR CATTLE & BUFFALO DEVELOPMENT (NOS.)

Artificial Insemination Centres/Sub-centres	179
Semen Collection Station	3
Frozen semen Bank	1
Liquid Nitrogen Plant	4
Intensive Cattle Development Project	2
Milk union	1
Dairy Plant	1
Disease Investigation Laboratory	3

5.4 TARGET OF MILK PRODUCTION

As per Sample Survey, the present per capita availability of milk in Tripura is 68.49 gms per head per day, which is far below the all India level of 211 gm per head per day. Considering the requirement of milk for different age group and Veg. & non-veg. population, existing production growth and initiative taken to accelerate the growth of production, the target of milk production has been fixed to attain 2,07,540 MT by 2011-2012 which will in turn increase per capita availability of milk from 68.49 gms to 150 gms per day on an average. The year wise target of milk production has been fixed on the basis of population growth upto the year 2011-12 and is presented in Table- 8.

TABLE - 8

REQUIREMENT OF MILK

A. Age group wise Requirement of Milk as per ICMR recommendation

Age Group	Daily requirement (in Kg)		Annual Requirement (in kg)	
	Vegetarian	Non Vegetarian	Vegetarian	Non Vegetarian
1. Upto 19 years	1.000	0.700	365.000	255.500
2. Above 19 years	0.400	0.250	146.000	91.250



TABLE - 8 (B)
YEAR AND AGE GROUP WISE REQUIREMENT OF MILK
 (considering Annual growth rate of 1.57% as per census 2001)

(In 000 MT)

Year	Age group	Estimated population			Annual requirement of milk		Age group wise Annual requirement	Total Annual requirement
		Total	Veg	Non-Veg	Veg.	Non-Veg		
04-05	Up to 19 Yrs	16.02	0.80	15.22	29.20	388.87	418.07	582.58
	Above 19 Yrs	17.50	0.88	16.62	12.85	151.66	164.51	
05-06	Up to 19 Yrs	16.27	0.81	15.46	29.57	395.00	424.57	591.59
	Above 19 Yrs	17.77	0.89	16.88	12.99	154.03	167.02	
06-07	Up to 19 Yrs	16.52	0.83	15.70	30.30	401.14	431.44	601.0
	Above 19 Yrs	18.04	0.83	16.70	13.14	156.49	169.63	
07-08	Up to 19 Yrs	16.79	0.84	15.95	30.66	407.52	438.18	610.48
	Above 19 Yrs	18.33	0.92	17.41	13.43	158.87	172.30	
08-09	Up to 19 Yrs	17.05	0.85	16.20	31.03	413.91	444.92	619.94
	Above 19 Yrs	18.62	0.93	17.69	13.58	161.42	175.00	
09-10	Up to 19 Yrs	17.32	0.87	16.45	31.76	420.30	452.06	629.82
	Above 19 Yrs	18.91	0.95	17.96	13.87	163.89	177.76	
10-11	Up to 19 Yrs	17.56	0.88	16.71	32.12	424.64	459.06	639.31
	Above 19 Yrs	19.21	0.96	18.25	14.02	166.53	180.55	
11-12	Up to 19 Yrs	17.82	0.89	16.98	32.49	433.84	466.33	649.73
	Above 19 Yrs	19.51	0.98	18.53	14.31	169.09	183.40	

TABLE - 8 (C)
ESTIMATED DEMAND AND TARGETED PRODUCTION OF MILK

(In 000 MT)

Year	Demand of milk	Targeted production of milk	% of deficit (-) & Surplus production of milk over the demand
2004-05	122.28	85.00	(-) 30.49
2005-06	127.09	95.00	(-) 25.25
2006-07	132.17	110.00	(-) 16.78
2007-08	137.46	135.00	(-) 1.79
2008-09	142.96	160.00	(+) 11.91
2009-10	148.67	185.00	(+) 24.43
2010-11	151.62	200.00	(+) 31.90
2011-12	160.81	207.54	(+) 29.05





5.5 STRATEGY FOR ACHIEVING TARGETED MILK PRODUCTION (2,07,540 MT) BY 2011-12

- ❑ Expansion of artificial insemination (A. I) network throughout the State for up gradation of cows to enhance overall production of milk in the State.
- ❑ Incorporation of mobile doorstep Artificial Insemination in every Panchayat of the state through trained unemployed youths on self employment basis.
- ❑ Functioning of A.I .Centres/ Sub-Centres on all the 365 days of the year including holidays for overall increase in total number of artificial insemination.
- ❑ Setting up of small scale Dairy farming in private sector under self employment programme with 10 dairy cows and 50 dairy cows with financial assistance of commercial banks/NABARD.
- ❑ Revitalization of existing sick dairy Cooperatives and formation of more new dairy Cooperatives for strengthening of marketing facilities of milk produced in rural areas of the State.
- ❑ Promotion of fodder cultivation in farmers land in a massive way and also enrichment of straw with urea/ urea molasses to supplement shortage of concentrate feed in the State.

5.6 ACTION PLAN FOR ACHIEVING TARGETED PRODUCTION OF MILK DURING 2004-05 TO 2011-12

Presented in Annexure at Table – 2

5.7 DAIRY DEVELOPMENT

5.7.1 STRATEGY

- ❑ Development of Dairy in Co-operative sector.
- ❑ Revitalization of existing milk producers' societies at village level.
- ❑ Extension of milk co-operative societies to all districts.
- ❑ Motivation and induction of more nos. of milk producers under co-operative system.
- ❑ Involvement of existing LAMPs, PACs in milk marketing system.
- ❑ Improvement of service at all levels from societies to milk union.





- ❑ Provision of milk chilling plants in all sub-division HQs to prevent milk spoilage and attract more farmers under organized milk marketing system.
- ❑ Provision of new dairy plant in other Districts for marketing of pasteurized milk and other milk products.
- ❑ Formation of 3(three) milk union in other districts and one apex body like Dairy Federation at State level.
- ❑ Consumer awareness for consumption of processed milk through extensive popularization campaign.
- ❑ Formation of appropriate legislative rules and regulations for prevention of adulterated milk marketing.

5. 7. 2 ORGANIZING DAIRY FARMING IN PRIVATE SECTOR

The gap between the projected requirement and expected production of milk still remains wide. This may be further minimized by way of raising entrepreneurship/ commercial dairy farms in private sector, where they will maintain high yielding stock of milch cattle with production capacity of 2400 kg / annum / animal.

5. 7. 3 YEAR WISE ACTION PLAN FOR SETTING UP OF ORGANIZED SMALL DAIRY FARMS IN PRIVATE SECTOR

TABLE – 9

Years	Number of Small Dairy farms to be set up	Number of cross bred cows to be reared	Year wise projected milk production(MT)
2004-05	150	1500	3150
2005-06	150+250=400	1500+2500=4000	7612
2006-07	400+300=700	4000+3000=7000	12009
2007-08	700+250=950	7000+2500=9500	13207
2008-09	950+200=1150	9500+2000=11500	13055
2009-10	1150+150=1300	11500+1500=13000	11981
2010-11	1300+100=1400	13000+1000=14000	11086
2011-12	1400+100=1500	14000+1000=15000	10415



5.7.4 FARMER'S INVOLVEMENT IN HOUSE HOLD MILK PRODUCTION PROCESS

TABLE - 10

Year	Total milch cow to be brought under milk production (Local + upgraded)	Framers involved in household rearing of Milch Cow (average 2-3 cows)	Unemployed youth to be brought under self employment organized Dairy farm	Total farmers to be involved in milk production process
2004 - 05	2,05,988	75,723	600	71,686
2005 - 06	2,15,005	84,491	800	76,323
2006 - 07	2,25,012	89,649	1000	80,662
2007- 08	2,36,090	95,419	1200	85,491
2008 - 09	2,48,400	1,01,801	1400	90,849
2009 - 10	2,61,942	91,060	1600	96,819
2010 - 11	2,76,716	1,08,793	1800	1,10,593
2011 - 12	2,92,723	1,16,395	2000	1,18,395

6. PERSPECTIVE PLAN FOR EGG PRODUCTION

6.1 AVAILABLE ANIMAL RESOURCES/INFRASTRUCTURE

Available Animal resources	Total number	Remarks
i) Layer Hen	8,03,811	1. Figure as per Livestock Census,2003(Provisional).
ii) Layer Duck	3,44,536	
Available infrastructure under Govt. Sector		2. The existing Broiler Breeding farms & Hatcheries in private sector are producing 2.50 lakh chicks monthly against the current requirement of 3.00 lakh/ month.
i) Poultry Breeding farm	3	
ii) Duck Breeding farm	2	
iii) Hatcheries	5	
Available infrastructure under Private Sector		
i) Broiler Breeding farm	6	
ii) Hatcheries	6	





6.2 TARGET OF EGG PRODUCTION

As per last sample survey conducted by Animal Resources Development Department during 2003- 2004, it is found that the present availability of eggs is 42 Nos. per head per annum, out of which 30 nos. are produced in the State itself and 12 nos. are procured from outside the State.

Considering regional food habit, the population of the State is predominantly being non-vegetarian, the demand of the region is significantly higher than the national average.

In Tripura, production of eggs comprises both of Poultry and Duck eggs. As per recent Sample Survey conducted by ARDD it is seen that out of total eggs produced in the State, 23 % eggs comes from Duckery and rest 77 % comes from Poultry.

Requirement of egg for present population of the state has been estimated as per ICMR recommendation taking into consideration the requirement of different age group, non – vegetarian population and consumption pattern of other animal protein like meat & fish.

The estimated production of eggs from the existing stock of poultry & ducks in the State for the year **2004-05** is **1056 lakh nos.** against the production of eggs of 1005 lakh nos in 2003-2004.

Presently The estimated procurement of eggs from outside the state annually, as per wholesale market survey is **400 lakh nos.** There is a trend of 15 % annual growth of such procurement.

Considering State production of eggs and procurement from outside, the targeted production of eggs has been calculated for **2943.33 lakh nos. by 2011 –12.**

6.3 STRATEGY OF EGG PRODUCTION

- Rearing of Low Input Technology (LIT) poultry & duck in scavenging system.
- Setting up of “brooder house” in all the 40 Block head quarters where 30 blocks has been earmarked for rearing of day old chicks (LIT variety) and 10 blocks for rearing of K.C. ducklings up to one month and subsequent sale / supply of the same to the farmers for rearing at household level.
- Maintenance of requisite number of parent stock of poultry (LIT) and Duck (khaki Campbell) in Govt. Breeding farms to ensure supply of required number of female day old poultry chicks and ducklings to brooding stations for rearing of LIT poultry layer and K.C. duck layer up to one month and distribution of the same to the farmers for rearing in scavenging system.





6. 4 REQUIREMENT AND TARGET OF EGG PRODUCTION FROM EXISTING STOCK AND BY SPECIAL EFFORT

TABLE – 11

(figures in lakh)

Parameters	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12
Population of the state (estimated)	33.52	34.03	34.56	35.12	35.67	36.23	36.79	37.37
Requirement of eggs as per ICMR recommendation	5306	5389	5474	5550	5647	5785	5825	5917
Estimated demand	1456	1566	1690	1830	2203	2390	2600	2830
Estimated Production of eggs from the existing stock of poultry & duck. (Considering 5% growth in egg production)	1056	1108	1163	1221	1282	1346	1414	1484
Shortfall of eggs over market demand	400	458	527	609	921	1044	1186	1346
Prod. of additional eggs by setting up Brooder House at Bock Head Quarter and production of eggs at house hold level.	—	155	643	832	926	1107	1319	1459
(Assumption: 1.Success in the first year of laying-60%, 2nd year-95% and 3rd year 65%. 2.Fresh scheme to be implemented every year till 2011-12)								
Total anticipated production under special initiative.	—	155	643	832	926	1107	1319	1459
Total targeted State production of eggs —	1056	1263	1806	2053	2208	2453	2733	2943
Targeted Per capita availability of eggs	31.50	37.11	52.25	58.45	61.90	67.70	74.28	78.75

6. 5 EGG FROM POULTRY SECTOR

Traditionally Poultry rearing is very much popular among the Tribal and backward population in the State. They generally rear both Deshi and Cross breeds in small flocks by adopting free-range system.

In recent years, poultry farming in plains, particularly to the unemployed youths has also become much popular. In private sector about 1200 broiler and 50 layer farms has come up in Tripura with capacity of 100 to 1000 Poultry birds per farm. Layer day old chicks(LIT variety) are mainly supplied from State Poultry Farm, Gandhigram and two District Poultry Farms at Udaipur and Panisagar.





Besides HIT variety of layer poultry chicks are mainly procured from outside State. As a result, Poultry population has increased substantially in the State itself.

The poultry and Duck population of Tripura are mostly of Deshi variety having poor productivity. As per latest Census (2003) the total layer of poultry and duck in Tripura are as follows –

Poultry Layer	8,03,810	Improved	54,724	Deshi	7,49,086
Duck Layer	3,44,536	Improved	11,080	Deshi	3,33,456
Total	11,48,346	Improved	65,804	Deshi	10,82,542

As per above data, the percentage of Duck layer population is 36% and the poultry layer population is 64 % of the total layer population. The productivity of a Deshi Poultry layer is about 60 eggs per annum in Tripura while the productivity of Deshi Duck is slightly higher than the Deshi Poultry. Accordingly, it is assured that 23 % of the total egg requirement will be supplemented from Duckery and the remaining 77% will be supplemented from Poultry sector.

6.5.1 ACTION PLAN FOR AUGMENTATION OF EGG PRODUCTION FROM POULTRY SECTOR

As the State is deficient in required feed ingredients in respect of Poultry concentrate ration, we can adopt Poultry rearing in rural areas in scavenging system without much stress on concentrate feed. Moreover, the cost of concentrate feed is comparatively higher, which can not be economically feasible for the villagers to supplement concentrate feeds for Poultry rearing.

In order to achieve the shortfall of eggs and also to curb the dependency on procurement of eggs from outside the State, Deptt. has planned to enhance the production of eggs within the State itself. For this purpose, setting up of “brooder house” at all the 40 Block head quarters has been undertaken by the Department where 30 blocks has been earmarked for rearing of day old chicks (LIT variety) and 10 blocks for rearing of K.C. ducklings up to one month and subsequent sale /supply of the same to the farmers for rearing at household level.

Under this programme Deptt. has decided to give main thrust on rearing of LIT layer birds in scavenging system instead of HIT variety considering high production cost mainly due to ration and also to minimize managerial cost.



6.5.2 ACTION PLAN FOR PRODUCTION OF POULTRY EGGS BY MASS WITH LOW INPUT TECHNOLOGY BIRDS

TABLE – 12

(figures in lakh)

Sl.No	Year	Total targeted production of egg	Total projected requirement of eggs from Poultry	Present status of egg production from poultry	Eggs to be produced from poultry with low input technology birds	Female low input technology birds to be reared by farmers	Unit of 15 birds / family to be involved for rearing (Nos. of family)
1.	04-05	1056	813.12	658.18	154.94	2.06	0.13733
2.	05-06	1263	972.51	691.08	281.43	3.75	0.25000
3.	06-07	1806	1390.62	725.63	664.99	8.86	0.59066
4.	07-08	2053	1580.81	761.91	818.90	10.91	0.72733
5.	08-09	2208	1700.16	800.00	900.16	12.00	0.80000
6.	09-10	2453	1888.81	840.00	1048	13.97	0.93133
7.	10-11	2733	2104.41	882.00	1222.41	16.29	1.08600
8.	11-12	2943	2266.11	926.10	1340.00	17.86	1.19066

- The targeted no. of chicks will be produced in the Departmental farms for distribution amongst public.
- The normal growth rate of egg production has been considered to be 5% per annum.
- In backyard system without concentrate feed, the annual egg production from a hen has been considered to be 75 per year.

6.5.3 ROLE OF GOVT. POULTRY FARMS FOR EGG PRODUCTION BY MASS

Since last few decades, an extensive endeavor has been made towards production of exotic variety and cross variety of laying hens for production of eggs in the State. But so far practical experience is gathered it is revealed that the survivability of these sophisticated birds are very poor in the field condition, due to lack of balanced ration and proper managerial practices. As such, it is aimed to supply low technology input birds to be reared in scavenging manner. With this end in view it is required to maintain parent stocks of low input variety of birds in Govt. Farms.



6. 5. 4 ACTION PLAN FOR POULTRY EGG PRODUCTION BY MASS WITH ASSISTANCE OF GOVT. FARMS

TABLE – 13

(Number in lakh)

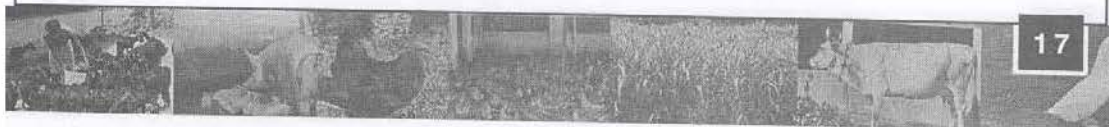
Sl No.	Year	Targeted production of low input technology female Chicks in Govt. farms	Targeted LIT parent stock to be maintained in Govt. farm to produce targeted chicks	Targeted production of eggs	Targeted production of chicks (60% of eggs)	Targeted distribution of female chicks (50% of total chicks)
1	2004-05	2.37	0.035	7.875	4.725	2.06
2	2005-06	4.05	0.060	13.50	8.10	3.75
3	2006-07	9.50	0.140	31.50	18.90	8.86
4	2007-08	11.55	0.170	38.25	22.95	10.91
5	2008-09	13.10	0.200	45.00	27.00	12.00
6	2009-10	14.85	0.220	49.50	29.70	13.97
7	2010-11	17.22	0.255	57.375	34.43	16.29
8	2011-12	18.90	0.280	63.00	37.80	17.86

6. 5. 5 ACTION PLAN FOR POULTRY EGG PRODUCTION IN PRIVATE SECTOR

- i) Low input technology birds will be introduced for rearing on scavenging system in farmers house.
- ii) Large number of beneficiaries will be involved in rearing of low input technology birds under scavenging system which will produce at least 75 nos. of eggs per bird per year and thereby will earn an additional income to a satisfactory level.
- iii) The number of farmers/ beneficiaries will be increased gradually.

6. 5. 6 ACTION PLAN FOR ORGANIZED POULTRY FARMING FOR SELF EMPLOYMENT

- i) In addition to LIT poultry farming it is also required to organize HIT poultry farming in private sector through entrepreneurship development for curbing the dependency of eggs on outside State sources. For organized poultry farming in private sector, it is targeted to rear high yielding sophisticated management practices to regenerate desired level of profit.
- ii) It is planned to incorporate resourceful, experienced poultry farmers to undertake organized poultry farming with B.V-300 / IL-120 / CARI- GOLD / HS-200 etc. breeds of poultry birds.



- iii) The beneficiaries will be selected in a clustered manner to facilitate Vety. Care and easy transportation of inputs.
- iv) The chicks will be provided to the respective beneficiaries from outside States of reputed private breeders.
- v) The number of farmers/ beneficiaries will be increased gradually.
- vi) By up taking such farming, it will be an attempt to reduce dependency on outside States for supply of requisite nos. of poultry eggs and will create self employment generation programme for the State itself.

6.5.7 ACTION PLAN FOR ORGANIZED POULTRY FARMING IN PRIVATE SECTOR

TABLE – 14

Sl. No.	Year	Total projected production of eggs from Organised HIT layer poultry farming in private sector (Number in lakh)	Number of HIT layer birds to be reared	Number of units/unemployed youths to be involved for HIT poultry farming (unit size – 1000 HIT birds/farm)
1	2004 - 05	—	—	—
2	2005 – 06	27.50	10,200	10
3	2006 – 07	41.25	15,300	15
4	2007 – 08	55.00	20,400	20
5	2008 – 09	68.75	25,500	25
6	2009 – 10	82.50	30,600	30
7	2010 – 11	96.25	35,700	35
8	2011 - 12	110.00	40,800	40

6.6 EGG FROM DUCK SECTOR

Duck rearing is a normal practice of rural people of Tripura. Duck rearing occupies the second place to chick for production of table eggs in the State. The Agro-climatic condition of the State is characterized by heavy rainfall, spread over for more than 6-7 months in a year with average rainfall of 234.4 cm. per year. Such rainfall has led to create a lot of water areas in the State, making scope of enormous rearing of Ducks in the State. In addition to this, the paddy lands are also utilized for Duck rearing by rural mass traditionally along with paddy cultivation. Duck eggs are greater in size and fetch 50% higher price than that of Poultry eggs in the region and also is very much liked by the people of the State unlike people of Northern and Southern part of India. Drakes and culled Ducks from house hold and farms have a good market in the state. So, duck rearing as a whole has tremendous potentiality in Tripura State.





6. 6. 1 DUCK POPULATION IN TRIPURA (1956 – 2003)

(figure in lakhs)

Year	1956	1961	1966	1972	1977	1982	1987	1992	1997 (Prov.)	2003 (Prov.)
Duck population	0.41	0.81	1.15	0.76	1.16	2.24	4.60	6.12	8.76	7.01

Category wise Duck population in Tripura (Census, 2003)

- Duck Layer - 3,44,536
- Improved - 11,080
- Deshi - 3,33,456

6. 6. 2 ROLE OF GOVT. FARMS FOR DUCK EGG PRODUCTION BY MASS

The production capacity and geo climatic adaptability of Khaki Campbell (K. C.) duck is well known to the people of Tripura and for this the K.C Ducklings are reared at Regional Exotic Duck Breeding Farm, R.K Nagar and C.L.F Devipur. It is worthwhile to mention here that the K.C ducklings so produced in the Farm and supplied to the field has shown a good adaptability and good laying percentage.

The normal growth rate of Duck egg production has been considered to be 5%. So, excepting the normal growth of duck egg production which will propagate as usual, the rest will have to be produced further by mass. And for targeted production of duck egg by mass, it is required to produce targeted number of Khaki Campbell ducklings by the Govt. farms. To supply the same in field for production of duck eggs by mass without any concentrate feed the annual egg production from a female adult K.C duck has been considered to be 100 nos. per year. As per livestock Census-2003, duck layer of the State has been taken into the consideration to 3,44,536 nos.

6. 6. 3 ACTION PLAN FOR HOUSEHOLD DUCK EGG PRODUCTION IN PRIVATE SECTOR

- (i) The household productivity and geo climatic adoptability of K. C. Ducks is well defined and for this Regional Exotic Duck Breeding Farm, R. K. Nagar and Duck Breeding Unit, CLF, Devipur are continuing their production to cater the need of the State.
- (ii) Though the parent stock of K. C. Ducks at Govt. Breeding Farms lays 220 – 230 eggs/ Duck per year, but the actual production in household sector without any concentrate feed is calculated to be 100 eggs/Duck/year.
- (iii) The requisite day old ducklings as mentioned in the chart is being produced and supplied by Govt. Farms of the Department.



- (iv) For household production, the actual rearer will rear the ducks in ponds/lakes/paddy field and will thrive on snails and other aquatic small insects and household offal etc. and will continue their production.
- (v) As the targeted farmers are of BPL group, necessary funding in the shape of Bank credit, subsidy from DRDA/SGSY/PDF etc. and the rest will be borne by the beneficiary itself.
- (vi) Through this household rearing of ducks without any sophisticated technology, the farmers will get an additional income and in this way, it will be an attempt towards alleviation from BPL category.
- (vii) The beneficiaries will be selected in an area based phenomenon.

In order to achieve the shortfall of eggs and also to curb the dependency on procurement of eggs from outside the state, Deptt. has planned to enhance the production of eggs within the State itself. For this purpose, setting up of "brooder house" at all the 40 Block head quarters has been undertaken by the Department where 30 blocks has been earmarked for rearing of day old chicks (LIT variety) and 10 blocks for rearing of K.C. ducklings up to one month and subsequent sale/ supply of the same to the farmers for rearing at household level.

6. 6. 4 ACTION PLAN FOR PRODUCTION OF DUCK EGGS BY MASS WITH THE ASSISTANCE OF GOVT. FARM

TABLE – 15

(figures in lakh)

Sl. No	Year	Total targeted production of egg	Total projected requirement of eggs from Duckery	Present status of egg production from Duckery including 5 % annual growth	Targeted additional eggs to be produced from K. C. Duck	Female Ducklings to be produced in Govt. farms for distribution to the farmers for production of targeted additional eggs by mass	Number of Families to be involved to rear small unit (10 female) of ducks for household prod. of eggs
1.	04-05	1056	243	232	11	0.11	0.011
2.	05-06	1263	290	243	47	0.47	0.047
3.	06-07	1806	428	256	172	1.72	0.172
4.	07-08	2053	472	268	204	2.04	0.204
5.	08-09	2208	508	282	226	2.26	0.226
6.	09-10	2453	564	296	268	2.68	0.268
7.	10-11	2733	628	311	317	3.17	0.317
8.	11-12	2943	677	326	351	3.51	0.351



6.7 SPECIAL ENDEAVOUR IN POULTRY SECTOR

6.7.1 ESTABLISHMENT OF BROODING CENTRES

It has been experienced over the years that survivability of day old chicks/ducklings is not encouraging at farmers door for lack of required brooding facility & technical knowhow. Naturally, farmers in general prefer month old chicks / ducklings for better survivability. On the other hand the departmental farms do not have adequate floor space for brooding such a huge number of chicks / ducklings up to 0-30 days. If a Brooding Centre for poultry chicks / ducklings is established at each Block , this will be of immense help in promoting rural poultry farming in a massive way in the state.

Management of these Brooding Centre for poultry chicks / ducklings may be taken up by Panchyaet/Block Panchyaet Samiti through women SHG or group of unemployed youth. The Deptt. of ARD will provide training & technical guidance for running the center. Plan and estimate for construction of Brooding center will be provided by the Deptt. to the respective BDO of the R.D. Block to undertake the construction work out of Panchyaet Development Fund. Supply of poultry chicks/ducklings after one month brooding in the respective Brooding center may be arranged under different R.D. schemes / other organization.

Out of 40 blocks, Brooding center may be constructed in 10 blocks for brooding of ducklings and in 30 blocks for Chicks (LIT variety).





6.7.2 ABSTRACT ON THE ESTABLISHMENT OF ' BROODER HOUSE' AND REARING OF POULTRY CHICKS/ DUCKLINGS AT BLOCK HEAD QUARTER AND SUBSEQUENT REARING AT HOUSE HOLD LEVEL FOR ENHANCEMENT OF EGG PRODUCTION IN THE STATE.

TABLE – 16

(Rs.in lakh.)

SL. NO	ITEM OF WORK	FINANCIAL INVOLVEMENT			BENEFICIARIES TO BE INVOLVED	REQUIREMENT OF POULTRY/ DUCKLINGS	ANTICIPATED EGG PRODUCTION	ANTICIPATED MEAT PRODUCTION IN 3 YEARS	ANTICIPATED INCOME PER BATCH
		CAPITAL COST	RECURING COST	TOTAL COST					
<i>Duck Rearing</i>									
1.	Cost of construction of Brooder House at Blockhead quarter and rearing of ducklings' upto 1(one) month for 10 Blocks. Unit cost – 2.41 Lakh	18.00 (1.80 X 10 nos)	6.10 (0.61 x 10 NOS)	24.10	—	—	—	—	0.11
2	Rearing of 1(one) month old Ducklings at house hold level Unit Cost – 0.024 lakh	71.47 (700 X 1021 X 10 nos)	173.57 (1700 X 1021 X 10 nos)	245.04	0.10210	1.53	461.49	2.295	0.12130
<i>Poultry Rearing</i>									
3	Cost of construction of Brooder House at Block head quarter and rearing of Poultry chick's upto 1(one) month for 10 Blocks. Unit cost – 1.848 Lakh	46.50 (1.55 X 30 nos)	8.94 (0.298 X 30 nos)	55.44	—	—	—	—	0.0630
4	Rearing of 1(one) month old Poultry chicks at house hold level Unit Cost – 0.0204 lakh	214.41 (700 X 1021 X 30 nos)	410.44 (1340 X 1021 X 30 nos)	624.85	0.30630	4.59	1384.48	6.885	0.07970



7. MEAT PRODUCTION

7.1 PRESENT STATUS OF MEAT PRODUCTION

The national mandate of India is household nutritional security, health care and production. Livestock and Fishery sectors provide milk, eggs, fish and meat to meet the animal protein requirements of the vast human population. Present trend shows that requirement of animal protein is growing at a faster rate than other sources as far as consumption pattern is concerned.

The present production of various types of meat and poultry is estimated to be about 4.14 million tons as per the FAO's estimate {as published in Basic Animal Husbandry statistics (1997), Department of A.H & Dairying, Ministry of Agriculture, Govt. of India}. As per the said report, 31.19% of the total meat is from Beef, 29.06% from buffalo, 4.17% from sheep, 11.44% from goat, 10.14% from Pig and 13.95% from Poultry. The variety of domesticated animal species like rabbit, quail etc. has a very less significant contribution towards total production of meat in the State.

As far as State scenario in respect of meat production is concerned, the total meat production in Tripura is comparatively at a lower side, as more than 95% people are not habituated in taking beef. As such, contribution to meat production in Tripura from cattle and buffalo is approximately nil. Tribal population of the State are fond of pork and they use it in their rituals. Recently, liking in favour of broiler meat is also remarkably increasing day by day.

As per Sample Survey report (2002- 03) submitted by the Statistical cell, Directorate of ARDD, the species wise meat production percentage in Tripura, are as follows.

Sl. No	Variety of meat	Estimated quantity of meat (in M.T)	Percentage over total production
1.	Chevon (goat meat)	995.264	13.27 %
2.	pork (pig meat)	3215.85	42 %
3.	Poultry broiler meat	1838.25	24.51 %
4.	poultry & duck	1450.637	20.22 %

Considering the above, the targeted percentage (%) of different variety of meat over total meat production is estimated as follows —

Sl. No	Variety of meat	Percentage over total production
1.	Chevon (goat meat)	13.00%
2.	pork (pig meat)	40.00%
3.	Poultry Broiler meat	25.00%
4.	poultry & duck	22.00%

7.2 PERSPECTIVE PLAN FOR PRODUCTION OF MEAT DURING 2004 – 05 TO 2011 – 2012

Meat sectors	Physical Target	Financial Target
Pork (pig meat) sector	160 SHGs are to be raised @ 4 SHGs per Block for fulfillment of demand of exotic piglets and pork by next 5 years.	Requirement of fund for 150 SHGs is available under already sanctioned CSS, "Special SGSY" (Rs. 639.285 lacks). Additional fund requirement for raising more 10 SHGs will be Rs. 42.619 lacks. (@ unit cost per SHG RS. 4.26190 lacks) and may be met from Bank Credit/PDF etc.
Cheavon (goat meat) sector	240 SHGs are to be raised @6 SHGs per block for fulfillment of demand of Goat meat (cheavon) by next 6 years.	Requirement of fund for 50 SHGs is available under already sanctioned CSS, "Special SGSY." (Rs. 121.42 lacks,) and for raising rest 190 SHGs. Additional requirement of fund will be Rs. 461.396 lacks for next 7 years (@Rs. 2.42840 lack per unit) which may be met from Bank Credit/ PDF etc.
Broiler chicken sector	In order to achieve the target of Broiler chicken production from organized sector 400 numbers of SHGs are to be raised for fulfillment of demand of Broiler chicken in next 7 years (@ 10 SHGs per block).	Requirement of fund for raising 400 SHGs will be 600 lacks @ Rs. 1.5 lack per unit, which may be met from Bank Credit/PDF etc.
Duck/ poultry and other meat sector	1200 SHGs in layer poultry bird rearing are to be raised @ 30 SHGs per block; each member will rear 15 LIT variety of layer birds in backyard/ scavenging system and 1120 SHGs in Kakhi Campbell duck rearing are to be raised @ 28 SHGs per block. Each member will rear 15 ducks in back yard system. Which will take 6 years time to achieve the target of meat sector.	Requirement of fund in raising 1200 SHGs in poultry sector is Rs. 1800 lacks in 6 years @ Rs. 1.50 lacks per unit. Requirement of fund in raising 1120 SHGs in Duck sector is Rs. 2800 lacks in 6 years @ Rs. 2.50 lacks per unit.





7.3 STRATEGY OF MEAT PRODUCTION

- Exotic piglet production through SHG for ensuring large scale-fattening programme for supporting pig meat production. 150 SHG will be covered within 3 years for ensuring supply of 45,000 improved variety of exotic piglets and production of 2,00,000 piglets in down stream at farmers premises.
- Emphasis has been given on commercial goat farming through SHG, especially by the rural women.
- Strengthening of Broiler Poultry Sector through enhanced Broiler Chick production in the Private Hatcheries within the state itself.
- Promotion of broiler duck rearing in large scale by the unemployed youths and rural farmers.

7.4 TARGETED NUMBER OF SHGs TO BE RAISED IN PRIVATE (ORGANIZED) SECTOR FOR MEAT PRODUCTION

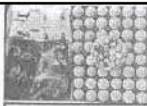
TABLE – 17

Year	Pork	Chevon	Broiler Chiken	Poultry	Duck	Total
2004 - 05	50	10	20	320	320	720
2005 - 06	50	20	28	320	320	738
2006 - 07	50	20	36	320	320	746
2007 - 08	10	50	44	240	160	504
2008 - 09	-	50	52	-	-	102
2009 - 10	-	50	60	-	-	110
2010 - 11	-	40	80	-	-	120
2011 - 12	-	-	80	-	-	80
Total	160	240	400	1200	1120	3120
Number of SHGs are to be raised in each block on average.	4	6	10	30	28	78

7.5 PORK (PIG MEAT) PRODUCTION

There is a great potential for the growth of Pig Husbandry in Tripura. By providing assistance to the farmers/breeders and taking up the massive cross breeding programme, by utilising exotic germ plasm and modern techniques, better management and extension programme, it would be possible to upgrade about 40-50% of the pig population under this programme.





Piggery is an important activity amongst weaker section people of the society. It is one of the major Animal Husbandry activities in North eastern region, where pork is used most commonly.

As per regional food habit, the Tribal population which contributes 1/3rd of the total population in Tripura give highest preference to pork in their daily dish. Recently pork is being popularized amongst non-tribal too, especially to weaker section people of the society.

In comparison to any other livestock business, Piggery is the most profitable one, as because of superior feed conversion ratio, faster growth rate, short generation interval (among major meat producing animals) and high proliferation (6-12 litters per farrowing),

The domestic indigenous varieties of pigs ("Mali" & "Dome") available in Tripura are small in size with poor feed conversion abilities. Average adult body wt. is about 45 Kg. Their growth rate is poor and litter size is small (4-5 per farrowing).

In order to improve, pig production in the State, Exotic breeds of pigs were introduced in Tripura during the 6th Five year Plan for upgrading the local variety of pigs. The cross bred pigs showed significant improvements. Adult body weight of the improved breed of pigs come upto 70-80 Kg. with increased litter size. It has been observed that exotic and cross breed pigs (50% exotic inheritance) had good growth rate ,attained puberty at about 6-8 months , breed twice in 16-18 months and also have better feed conversion ability. They are found to be prolific breeder, and if managed properly, deliver 10-12 piglets at a time.

Carcass weight was found to be 65-70% of live weight. Large White Yorkshire and Hampshire breed have been largely used for upgrading the local pigs.

Accordingly it is aimed to improve the local variety of pigs by cross breeding with improved ones and proliferation of exotic variety to augment pork production in the State.

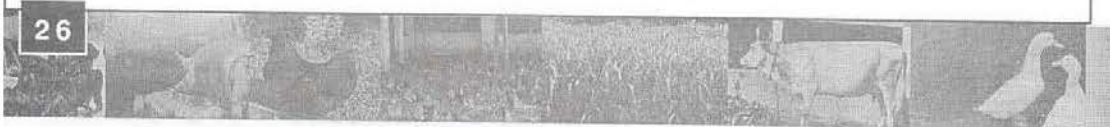
7. 5. 1 PRESENT STATUS OF PIGGERY IN TRIPURA

PIG POPULATION IN TRIPURA

(Source - Animal census , ARDD, Tripura)

(figure in lakhs)

2003 (Provisional)				
West	South	North	Dhalai	Total
100495	94940	31624	9838	209370
Croosbred - 94,981				
Indigenous - 1,14,389				





7.5.2 ACTION PLAN FOR TARGETED PORK (PIG MEAT) PRODUCTION

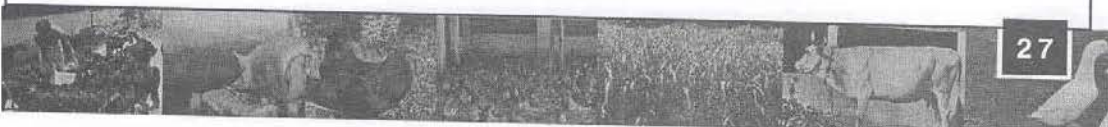
- (i) The State Govt. Farms will supply the seedling only i. e exotic boars for cross breeding of Deshi stock of pig population at farmer's premises.
- (ii) To augment pig meet production, simultaneous effort will be exerted towards fattening of Pigs with exotic variety at farmers door. For this purpose, the 50% female exotic piglets will be supplied from Govt. farms and rest 50% will be procured from private breeders having stock of exotic pigs. The required exotic boars for this purpose will be supplied from State Govt. farms.
- (iii) The carcass yield of Deshi fatteners at farmer's premises has been taken into consideration as 30Kg each and in case of fattener pigs of exotic variety the carcass yield has been considered to be 60 Kg each.
- (iv) For targeted pork (pig meat) production by mass, it is required to raise foundation stock of large White Yorkshire variety which has shown significant performance in the State both at Govt. farms and at field level too.

7.5.3 INVOLVEMENT OF SHGs IN PIGGERY

TABLE – 18

District wise break up of SHGs to be engaged with Piggery

Districts	Number of SHGs are to be raised									Remarks
	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	Total	
West	21	20	20	4	-	-	-	-	65	Ultimate target is to raise 4 SHGs per Block in 4 years
South	12	10	10	2	-	-	-	-	34	
North	9	10	10	2	-	-	-	-	31	
Dhalai	8	10	10	2	-	-	-	-	30	
Total	50	50	50	10	-	-	-	-	160	



7. 5. 4 TARGET OF PORK (PIG MEAT) PRODUCTION

TABLE – 19

Sl No.	Year	Targeted production of Meat (000' M.T)	Targeted pork production of Pork (40% of total meat requirement) (000 M.T)
1.	2004 -2005	20.69	8.27
2.	2005 –2006	22.07	8.82
3.	2006 –2007	22.84	9.13
4.	2007 –2008	23.63	9.45
5.	2008–2009	24.67	9.86
6.	2009 –2010	25.95	10.38
7.	2010 –2011	26.79	10.71
8.	2011 -2012	27.52	11.00

7. 5. 5 ACTION PLAN FOR PIGGERY DEVELOPMENT IN PRIVATE SECTOR

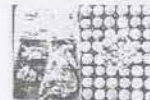
UNORGANISED SECTOR

- Exotic breeding stock will be supplied from Govt. Pig farms to SHGs/farmers/breeders in private sector to upgrade the genetic potentiality of deshi (local) pigs and to generate self employment opportunity.

ORGANISED SECTOR

- Emphasis will be given to develop organized sector in the field of pig production to reduce the gap between demand and supply of meat in Tripura.
- Pig growers will be trained and financially assisted in the through bank credit/ PDF etc.
- To generate self employment opportunity.
- Total demand of meat in Tripura by next eight years will be 27.52 000'MT. out of which 40% will be provided from piggery sector (11000 MT).





7.5.6 PORK PRODUCTION DURING 2004 – 05 TO 2011 – 12.

Details of pork production from normal growth, organised and unorganized sector in next 8 years is presented below -

TABLE – 20

Sl No.	Particulars	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12
1.	No. of SHGs are to be raised	50	50	50	10	-	-	-	-
2.	No. of exotic sows are to be raised in organized sector	1500	1500	1500	1500	1500	1500	1500	1500
3.	No. of exotic piglets will be available for breeding purpose from Organized sector	5850	9750	9750	5850	9750	9750	5850	9750
4.	No. of exotic piglets will be available for breeding purpose from unorganized sector	-	17550	29250	29250	17550	29250	29250	17550
5.	No. of exotic fattener piglets will be available for meat purpose from Organized sector	-	3150	5250	5250	3150	5250	5250	3150
6.	No. of exotic fattener piglets will be available for meat purpose from unorganized sector	-	9450	15750	15750	9450	15750	15750	9450
7.	Qty. of pork will be available from fatteners of Organized sector (MT)	-	206.5	574	994	1035.3	1067.5	1067.5	1035.3
8.	Qty. of pork will be available from fatteners of Unorganized sector (MT)	-	-	625.5	1745.5	3042	3167.1	3266.1	3167.1

7.6 MEAT FROM POULTRY SECTOR

Poultry rearing in India including Tripura was mostly a backyard venture almost upto 1960. Indigenous poultry, which are hardy but poor in growth and productivity, were used for the production of eggs and meat. During recent past, the scenario of poultry farming in the country has changed. Thousands of Poultry Farmers, both small and large, have come up all over India and indigenous/deshi birds have given way to highly specialized layers and broilers. A network of hatcheries has been established to supply quality commercial hybrid chicks.

Poultry is most price attractive next to fish. More than 60% poultry meat is produced in 5 States, Andhra Pradesh, Maharashtra, Punjab, West Bengal and Karnataka. Similarly, more than 60% of eggs are produced in Andhra Pradesh, Maharashtra, Punjab, Tamil Nadu and Haryana.





However, Tripura is lagging behind in poultry meat production in comparison to all India standards. But during recent years a considerable growth has been registered in broiler farming and broiler meat production, particularly in urban areas. Considering the scope of further development in this sector it is planned to augment the production of poultry meat by involving a large number of educated unemployed and other farmers.

7.6.1 MEAT FROM POULTRY/DUCK LAYER (DESHI/UPGRADED)

- It is targeted to produce 22% of the total requirement of meat from Deshi/upgraded poultry and duck of laying variety.
- The poultry and ducks reared traditionally for egg production, eventually stipulates meat production too, as the whole male population generated along with this process and the culled female birds after laying are utilized for meat.

7.6.2 TARGET OF MEAT PRODUCTION FROM LAYER VARIETY OF POULTRY AND DUCK

TABLE – 21

Sl No.	Year	Targeted production of Meat (000' M.T)	Targeted production of meat from Duck & Poultry (22% of total meat requirement) (000 M.T)	Remarks
1.	2004-2005	20.69	4.55	The year wise growth as targeted will be produced from normal growth rate and from targeted layer variety poultry & duck as kept for egg production purpose in backyard rearing.
2.	2005-2006	22.07	4.85	
3.	2006-2007	22.84	5.02	
4.	2007-2008	23.63	5.19	
5.	2008-2009	24.67	5.42	
6.	2009-2010	25.95	5.70	
7.	2010-2011	26.79	5.89	
8.	2011-2012	27.52	6.05	

7.6.3 ACTION PLAN FOR PRODUCTION OF POULTRY & DUCK MEAT Presented in Annexure at Table - 3





7.7 POULTRY MEAT FROM BROILER

In order to improve high body weight with improved feed efficiency at a shorter period attempts were made for appropriate breeding technology and resulted to evolve a special meat variety of poultry bird named Broiler.

In India the target is to develop commercial broilers to achieve a body weight of 1800 gm. at 6 weeks of age by the end of IX th five year Plan and 2000 gm. at 5 weeks of age by 2020 AD and feed efficiency of less than 2.0 at the age of marketing.

With this background in the field of Broiler Industry, our State took up this venture during early eighties in private sector. It took 10 years to popularise the broiler meat consumption irrespective of caste and creed differentiation.

During last 10 years a significant development has been encountered in broiler sector in the State. The rearing capacity of these Broiler Farms are 100-10,000 per farms. These farms are run by unemployed youths, women, villagers etc. 3 private hatcheries exclusively for broiler chicks multiplication are in operation in the State. They maintain 7000 broiler parent stock, with capacity of providing only 50,000 Broiler D.O.C per month. But actually the present demand of Broiler D.O.C in the state is 2.50 Lakh per month.

Considering the tremendous steady growth in private sector, the Govt. should let it continue in private sector.

7.7.1 STATUS OF BROILER DEVELOPMENT IN PRIVATE SECTOR

1. Number of broiler rearing farm in Tripura	1500 nos.
● Farmers having farm of 10,000 capacity	1 no.
● Farmers having farm of 5,000 capacity	5 no.
● Farmers having farm of 3,000 capacity	8 nos.
● Farmers having farm of 1,000 capacity	25 nos.
● Farmers having farm of 100-900 capacity	1461 nos
2. No. of hatcheries in private sector engaged in broiler chick hatching	3 nos
3. Present local production of D.O.C in private sector	50,000/ month
4. Present total demand of broiler chicks	2.50 Lakh/month
5. Growth rate/marketing age	1.4 -1.5 Kg/in 38-40 days
6. Broiler chicks procured from outside State hatcheries	1.5 to 2.0 Lakh/ month
7. Manpower engaged in Broiler farming in private sector	1500 families



7.7.2 TARGET OF MEAT PRODUCTION FROM BROILER CHICKEN

TABLE – 22

Sl. No.	Year	Total projected requirement of meat (in 000'M.T)	Meat to be produced from broiler sector in 000' M.T (25 % of total meat)
1.	2004-2005	20.69	5.17
2.	2005-2006	22.07	5.51
3.	2006-2007	22.84	5.71
4.	2007-2008	23.63	5.90
5.	2008-2009	24.67	6.16
6.	2009-2010	25.95	6.48
7.	2010-2011	26.79	6.69
8.	2011-2012	27.52	6.88

7.7.3 ACTION PLAN FOR BROILER DEVELOPMENT IN PRIVATE SECTOR

7.7.3.1 INVOLVEMENT OF SHGs IN BROILER FARMING

TABLE – 23

District wise break up of SHGs to be engaged with Broiler farming

Number of SHGs are to be raised									Remarks Ultimate target is to raise 10 SHGs per Block in 7 years.
04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	Total	
5	7	9	11	13	15	20	20	100	
5	7	9	11	13	15	20	20	100	
5	7	9	11	13	15	20	20	100	
5	7	9	11	13	15	20	20	100	
20	28	36	44	52	60	80	80	400	

7.7.3.2 BROILER CHICKEN MEAT PRODUCTION DURING 2004-05 TO 2011-12

TABLE – 24

Sl No.	Particulars	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12
1.	No. of SHGs are to be raised	20	28	36	44	52	60	80	80
2.	No. of broilers are to be raised in organised sector (in lakh)	1.60	2.24	2.88	3.52	4.16	4.80	6.40	7.40
3.	Qty. of broiler meat are to be produced from organised sector (MT)	160	224	288	352	416	480	640	740
4.	Qty. of broiler meat are to be produced by normal growth (MT)	2352	2634	2950	3304	3700	4144	5641	6198
5.	Total Qty.(MT) of broiler meat are to be produced (3 + 4)	2512	2858	3238	3656	4116	4624	6281	6938



7. 8 MEAT PRODUCTION FROM GOAT

Since long it is known that Tripura, Assam, undivided Bengal, part of Orissa and Bihar is the home tract of Black Bengal breed of goat. It has worldwide reputation for good quality meat and export quality skin. Goat rearing in Tripura is a common practice of rural mass, especially people living below poverty line. The Black Bengal goats are of smaller size and meat yield per animal is about 4.5 Kg (average). Goat is one of the animal which in spite of very high slaughtering rate has been proliferating significantly, that to without much care. Above all, in the light of meat quality, goat meat (i.e Chevon) stands number one in preference.

With a view to improve goat development sector in Tripura, Cross-breeding was undertaken during late eighties with Black Bengal, Beetal and Barbari breeds in Regional Goat Breeding farm, Debipur and the performance of these cross-breed goats was not satisfactory. The Beetal and Barbari goats are from dry tract of Punjab and Mathura. These breeds of goats did not thrive well, in the high rainfall area of Tripura. Later on, it was decided that Black Bengal goats would be reared in the state through selective breeding, improved feeding and better managemental practices. With this perspective, programme has been undertaken for regenerating the nos. of Black Bengal Goats in the State at farmers premises, as Tripura is the original tract of this variety which are flourishing at it's own.

7. 8. 1 GOAT POPULATION IN TRIPURA (1956 – 2003)

(figure in lakhs)

Year	1956	1961	1966	1972	1977	1982	1987	1992	1997(Prov.)	2003(Prov.)
Goat Population	1.01	1.57	1.32	1.47	1.97	3.43	4.39	5.13	6.39	4.71

7. 8. 2 TARGET OF GOAT MEAT PRODUCTION

TABLE – 25

Year	Total projected requirement of meat (in 000'M.T)	Meat to be produced from goat (13% of Total Meat) in M.T (Average Caracas yield- 4.5 Kg)
2004 - 2005	20.69	2.68
2005 - 2006	22.07	2.86
2006 - 2007	22.84	2.96
2007 - 2008	23.63	3.07
2008 - 2009	24.67	3.20
2009 - 2010	25.95	3.37
2010 - 2011	26.79	3.50
2011 - 2012	27.52	3.57





7. 8. 3 ACTION PLAN FOR GOAT DEVELOPMENT IN PRIVATE SECTOR

Target of Chevron production as per I.C.M.R recommendation	3000 M.T
Demand of Chevron production	3000 M.T
Period to achieve the target	8 years
Total number of SHGs are to be raised during 4 years	240
Total number of Districts are to be covered	4

7. 8. 3. 1 INVOLVEMENT OF SHGs ON GOAT DEVELOPMENT

TABLE – 26

District wise Break up of SHGs to be engaged with Piggery

Districts	Number of SHGs are to be raised									Remarks
	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	Total	
West	4	8	8	10	10	10	10	-	60	Ultimate target is to raise 6 SHGs per Block in 7 years
South	2	4	4	12	12	12	12	-	56	
North	2	4	4	14	14	14	14	-	62	
Dhalai	2	4	4	14	14	14	14	-	62	
Total	10	20	20	50	50	50	50	-	240	

7.8.3.2 GOAT MEAT (CHEVON) PRODUCTION DURING 2004 – 05 TO 2011 – 12.

TABLE – 27

Sl No.	Particulars	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12
1.	No. of SHGs are to be raised	10	20	20	50	50	50	40	-
2.	No. of she goats are to be raised in organised sector	1500	3000	3000	7500	7500	7500	6000	6000
3.	No. of kids are to be raised from Organised sector	2250	7875	14625	27000	42750	59625	69750	73125
4.	Qty. of chevon are to be produced from Organised sector (MT)	-	4.272	16.628	32.796	57.968	94.574	139.506	160.496
5.	Qty. of chevon are to be produced from unorganised sector (MT)	-	3.876	14.821	28.959	51.532	83.684	151.625	148.432
6.	Qty. of chevon are to be produced by normal growth (MT)	1223	1406	1616	1858	2136	2456	2824	3332
7.	Total quantity of chevon are to be produced (MT)	1123	1414.14	1647.44	1919.75	2245.50	2634.25	3115.131	3640.92





8. FEEDS & FODDER DEVELOPMENT

8.1 INTRODUCTION

For economic and sustainable livestock and birds rearing/farming feeds and fodder contribute a major role, as 65-80% of the production cost rests on cost of feed. So, to ensure rearing of targeted livestock and birds for targeted production of milk, meat and egg, a scientific and economic approach towards production of required quantum of feeds and fodder is the prime need.

The productivity of ruminant species i.e. cattle, buffalo, sheep and goat depends mainly on the availability of green grass/fodder. On the other hand, to achieve optimum production in poultry, pig and duck supplementation of concentrate feed (i.e. compounded balanced ration) is of prime importance.

It is a paradox that in spite of having a blanket of greenery, throughout the State little of these greens is available for feeding the livestock and birds. It is because, that most of the total area of the State and most of them are unpalatable or out of reach of the domesticated animals and birds.

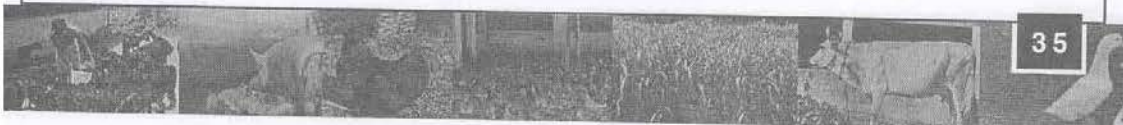
On the other hand organized cultivation of fodder in farmer's land is not in practice widely, nor the earlier tradition of keeping a plot of land for fodder/grass cultivation by farmers is continued now a days. This is might be due to the intensive pressure on land for cultivation of food grains and cash crops. Thus the poor livestock have to depend on natural grasses of very limited area and or on the paddy straw –the crop residues. Productivity of livestock of the State thus remains in a lower status.

Regarding production of ingredients of concentrate feed it is a reality that the production of such ingredients like maize, wheat, beans, oil seeds, cakes are very less for which State has to depend fully on other States where these become surplus for animal feed.

The main constraints for feeds and fodder cultivation is the non availability of cultivable land other than food grains, inadequate quality fodder seeds, cuttings, proper infra structural and extension support. However, ARDD has created a good number of fodder seed production farm which has been strengthened recently for catering the need of seed materials for farmers.

To ensure rearing of targeted livestock and birds with their optimum productivity to attain targeted production of milk, meat and egg by 2011-2012 a scientific and economic approach towards production of required quantum of feeds and fodder is of extreme need.

Considering the scarcity of land, feeds and fodder resources, efforts will of course be made towards increased productivity per unit of area available for fodder





cultivation along with improved conservation methods and improving nutrients value of roughages.

Attempts are to be made to motivate and train the farmers to ensure best utilization of their land by fodder cultivation during intercropping period with definite profit. Vacant land and cultivable waste land should also be brought under fodder cultivation. Degraded forest land may also be utilized for cultivation of suitable fodder crops and fodder trees. Silvi Pasture method be introduced in vast forest land.

8. 2 STRATEGY

- Emphasis will be made to produce quality green fodder to meet the requirement of all cross bred cattle. In rain fed condition fodder production is feasible for 8 months i.e. from April to November. Fodder requirement for rest 4 months will be met from other sources like agricultural by-products, preserved fodder etc. Simultaneous effort will also be exerted towards optimum utilization of Agricultural crop residues by enriching their nutritive value.
- Production & supply of quality fodder seeds and cutting materials from Govt. farms will be made to farmers for extensive cultivation of fodder in cultivable waste land and in between two agricultural main crops.
- Utilization of degraded forest for Sylvie pasture development and fodder tree plantation will be ensured under JFM prorgamme.

8. 3 ACTION PLAN FOR TARGETED GREEN PRODUCTION IN FARMER'S LAND

TABLE – 28

Year	Units of production	Perennial Crops	Annual crop non - legumes	Legumes	Tuber crops	Milletts	Fodder Trees	Grand Total
2004 -05	Area in Hector	2010	510	255	510	255	97	3637
	Production in MT	201075	20400	5100	10200	2550	475	239800
	Yield (MT) / Hector	100	40	20	20	10	1st Cut	
2005 - 06	Area in Hector	2110	520	260	520	260	92	3762
	Production in MT	211050	20800	5200	10400	2600	1425	251475
	Yield (MT) / Hector	100	40	20	20	10	7.5	
2006 -07	Area in Hector	2215	530	260	530	260	100	3905
	Production in MT	221550	21200	5300	1600	2650	230	26300
	Yield (MT) / Hector	100	40	20	20	10	8	
2007 -08	Area in Hector	2325	540	270	540	270	102	4047
	Production in MT	232575	21600	5400	10800	2700	3500	276575
	Yield (MT) / Hector	100	40	20	20	10	9	





Year	Units of production	Perennial Crops	Annual crop non - legumes	Legumes	Tuber crops	Millets	Fodder Trees	Grand Total
2008 -09	Area in Hector	2441	550	270	550	275	102	4193
	Production in MT	244125	22000	5500	1100	2750	3975	289350
	Yield (MT) / Hector	100	40	20	20	10	10	
2009 -10	Area in Hector	2563	561	280	561	280	104	4349
	Production in MT	256305	22400	5600	11200	2800	4950	304215
	Yield (MT) / Hector	100	40	20	20	10	10	
2010 -11	Area in Hector	2691	572	285	572	285	105	4510
	Production in MT	269115	22800	5700	180	2850	5980	306705
	Yield (MT) / Hector	150	40	70	20	10	10	
2011 -12	Area in Hector	2825	583	290	583	290	106	4677
	Production in MT	282555	22880	5800	11660	5980	6010	332245
	Yield (MT) / Hector	100	40	20	20	10	10	

8.4 PROGRAMME FOR PRODUCTION OF CUTTING (CONGO SIGNAL & LEGUMES) IN GOVT. FARMS FOR CULTIVATION IN FARMER'S FIELD (2004-05 TO 2011-12)

TABLE - 29

Sl. No.	Name of Govt. farms	Cultivation of Congo Signal grass	Production of cuttings of Congo Signal (MT)	Cultivation of Legumes (Area in ha)	Production of Legume seeds (MT)	Cultivation of Tapioca (Area in ha)	Production of Tapioca Cuttings (Nos.)
1.	R.K Nagar	55	2750	25	20.00	15	3,00,000
2.	Debipur	60	3000	15	12.00	20	4,00,000
3.	B.C Manu	10	500	5	4.00	8	1,16,000
4.	Nalkata	—	—	—	—	6	1,12,000
5.	Poultry Farm Gandhigram	—	—	2	1.60	5	1,00,000

9. ANIMAL HEALTH AND VETERINARY SERVICES

Optimum productivity of livestock and birds depends on their state of health and managerial care. As such it is of prime importance to protect the animal resources from diseases and other ailments. This protection mainly comprises prevention and control of diseases through immunization, maintenance of hygienic condition and proper treatment as and when affected with diseases.



For effective management of preventive and curative measures a state wide vety services network will be ensured which comprises provision of diagnostic facilities, Vety. Clinical Institutions, Vety. Medical stores, vaccine procurement, storage and transportation facilities.

At present there are 15 Vety. Hospitals, 56 Veterinary Dispensaries, 11 Reproductive health Centres (A.I.Centres), 385 Vety. First Aid Centre/ Stock man Subcentres from where required vety.services are rendered. But to cope up with the targeted production of milk, meat and egg as reflected in the Perspective plan, a substantial number of animals and birds will be brought under regular health care management system. In view of the above, it is targeted to cover 70 % of the total Gram Panchayet of the State with at least one Vety. Institution along with proportionate Vety. Dispensaries, Vety.Hospitals, Disease Diagnostic Laboratories etc. and for this required number of vety. Institutions will be provided through upgradation and opening of new centers. Apart from this, provision of vaccine, medicines and appliances will be provided proportionately for rendering animal health care and vety. Services successfully.

9. 1 PRESENT STATUS OF ANIMAL HEALTH AND VETERINARY SERVICES NETWORK

TABLE – 30

Sl. No.	Type of Vety. Institutions	Existing number of Veterinary Institutions (District wise)				
		West Tripura	South Tripura	North Tripura	Dhalai	Total
1	Veterinary Hospitals	4	4	3		15
2	Veterinary & reproductive Health Centres(A.I.C)	25	22	13	7	67
3	Veterinary Sub Centres	175	99	74	37	385
4	Disease Investigation Laboratory	1	1	1	1	3
5	Veterinary Medical Store	1	1	1	1	4
6	Mobile Veterinary Unit	-	1	-	-	1
	TOTAL	202	124	89	46	461

9. 2 ACTION PLAN FOR STRENGTHENING OF ANIMAL HEALTH AND VETERINARY SERVICES NETWORK

TABLE – 31

Year	Vety. Hosp.	Vety. Disp.	VFAC/ SMSC	Patho- logical Unit	Clinico- patho- logical Lab	Mobile Vety. Unit	Remarks
2004-05	2	3	25	3	3	2	1. Vety Hospital will be opened by up gradation of existing Vety Dispensary.
2005-06	2	3	25	3	3	1	
2006-07	2	3	25	3	3	1	2. Vety .Disp .will be opened by up gradation of existing Vety. Sub Centre.
2007-08	2	3	25	3	3	1	
2008-09	2	3	25	3	3	1	3. Pathological Unit. will be attached with each Vety. Hosp.
2009 -10	2	3	25	3	3	1	
2010 -11	2	3	25	3	3	1	4. Clinico –pathological Lab. will be attached to each Vety. Disp.
2011 -12	2	3	25	4	3	1	
Total	28	32	255	38	77	14	5. Mobile Vety unit. will be a part of each sub–divisional / district Vety. Hosp. 6. Sub – centers will be opened newly.

10. EXTENSION SUPPORT AND TRAINING

To achieve the target, peoples participation is of paramount importance. To engage maximum number of people in animal husbandry practices with modern concept, motivation and intensive training for individual skill up-gradation on scientific rearing and management of animal and birds is highly necessary.

At present the Deptt. is having 15 Vety. Hospitals, 67 Vety. Dispensaries & reproductive health Centres and 385 sub centers through which motivation campaign towards animal husbandry management practices are being done. There is one State level Vety. Training Institute from where specific training of farmers on different animal husbandry activities are imparted. Recently three more Dist. level Vety. Training Institutes have been opened to cater the need of farmers training of the entire State. Vety hospital and dispensaries also render short training programmes for skill up-gradation of farmers. However, keeping conformity with the need of development in recent skill up-gradation programme, it has been planned to modernize the State level Vety. Training Institute under the financial assistance of NEC.

10.1 ACTION PLAN FOR TRAINING FOR AND SKILL UP-GRADATION

TABLE – 32

Year	No. of Training Institute to be opened				Remarks
	West Tripura	South Tripura	North Tripura	Dhalai	
2002 - 03	-	1	2	1	1. Only one State level Vety. training Institution is existing in West Tripura at R.K.Nagar.
2003 - 04	1	1	-	1	
2004 - 05	1	1	1	-	2. Each sub-division is to be provided with one Training Institute.
2005 - 06	-	1	-	1	
2006 - 07	1	-	1	-	3. One additional Training Institute is required based on farm &ICDP for special training
2007 - 08	1	1	-	-	
2008 - 09	-	-	-	1	4. Establishment of required Training Institute is to be completed by 2008-2009.
Total	4	5	4	4	

11. MARKETING FACILITIES

To fetch appropriate price of Animal husbandry produces by the producers, necessary marketing facilities has been targeted through Co-operative bodies. Dairy Cooperative sector has been planned to strengthen further and also to extend their operation area throughout the State.

To implement the programme, a marketing wing has been opened in the Directorate of Animal Resources Development Deptt.

12. SELF EMPLOYMENT

It has been targeted to generate full scale self employment of unemployed youth by organized farming in different Animal husbandry based activities. It is expected that about 24,000 unemployed youths can be benefited during the period of ten years.

About 1000 nos. of Self Help Groups shall be organized whose key activities shall be based mainly in animal husbandry practices.

13. CREDIT

Since the role of the private sector in achieving set targets shall be very crucial, flow of required component from financial institutions is equally important. It has





been estimated that the Credit flow to the extent of about Rs.240 Crores shall be required during the Perspective Plan period. Since it is a Primary Sector, positive response from Banks is expected. The matter has been taken up with the financial institutions at the State level.

14. FINANCIAL REQUIREMENT

For successful implementation of the perspective plan in both Government and Private sector, the total financial involvement is as follows:

1. Govt.sector = Rs.15375.97 Lakh.
 2. Private sector = Rs. 34283.69 Lakh.
- Total investment Rs. 49659.66 Lakh

15. EXPECTED BENEFIT

Successful implementation of the Perspective Plan will increase the total production of milk, meat and egg substantially, to a level of Milk – 2,07,540 MT, Meat – 27,520 MT and egg – 29.43 crores at the end of the plan period (2011-12).

At the same time, it will generate self-employment for 24,000 unemployed youths. In addition, the programme will enhance earnings of a large number of farmers through different animal husbandry practices at household level. In terms of money the ultimate benefit expected to yield :

● In Milk sector	-	Rs. 41508 Lakh
● In Egg sector	-	Rs. 5886 Lakh
● In Meat sector	-	Rs. 27520 Lakh
Total	-	Rs. 74914 Lakh





ANNEXURE

(Table - 1 to Table - 6)



TABLE – 1
SUMMARY OF THE REVISED PERSPECTIVE PLAN

Parameters	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Demand of Milk ('000 MT)	122.28	127.09	132.17	137.46	142.96	148.67	151.62	160.81
Demand of Meat ('000 MT)	22.76	23.12	23.49	23.85	24.23	24.60	24.97	25.52
Demand of Egg (number in lakh)	1456.66	1566.06	1690	1830	2203.36	2390	2600	2830
Targeted production of Milk ('000 MT)	85.00	95.00	110.00	135.00	160.00	185.00	200.00	207.54
Targeted production of Meat ('000 MT)	20.69	22.07	22.84	23.63	24.67	25.95	26.79	27.52
Targeted production of Egg (number in lakh)	1056.66	1263.33	1806.66	2053.33	2208.00	2453.33	2733.33	2943.33
FINANCIAL REQUIREMENT								
a) Private Sector (Rs. in lakh)	2938.26	3243.11	3556.05	3972.03	4377.95	4852.17	5397.29	5946.83
b) Govt. sector (Rs. in lakh)	1106.12	1473.27	1491.58	1729.02	1952.91	2196.75	2526.45	2899.86
Nos of people to be benefited								
i) Through Household production	162690	183381 (162690 +20691)	205360 (183381 +21979)	229503 (205360 +24143)	255133 (229503 +25630)	282712 (255133 +27579)	312765 (282712 +30053)	344955 (312765 +32190)
ii) Through Self –employment i.e., Organised farming.	10629	12196 (10629 +1567)	13784 (12196 +1588)	15606 (13784 +1822)	17461 (15606 +1855)	19420 (17461 +1959)	21578 (19420 +2158)	23986 (21578 +2408)

TABLE - 2

**ACTION PLAN FOR ACHIEVING TARGETED PRODUCTION OF MILK DURING
2004-05 TO 2011-12**

Sl. No.	Year	Targeted Milk production ('000 MT)	Targeted per capita availability of milk (gm) per day	Target of Artificial Insemination in Cattle to produce upgraded milch animals (Nos.)	Incorporation of mobile door step A. I service on self employment basis	
					Panchayet to be covered with mobile service	Number of self employed to be in mobile service
1.	2004-05	85.00	69.49	1,00,000	400	400
2.	2005-06	95.00	76.48	1,50,000	400 + 600 = 1000	400 + 600 = 1000
3.	2006-07	110.00	87.25	3,00,000	All the Panchayet of the State would come under Mobile door step A. I. service by 2005-06 and will continue.	Above 1000 trained unemployed youths will continue their service in all the Panchayet of the State.
4.	2007-08	135.00	103.70	3,00,000		
5.	2008-09	160.00	121.00	3,00,000		
6.	2009-10	185.00	137.76	3,00,000		
7.	2010-11	200.00	146.62	3,00,000		
8.	2011-12	207.54	150.00	3,00,000		

TABLE – 3
ACTION PLAN FOR PRODUCTION OF POULTRY & DUCK MEAT

- Total No. of SHGs are to be raised during 8 years period (2004-05 to 2011-12) - 2320
- Target of Duck and Poultry meat production as per ICMR recommendation - 5077 M.T
- Demand of Duck, Poultry and other meat production - 5077 M.T

INVOLVEMENT OF SHG IN PRIVATE SECTOR

Sl No.	District	Number of SHGs are to be raised																Remarks
		2004-05		2005-06		2006-07		2007-08		2008-09		2009-10		2010-11		2011-12		
		P	D	P	D	P	D	P	D	P	D	P	D	P	D	P	D	
1	West	128	128	256	256	384	384	480	448	480	448	480	448	480	448	480	448	Ultimate target is to raise @ 30 SHG for poultry per Block and @ 28 SHG for Duckery per Block P — Poltry D — Duck
2	South	88	88	176	176	264	264	330	308	330	308	330	308	330	308	330	308	
3	North	64	64	128	128	192	240	224	224	240	224	240	224	240	224	240	224	
4	Dhalai	40	40	80	80	120	120	150	140	150	140	150	140	150	140	150	140	
TOTAL		320	320	640	640	960	960	1200	1120	1200	1120	1200	1120	1200	1120	1200	1120	

PRODUCTION OF DUCK AND POULTRY MEAT DURING 2004 - 05 TO 2011 - 2012

Sl No.	Particulars	Production of Duck and Poultry meat during 2004 - 05 to 2011 - 2012																Remarks
		2004-05		2005-06		2006-07		2007-08		2008-09		2009-10		2010-11		2011-12		
		P	D	P	D	P	D	P	D	P	D	P	D	P	D	P	D	
1	Number of SHG are to be raised	320	320	640	640	960	960	1200	1120	1200	1120	1200	1120	1200	1120	1200	1120	Poultry unit size per SHG – 300 Bird Duckery unit size per SHG – 300 Duck P — Poltry D — Duck
2	Poultry bird/Ducks are to be sold (Number in lakh)	—	—	0.96	—	1.92	0.96	2.88	1.92	3.60	2.88	3.60	3.36	3.60	3.36	3.60	3.36	
3	Qty. of Poultry and Duck meat are to be produced (M.T)	—	—	96	—	192	144	288	288	360	432	360	504	360	504	360	504	
TOTAL		—		96		336		576		792		864		864		864		

TABLE - 4

**FINANCIAL ABSTRACT OF REVISED PERSPECTIVE PLAN OF ARDD
(FOR GOVT. SECTOR) FROM 2004-05 TO 2011-12**

(Rupees in Lakh)

FINANCIAL ABSTRACT OF REVISED PERSPECTIVE PLAN OF ARDD (FOR GOVT. SECTOR) FROM 2004-05 TO 2011-12												
Year	Requirement of Fund for							Expected flow of Fund				Additional requirement of fund expected to be met from PDF/Additional allocation from State Plan/CSS/NEC
	Milk . Prodn	Egg Prodn	Meat Prodn.	Fodder Prodn.	Animal health Care & Vety. Service	Extn. & training	Total	State Plan	CSS	NEC	TOTAL	
1	2	3	4	5	6	7	8	9	10	11	12	13
2004-05	297.10	165.00	289.61	81.187	223.731	49.50	1106.128	331.8384	221.2256	37.00	590.064	1696.192
2005-06	547.70	183.70	320	92	259.87	70.00	1473.27	441.981	294.654	60.00	796.635	2269.905
2006-07	400.00	234.70	370	100	306.88	80.00	1491.58	447.474	298.316	65.00	810.79	2302.37
2007-08	460.78	290.00	420	105	363.24	90.00	1729.02	518.706	345.804	78.00	942.51	2671.53
2008-09	500.00	340.00	470	110	432.913	100.00	1952.913	585.8739	390.5826	100.00	1076.457	3029.3695
2009-10	522.68	400.00	530	120	514.065	110.00	2196.745	659.0235	439.349	110.00	1208.373	3405.1175
2010-11	600.00	450.00	610	130	611.45	125.00	2526.45	757.935	505.29	130.00	1393.225	3919.675
2011-12	700.00	500.00	680	150	729.86	140.00	2899.86	869.958	579.972	150.00	1599.93	4499.79
TOTAL	4028.26	2563.40	3689.61	888.187	3442.009	764.50	15375.97	4612.79	3075.193	730.00	8417.983	23793.949

TABLE – 5**FINANCIAL ABSTRACT OF REVISED PERSPECTIVE PLAN FOR PARTIAL
AND FULL SELF EMPLOYMENT IN PRIVATE SECTOR WITH ANIMAL
HUSBANDRY PRACTICES DURING 2004-05 TO 2011-12**

(Rupees in lakh)

Year	Requirement of Fund for					Expected flow of fund		
	Milk Prodn.	Egg Prodn	Meat Prodn.	Fodder Prodn.	Total Requirement	Bank Credit	Govt. Source (PDF/ SGSY/ DRDA/TW/SC)	Beneficiary Contribution
1	2	3	4	5	6	7	8	9
2004-05	2392.83	144.43	370.06	30.938	2938.258	2056.78	293.82	587.65
2005-06	2658.39	157.09	394.19	33.438	3243.108	2270.17	324.32	648.64
2006-07	2957.15	158.43	404.38	36.094	3556.054	2489.24	355.60	711.21
2007-08	3305.67	158.96	468.53	38.876	3972.036	2780.43	397.20	794.40
2008-09	3695.29	157.75	483.06	41.846	4377.946	3064.562	437.7946	875.5892
2009-10	4131.18	160.96	515.16	44.869	4852.169	3396.518	485.2169	970.4338
2010-11	4613.33	164.03	571.65	48.284	5397.294	3778.106	539.7294	1079.459
2011-12	5141.74	108.56	644.75	51.781	5946.831	4162.782	594.6831	1189.366
TOTAL	28895.58	1210.21	3851.78	326.126	34283.696	23998.588	3428.364	6856.748

TABLE-6

NUMBER OF PEOPLE TO BE BENEFITED THROUGH DIFFERENT ANIMAL HUSBANDRY PRACTICES UNDER PERSPECTIVE PLAN DURING 2004 -05 TO 2011 - 12

Sl No.	Year	People to be benefited through household production to generate additional income					Total no. of beneficiary to be benefited	People to be benefited through organized farm production system to generate self employment programme						Total no. of beneficiary to be brought under self employment programme
		From Milk production	For egg production		For meat production			From Milk production	For egg production		For meat production			
			From Poultry	From Duckery	From Piggery	From Goatery			From Poultry	From Duckery	From Goatery	From Piggery	From Broiler	
1.	2004-05	75,723	20,200	9,102	11,697	45,968	1,62,690	600	70	20	4056	683	5200	10,629
2.	2005-06	79,862	24,233	11,502	16,610	51,174	1,83,381	800	90	24	4515	978	5789	12,196
3.	2006-07	84,491	28,333	14,100	22,052	56,384	2,05,360	1000	110	28	4975	1293	6378	13,784
4.	2007-08	89,649	32,500	16,602	28,117	62,635	2,29,503	1200	130	32	5527	1633	7084	15,606
5.	2008-09	95,419	36,766	19,200	34,821	68,927	2,55,133	1400	150	36	6082	1998	7795	17,461
6.	2009-10	1,01,801	41,133	21,900	42,273	75,606	2,82,712	1600	170	40	6671	2388	8551	19,420
7.	2010-11	1,08,793	45,766	24,702	50,379	83,130	3,12,765	1800	190	44	7335	2807	9402	21,578
8.	2011-12	1,16,395	50,133	27,300	59,360	91,767	3,44,955	2000	200	48	8098	3261	10379	23,986

