

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 2006-07 is 269.93 thousand tones and the anticipated achievement during 2007-08 is 291.00 thousand tones. By the end of the Eleventh Plan, the production is expected to touch 379.00 thousand tones. The target during 2008-09 is to produce 291.00-thousand tones of food grains.

1.1.2 : The 11th Plan Proposed Outlay under Crop Husbandry including SF/MF is **Rs 10,000.00 lakhs**. The Approved Outlay for 2007-08 is **Rs 2075.00 lakhs** which is expected to be fully utilized. The Proposed Outlay for the Annual Plan 2008-09 is **Rs 2,300.00 lakhs**. Out of the Tenth Plan Projected Outlay of **Rs 8100.00 lakhs** under Crop Husbandry including SF/MF the total actual expenditure during the Tenth Plan (2002-07) is **Rs 4987.66 lakhs**

1.1.3 OBJECTIVE:

The goal for the 11th Plan was laid out to usher in a paradigm shift from the implementation of omnibus schemes widely dispersed all over the seven districts with dissipating effect on scarce resources to a more focused approach based on cluster and backed by an integrated package of practices. The strategy would be to consolidate traditional strengths and past gains and at the same time to capitalize on emerging opportunities. This would continue to be the focus areas during the current year.

1.1.4 CLUSTER APPROACH :

A restructuring 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.

1.1.5 FOCUS CROPS :

Instead of cultivation of a plethora of crops, in small quantities, concentration would be on a few Focus Crops to keep their alternative avenues of income intact. As laid out for the 11th Plan, the focus for the current year would continue to be on some of the traditional crops namely rice, kharif maize, soybean and mustard which have been doing consistently well and to expand area under promising crops, like rabi maize, soybean and boro (spring) paddy.

1.1.6 FOOD GRAINS :

With the aim to achieve the target of 3.79 lakhs MT foodgrains by the end of the 11th Plan period, 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 in area and production of maize would continue to be one of the focused areas. In order to boost rice production, effort will be taken to cover 20,000 ha during the year in 200 clusters of 100 ha each. This would be achieved through land reclamation to add fresh areas under paddy and increasing crop intensity with Boro (spring) paddy in existing rice area.

1.1.7 SEED CERTIFICATION :

The availability of quality seeds is crucial if the productivity is to be raised and hence Seed Certification is another area to be undertaken within the plan period so that farmers are supplied with certified seeds for productive cultivation. While the Department is grateful to the Assam Seed Certifying Agency (ASCA), for its help in certifying seeds particularly rice and maize, this is not always a convenient arrangement, for obvious reasons. Hence, one of the targets is the establishment of the Meghalaya Seed Certifying Agency (MeSCA) to cater to this vital requirement.

1.1.8 ORGANIC FARMING :

The consumption of chemical fertilizers in the State is very low being only 18 kgs/Ha as compared to the national average of above 94kgs/Ha. The total consumption of fertilizers in the State is concentrated mainly in potato and vegetable crops and to some extent paddy crop in mid and low altitude areas. There are still villages in the State where chemical fertilizers are still unknown and that crops are being grown organically with organic manures as the only source of plant nutrient. Keeping this in mind, there is a very good scope of encouraging farmers to continue with this farming system in order to take advantage of the increasing demand and higher prices of organically grown crops. To give more impetus to organic farming in the State the Department proposes :

- i)** To organize mass awareness programmes through trainings on the correct steps of organic farming approaches like selection of organically grown seeds, soil amendments through organic manures / bio fertilizers and plant protection measures through bio pesticides / bio agents etc.
- ii)** A model organic farm on 2 hectares of land is proposed to be set up with the required conversion norms for certified organic farming and to identify service providers one each for the project areas at Tura Headquarter in the West Garo Hills

District, Jowai Headquarter in the Jaintia Hills District and the East Khasi Hills District.

- iii) To promote organic farming through use of bio fertilizers and organic manures in suitable combination which will not only maintain higher productivity but also sustain soil fertility and give impetus to the use of vermi culture through training programmes on organic farming.
- iv) Key agriculture and horticulture crops have been identified for organic production/conversion like local rice, cashewnut, pineappkle, ginger, turmeric etc.

1.1.9 CAPACITY BUILDING :

Modern capacity building entities are key hubs for skill development both for farmers and Departmental officials. Systematic training programmes are needed to be conducted for both officials and farmers in various subject areas especially in new technologies like Hi Tech Agriculture, Green House Management, Soil-less horticulture, Risk Management, Integrated Marketing and Value Chain Creation, Organic Certification, Phytosanitary Protocols ,WTO Concepts, Modern Extension Reforms, Application of Information Technology, Food Quality Standards etc.

1.1.10 AGRICULTURAL MECHANIZATION :

The present available power on agricultural mechanization in the State is only 0.0345 hp per hectare against the all India level of 1 hp per hectare, priority will therefore be given to the promotion of agricultural mechanization in order to boost agricultural production and to stress on timely sowing and planting. The Department will continue to implement the Central Schemes of farmers Agro-service Centres, Agricultural machinery, Training & Evaluation Centres and popularisation of Improved Agricultural Equipments alongside the State Plan Schemes of Mechanical Engineering Workshop and supply of power tillers, power threshers, power reapers, etc. with the level of subsidy to be raised.

1.1.11 WATERSHED DEVELOPMENT :

The Govt. of India approved 78 micro watershed projects in the state during the 10th Plan period with two projects in each of the C& R D Block. These watershed projects have shown tremendous impact and are being configured as bases for agriculture development in the State.

The watersheds are integral to sustainable agriculture development and livelihood improvement due to multi dimensional activities which focuses on the specific needs of the watershed areas and their agro-ecological situation. In a watershed, integrated farming approach is practiced along with multiple vocational support activities like carpentry, sewing, handicraft, bee keeping, food processing etc. Watershed can also be dovetailed with the technology mission scheme on horticulture to spread the impact of the programmes in a sustainable manner,. Besides, soil conservation, water conservation measures are adopted through creation of check dams, terracing etc.

The implementation of the programmes is through hundred percent fund releases by the Govt. of India through the Centrally Sponsored Schemes of Macro Management of Agriculture on the basis of the work-plan proposed by the Department. annually with a projected target for each plan period.

1.1.12 SPECIAL PROGRAMME FOR ASSISTANCE TO SMALL AND MARGINAL FARMERS:

The aim and objectives 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 Tenth Plan is **Rs. 464.00 lakhs**. The proposed outlay for the 11th Plan (2007-12) is **Rs 560.00 lakhs** under SF/MF. An outlay of **Rs.210.00 lakh** has been proposed for Annual Plan 2008-09.

1.1.13.1 RASHTRIYA KRISHI VIKAS YOJANA (RKVY) :

In its meeting held on 29/5/2007, the National Development Council resolved to introduce an additional central assistance scheme called RKVY that incentivizes States to increase public investment in agriculture and allied sectors. The key end goal is to achieve at least 4.1 percent growth in Agriculture by the end of the 11th Five Year Plan. The objectives of RKVY are ;

i) to incentivize the States to increase their investment in Agriculture and allied sectors, **ii)** to provide flexibility and autonomy to the States in planning and executing programmes for Agriculture, **iii)** to ensure the preparation of Agriculture plans for the Districts and the States, **iv)** to achieve the goal of reducing the yield gaps in important crops, **v)** to maximize returns to the farmers, **vi)** to address the agriculture and allied sectors in an integrated manner.

The distribution of funds under RKVY are in two streams viz stream 1 and stream 2. Under stream 1 at least 75% of the allocated amount will be distributed to the States and approved by the State Level Sanctioning Committee headed by the Chief secretary. Under stream 2, existing schemes that require strengthening can be covered under this stream for such schemes that have a resource gap. Not more than 25% allocated funds can be used for this stream and the sanctioned procedure will be as in the case of other plan schemes.

The first State Level Sanctioning Committee (SLSC) was held on 17/12/07 in the presence of the representatives from the Ministry of Agriculture and the Planning Commission in which the programmes under Agriculture and Horticulture Sectors were approved.

- (a) Under the Agriculture Sector, the thrust is on area expansion of Boro Paddy (Winter crop) given the fact that this has the potential to provide for yields of 3-4 metric tones per hectare, in comparison with 1.5- 2.0 metric tones realized through Sali Paddy(summer crop). The area expansion necessarily supported by irrigation has the potential to substantially increase productivity, production and farmers' income. Potential areas for Boro Paddy could be cultivated primarily due to the absence of assured irrigation in the dry season. As such, under RKVY, the micro irrigation interventions like rain water harvesting , flexible sausage dams, shallow tube wells and surface water pumping are being proposed and approved for Rs 285.00 lakhs for 2007-08.
- (b) Under the Horticulture Sector, the thrust encompasses area expansion of new crops under C2C (Concept to Completion) mode, post harvest and pre market interventions for traditional crops and new initiatives for organic certification for a few selected

crops. The SLSC has approved the Programmes for area expansion for coloured capsicums and Roses, turmeric processing units, two units reefer vans of 6 M T capacity, 2 units pre-coolers of 6 M T capacity and organic certification for 5 crops for a total amount of Rs 345.00 lakhs for 2007-08.

1.1.14- AGRICULTURAL RESEARCH AND EDUCATION :

Out of the Tenth Plan Projected Outlay of **Rs.165.00 lakhs** under Agricultural Research and Education, the total actual expenditure under the Tenth Plan (2002-07) is **Rs.184.37 lakhs**. The 11th Plan Proposed Outlay is **Rs.500.00 lakhs**. The Approved Outlay for 2007-08 is **Rs.50.00 lakhs** which is expected to be fully utilised. The Annual Plan Proposed Outlay for 2008-09 is **Rs.65.00 lakhs**.

1.1.15- INVESTMENT IN FINANCIAL INSTITUTIONS :

Out of the Tenth Plan Projected Outlay of **Rs 30.00 lakhs** under Investment in Financial Institutions, the total actual expenditure during the Tenth Plan (2002-07) is **Rs 16.46 lakhs**. The 11th Plan Proposed Outlay is **Rs 100.00 lakhs**. The Approved Outlay for 2007-08 is **Rs. 8.00 lakhs** which is expected to be fully utilised. The Annual Plan Proposed Outlay for 2008-09 is **Rs. 10.00 lakhs**

1.2 HORTICULTURE

1.2.1 11th PLAN & ANNUAL PLAN 2008-09 PROJECTIONS :

The Eleventh Plan Proposed Outlay for Horticulture Development is **Rs 20,000.00 lakhs**. The Approved Outlay of **Rs 1100.00 lakhs** is expected to be fully utilised and the Proposed Outlay for the Annual Plan 2008-09 is **Rs. 1500.00 lakhs**. Out of the Tenth Plan Projected Outlay of **Rs. 2150.00 lakhs**, the total actual expenditure during the Tenth Plan 2002-07) is **Rs. 2668.92 lakhs**.

1.2.2 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. The actual achievement of horticulture produce during the Tenth Plan period is **234.33 thousand tones**. The anticipated horticultural produce during 2007-08 is of the level of **288.64 thousand tones**. Hence, having realized this potential, the State Government has decided to assign priority to horticulture during the Eleventh 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 **291.08 thousand tones** of horticulture produce by the end of the Eleventh Plan and **289.47 thousand tones** during

2008-09. During the Eleventh Plan (2007-12) the State Government will also lay much emphasis on Post Harvest Management including processing and marketing of horticultural produce.

1.2.3 KEY ISSUES :

- Under the Technology Mission on Horticulture a notable achievement is the coming up of Centres of Excellence in two Districts (Ri Bhoi for Roses and Strawberry and East Garo Hills for Anthurium) Replication of such Centres of Excellence in different crops in the remaining five Districts would be another goal during the Eleventh Plan period. The Centres have shown the potentialities of breaking new frontiers in horticultural revolution in the State.
- Various State Plan schemes under general Horticulture for development of fruits, vegetables, plantation crops and spices were taken up on promotional basis.
- Under the Technology Mission for Integrated Development of Horticulture, more facilities could be provided in the form of assistance to the individual and group of farmers.
- The area expansion of vegetables, flowers, spices and fruit crops have helped in improving the economic livelihood of the farmers.
- The construction of community tank, Vermi-compost units, green houses, irrigation facilities like tube wells, drip irrigation, sprinkler irrigation and the provision of improved power and manually operated farm implements and tools are also the incentives that have made a difference.

1.2.4 THRUST AREA :

- **Fruit Sector:** - Khasi Mandarin – rejuvenation and area expansion; area expansion and processing of pineapple.
- **Temperate Fruit sector:** - plum, peaches, pears, kiwi fruit etc.
- **Indigenous Fruit sector:** - popularisation and commercialization of indigenous crops like sohiong, sohpie etc.
- **Vegetable Sector:** - production of off-season vegetables, potatoes and seed production.
- Production of low-volume and high value crops like strawberry, capsicum, broccoli etc. and flowers like roses, anthurium, carnation, bird of paradise etc.
- Cultivation of cash crops like Black pepper, cashewnut
- Tapping of ground water potential
- Promotion of farm mechanization with small power tillers adaptable to the topography of the State and popularization of new machineries to reduce the cost of cultivation on manual labour and consequently to enhance timely sowing of crops.
- Integrated Pest management with stress on training of Officers.
- Stress on Organic farming for spices like ginger & turmeric, fruits and vegetables.
- Encouraging protected cultivation by using plastic and shade nets in horticulture.
- Research and Development.
- Post-Harvest Management will be taken up intensively and extensively during the Eleventh Plan. The Department will take up sponsorship of the educated unemployed youth of the State for short term and long term training in fruit processing, fruit preservation and marketing which have vast potential in employment and income generation.

1.2.5 CONSTRAINTS:

- Low to very low productivity of crops;
- Lack of assured irrigation facility;
- Poor agro-mechanization process;
- Unscientific land use;
- Poor economic condition of the farmers, remoteness of the area and backwardness;
- Inadequate extension service in dissemination of improved production technology to the growers due to lack of adequate manpower at the field level;

1.2.6 SUGGESTIONS :

- Development of micro- water structures including Hydrams and drip irrigation
- Area expansion in cluster basis under tea cultivation through small tea growers
- Commercialization of floriculture
- Developing appropriate packaging and value addition for some Horticultural produce in the State
- Cluster approach : on major horticultural crops in the State
- Creation of Farm handling units

1.2.7 AGRICULTURAL MARKETING

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

Out of the Tenth Plan projected outlay of **Rs 415.00 lakhs** under Agricultural Marketing, the total expenditure during the Tenth Plan 2002-07 is **Rs 396.57 lakhs**. The 11th Plan proposed outlay is **Rs 1250.00 lakhs**. The Approved Outlay during 2007-08 is **Rs 50.00 lakhs** which is expected to be fully utilised. The Annual Plan Proposed Outlay for 2008-09 is **Rs 90.00 lakhs** .

1.3. SOIL AND WATER CONSERVATION

1.3.1. The projected Eleventh Plan Outlay for Soil Conservation sector is Rs.160000 lakhs. The actual expenditure incurred during the Ninth Plan period was Rs.5029.79 lakhs. The approved outlay during 2007-08 is Rs.1700.00 lakhs which is expected to be fully utilized. The proposed outlay for the Annual Plan 2008-09 is Rs.3000.00 lakhs which includes Rs.700 lakhs for Water Harvesting Mission, Rs.200 lakhs of NABARD Loan and Rs.625 lakhs of SCA specially earmarked for Control of Shifting Cultivation.

Some of the important schemes implemented by the Department are highlighted below:-

1 Soil Conservation works in general areas :

The scheme comprises a number of items taken up to treat both the Agricultural Lands and Non – agricultural Lands by conservation measures of which 95% of the schemes are rural based. The farmers are directly involved and benefited from the scheme. The proposed amount for the year 2008-09 is Rs.388.89 lakhs.

2. Watershed Management Scheme:

Under this scheme, proposal has been made at an outlay of Rs.114.17 lakhs, during 2008-09, for taking up Afforestation P- 123ha. and Maintenance 202.99ha., Cash/Horticultural Crop Plantation Maintenance 110 ha. and Nurseries P-100000 Nos. & M-42190 Nos. The anticipated achievement during 2007-08 under Afforestation is P-120.54 ha., M-112.89 ha. and Cash/Horticultural Crop Plantation P-78.97 ha., M-85.89 ha. & Nurseries P – 62084 Nos. & M- 92656 Nos.

3. 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 the Tenth Plan period (2002-07) was Rs.1697.00 lakhs. The approved outlay for 2007-08 is Rs.500.00 lakhs and the proposed outlay for the Annual Plan 2008-09 is Rs.625.68 lakhs.

NABARD LOAN: During the Tenth Five year Plan, 11(eleven) projects were implemented under RIDF. During the first year of the 11th Plan i.e. 2007-08, 7(seven) projects have been sanctioned under RIDF- XIII at an approved amount of Rs. 757.15 Lakhs. The proposed amount for the Annual Plan 2008-09 is Rs.300.70 lakhs.

Besides the above schemes, implementation of the following schemes will also be continued during the Annual Plan 2008-09.

1. Direction and Administration
2. Soil Survey and Testing
3. Extension and Training
4. Construction of roads to work areas
5. Construction and maintenance of Departmental/ Non-residential buildings.
6. Research and Training.
7. Financial Assistance to Commercial Crops Development Board.

New schemes proposed for the Eleventh Plan Period include the following:-

1. Improved Jhum cultivation.
2. Jatropha cultivation.
3. Improvement of Environment of Cherrapunjee and surrounding areas.
4. Rainwater Harvesting scheme.

1.4. ANIMAL HUSBANDRY

1.4.1. The total proposed outlay for the Eleventh Plan for this sector is **Rs. 10500.00 lakhs and the approved outlay for the Annual Plan 2007 – 2008 is Rs. 1200.00 lakhs** which is expected to be utilised in full. **The proposed outlay for the Annual Plan 2008-2009 is Rs.1750.00 lakhs.**

1.4.2. The approved outlay for the Tenth Plan is Rs.5500.00 lakhs. The actual expenditure incurred during the Plan period is Rs.3407.83 lakhs.

1.4.3. The Programme for the 11th Plan (2007 – 2012), Annual Plan 2007 - 08 & Annual Plan 2008 – 09 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 proposed outlay for 2008 – 2009 is Rs.179.80 lakhs**

2. Veterinary Services & Animal Health: During 2008-2009 4 (four) New Veterinary Dispensaries will be established. 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 spilled over schemes for construction / upgradation of 4(four) New Veterinary Dispensaries at Namdong, Nongkrem,,Belguri, Rymbai will also be completed during 2008-2009. An amount of **Rs. 424.90 lakhs is proposed for 2008-2009** under this programme, which includes State Share for implementation of Central Sponsored Scheme – Assistance to State for Control of Animal Diseases (ASCAD).

3. Cattle Development : The numbers of Cross Bred Cattle population of the state constitute only 3.00% of the total Cattle population. 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.

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 2008-2009. **An amount of Rs. 116.90 lakhs is proposed for 2008 – 2009.**

4) Poultry Development: Egg production in the State is far below the requirement. 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 during 2008-2009. Rural Cluster Approach on Poultry Development to increase meat & eggs production is proposed to continue during 2008-2009. **An amount of Rs.167.90 lakhs is proposed for 2008 – 2009.**

(5) Sheep, Goat and Rabbit Development : 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. The only Rabbit farm in the State is 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 during 2008 – 2009. **An outlay of Rs. 15.50 lakhs is proposed for 2008- 2009 for Sheep, Goat and Rabbit Development.**

(6) Piggery Development:Piggery is common among the people of Meghalaya. It is almost a way of life for every household in rural areas. The Regional Pig Breeding Farm, Kyrdemkulai and 9 District Piggery Farms will be strengthened to meet the demand for Breeding Stock. 1(one) New Base Piggery Breeding Farm at West Garo Hills to cater to the need of breeding stock of pigs will be established by 2008-2009. 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.**An amount of Rs.171.30 lakhs is proposed for 2008 – 2009 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 Kyrdemkulai 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 during 2008-2009 to facilitate quick analysis of Feed as the present Laboratory is located at a very far distance from Garo Hills. Distribution of minikits will continue to increase fodder production. **An outlay of Rs. 56.00 lakhs is proposed for 2008 – 2009.**

(8) Administrative Investigation & Statistics: The Govt. of India have recommended the expansion of Integrated Sample Survey for estimation of major Livestock Product. **An amount of Rs. 10.00 lakhs is proposed for the Annual Plan 2008-2009** to cover the State Share for meeting the pay & allowances of the staff.

(9) Research : The Clinical Laboratory Shillong & Vaccine Depot will continue with the proposed outlay of **Rs. 16.70 lakhs** during 2008 – 2009.

(10) Education & Training:The Vocational Training Centres, Kyrdemkulai / Tura will be strengthened with additional training infrastructure and staff and additional Hostel accommodation for farmers trainee. 1 (one) No. of Vocational Training Centre will be established at Jaintia Hills. In service Personnel shall regularly be sent for specialized training in different Institution in India preferably in the subject of his specialization (Job

assignment basis). Candidates would also continue to be sponsored for training in B.V.Sc Course/B.Sc (Dairy Tech) and V.F.A. Training Course. **An amount of Rs. 69.00 lakhs** is proposed for Education and Training during 2008 – 2009.

(11) Other Expenditure etc – Construction & Improvement of both Residential & Non Residential Building: Besides the existing infrastructure, establishment of new Cattle Farm at Samgong in East Garo Hills, establishment of Base Piggery Production Farm in Garo Hills, establishment of Vocational Training Centre at Jaintia Hills & West Khasi Hills are proposed to be taken up during 2008- 2009. An amount of **Rs. 100.00 lakhs** is proposed for maintenance of the infrastructures & **Rs. 322.00 lakhs** for taking up of the new schemes.

1.5. DAIRY DEVELOPMENT

1.5.1. **The outlay proposed for Dairy Development Sector for the 11th Plan is Rs. 2200.00 lakhs and the approved outlay for the Annual Plan 2007 – 2008 is Rs. 225.00 lakhs** which is expected to be utilized in full. The proposed outlay for the Annual Plan 2008-2009 is **Rs.300.00 lakhs**. Milk production during the Tenth Plan is 75.00 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.

1.5.2. The Tenth Plan approved outlay for Dairy Sector is Rs.800.00 lakhs. The actual expenditure incurred during the Plan Period is Rs. 625.41 lakhs as against the Revised Outlay of Rs. 731.00 lakhs which work out to 85.56%.

1.5.3. During the 11th Plan (2007 – 2012), emphasis are being made on milk production and Employment Generation. During the year 2008-09 more Dairy plants are proposed to be set up. There are 5 (five) milk Chilling Plants and one Creamery & Ghee making Centre in the State. 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.

The Employment Generation Scheme for taking up Dairy Farming for educated un-employed youth & general farmers will continue during 2008-2009 with a larger outlay so as to cover more beneficiaries.

Survey is being conducted for establishment of 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.

1.5.4. The broad break –up of the proposed outlay for the 11th Plan (2007-12) and Annual Plan 2007-08 and 2008-2009 are as indicated in the Table below:-

(Rs. Lakhs)					
Sl. No.	Name of programme / scheme	11 th Plan 2007- 12 Proposed Outlay	Annual Plan 2007-08 Approved Outlay	Anticipated Expenditure 2007 -2008	Annual Plan 2008-09 Proposed Outlay
1.	Direction and Administration	30.00	28.00	28.00	36.00
2.	Employment Generation	250.00	39.48	39.48	30.00
3.	Cattle-cum Dairy Development	1220.00	107.52	107.52	127.50
4.	Construction & improvement of Residential and Non-Residential Buildings, etc.	700.00	50.00	50.00	106.50
	Total	2200.00	225.00	225.00	300.00

1.6. FISHERIES

1.6.1. The Eleventh Plan (2007-2012) Projected Outlay of Fisheries sector is Rs.4500.00 lakhs. The approved outlay for 2007-08 is Rs.450.00 lakhs which is expected to be fully utilized. **The proposed outlay for the Annual Plan 2008-09 is Rs.600.00 lakhs.** The Tenth Plan Outlay of Fisheries sector is Rs.700 lakhs. The actual expenditure incurred during the Tenth Plan period was Rs.1070.27 Lakhs.

ANNUAL PLAN 2008-09 :-

1.6.2. The following programmes will be continued during 2008-09 :-

1. Inland Fisheries – These are continuing schemes which are meant for maintenance of departmental Fishseed farms, creation of fish ponds, creation of awareness programmes on the need for conservation and maintenance of the ecological balance. The schemes also provide financial assistance @ 50% subsidy for creation of ponds and purchase of inputs. Programmes under Inland Fisheries comprises the following:-

- (a) Fish seed production and demonstration centre
- (b) Development of reservoir: —
- (c) Conservation and Legislation for protection of fisheries
- (d) Subsidised cost of fishseeds, feed etc for integrated fish farming
- (f) Community Fishery Development Project

2. Processing, preservation and marketing of fish and fish seeds:-

This is a continuing scheme meant for transporting of fish seed from production centres to the distribution centres. During the year 2008-09, it is proposed to provide

fishseeds to the fish farmers for culture in ponds and tanks at 25% subsidized rate. The approved outlay during 2007-08 is Rs. 8.00 lakhs and Rs.10.00 lakhs is proposed during the Annual Plan 2008-09.

3. **Agricultural Research and Education :-**

This is a continuing scheme which aims at conducting research works in the field of fisheries development. During the year 2008-09, it is proposed to set up 1(one) Training Centre for providing training to private pisciculturists. The approved outlay during 2007-08 is Rs.8.00 lakhs and the proposed outlay for the Annual Plan 2008-09 is Rs.35.00 lakhs.

4. **Aqua culture Development – One Thousand Ponds : -** This is an ambitious scheme with back ended subsidy at 25% loan and 75% subsidy. The beneficiaries are be provided financial assistance for construction of ponds including cost of inputs @Rs. 3.60 lakhs/ ha water area. An amount of Rs.2700.00 lakhs is proposed for the 11th plan period and the approved outlay during the Annual Plan 2007-08 is Rs.250.00 lakhs which is expected to be fully utilized. The proposed outlay during 2008-09 is Rs.280.00 lakhs.

The Scheme wise budgeted outlays are as follows :-

Sl. no.	Name of Schemes	Projected 11 th Plan outlay 2007 -2012	Approved outlay 2007 -08	Anti. expd. 2007-08	Proposed outlay 2008-09
1	Direction & Administration	370.00	32.30	32.30	50.00
2	Inland Fisheries:-				
i)	Fishseed Production & Demonstration Centre	100.00	28.00	28.00	40.00
ii)	Development of reservoirs	100.00	15.00	15.00	20.00
iii)	Conservation & legislation for protection of fishes.	100.00	10.00	10.00	20.00
iv)	Community Fishery Dev. Project	100.00	25.20	25.20	30.00
3	Marketing & Transport of Fish/Fishseeds	100.00	8.00	8.00	10.00
4	Extension & Training	75.00	13.50	13.50	20.00
5	Research & Education-	25.00	8.00	8.00	35.00
6	Construction/ Improvement of Depttl- resi. Buildings	50.00	10.00	10.00	30.00
7	Construction/ Improvement of Depttl Non- resi. Bldg	50.00	10.00	10.00	15.00
8	Aquaculture for Development of One- Thousand Ponds	2700.00	250.00	250.00	280.00
9	Fish Farmer Dev. Agency(state share)	160.00	12.00	12.00	15.00
10	National scheme for welfare of fishermen(state share)	200.00	10.00	10.00	15.00
11	Culture & Dev. of Mahaseer fisheries(state share)	170.00	6.00	6.00	8.00
12	Culture & breeding of ornamental fishes(state share)	200.00	12.00	12.00	12.00
	Total	4500.00	450.00	450.00	600.00

Centrally Sponsored Scheme In addition to the State Plan Schemes the Centrally Sponsored Scheme viz., **Fish Farmer's Development Agency** will be implemented during 2005-2006. This is a Centrally Sponsored Scheme with a component of 25% grant and 75% loan or own contribution by the beneficiaries. The 25% grant is shared between the Central and the State govt. on the ratio 25:75 basis. The aim of the scheme is to create more culturable water area for fish production. The approved outlay for 2007 -08 is Rs. 12.00 lakhs which is expected to be utilized in full. The proposed outlay 2008-09 is Rs.15.00 lakhs.

1.7. FOOD, STORAGE & WAREHOUSING

1.7.1. The Eleventh Plan(2007-2012) projected outlay is Rs.450.00 lakhs. The approved outlay during 2007-08 is Rs.15.00 lakhs which is expected to be fully utilized. An outlay of Rs.20.00 lakhs is proposed for the Annual Plan 2008-09.

1.7.2. The State Ware Housing Corporation has so far constructed a total capacity of 13200 M.T. During the Annual Plan 2008-09, an additional capacity of 0.025 Metric tones is proposed to be constructed in places like Khanapara, Nongstoin, Mawlai, Byrnihat etc where additional storage spaces are required for buffer stocking of foodgrains. The Tenth Plan projected outlay for this sector was Rs.150.00 lakhs. The actual expenditure incurred during the tenth plan period was Rs.27.00 lakhs.

1. 8. COOPERATION

1.8.1. The proposed outlay for the Eleventh Plan (2007-2012) is Rs. 5100.00 lakhs. The approved outlay for 2007-08 is Rs.575.00 lakhs which is expected to be fully utilized. **The proposed outlay for the Annual Plan 2008-09 is Rs.850.00 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.

The Tenth Plan (2002-07) projected outlay was Rs. 1700.00 lakhs and the actual expenditure incurred was Rs.1865.32 lakhs.

1.8.3. Some of the important schemes implemented by the Department 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.136.00 lakhs is approved for 2007-08 which is expected to be fully utilised and Rs.291.00 lakhs is proposed for 2008-09.

2. Training

3. Research & Evaluation

4. Information & Publicity:

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. 65.00 lakhs is approved for 2007-08 and Rs. 77.50 lakhs is proposed for the Annual Plan 2008-09.

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 approved outlay for 2007-08 is Rs.32.50 lakhs and Rs. 58.00 lakhs is proposed for the Annual Plan 2008-09.

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. The approved outlay for 2007-08 is Rs.140.00 lakhs and the proposed outlay for the Annual Plan 2008-09 is Rs. 180.00 lakhs.

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 approved outlay for 2007-08 is Rs.165.50 lakhs and Rs. 195.00 lakhs is proposed for the Annual Plan 2008-09.

9. The break up of the projected outlay for the 11th plan, approved outlay and anticipated expenditure during 2007-08 and the proposed outlay for 2008-09 are indicated below :-

(Rs. lakhs)

Sl. No.	Name of scheme	Projected outlay for 11 th Plan	Approved outlay 2007-08	Anti. expd. 2007-08	Proposed outlay 2008-09
1.	Direction & administration	565.00	136.00	136.00	291.00
2.	Training	70.00	5.00	5.00	5.50
3.	Research & Evaluation	11.50	2.00	2.00	3.00
4.	Information & Publicity	40.00	4.00	4.00	5.00
5.	Assistance to Multipurpose Rural Cooperation	143.00	65.00	65.00	77.50
6.	Assistance to Credit Cooperatives	2550.00	32.50	32.50	58.00
7.	Assistance to Other Cooperatives	946.50	140.00	140.00	180.00
8.	Other Expenditure	553.00	165.50	165.50	195.00
9.	Agril. credit Stabilization Fund.	20.00	-	-	-
10.	Education	196.00	25.00	25.00	35.00
	Total	5100.00	575.00	575.00	850.00