

CHAPTER – I

AGRICULTURE & ALLIED SERVICES

1.1 CROP HUSBANDRY

1.1.1 BACKGROUND:

Meghalaya's economy is basically agrarian in which about 70 percent of the population depend their livelihood in agriculture. However, the contribution of this sector to the State's economy is only around 22 percent of NSDP. This would reflect that most of the people dependent on agriculture are living more or less at subsistence level and still a large percentage of them are living below the poverty line. As such, proper management for development of the Crop Husbandry sector is vital for the healthy growth of this primary sector. Enhancement of food grain production in the hill State of Meghalaya is constrained by its topography making available only about 12 percent of its geographical area suitable for cultivation of crops for food grain production. However, improvement of production to the extent possible by way of more coverage and improvement of irrigation facilities, use of HYV seeds, application of fertilizers and pest control are being taken up. The production of food grains as during 2005-06 is 248.40 thousand tones and the anticipated achievement during 2006-07 is 269.93 thousand tones. By the end of the Eleventh Plan, the production is expected to touch 379.00 thousand tones. The target during 2007-08 is to produce 291.00 thousand tones of food grains.

1.1.2 OBJECTIVE :

In the past, omnibus schemes widely dispersed all over the seven districts had been implemented, which had a dissipating effect on scarce resources. It was difficult to monitor such projects and harder still to evaluate the impact they had on the livelihood of the stakeholders, the farmers of the State. The goal for the 11th Plan therefore would be to usher in a paradigm shift from these diffused schemes to a more focused approach based on cluster and backed by an integrated package of practices. In consonance with this strategy, the Department would seek to consolidate traditional strengths and past gains, on one hand, and capitalize on emerging opportunities, on the other.

1.1.3 CLUSTER APPROACH:

A structuring of policies and institutions would inevitably accompany the radical transformation. The cultivated area of the State would be divided into crop-wise clusters. Each cluster would be defined as a Crop Development & Marketing Unit (CDMU), stressing not only the supply facet, but, more importantly, the demand side of the cluster and would ideally be under the charge of a Departmental Officer.

1.1.4

POST HARVEST MANAGEMENT:

There is an urgent need to establish collection centers near the clusters, primary markets to cater to several clusters and secondary markets at the wholesale level. The facilities are pack houses while the secondary markets and some of the primary markets would be equipped with godowns (for non – perishables) and cold storages (for perishables) of adequate capacities. The transportation needs of the farmers, both ordinary and reefer vehicles would also be the mandate of the CDMUs. This would result in a network of post – harvest management services as well as cold chains.

1.1.5

MARKETING:

Remunerative returns for the farmers, particularly for the Small and Marginal Cultivators, will be the avowed objective for the 11th Plan. For this purpose, marketing intervention for horticultural produce, with a full complement of post- harvest infrastructure and network of markets, is fundamental. These CDMUs would be bolstered with appropriate managerial and financial flexibility for assisting the producers to get reasonable profits from their efforts.

1.1.6

COLD CHAINS:

Establishment of a Cold Chain along major arterial highways like Jowai- Shillong- Guwahati and Tura- Resubelpara- Guwahati is critical, if the State is to exploit the rich Horticultural Potential and market these 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.

1.1.7

FOCUS CROPS:

Over the years, and till now, a majority of Small Farmers Cultivate a plethora of crops, in small quantities, to keep their alternative avenues of income intact . During the 11th Plan, however, the strategy would be to focus on some of some of the traditional crops (rice, maize, mustard and jute) which have been doing consistently well and to expand area under promising new crops, like boro (spring) paddy .

1.1.8

WATER SHED:

The watershed projects under the existing national Watershed Development Project for Rain fed Areas (NWDPA), a laudable concept for holistic and integrated development , have not been able to progress at the desired pace as, presently the officers – in charge are saddled with numerous other tasks. With the proposed organizational streamlining, each watershed project would be assigned to a full time Manager to help in achieving the objective of the project and in realizing the aspirations of the beneficiaries.

1.1.9

FOOD GRAINS:

Food grains production during the 11th Plan will be enhanced concerted efforts of increasing productivity of local varieties, shift toward HYV and Hybrid paddy, double cropping with spring paddy, land reclamation and supplemented by increased area and production of maize (ideal for Meghalaya conditions). In order to boost rice production, effort will be taken to cover 20,000 ha each year in 200 clusters of 100 ha each for which substantial investment will be required during the 11th Plan period.

1.1.10

IRRIGATION:

Although Meghalaya boasts of two locations, Cherrapunjee and Mawsynram, which receive the highest annual precipitation in the world, most of its cultivated area is still rain fed. As such, a thrust in the 11th Plan is this vital sector of water availability. In order to achieve this objective, the proposed strategies are to ensuring 24/7 water availability in completed projects, expeditious completion of ongoing projects, restoring damaged irrigation projects, popularization of micro-irrigation facilities, rainwater- harvesting, exploitation of ground water resources, recharging of wells, popularization use of hydrams, use of water conservation measures like plastic mulching and implementation of participatory Irrigation management (pim) through Water Users Associations (WUAs) in each command area.

1.1.11

SEED CERTIFICATION:

While the State is grateful to the Assam Seed Certifying Agency (ASCA), for its help in certifying, Seeds particularly rice and maize, this is not always convenient arrangement, for obvious reasons. Hence, one of the targets for the 11th Plan is the establishment of the Meghalaya Seed Certifying Agency (MeSCA) to cater to this vital requirement.

1.1.12

ORGANIC FARMING:

It has been aptly remarked that Meghalaya is an “organic” State by default, as most of its farmers do not have the ability to buy chemical fertilizers and pesticides. This is especially true of those areas where “Jhum” (slash & burn) cultivation is in vogue. Taking a cue from this, it is proposed to convert some Departmental farms into model Certified Organic Farms during the 11 Plan period. It is expected that farmers would come up around these model farms so as to take advantage of the growing demand for organic produce in the affluent parts of the State and the country.

1.1.13.

CAPACITY BUILDING

Modern capacity building entities are key hubs for skill development both for farmers and Departmental personnel and hence up gradation of departmental training centers on the lines of some of the leading training, and consultancy, institutions of the country are important. For establishment of these capacities building centers in each of the seven districts of the State an additional amount of Rs. 2.00 crores would be required for each centre.

1.1.14. SPECIAL PROGRAMME FOR ASSISTANCE TO SMALL AND MARGINAL FARMERS:

The aim and objective of the programme is for providing minikits of improved seeds and other facilities in the form of small irrigation canals to small and marginal farmers for increasing agricultural production to boost their economy. In Meghalaya, this programme is implemented by the Community and Rural Development Department. The expenditure during the first four year of the Tenth Plan was **Rs 320.00 lakh**. The proposed outlay for the 11th Plan (2007-2012) is **Rs 560.00 lakh** under SF/MF and the expenditure during the first four years of the 10th Plan was **Rs 320.00 lakh**. An outlay of **Rs 175.00 lakh** has been proposed for the Annual Plan 2007-08.

1.1.15. TENTH PLAN EXPENDITURE :

During the first 4(four) of the Tenth Plan, the expenditure on Crop Husbandry was **Rs. 3520.04 lakh** inclusive of SF/MF. The current year outlay of **Rs 1612.00 lakh** would be fully utilized. Thus the total expenditure during the Tenth Plan period would be **Rs. 5132.04 lakh**

1.1.16. PROPOSED OUTLAY FOR THE 11TH PLAN (2007-12) AND ANNUAL PLAN 2007-08 :-

The Eleventh Plan proposed outlay is **Rs 10,000.00 lakh** inclusive of **Rs. 560.00 lakh** under SF/MF. For the Annual Plan 2007-08 the proposed outlay is **Rs 3300.00 lakh** out of which **Rs. 175.00 lakh** would be allocated for SF/MF. The break up of the proposed outlay for the Eleventh Plan and the Annual Plan 2007-08 in respect of Crop Husbandry sector is indicated in the table below:-

(Rs lakhs)

Sl no	Name of schemes	Tenth Plan approved outlay	Actual expenditure from 2002-03 to 2005-06	Annual Plan 2006-07	Total	11 th Plan 2007-12 Proposed outlay	Annual plan 2007-08
1	2	3	4	5	6	7	8
1	Direction and Admn	342.72	271.78	111.43	383.21	750.00	105.00
2	Seeds	1744.96	906.92	376.14	1283.06	2000.00	400.00
3	Manure and Fertilizer	292.99	247.20	104.98	352.18	1500.00	600.00
4	Plant Protection	278.46	171.86	65.29	237.15	400.00	100.00
5	Commercial Crops	1619.51	134.41	109.78	244.19	1000.00	600.00
6	Extension and training	369.50	178.04	68.64	246.68	1000.00	520.00
7	Agri Eco and Stats Land use and Survey	14.54	38.30	35.15	73.45	75.00	15.00
8	Agri Engineering (MECH)	689.27	744.44	366.00	1110.44	1200.00	320.00
9	Assistance to farming co-op	1845.18		12.68	12.68	100.00	15.00
10	Other Expenditure	122.40	311.96	90.64	402.60	600.00	100.00
11	Housing (Resdl bldg)	95.62	69.58	54.12	123.70	300.00	100.00
12	Capital Works	210.37	125.55	73.15	198.70	400.00	200.00
13	Corpus Fund on Crop Insurance	24.48				115.00	50.00
14	SF/MF	450.00	320.00	144.00	464.00	560.00	175.00
15	Total Crop Husbandry	8100.00	3520.04	1612.00	5132.04	10,000.00	3300.00
16	Agri Research and Education	165.00	138.90	50.00	188.90	500.00	70.00
17	Investment in Financial Institutions	30.00	9.46.	7.00	16.46	100.00	10.00

1.1.17

AGRICULTURAL RESEARCH AND EDUCATION:

The approved outlay for the 10th Plan for the Agricultural Research is Rs 165.00 Lakhs . The expenditure up to the fourth year of the Plan was Rs.138.90 Lakhs and the anticipated expenditure during 2006-07 is Rs. 50.00 Lakhs. **The proposed outlay for the 11th Plan is Rs.500.00 Lakhs and the proposed outlay for the Annual Plan 2007-08 is 70.00 Lakhs.**

1.1.18

AGRICULTURAL FINANCIAL INSTITUTIONS:

The approved outlay for Agricultural Financial Institutions is Rs.30.00 Lakhs and the expenditure up to the end of the fourth year of the Plan was Rs.9.46 Lakhs only. **The proposed outlay for the 11th Plan (2007 -12) is Rs.100.00 Lakhs and the proposed outlay for the Annual Plan 2007 -08 is Rs.10.00 Lakhs.**

1.2. HORTICULTURE

1.2.1. BACKGROUND:

In view of its topography, only about 12 percent of the geographical area of Meghalaya is suitable for cultivation for the purpose of food grain production. As such, Meghalaya will not be in a position to achieve self sufficiency in food grain production. However, the climatic conditions of the State are suitable for the development of different varieties of horticulture crops. Since time immemorial, horticulture has been known in the hills of Meghalaya as an important source of supplementary income and employment to the rural people. Horticultural produce during 2005-06 was of the level of 234.33 thousand tonnes which is expected to be at the same level during 2006-07. Hence, having realized this potential, the State Government has decided to assign top priority to horticulture development during the 11th Plan with a view to generating income and employment, removing poverty and thereby improving the economy and well being of the people of the State. The target is to reach a level of 291.98 thousand tonnes of horticultural produce by the end of the 11th Plan and 288.64 thousand tonnes during the first year of the Plan (i.e. 2007-08). During the 11th Plan (2007-12) **the State Govt. will also lay much emphasis on post harvest management including processing and marketing of horticultural produce.**

1.2.2. TENTH PLAN OUTLAY AND EXPENDITURE: -

The approved outlay during the 10th Plan (2002-2007) is **Rs 2150.00 lakh**. The expenditure during the first four years of the Plan was **Rs 1973.43 lakh**. The current year outlay of **Rs 770.00 lakh** would be fully utilized. Thus the total expenditure during the 10th Plan would be **Rs 2743.43 lakh**.

1.2.3. ELEVENTH PLAN (2007-12) PERSPECTIVE, VISION & CHALLENGES: -

The Eleventh Plan (2007-12) envisaged the need to emphasize on the adoption of a paradigm shift from the diffused, resource dissipating schemes of earlier Five Year Plans to a more focused, grass root driven, crop and altitude specific holistic **cluster approach** to Horticultural Development with total integration of all required components and package of practices from the primary production level to the points of sale. The vision is to make Meghalaya an economically strong, self reliant and an integral part of the national mainstream and realizing this vision however, is not an easy task, given the topography and agro-climatic regime of the State as well as its remoteness from the major consuming and input producing centers of the country. Increase in productivity per unit area, increased cropping intensity and increase in irrigation area in the low and mid altitudes with simultaneous emphasis on the widespread adoption of high value horticulture crops in the low, mid and high altitudes are very important in this regard. Thus the major CHALLENGES will continue to be as follows:

- 1) To increase production and productivity vis-à-vis the constant land and the increasing population.
- 2) To address the problems of unemployment, poverty and malnutrition.
- 3) To tackle the hazards of natural calamities and destruction of standing crops.
- 4) To increase utilization of irrigation potential, promote water conservation, efficient water management and expansion of irrigation facilities.
- 5) To wean away jhumias from their traditional practice of jhuming and conversion of Jhum lands into permanently cultivable tracts through horticulture development.
- 6) To restrict increasing pressure for diversion and transfer of productive horticultural lands for non horticultural purposes.
- 7) To arrest land degradation and environmental pollution caused by wanton and unscientific extraction of natural resources in specific areas of the State.
- 8) To address the problem of inadequate credit flow to farmers from financial institutions due to the absence of land documents.
- 9) To develop areas of untapped potential, thereby correcting uneven development and reducing regional imbalance.

1.2.4. ELEVENTH PLAN PRIORITIES:-

(a). Production of Quality Planting Material: A Seed certification Agency will be established in the State. HYV and Hybrid seeds to be sourced from reputed seed companies. Quality seeds and planting material of local indigenous crops will also be preserved and multiplied.

(b). Irrigation: Ensuring 24/7 water availability from completed, ongoing and new irrigation projects. Rain water harvesting through conservation ponds and community tanks, including the use of micro irrigation, participatory irrigation management and use of Hydrams will be popularized.

(c). Crops Strategies: Food grains production would be increased by using Hybrid varieties through area expansion and reclamation. Commercial ventures and expansion of high value low volume vegetables like Strawberries, colored Capsicum, Gherkins, Cherry Tomatoes, Asparagus, Broccoli and floricultural crops like Roses, Anthurium, Lilliums, Gerberas, carnation, BOP, Heliconia, Leather leaf, etc.will be encouraged.

(d). Post Harvest Management A cold chain on the major arterial highway viz., Jowai-Shillong-Guwahati and Tura-Resubelpara-Guwahati will be established.

Marketing-State SFAC, DRDA, NaRM Groups of MRDS, CDMU's to play proactive role in market intervention of crops including creation of appropriate market linkages between farmers and buyers.

(e). Exports: Setting up of Phyto-sanitary Laboratory and Plant Quarantine Stations to promote exports to neighboring countries and South East Asian Countries.

(f). Processing and Value addition: Encouraging Fruit processing and value addition ventures in the private sector with the government playing a facilitator role.

(g). Research: DNA fingerprinting, geographical indication of indigenous crops will be taken up.

(h). Extension: Extension reforms on ATMA model will be implemented along with the use of ICT to provide improved services to the farming community.

1.2.5. FOCUS CROPS:-

(1). Thrust on commercial floriculture for flowers like roses, anthuriums, liliuems, gerberas, carnation, BOP, Heliconia, leather leaf and other foliage plants.

(2). Low volume and high value horticultural crops mainly strawberries, colored capsicum, cherry tomatoes, gherkins, asparagus broccoli.

1.2.6. THRUST AREAS:-

1. Ensuring remunerative prices for the horticulture producers especially the small and marginal farmers.

3. Promotion of farm mechanization with small power tillers adaptable to the topography of State and popularization of new machineries to reduce cost of cultivation on manual labour and consequently to enhance timely sowing of crops.

4. **Setting up of State Seed Certifying Agency and strengthening of the existing State Seed Testing Laboratory.**

5. **Establishment of a cold chain along major arterial highways viz. Jowai –Shillong –Guwahati and Tura –Resubelpara –Guwahati. A cold chain essentially comprises a network of cold storage facilities (of different capacities) along with a fleet of Reefer vehicles to transport the produce from one cold storage to another. The operation can be in a PPP model or on least bases with private entrepreneurs.**

6. Building up the processing and value addition segments to tap the ever growing market for processed products while generating meaningful employment to the people.

7. Encouraging commercial ventures and expansion of cluster areas under low volume High value horticultural and floricultural crops.

8. Strengthening the holistic and integrated development of horticulture in water shed projects along with convergence of the scheme of other line departments coupled with effective re-organization of water shed personnel in the implementation the water shed programmes.

1.2.7.

STRATEGIES:-

- **Cluster approach:** Crop-specific and location specific clusters including sub-clusters will be the principal method of intervention all over the state. Holistic “Concept to Completion” (c-c) approaches with recommended package of practices will be administered to create a visible and long lasting impact within that crop cluster.
- **Setting up of Crop Development and Marketing Units (CDMUs)** - CDMU's will be the principal vehicle to create market linkage between the farmers and the buyers. Existing Extension Officers of the department will be retrained to manage all the marketing related aspects including crop development of the cluster in projectised mode.
- **Restructuring Organizational set-up** – The present strength of Officers comprising of 133 Grade III and 82 Grade II Officers will be designated as Project Managers to manage the CMDU's along business lines, thereby injecting the desired level of professionalism with requisite responsibility and accountability.
- **Training-** Existing Training Centers of the department will be upgraded on the lines of HTC, Pune. Farmers's field school type of training and cluster demonstrations will be given more emphasis. **Besides the above, training on Post Harvest Management will be taken up intensively and extensively during the Eleventh Plan. The Department will take up sponsorship of the educated un-employed youth of the State for short term and long term training in fruit processing , fruit preservation and marketing which have vast potential employment and income generation.**
- **Centres of Excellence-** Under the Technology Mission on Horticulture (TMH), a notable achievement is the coming up of Centres of Excellence in 2 districts (Ri Bhoi District for Roses and Strawberries and East Garo Hills District for Anthurium). Replication of such Centres of Excellence in different crops in the remaining 5 Districts would be another goal during the coming plan period.
- **Fruit Processing-** The 2 (two) Departmental Fruit Processing Units have not fared well because of system constraints and hence, privatization of their management is imperative in order to exploit the tremendous scope in this Sector.

1.2.8. PROPOSED OUTLAY FOR THE 11TH PLAN (2007-2012) AND ANNUAL PLAN 2007-08:-

The Eleventh Plan proposed outlay for Horticulture Development is **Rs 20,000.00 lakh**. For the Annual Plan 2007-08, the proposed outlay is **Rs 1600.00 lakh**. The broad breakup of the proposed outlay for the 11th Plan and Annual Plan 2007-08 is as indicated in the table below:-

(Rs. Lakhs)

Sl no	Name of scheme	Tenth Plan approved outlay	Actual Expenditure 2002-03 to 2005-06	Annual Plan 2006-07	Total (4+5)	11 th Plan 2007-12 proposed outlay	Annual Plan 2007-08 Proposed outlay
1	2	3	4	5	6	7	8
1	Direction and Administration	111.15	118.77	35.00	153.77	620.00	44.00
2	Manure and Fertilizer	90.95	101.52	32.00	133.52	5951.00	515.00
3	Plant Protection	69.23	89.11	25.00	114.11	330.00	45.00
4	Commercial Crop	528.90	725.61	208.00	933.61	2,210.00	215.00
5	Extension and Training	33.23	20.82	8.00	28.82	410.00	28.00
6	Horticulture and Vegetable crops	1278.82	880.68	462.00	1342.68	10,479.00	753.00
7	Other Expenditure						
8	Land Acquisition	37.72	36.92		36.92		
9	Total : Horticulture	2150.00	1973.43	770.00	2743.43	20,000.00	1600.00
10	Agril Marketing	415.00	272.37	128.00	400.37	1250.00	350.00

1.2.9 AGRICULTURAL MARKETING

Agriculture Marketing plays a vital role in the development of rural economy. A properly organized marketing ensures remunerative return to the farmers for their produce and in turn help in augmentation of production. Meghalaya has immense scope for development of Horticulture through diversification and intensification of production plans.

The proposed outlay for the Eleventh Plan (2007-2012) is **Rs 1250.00 lakh**. The expenditure incurred during the first four years of the 10th Plan was **Rs 272.37 lakh**. An outlay of **Rs 350.00 lakh** has been proposed for the Annual Plan 2007-08 as per table below:-

(Rs lakhs)

Sl No	Name of scheme/ programme	Tenth Plan approach outlay	Actual Expenditure 2002-03 to 2005-06	Annual Plan 2006-07	Total (4+5)	11 th Plan 2007-12 proposed outlay	Annual Plan 2007-08 Proposed outlay
1	2	3	4	5	6	7	8
1	Agril Marketing	415.00	272.37	128.00	400.37	1250.00	350.00
	Total	415.00	272.37	128.00	400.37	1250.00	350.00

1.3. SOIL AND WATER CONSERVATION

1.3.1. The Tenth Plan Outlay for Soil & Water Conservation sector is Rs.5000.00 lakhs. The expenditure incurred from 2002-03 to 2005-06 was Rs.3926.73 lakhs. The approved outlay during 2006-07 is Rs.1200.00 lakhs and the entire amount is expected to be utilized in full. The anticipated expenditure for the Tenth plan comes to Rs.5126.73 lakhs. **The proposed outlay for the 11th plan period (2007-2012) is Rs.15000.00 lakhs. and the proposed outlay for 2007-08 is Rs.2400.00 lakhs.**

1.3.2. Achievements made during the Tenth Plan Period:-

During the Tenth Plan period, erosion control work was made covering an area of 4611 hectares, afforestation covering about 770 hectares and also irrigation works to 1830 ha. Watershed Development Project in shifting cultivation areas under Special Central Assistance was implementing with effect from 1999-2000. The main programmes include contour bunding, crop demonstration works, spur/gabion structure, water harvesting/farm ponds, peripheral bunding of about 7.10 lakhs Rs. The department is also implementing Soil & Water Conservation programmes under RIDF-NABARD Loan. 11 (eleven) numbers of projects under RIDF-IX was sanctioned and the works are still continuing upto 2006-07. During the 11th Plan, more new projects will be included under the programme.

1.3.3. Objectives of the 11th Plan :-

- * Enhancing and sustaining productivity of land available for primary production systems (crop cultivation, livestock raising and forest management).
- * Maintaining beneficial relationship between land and water to reduce hazards of drought and flood.
- * Generating additional employment opportunities and income for secured livelihood in rural areas.
- * Supporting the community's demand for food, water and energy by improving the productivity of natural resources.

1.3.4. Schemes/Projects for the 11th Plan:-

i) **Soil and Water Conservation in General areas:-** The activities taken up under this programme are those which are not identified within a major package programme or watershed management. Such activities are taken up in an individual farmer's field or in community land. Identification and selection of the activity are spread throughout the entire area of the State where many individuals have derived benefits from the programme. Keeping in view the popularity of the programme, particularly for the small farmers of the State, this programme needs to be continued during the 11th Plan period.

ii) **Jhum Control scheme :-** The Scheme for control of extensive jhum cultivation is still being continued, though in a smaller scale with few items of work. It is felt that the scheme needs to be continued as it is observed that the jhummi families cannot leave their jhum fields straightaway. The department therefore is trying to find out ways and means to reduce the area under jhum by improving the jhum practice with scientific method.

iii) **Watershed/ Water Resources Management Programme :-** This programme aims at integrating various soil and water conservation measures to be taken up in selected micro watersheds. The activities include land development, drainage line treatment, water harvesting/ water conservation and distribution, afforestation, agro-forestry as well as horticultural plantation & crop development and construction of check dams. The sustained production of food, fuel, forage, fibre, fruits and water by the management of vital resources of water, soil and vegetation are determined by the nature of watershed functioning.

1.3.5 New development strategy for the Eleventh Plan Period.

i) **Improved Jhum Cultivation**-Based on past experience, the deptt realized the need to slightly alter the strategy in respect of Jhum Cultivation. An alternative method to develop Jhum Cultivation based on the proven technologies like Slopping Agricultural land Technology(SALT) is proposed to be taken up during the 11th Plan. This new strategy is primarily to reduce the area covered under Jhum cultivation. This new strategy is primarily to reduce the area covered under jhum to take up cultivation scientifically in the same area /plot for a period of 3 to 5 years instead of one year period.

ii) **Jatropha Cultivation**:-During the Tenth Plan Period, the Department started creation of Jatropha plantation through the assistance of the NOVOD Board (National Oilseeds and Vegetable Oils Development board).During the Eleventh five Year Plan, the Department will explore the possibility of large scale plantation under this crop. An outlay of Rs.961.65 lakhs is proposed for the 11th plan and Rs.126.44 lakhs for the Annual plan 2007-08.

iii)**Improvement of Environment. of Cherrapunjee and surrounding areas**:-The scheme aims at improving and conserving land and water resources through active participation of the people living the area to formulate a long term programme during the 11th Plan.

iv) **Rainwater Harvesting Scheme** :- The department is planning to harvest the excess water received during the rainy season to store in safe reservoirs for recycling during the dry season.

1.3.6. Special Central Assistance on Watershed Development Project in Shifting Cultivation Areas (WDPSCA):

The Department is also implementing the scheme on Water Development Project in Shifting Cultivation Areas through Special Central Assistance. The scheme have been started with effect from 1999-2000 at an outlay of Rs.2062.00 lakhs. The actual expenditure incurred during 2002-03 till 2005-06 was R.1350.00 lakhs. The proposed outlay for the 11th plan period is Rs.4304.00 lakhs and the proposed outlay for 2007-08 is Rs. 194.00 lakhs.

1.3.7 Commercial Crop Development Board :

An outlay of Rs.170.00 Lakhs and Rs 25.00. Lakhs respectively is earmarked as financial assistance (grant-in-aid) to the Meghalaya Commercial Crop Development Board (MCCDB) for running of the Board Office during the 11th Plan and Annual Plan 2007-08 respectively.

1.3.8. NABARD LOAN: During the Tenth Five year Plan,11(eleven) projects were sanctioned under RIDF. These schemes were implemented and are still continuing upto 2006-07.The proposed amount for the Eleventh plan period is Rs.1100.00 lakhs and the proposed amount for 2007-08 is Rs.200.00 lakhs.

1.3.9. The broad break up of the proposed outlay for the 11th Plan period and the Annual Plan 2007-08 is as indicated in the table below :-

(Rs. Lakhs)

Name of scheme	Proposed Outlay for the 11 th Plan	Proposed Outlay for Annual Plan 2007-08
Direction & Administration	1446.00	343.00
Soil Survey & Testing	34.00	5.00
Soil Conservation Scheme	3100.00	375.00
Extention & Training	260.00	45.00
Other Expenditure	5000.00	800.00

Name of scheme	Proposed Outlay for the 11 th Plan	Proposed Outlay for Annual Plan 2007-08
Watershed/Water Resources Management Programme	5000.00	800.00
Agricultural Research & Education	10.00	2.00
Housing -01-Govt. Resi-Bldg	150.00	30.00
Total	15000.00	2400.00

1.3. 10. Centrally Sponsored Scheme

The department also proposed to take up the following centrally sponsored scheme:-

i)Improvement of Environment of Cherrapunjee and surrounding areas:The scheme aims at formulating a long term programme during the Eleventh Five Year Plan. The proposed outlay for the 11th Plan is Rs3000.00 lakhs and Rs. 300.00 lakhs for the Annual Plan 2007-08

ii)Rain Water Harvesting:The department proposes to take up the scheme to harvest this excess water received during rainy season and store it in safe reservoirs for recycling during the dry season/period by construction of percolation ponds. This scheme is proposed in order to tide over the scarcity of water problem in the state. An outlay of Rs.5000.00 lakhs and Rs.500.00 lakhs is proposed for the 11th Plan and Annual plan 2007-08.

iii)Reclamation of Acid: The soil of Meghalaya are very rich for growth of all types of flora. However, there are many places where soils are highly acidic,(soils that have pH value of less than 5). The se soils need to be treated with gypsum or limestone. The Central Govt. is giving a lump sum of Rs.7000/- per hectare for treatment of acid soils. The Soil & Water Conservation department desires to take advantage of this Govt. of India's programme which is proposed to be started from the 11th Plan period. The Deptt. proposes an outlay of Rs.500.00 lakhs for the 11th plan and Rs50.00 lakhs for the Annual Plan 2007-08.

1.4. ANIMAL HUSBANDRY

1.4.1. Animal Husbandry & Veterinary Sector plays an important role for increasing production of animal origin food like milk, eggs & meat The approved outlay for the Tenth Plan is Rs.5500.00 lakhs. The actual expenditure incurred during the first four years of the Plan period is Rs.2612.01.The approved outlay for 2006 – 2007 is Rs. 900.00 lakhs which is expected to be utilised in full. Thus the anticipated expenditure during the Tenth plan is Rs.3512.01 lakhs which work out to 93.55% as against the Revised Outlay of Rs. 3754.00 lakhs as indicated below:-

Sector	Year	(Rs. Lakhs)	
		Revised Outlay	Actual Expenditure
A.H. & Veterinary	2002 - 2003	700.00	604.34
	2003 - 2004	711.00	569.27
	2004 - 2005	689.00	683.89
	2005 - 2006	754.00	754.51
	2006 - 2007	900.00	900.00
			(Anticipated)
	Total	3754.00	3512.01

1.4.2 **PHYSICAL ACHIEVEMENT:** The key items for assessment of achievement under this sector are (i) Meat production (ii) Egg Production (iii) Artificial Insemination (iv) Poultry Farms (v) Pig Farms (vi) Sheep Farm (vii) Veterinary Hospital (viii) Veterinary Dispensary (ix) Veterinary Aid Centre. Summary of achievement is as indicated in the table below:-

Items	Units	Tenth Plan Target	Actual Achievement from 2002 - 2003 to 2005-2006	Anticipated Achievement up to the end of Tenth Plan 2002-2007
<u>A.H. Products</u>				
1. Meat	000' tonnes	40.83	36.55	37.00
2. Eggs	Million Nos	100.00	97.25	98.00
<u>A.H. Programmes</u>				
1. Artificial insemination	000' Nos annually	38.0	26.14	38.0
2. Cattle & Buffalo Farm	Nos	5	5	5
3. Sheep & Goat Farm	Nos	2	2	2
4. Pig Farm.	Nos	13	10	11
5. Poultry Farm.	Nos	13	12	12
6. Veterinary Hospital	Nos	5	4	4
7. Veterinary Dispensary	Nos	80	70	74
8. Veterinary Aid Centre	Nos	65	60	58

1.4.3. The Strategy to increase livestock production is by involving large number of people in livestock production. The number of beneficiaries assisted during the Tenth Plan period is as follows:-

Distribution of Units to the Farmers (General)	Actual achievement				Anticipated Achievement 2006-2007	Total
	2002-03	2003-04	2004-05	2005-06		
A.1. Poultry	-	-	117	117	117	351
2. Piggery	56	-	60	62	62	240
3. Goatery	20	-	32	32	32	116
4. Dairy	-	-	-	-	-	-
B. Employment Generation to Educated Un-employed Youth						
1. Poultry/Broiler Farming	37	-	37	37	37	148
2. Piggery Farming	37	-	25	25	25	112
3. Dairy Farming	-	-	54	54	54	162

Distribution of Units to the Farmers (General)	Actual achievement				Anticipated Achievement 2006-2007	Total
	2002-03	2003-04	2004-05	2005-06		
C. Assistance to SF/MF and AI for rearing of cross breed Heifers	-	-	-	-	-	-
2. Poultry Production for SF/MF & AI	18	-	22	26	30	96
3. Piggery Production for SF/MF & AI.	61	-	25	27	30	143
Grand Total	229	-	372	380	387	1368

1.4.4. **PROGRAMME FOR THE ELEVENTH PLAN (2007-12) & ANNUAL PLAN 2007-08**

Considering the present state of development of Animal Husbandry in Meghalaya, the state will continue to devote on development of infrastructure & create condition to increase production of animal products like milk, meat and eggs and also to generate self employment to the people. Target fixed for production of meat & egg during the Eleventh Plan Period is 42,000 tonnes and 110 million nos. respectively. The approach to the 11th Plan is to achieve the objective and target as enumerated below :-

1. Enhancing & sustaining productivity of Livestock & Poultry.
2. Upgrading & improving local Livestock & Poultry & make available improved variety & livestock & poultry bird to the farmers.
3. Attain self-sufficiency in meat, milk and eggs.
4. Improvement of Livestock Services viz. Veterinary Health Care Vaccination & A/ I.
5. Professionalisation of Veterinary Services.
6. Generate additional employment opportunities to educated unemployed youths & farmers to increase production.

1.4.5. **Proposed Outlay for the 11th Plan (2007-12) and Annual Plan 2007-08 :**

The proposed outlay for the Eleventh Plan for this sector is Rs. 10500.00 lakhs and the outlay proposed for the Annual Plan 2007 – 2008 is & Rs. 2000.00 lakhs. The detailed programmes proposed are summarised below:-

1. Direction & Administration :

The main objectives of the scheme is to strengthen the present administrative set up of Directorate office & upgradation of the Joint Director's Office, Tura, District Offices, Sub-Divisional Offices , Engineering Establishment & Information wing. **The total outlay of Rs. 520.00 lakhs is proposed for the 11th Plan & Rs. 99.00 lakhs for the Annual Plan 2007 – 2008.**

2. Veterinary Services & Animal Health:

The State Health Cover Policy aim at increasing production and reduce economic loss of farmers by reducing mortality and morbidity. Norms as laid down by Government of India to provide 1(one) Vety. Dispensary or Vety. Aid Centre for every 5000 Cattle Heads and distance of 10 Km are being followed in the State. Based on projected Livestock Census the present requirement of Veterinary Institutions comes to 170 nos. The total number of existing Veterinary Dispensary & Veterinary Aid Centre is 70 Nos & 58 Nos respectively. Hence 20 Nos of New Veterinary Dispensary is proposed to be set up during the Eleven Plan Period. Further, with the implementation of Veterinary Council Act 1984, the existing Veterinary Aid Centres which were manned by the para Veterinary Personnel is also proposed to be upgraded into a full fledged Veterinary Dispensaries to be manned by a qualified Veterinary Practitioner. Veterinary Hospital at Shillong/Tura/Jowai & Nongstoin will be further strengthened & equipped with modern machineries & equipments for diagnosis & treatment of various diseases in the Districts. The spill over schemes for construction / upgradation of 4(four) New Veterinary Dispensaries Jongksha / Nongspung/ Nagalbibra / Rongchugre during the 10th Plan Period will also be completed during the 11th Plan. **The total outlay proposed for the programme for the 11th Plan is Rs. 2115.00 lakhs & Rs, 390.00 lakhs for the Annual Plan 2007 – 2008.**

3. Cattle Development :

Improvement of nondescript indigenous Cattle by Cross Breeding Programme with exotic breed by means of artificial insemination using frozen semen technology will continue. The numbers of Cross Bred Cattle population of the state constitute only 3.00% of the total Cattle population. During the 11th Plan it is proposed to increase the number of cross bred population to be achieved by increasing the coverage of Artificial Insemination by 20% per year.

The Existing Cattle Farms in the State will be strengthened to be able to supply good quality inputs (breeding animal of high quality) to the farmers & to contribute enhancement of milk production in the State.

In order to encourage and involve people participation in Cattle breeding & farming the existing scheme for distribution of Dairy units, feed subsidy for rearing of Cross Bred & Dairy Farming for Educated Unemployed Youth will continue with a larger outlay in order to cover more beneficiaries.

SL. No.	Items	Likely to be achieved in 11th Plan Period	Target for 2007 – 2008.
1.	Distribution of Dairy Unit (General)	50	10
2.	Feed Subsidy for rearing of Cross Bred Heifer.	200	40

Further with the objective to attain self sufficiency in meat, milk & eggs a new policy to invite Private Sector investment in the fields of Livestock & Poultry is proposed to be adopted by setting up of Livestock Development Board in the State. To ensure supply of good quality breeding stock of high quality it is proposed to set up a new cattle farm at Samgong in East Garo Hills during the 11th Plan Period. **An outlay proposed for the 11th Plan is Rs. 940.00 lakhs & Rs. 184.00 lakhs for 2007 – 2008.**

4) Poultry Development:

Eggs production in the State is far below the requirements. In order to ensure targeted production of eggs, the state is to re-orient its Poultry Breeding Farms, Broiler Farms and Duck Farms to meet the demand for chicks, eggs and broiler meat. The proposed re-orientation is focus on production of Layers Chicks, Broiler Chicks and Eggs production.

Further, In order to encourage and involve people in Poultry production, the existing schemes for distribution of Poultry Unit, Piggery production under SLBP and Poultry/Broiler Production schemes for educated un-employed youth will continue with larger outlay to cover more beneficiaries. The targeted beneficiaries to be covered under this scheme are :-

Items	Likely to be achieved in 11th Plan	2007 - 2008
i) Distribution of Poultry Unit	555	117
ii) Poultry Production under SLBP	200	30
iii) Poultry/Broiler Production of Educated Un-employed Youth	175	35

Past experienced shows that due to high cost of feed, many beneficiaries were unable to continue the schemes without support from Government. To overcome this constraint and make it sustainable it is proposed to ensure linkage with schemes for supply of feed subsidy to farmers under Feed and Fodder Development.

Rural Cluster Approach on Poultry Development to increase meat & eggs production is proposed to continue during the 11th Plan. **An amount of Rs.1180.00 lakhs is proposed for 11th Plan and Rs. 211.00 lakhs for 2007 – 2008.**

(5) Sheep, Goat and Rabbit Development :

With a view to popularizing Gaotery for meat production, one sheep and Goat Farm in West Khasi Hills was started during the Eight Plan. About 1200 kids both male and female is expected to be produced for the supply to farmers after keeping in reserve the required numbers in the farm for breeding purpose. In order to encourage and involve people in Goatery Production, the scheme for distribution of Goatery unit will continue with larger outlay to cover more beneficiaries.

Rabbit Farms:

Rabbit farming is very much encouraging to increase meat production, It is economically viable in rural areas because of less investment cost due to availability of local materials for housing and feeding and the return is expected to be high. The only Rabbit farms in the state are to be improved and strengthened to produce result and impact on the economy of farmers. A new Thrust is to be given in this aspect through training, adoption of modern system of management and breeding in collaboration with ICAR for NE region. **An outlay of Rs. 80.00 lakhs is proposed for the 11th Plan and Rs. 14.00 lakhs for 2007-2008 for Sheep, Goat and Rabbit Development.** The target of the beneficiaries to be covered under the scheme distribution of goat unit are as follows :

Item	Likely to be achieved in 11th Plan	2007 - 2008
i) Distribution of Goatery Unit	308	46

(6) Piggery Development:

Piggery is common among the people of Meghalaya. It is almost a way of life for every household in rural areas. There is one Regional Pig Breeding Farm and 9 District Piggery Farms. The State has the potentiality to show the best result in piggery production. All existing pig farms therefore need to be suitably strengthened to meet the demand for Breeding Stock. Some more pig Demonstration farms are to be set up in the Blocks which have not been covered by existing Farms.

- (i) The Regional Pig Breeding Farm will maintain 100 sows with 25 Boars and the targeted production of piglets is 1560 annually.
- (ii) 5(five) District Piggery Farms viz. Mawryngkneng, Tura, Jowai, Rongjeng, & Nongstoin will maintain 30 sows and 5 Boars each. Their targeted production of piglets is 465 annually each.
- (ii) 4(four) District Piggery Farm viz. Mairang/Dalu, Pynursla & Sohra will maintain 20 sows and 3 Boars each. Their targeted production of piglets is 290 annually each.
- (iii) **The New Scheme** proposed during the 11th Plan Period is to set up 2(two) Base Piggery Breeding Farm at West Garo Hills & Jowai to cater to the need of breeding stock of pigs in East/West & South Garo Hills & Jaintia Hills District.
- (iv) **Piggery farming for educated un-employed youth:**

In order to encourage and involve people in Piggery Production, the existing schemes for distribution of Piggery units, Piggery Production under SLBP and Piggery farming for Educated Un-employed Youth and Rural Cluster Approach on Piggery Development will continue with much larger outlay to cover more beneficiaries. To ensure continuity and make them sustainable, there will be linkage with the scheme for providing feed subsidy to farmers under Feed and Fodder Development.

The targeted beneficiaries to be covered under the scheme are:-

Items	Likely to be achieved in 11 th Plan	2007 - 2008
i) Distribution of Piggery Unit	300	50
ii) Piggery Production under SLBP	250	40
iii) Piggery farming for Educated Un-employed Youth	153	26

An amount of Rs.1100.00 lakhs is proposed for the 11th Plan and Rs.190.00 lakhs for 2007 – 2008 for Piggery Development.

(7) Feed and Fodder Development:

Two existing feed mill located at Umsning and Tura will be improved to enhance their utilization capacity. The Feed Analytical Laboratory Kyrdekulai will be provided with all necessary equipments and machineries for its modernization. One New Feed Analytical Laboratory is proposed to be set up in Garo Hills to facilitate quick analysis of Feed as the present Laboratory is located at a very far distance from Garo Hills. The existing fodder farms in the State have been able to cater to requirement of fodder for Government Cattle Farms. The production could be augmented further with provision of Tractors and Power Tiller etc. Provision has, therefore, been made to provide for these items. Distribution of seeds, minikits will continue to increase fodder production. **An outlay of Rs. 395.00 lakhs for 11th Plan and Rs. 78.00 lakhs for 2007 – 2008 is proposed.**

(8)Administrative Investigation & Statistics: The Govt. of India have recommended the expansion of Integrated Sample survey for estimation of major Livestock Product. Hence **an amount of Rs. 150.00 lakhs is proposed for the Eleventh Plan and Rs. 25.00 lakhs to cover the State Share for meeting the pay & allowances of the staff.**

(9)Education Research & Training: There is a growing demand of prospective farmers to get adequate training in modern Animal Husbandry Practices and basic knowledge about management feeding and health care. Besides, a larger number of beneficiaries under different schemes will be covered during the 11th Plan. The Vocational Training Centres needs to be strengthened with additional training infrastructure and staff and additional Hostel accommodation for farmer trainees. In service Personnel will regularly be sent for specialized training in different Institutions in India preferably in the subject of his specialization (Job assignment basis). Candidates would also continued to be sponsored for training in B.V.Sc. Course./ B.Sc (Dairy Tech) and V.F.A. Training Course. **An amount of Rs. 309.00 lakhs is proposed for 11th Plan and Rs. 86.00 lakhs for 2007 – 2008 for Education and Training and for Research an amount of Rs. 80.00 lakhs for 11th Plan and Rs. 15.00 lakhs for 2007 – 2008 is proposed.**

(10)Infrastructure –Construction & Improvement of Residential & Non Residential Building: During the 10th Plan and earlier, infrastructures were created by setting up numbers of Cattle Farms, Pig Farms, Poultry Farm, Feed Mills & Veterinary Institutions like Vety. Hospital/Dispensary/Aid Centres. The new schemes viz. Establishment of Veterinary Dispensary, Up-gradation of Veterinary Aid Centre, Modernisation of Veterinary Hospital, Establishment of Livestock Development Board, establishment of new Cattle Farm at Samgong in East Garo Hills, Rural Cluster Approach for Poultry & Piggery

Development, Establishment of Base Piggery Production Farm in Garo Hills & Jaintia Hills, Establishment of Vocational Training Centre at Jaintia Hills & West Khasi Hills are proposed to be taken up during the 11th Plan Period. **The proposed outlay for the Eleventh plan is Rs.3631.00lakhs and for the Annual Plan 2007-08 is Rs.708.00 lakhs.**

11. NEW SCHEMES PROPOSED FOR 11TH PLAN STARTING FROM 2007 - 2008.

1. With the view to increase meat & eggs production in the state for self reliance, the Department felt necessary to establish 2(two) nos. of Base Piggery breeding farms one each in Garo Hills & Jaintia Hills District for production of Piglets for farmers.
2. **A new policy to motivate participation of private partnership (PPP) in Livestock and Poultry production is proposed to taken up. In this regard the Department proposes to set up the Meghalaya Livestock Dev. Board for the purpose.**
3. Further, Improvement in Livestock Services will be taken up by the Department for this purpose. New Veterinary dispensary & infrastructure for New Vocational Training Centres are proposed to be established in different districts of the State.
4. At present there are only 4(four) Cattle Breeding Farms in the State located in East Khasi Hills, Jaintia Hills, Ri-Bhoi & West Garo Hills districts. To strengthen Cattle Development Programme in Garo Hills the Department proposed to set up 1(one) Cattle Breeding Farm, in East Garo Hills district.

1.4.6. CENTRALLY SPONSORED AND CENTRAL SECTOR SCHEMES.

The following are the Centrally Sponsored Schemes proposed to be continued during the 11th Plan Period.

1. Professional Efficiency Development- Establishment of State Veterinary Council.
2. Assistance to State for Control of Animal Disease (ASCAD).
3. National Project on Rinderpest Eradication (NPRE)
4. Sample Survey for estimation of Major Livestock Products.
5. Livestock Census.
6. National Project for Cattle & Buffalo Breeding.
7. Livestock Insurance Scheme.

Government of India is requested to retain all the above mentioned scheme for continuation in the Eleventh Plan Period. **The proposed outlay for the 11th Plan is Rs. 2745.00 lakhs and for the Annual Plan is Rs. 635.00 lakhs.**

1.4.7. **The broad break –up of the proposed outlay for the 11th Plan (2007-12) and Annual Plan 2007-08 in respect of Animal Husbandry and Veterinary sector are indicated in the Table below:-**

Sl. No.	Name of programme / scheme	(Rs. Lakhs)	
		11 th Plan 2007- 12 Proposed Outlay	Annual Plan 2007-08 Proposed Outlay
1.	Direction and Administration	520.00	99.00
2.	Vety. Services & Animal Health	2115.00	390.00
3.	Cattle and Buffalo Development	940.00	184.00
4.	Poultry Development	1180.00	211.00
5.	Sheep and Goat Development	80.00	14.00
6.	Piggery Development	1100.00	190.00
7.	Fodder & Feed Development	395.00	78.00
8.	Administrative Investigation & Statistics	150.00	25.00
9.	Research	80.00	15.00
10.	Education	309.00	86.00
11.	Infrastructure	3631.00	708.00
	Total	10500.00	2000.00

1.5. DAIRY DEVELOPMENT

1.5.1 The Tenth Plan approved outlay for Dairy Sector is Rs.800.00 lakhs. The actual expenditure incurred during the first four years of the Plan period including the anticipated expenditure for 2006 -07 is Rs. 635.37 lakhs as against the outlay of Rs. 731.00 lakhs which work out to 86.92%. as indicated below:-

<u>Year</u>	<u>Outlay</u>	<u>Actual Expenditure</u> (Rs. Lakhs)
2002-03	122.00	67.83
2003-04	125.00	94.06
2004-05	134.00	126.44

2005-06	160.00	153.58
2006-07	190.00	190.00 (Anticipated)
Total	731.00	635.37

1.5.2. Achievement of milk production in the State during the Tenth Plan Period is indicated below :-

Items	Units	Tenth Plan Target	Achievement 2005-06	Anticipated achievement by the end of Tenth Plan
Milk	'000'tonnes	93.17	74.00	76.00

1.5.3. **Employment Generation Scheme:-** With the objective to generate employment and increase milk production in the State, a Dairy Farming Scheme for Educated unemployed youth was taken up in the Tenth Plan Period and the anticipated beneficiaries (un-employed youth) to be assisted up to the end of the 10th Plan is 162 Nos. Dairying is one of the enterprises which have the potential for gainful and productive employment to the people. A rational approach to Dairy Development has been evolved by setting up of a number of Milk Chilling Plants in different districts to provide remunerative market for the milk producers for sale of their products and also to ensure supply of quality milk to the consumers.

1.5.4. **Integrated Dairy Development Project in non – operation hilly & backward areas (CSS):-** Implementation of the Centrally Sponsored Scheme viz; – “Integrated Dairy Development Project in non – operation hilly & backward areas” have been made in the District of Jaintia Hills & Garo Hills. Under this scheme, the existing installed capacity of the Dairy Plant at Jowai & Tura have been enhanced from 2000 litres per day to 8000 litres per day for each Plant.

1.5.5. PROGRAMMES FOR THE 11TH PLAN (2007 – 2012) AND ANNUAL PLAN 2007 – 2008:-

(a). **The outlay proposed for Dairy Development Sector for the 11th Plan is Rs. 2200.00 lakhs and for the Annual Plan 2007 – 2008 is Rs. 400.00 lakhs.** Milk production up to 2005-06 is 73.43 thousand tonnes and the anticipated achievement during the Tenth Plan is 76.00 thousand tonnes. The target for milk production for the 11th Plan is fixed at 95.00 Thousand tonnes and for the Annual Plan 2007-08 is 77.20 Thousand tones.

(b) There are 5(five) milk Chilling Plants and one Creamery & Ghee making Centre in the State. The installed capacity and the present utilisation is shown in the table below:-

Sl No	Name of the Plant	Installed capacity per day	Present utilisation per day	Target for the 11 TH Plan
1.	Central Dairy Mawiong,Shillong	10,000 ltrs	4000	10,000
2.	Town Milk Supply, Tura	8,000 ltrs	800	8,000
3.	Rural Dairy Extension Centre, Jowai.	8,000 ltrs	800	8,000
4.	Chilling Plant, Nongstoin	2,000 ltrs	100	1,000
5.	Chilling Plant, Gangdubi.	2,000 ltrs	100	1,000

With the expansion of the Dairy Plant at Jowai & Tura and with the implementation of the new policy in respect of procurement & marketing of milk where the same is now being handled by the Registered District Societies, it is expected that the utilization capacity of the Plants will be maximised up to its installed capacity to ensure procurement & distribution of good quality pasteurized milk to the consumers.

(c) **Employment Generation Scheme:-** The employment generation scheme for taking up Dairy Farming as implemented during the 10th plan is proposed to be continued in the 11th Plan Period with a larger outlay so as to cover 364 beneficiaries especially for educated un-employed youth.

(d) **New Schemes :-** During the 11th Plan it is proposed to establish one Dairy Plant each for East Garo Hills and West Khasi Hills to provide remunerative market for the milk producers for sale of the product and also to ensure supply of quality milk to the consumers of these two districts.

1.5.6. The broad break –up of the proposed outlay for the 11th Plan (2007-12) and Annual Plan 2007-08 are as indicated in the Table below:-

Sl. No.	Name of programme / scheme	11 th Plan 2007- 12 Proposed Outlay	(Rs. Lakhs)
			Annual Plan 2007-08 Proposed Outlay
1.	Direction and Administration	30.00	6.00
2.	Employment Generation	250.00	50.00
3.	Cattle –cum Dairy Development	1220.00	220.00
4.	Construction and improvement of Residential and Non- Residential Buildings, etc.	700.00	124.00
	Total	2200.00	400.00

1.6 FISHERIES

1.6.1. The Tenth Plan outlay of Fisheries sector is Rs.1100 lakhs. The actual expenditure incurred during 2002-03 to 2005-06 was Rs.655.75 lakhs. The approved outlay for 2006-07 is Rs.440.00 lakhs which is expected to be fully utilized. The anticipated expenditure for the Tenth Plan period is Rs.1095.75 lakhs. **The proposed outlay for the Eleventh Five Year Plan is Rs.4500.00 lakhs and the proposed outlay for the Annual Plan 2007-08 is Rs.600.00 lakhs.**

1.6.2. During the Eleventh Plan, it is proposed to cover 70.00 hectare water areas with an anticipated fish production of 140 MT (approximately). Awareness programme is also proposed to organize to check and combat unwanted destruction of fishes in collaboration with the NGO;s /Village Headmen/ sardars etc to declare fish sanctuary in some selected rivers/ streams.

1.6.3. Achievements during the Tenth Plan :-

During the Tenth Plan period, the department has achieved about 21.64 thousand tonnes of fish production under the Inland Fisheries scheme. The total number of fry and fingerlings production comes to 3.49 million. The department has also taken up scheme to reclaim and renovate the existing ponds /tanks by providing subsidy to some selected beneficiaries with a view to augment fish production from private sector. Training to fish farmers was also taken up on the modern concept of fish culture for improvement of fish production.

1.6.4. Approach, Objective and Strategy of the 11th Five Year Plan (2007-2012);-

- * To restructure the organization set up and to streamline the system and procedure for smooth functioning of the deptt.

- * To revitalize the existing infrastructure of all departmental farms and to examine the feasibility of upgrading some of these farms into a model fish farm for improving fish seeds.

- * To conserve the valuable indigenous species in the rivers and streams of the State from unwanted destruction by means of poison and dynamite through suitable legislation and public participation and also to create awareness to the public in general.

- * To introduce 2(two) numbers of innovative schemes viz. (1) Culture Development of Mahaseer Fisheries and (2) Culture and Breeding of Ornamental Fisheries.

- * During the 11th Plan, the department proposed to upgrade, improve the existing fish seed Farms, develop research facilities for production of compatible Fish seed suitable to Agro-climatic conditions of the areas well as to involve private sector in the rural areas through financial assistance, grants etc.,

1.6.5. The schemes proposed to be taken up during the 11th Plan are as follows:-

A Direction & Administration:-

This is a continuing scheme which is meant for strengthening and streamlining the activities of the department. It is proposed to create some posts viz Joint Director, Administrative Officer, Statistical Assistances, Fishery Officer, LD assistant cum Typist and Peon. An outlay of Rs.370 lakhs is proposed during the 11th plan period and Rs.50.00 lakhs for the Annual Plan 2007-08.

B Inland Fisheries

i) Fishseed Production and Demonstration centre :- This is an on going scheme meant for the maintenance of the Departmental fish seed farms. The farms serve as the fish seed production as well as demonstration centre for the benefit of the farmers. An amount of Rs.100.00 lakhs is proposed for the 11th plan period and Rs.35.00 lakhs for the Annual plan 2007-08.

(ii) Development of reservoir and Lakes:- This is an on going scheme to develop the reservoirs at Kyrdem Kulai and Nongmahir for fish production. The reservoirs require restocking with quality fish seeds. Modern machineries/equipment are to be provided for a successful harvesting operation. An amount of Rs.100.00 lakhs is proposed for the 11th Plan and Rs.20.00 lakhs for the Annual Plan 2007-08.

(iii) Conservation and Legislation for protection of fisheries:- This is a continuing scheme which is meant to create an awareness on the minds of the public of the need of conservation measures through seminars, workshops etc. to conserve and to maintain the ecological balance with respect to fisheries. An amount of Rs.100.00 lakhs is proposed for the 11th plan period and Rs.15.00 lakhs for the Annual Plan 2007-08.

(iv) Community Fishery Development Project:- This is a continuing scheme which provides financial assistance to the community village society for construction of community pond @ 50% of subsidy to the extent of 1.00 ha water areas and a minimum water area of 0.20 hectare. An amount of Rs.100.00 lakhs is proposed for the 11th plan period so as to cover 70.00 Ha water areas and Rs.40.00 lakhs for the Annual Plan 2007-08.

C. Processing, preservation and marketing:-

i) Marketing and Transport of fish and fishseeds:- This is a continuing scheme meant for transporting of fish seed from production centres to the distribution centres. During the 11th plan period, it is proposed to provide fishseeds of different species to the fish farmers for culture in ponds and tanks at 50% subsidized rate. It is proposed to construct 7 (seven) numbers of ice plants one in each District including purchase of refrigerated van for Garo Hills. An amount of Rs.100.00 lakhs is proposed for the 11th plan and Rs. 25.00 lakhs for the Annual Plan 2007-08.

D. Extention & Training:-This is a continuing scheme which aims at providing training to fish farmers on the modern concept of fish culture through extention machineries with a view to improve fish production. During the 11th Plan period, it is proposed to strengthen the extention programmes further by providing separate provision for training of Officers and staff, organization of seminar, workshops/fish festival in the state. An amount of Rs.75.00 lakhs is proposed for the 11th Plan period and Rs.20.00 lakhs for the Annual Plan 2007-08.

E. Research and Education :-

Research –cum -Fishseed production centre :- This is a continuing scheme which the department had to conduct research works on the breeding of chocolate Mahaseer and to augment the present level of fish seed production from the Research Centre and also to improve the existing infrastructure of the Research Centre. The proposed amount for the 11th Plan period is Rs.25.00 lakhs and for the Annual Plan 2007-08 an amount of Rs.10.00 lakhs. is proposed.

F. Aquaculture Development – One Thousand Ponds : This is a continuing scheme initiated during 2005-06 and proposes to be intensified during the 11th plan period. The scheme is a back ended subsidy with 25% loan and 75 % subsidy. The minimum eligible area is 0.20 Ha subject to a maximum of 1.00 Ha water areas. During the 11th plan period, it is proposed to cover 500 Ha water area with an anticipated fish production of 1000 M T. An amount of Rs.2600.00 lakhs is proposed for the 11th plan period and Rs.280.00 lakhs for the Annual Plan 2007-08.

G. New schemes:-

The department proposed to take up the following new schemes during the 11th plan period.

i) Culture & Development of Mahaseer Fisheries:- This is a new innovative scheme during the 11th plan period for setting up 1 (one) Mahaseer Hatchery unit at the existing Departmental fish farm of Nongstoin. It is proposed to provide financial assistance to fish farmers for taking up Mahaseer culture especially the chocolate Mahaseer at 75% subsidy and 25% beneficiaries own contribution. Financial assistance for construction of Fishery ponds including inputs will be provided as per existing norms @ Rs. 3.60 lakhs / Ha. An outlay of Rs. 50.00 lakhs is proposed for the 11th plan period and Rs.15.00 lakhs for the Annual plan 2007-08.

ii) Culture and Breeding of Ornamental/Aquarium Fishes: The scheme aims at culture and breeding of ornamental / Aquarium fishes in private sector by providing financial assistance to interested fish farmers for taking up the scheme. An amount of Rs. 50.00 lakhs is proposed for the 11th plan period and Rs. 15.00 lakhs is proposed for the Annual Plan 2007-08.

(Rs. Lakhs)

Sl.No.	Name of Schemes	Proposed Outlay for the 11 th Plan period(2007-2012)	Proposed Outlay For 2007-08
1	Direction & Administration	370.00	50.00
2	Inland Fisheries- i) Fishseed Production & Demonstration Centre	100.00	35.00
3	ii) Development of reservoirs	100.00	20.00
4	iii) Conservation & legislation for protection of fishes	100.00	15.00
5	iv) Community Fishery Development Project	100.00	40.00
6	Marketing & Transport of Fish/Fishseeds	100.00	25.00
7	Extention & Training	75.00	20.00
8	Fishseed Production demonstration cum R/centre	25.00	10.00
9	Construction/ Improvement of Depttl resi. Buildings	50.00	20.00
10	Construction/ Improvement of Depttl Non- resi. Bldg	50.00	20.00
11	Aquaculture for Development of One- Thousand Ponds	2700.00	280.00
12	Fish Farmer Dev. Agency (state share)	160.00	25.00
13	National scheme for welfare of fishermen(state share)	200.00	10.00
14	Culture & Dev. of Mahaseer fisheries	170.00	15.00
15	Culture & breeding of ornamental fishes	- 200.00	15.00
	Total	4500.00	600.00

1.6.4. Centrally Sponsored Schemes:-

i) Fish farmer development agency:- This is a Centrally Sponsored Scheme with a component of 25% grant 75% loan or own contribution by the beneficiaries. The 25% grant is shared between the Central and the State Government on the ratio of 25:75 basis. The aim of the scheme is to create more culturable water area for fish production. An amount of Rs 160.00 lakhs is proposed for the 11th Five Year Plan(2007-2012) and Rs.27.00. lakhs for 2007-08.

ii) National Scheme for welfare of Fishermen:- This is a centrally sponsored scheme which was taken up during 2005-06. The cost of development under the scheme will be shared between the State and the Central Govt on a 50:50 basis. The components are housing, drinking water and construction of Community Hal for the fishermen villages. An amount of Rs. 50.00 lakhs is proposed for the 11th plan period and Rs. 10.00 lakhs for the Annual Plan 2007-08.

1.6.5. Central Sector Scheme:-

Strengthening of Data base & Information Networking for the Fishery Sector:- This is a CSS with 100 p.c. assistance from the Govt. of India which aims at survey and identification of the Fishery resources available in the state and at the same time to access and monitor different aspect of activities through Net Working System. An amount of Rs. 50.00 lakhs is proposed for the 11th Plan period and Rs. `12510.00 lakhs for the Annual Plan 2007-08.

1.7. FOOD, STORAGE & WAREHOUSING

1.7.1 The Tenth Plan projected outlay for this sector is Rs.150.00 lakhs. No expenditure was incurred during 2002-03 and during 2003-04 the expenditure incurred was Rs.11.00lakh. The approved outlay for 2006-07 is Rs.15.00 lakhs which is expected to be fully utilized. The anticipated expenditure for the Tenth plan period is Rs.31.00 lakhs. **The proposed outlay the 11th plan is Rs .450.00 lakhs and the amount proposed for 2007-08 is Rs.30.00 lakhs.**

1.7.2. The State Warehousing Corporation has so far constructed a total capacity of 13200 M.T .During the Tenth Plan period, additional capacity proposed to be created is at 0.10 lakhs Metric tones and the Tenth plan anticipated achievement is at 0.125M.T.The Eleventh plan target is 0.10 lakhs MT.The achievement is solely dependent on timely release of equity share both by the Central Warehousing and the State govt.

1.8. COOPERATION

1.8.1. The Tenth Plan outlay for Cooperation is Rs.1700.00 lakhs. The actual expenditure incurred from 2002-03 to 2005-06 was Rs. Rs.1396.51 lakhs. The approved outlay for 2006-07 is Rs.500.00 lakhs. which is expected to be fully utilized.The anticipated expenditure for the Tenth Plan period comes to Rs.1896.51 lakhs **The proposed outlay for the 11th plan period is Rs.5100.00 lakhs and the outlay proposed for the Annual Plan 2007-08 is Rs.800.00 lakhs .**

1.8.2 The Cooperative Movement in the State has not yet been able to play its role effectively in the promotion of equity, social justice and economic development because of the structural weakness of the majority of the Cooperative Societies as well as the managerial inefficiency. Liberalisation of economy has thrown a new challenge for survival of Cooperatives in the state and a special attention is thereby required for strengthening of the Cooperative Organisation.

1.8.3. Approach and strategies of the Eleventh Plan:-

It is imperative that all Cooperative societies in the 11th Plan period is treated as 'Micro business enterprises' and any assistance given to them would have to be item-based .This project based approach should ensure that only viable and feasible projects are to be taken up on a sustainable basis. The programmes for the Eleventh Plan and the annual Plan 2007-08 are worked out keeping in view the need for balanced development of the Cooperative movement.

1.8.4. The Eleventh Plan priorities are as follows:-

- i) Strengthening and revitalizing of Cooperative Credit structure, consumer cooperative structure
- ii) Development of Housing Cooperatives, Handloom Weavers cooperative structure, women cooperatives etc.,
- iii) Spread of cooperative education , cooperative consciousness.

1.8.5 Programmes for the Eleventh Plan(2007 -1012) and Annual Plan 2007-08:-

The programmes for the Eleventh five Year Plan and the Annual Plan 2007-08 are worked out keeping in view the need for balanced development of the Cooperative Movement in the State as a self reliant instrument of socio- economic service in the given period. The detail programmes are as follows:-

1. Direction & Administration: – The department proposes to set up 3 (three) Sub-divisional Offices at Resubelpara, Mairang and Khliehriat for bringing the administration further closer to the people. An outlay of Rs.565.00 lakhs is proposed for the 11th Plan period and Rs.135.00 lakhs is proposed during 2007-08.

2. Training:- departmental Officers and Executive Level Officers of the State level Cooperative Societies are proposed to be exposed to train outside the State for skill upgradation and for familiarizing them with new technique of development. It is also proposed to upgrade and improve the training facilities of the Meghalaya Cooperative training Institute. An outlay of Rs.70.00 lakhs is proposed for the 11th Plan and Rs. 4.00 lakhs for the Annual Plan 2007-08.

3. Research & Evaluation:-

With the Cooperative activities covering new functional areas which required outside consultancy services and expert advice from formulation state to the implementation of the project, it is necessary to help cooperative societies to hire consultancy services as they do not have the resources to meet the cost for the same on their own. An outlay of Rs.11.50 lakhs is proposed for the 11th Plan and Rs.1.00 lakh for the Annual Plan 2007-08.

4. Information & Publicity:

In order to make the common people aware of the cooperative principles and ideals, it is proposed to intensify the existing publicity programmes and start motivational programmes right upto village level. An outlay of Rs.40.00 lakhs and Rs. 3.00 lakhs is proposed for the 11th Plan period and Annual Plan 2007-08 respectively.

5. Assistance to Multi purpose Rural Cooperatives:

The main thrust of the scheme is to revitalize the Service Societies (PACS) which form the backbone of Cooperative credit structure at the grass root level by giving new orientation to their activities. An outlay of Rs. 143.00 lakhs is proposed for the 11th Plan period and Rs. 35.00 lakhs for the Annual Plan 2007-08.

6. Assistance to Credit Cooperatives:

The State Cooperative Banks and the Urban Cooperative Banks have been directed by the Reserve Bank of India to adopt the new norms of classification of non-performing assets including overdues and adjustment of the same in the Profit & Loss Account and balance sheet of the Banks concerned. The Meghalaya Cooperative Apex Bank Ltd. is functioning satisfactorily. Unless special assistance is given to the Meghalaya Cooperative Apex Bank Ltd. And Urban Banks to absorb the losses due to overdues as was given by the Govt. of India to the Commercial Banks to which the same norms are applicable, the Banks very existence will be threatened. The revival package for the Rural Credit Cooperative Institutions on the recommendation of the Task force on “ Revival of Rural Cooperative Credit Institution” (Vaidyanathan Committee Report) is taken into consideration in order to revitalize the whole credit structure for ensuring adequate flow of credit to the farmers. Computerisation of the Cooperative Banks is also very important and essential for survival as well as smooth functioning. An outlay of Rs.2555.00 lakhs is proposed for the Eleventh Plan and Rs. 333.00 lakhs for the Annual Plan 2007-08.

7. Other Cooperatives.

The different types of Cooperative Societies like Marketing, Consumer, Processing, Livestock etc., Cooperatives will continue to play a very vital role in the Cooperative Sector. An outlay of Rs.946.50 lakhs is proposed for the 11th Plan period and Rs.172.00 lakhs proposed for the Annual Plan 2007-08.

8. Other Expenditure :

The Handloom activity has a vast potential for development in the State for income and employment generation in the rural sector. This is meant for meeting the salary of cadre Secretaries posted to Handloom Weavers Cooperatives. The scope/potentials are available in the State for development of activities allied to Agriculture like Dairy, Poultry, Piggery, fishery etc. Assistance to Women Cooperatives has also been set up in all districts for giving opportunity among women for self-employment. The proposed outlay for the 11th Plan period is Rs.553.00 lakhs and Rs. 108.00 lakhs for the Annual Plan 2007-08

9. Agricultural Credit Stabilisation:

An outlay of Rs.20.00 lakhs is proposed for the 11th Plan period and a sum of Rs.2.00 lakhs for the Annual Plan 2007-08 for the release of State's share of contribution to the Agricultural Credit Stabilisation Fund of the State Cooperative Bank in order to strengthen the fund and maintain it at the optimum level to meet the eventuality of natural calamity.

10. Education:

The department feels that more stress should be given on educational and motivational programmes to be taken up in rural areas to raise the Cooperative consciousness of the people which has been identified as the biggest constraint for the proper growth of rural Cooperative. The Cooperative Development fund has been activated and a no. of promotional and training programmes have already been funded out of it with satisfactory results. An outlay of Rs. 196.00 lakhs is projected for the 11th Plan period and Rs. 15.00 lakhs for the Annual Plan 2007-08.

(Rs.Lakhs)

Name of scheme	Proposed Outlay for the 11 th Plan	Proposed outlay for Annual Plan 2007-08
Direction & administration	565.00	135.00
Training	70.00	4.00
Research & Evaluation	11.50	1.00
Information & Publicity	40.00	3.00
Assistance to Multipurpose Rural Cooperation	143.00	35.00
Assistance to Credit Cooperatives	2555.00	333.00
Assistance to Other Cooperatives	946.50	172.00
Other Expenditure	553.00	108.00
Agricultural Credit Stabilization Fund	20.00	2.00
Education	196.00	7.00
Total	5100.00	800.00