

## CHAPTER - I

### AGRICULTURE & ALLIED SERVICES

#### 1.1 CROP HUSBANDRY

**1.1.1** Agriculture occupy an important place in the economic development of the State, where more than 70% of the population is still dependent on this sector for their livelihood. Agriculture is the key to rural prosperity and food security, and it continues to play a significant role in the economy of the State. The contribution of this sector to the State's Economy is around 22% of the Gross State Domestic Product (GSDP). In order to further increase the contribution of this sector (Agriculture Sector) to the State's Economy, the State Government is committed to accord top priority to the Agriculture Sector through the overall increase allocation in the State Plan, from 24.9 crores during 2011-2012 to 28 crores during 2012-13. The growth rate of the Agriculture Sector during the 11<sup>th</sup> Plan Period (2007-08 to 2011-2012) averaged 4.41 %.

**The projected outlay during the 12<sup>th</sup> Five Year Plan (2012-17) is Rs 32950.00 lakh. The approved Outlay for the Annual Plan 2012-13 is Rs 2800.00 lakh, and the anticipated expenditure is Rs 2590.00 lakh which includes Rs 56.00 lakh for World Indigeneous Terra Madre Conference. The proposed Outlay for the Annual Plan 2013-14 is Rs 2900.00 lakh.**

The total cropped area in the State during 2010-2011 was 337853 hectares which is about 15.06% of the total geographical area, while the net cropped area was 283879 hectares representing 12.65% of the geographical area. The cropping intensity stands at 121%. The target is to raise cropping intensity to 128% through winter planting, multiple cropping utilizing wasteland and fallow lands during the 12<sup>th</sup> plan period.

Foodgrains production during the Eleventh Five Year Plan period stood at 2.391 lakh tonnes at the end of the year 2010-11. During 2011-12, the targeted production of foodgrains is pegged at 2.828 lakh metric tonnes and the likely achievement is 2.820 lakh metric tonnes. Continued thrust will be given to increase areas under Boro paddy including extending coverage of High Yielding Varieties (HYV) in areas with assured irrigation. The State had a total rice area of 1, 09,000 ha, with the total output of 2, 08,000 tons. The average rice yield is at 1.9t/ha which is lower than the national average value of 2.4t/ha. Currently, the state rice production meets only 50% of the consumption requirement of its population of 2.96 million (Population census, 2011).

**1.1.2** Rice Mission project to increase rice production is being taken up to bridge the gap between demand and supply thereby narrowing the gap between the potential yield and the actual yield. Breeding for Rice variety which are high yielding and tolerant to biotic and abiotic stresses is one of the steps in achieving the goal. Capacity building process on Rice breeding for improvement and enhancing productivity of local varieties and post harvest management with the International Rice Research institute (IRRI) Los Banos Philippines is also initiated. An important component of the Mission would be capacity building of the departmental officers on germ-plasm collection and establishment of seed bank, crop breeding, water management and post-harvest technology through short-term courses,

hands-on internship in specific disciplines and in-country training with IRRI scientists as instructors. This will also help in renovating and upgrading existing laboratories and infrastructure for research.

**1.1.3** The Government has been promoting winter planting of rice, in the plains bordering Bangladesh, through assured irrigation in the form of small water harvesting water structures, shallow tube wells and surface water pumping system. Expansion of 'Boro' paddy cultivation from the existing 13000 ha to 60000 ha is being projected during the 12<sup>th</sup> plan period at an annual increase of approximately 11750 hectares. Simultaneously, small and marginal farmers, who constitute the major proportion of farming community, will continue to be assisted with mini-irrigation facilities like small check-dams, surface water pumping systems and shallow tube wells, doggies and other water conservation measures which would be a great asset to this category of farmers, especially during periodic dry spells.

**1.1.4** Popularization of maize cultivation is being carried out in the State through the introduction of high yielding varieties and hybrids . The practice of inter cropping of maize with soya bean has been implemented in farmers' fields with good result especially in khasi Hills, Jaintia and Ri Bhoi Districts. It also helps in better utilization of land, improved soil structure development and higher crop productivity . This inter cropping technique will be expanded to other Districts. During the 12<sup>th</sup> Plan period, this activity will be linked to the demand of feed mills in the A.H.& Veterinary Sector.

**1.1.5** Recognizing that quality seeds account for 25% to 30 % of the increment in the crop yield , effort is being made to increase the seed replacement rate. This will be continued during the 12<sup>th</sup> plan through production of foundation seeds with the involvement of farmers and distribution of quality and certified seeds.

Seed testing facilities offered by the Department ensure seed quality ,germination and adherence to prescribed purity standards . Presently, seed testing laboratories have been set up only in Shillong, Jowai and Tura. It is proposed to set up seed testing laboratories in the remaining districts of the State in order to ensure better seed testing services and quality seed distribution to farmers.

Further , conservation of germplasm of indigenous crop varieties is vital to ensure better diversity and preservation of our rich crop bio-diversity especially in the face of climate change , since native varieties are better adapted to withstand the onslaught of climate change , their systematic identification, documentation, collection, preservation, both in-situ and ex-situ is of prime importance. It is proposed to focus on germplasm development of major foodgrains like rice and maize.

Adequate and scientific seed storage at the village level is also a vital component to ensure availability of seeds at the right time. Adequate capacity needs to be created at community levels in term of storage infrastructure and provision of seed storage equipments. Community seed banks will ensure availability of seeds at village levels during exigency on account of climate related causes.

**1.1.6** In order to tap the achievements made by the regional , national and international institutes in the realm of scientific and technological research by suitably adapting and applying such innovations (foliar nutrition application, stress -tolerant rice

varieties etc) in the State , the extension wings of the Department namely the KVKs (Krishi Vigyan Kendras) and ATMAs (Agricultural Technology Management Agencies) are entrusted with this job.

**1.1.7** During the 12<sup>th</sup> Plan , it is proposed to shift from a fixed amount to 75% subsidy for power tillers . This step is necessary to increase the existing farm power and to overcome the shortage of farm labour especially during critical phases of crop operations. Further, it is planned to phase out Departmental machineries and to replace them with new ones to improve working efficiency and to reduce the operational and maintenance costs.

**1.1.8** Because of the state's high altitude and mountainous terrain, water run-off is very high which makes multiple-cropping almost impossible. Thus, water harvesting and water retention along with major irrigation based on river and stream water, may be the *sine qua non* of agricultural development in Meghalaya. Such steps also will increase both land and labour productivity in agriculture. Small and marginal farmers would be assisted with mini irrigation facilities like small check dams, surface water pumping systems and shallow tube wells to be implemented by the Water Resources Department which would be a great asset to the farmers especially during dry spells.

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

**1.1.10** Traditionally, cultivation in the State is organic, with very little utilization of chemicals fertilizers and pesticides . While this used to be considered a disadvantage in terms of lower productivity , organic products are increasing in popularity among health conscious consumers . This is especially true in the country's metropolitan cities and international markets. Hence , the loss to farmers due to low productivity can be more than compensated by a premium on price in such niche markets. The Department proposes to take advantage of this traditional system of organic farming by introducing organic certification for select crops. These crops will be suitably identified , area under each will be assessed and certification will be implemented.

#### **1.1.11 CENTRALLY SPONSORED & CENTRAL SECTOR SCHEMES: MACRO MANAGEMENT OF AGRICULTURE**

##### **i) National Watershed Development Projects For Rainfed Areas (NWDPA)**

The Projects will endeavour to achieve the twin objectives of sustainable production of bio-mass and restoration of ecological balance in the large tracts of rainfed areas in the country particularly Meghalaya.

The scheme has the integrated approach towards conservation, upgradation and utilisation of soil, water, plants, animal and human resources in a harmonious and integrated manner. This will ensure perpetual availability of food, fodder, fuel, fibre, timber and biomass for rural and cottage industries to meet the growing demand of human and

livestock population through diversified land use system. It generates massive employment during the project period and regular employment after the project is over.

*In situ-moisture* conservation, introduction of scientific production system, net work of run-off management structures and devices for recharge of ground water will ensure enhancement availability of water for livestock and human consumption purposes, and raising of appropriate cash crops according to the agro climatic potentials.

## ii) **AGRICULTURAL MECHANIZATION**

The State with its undulating terrain where maximum of the Agricultural lands are situated either in an approachable valleys or hills slopes is yet to reach its Mechanization programmes to the All India Level of 1 HP/hectare. For the 2.60 lakh hectares of Agricultural land with only around 800 numbers of power tillers and 120 numbers of tractors which together generates hardly 13,800 HP of Mechanical power, the Horse power *availability* in the state works out to hardly 0.053 Hp/hectare even though the Draft National Agricultural Policy for the X Plan Period, this Horse Power availability in the state was proposed to be raised to 2 Hp/hectare. To reach this figure, the State requires 5,06,200 additional Horse power during the X Plan Period which is equivalent to 42,184 numbers of power tillers at a rough estimate cost of ` .477.00 crores.

Besides power tillers and tractors, other machines such as diesel driven pumps, diesel powered threshers, hullers, polishers and self propelled reapers are other machineries which can increase this horse power availability in the state agricultural sector. With this point in mind, the following schemes have been proposed to continue under the work plan of the Macro management Mode besides the effort from budget allocation under the State Plan Scheme.

### **Integrated Cereals Development Programme – Maize**

The Accelerated Maize Development Programme was implemented in the state since 1997-98 under the Centrally Sponsored Scheme with the pattern of assistance for the state level components at 75:25 shared by the Government of India and the State Government. This scheme is being implemented in the two potential maize production districts of the state namely the West Garo Hills and the Ri Bhoi District. The implementation of the scheme has been shown to be successful in which maize production is increasing and farmers are growing maize 2 to 3 times in a year. From 2001- 2002, the scheme has been implemented under the macro management mode for all the seven district of the state.

Main objective of this scheme is to achieve a significant increase in maize production through adoption of crop specific and location specific production technology.

### **Integrated Cereal Development Programme - Wheat**

Wheat is grown in the three districts of the State i.e. the Garo Hills districts. There is no State Plan Scheme formulated specially for wheat and the crop is grown through the minikit programme. Since 2001- 02, the scheme on wheat was included under Macro Management Mode under the name of " Minikit of Wheat including propagation of new technology" and referred to as "ICDP- Wheat",

The objective of the scheme is to acquaint the extension of workers and ascertain farmers reaction to the newly released wheat varieties in order to increase production and productivity and to motivate the use of improved crop production and new technology.

## **Jute Development Programme**

The aims and objectives of the Scheme is to increase the production and productivity of jute in the State and to improve the quality Jute fibre. For effective implementation of the programme the areas and blocks where the programmes are to be implemented ought to be agronomically and infrastructurally potential for raising the productivity and improving the quality of the fibre and preference is given to those areas which have concentration of area under jute. Productivity in the selected areas could be raised in such a manner that the overall State average productivity is increased to a desired level to achieve the targetted production. Production of quality fibre is another aspect, as demand for *quality* jute fibre from the industries is increasing. Retting is the important factor which determine the quality of the fibre" At present, whole plant retting is practiced which affects the quality of the fibre. For improvement of the fibre, quality "Ribbon retting" technology has been introduced. This has got many advantages of which the important being the reduction in the requirement of water and time required, leading to improvement of quality fibre. The Scheme is also aimed at encouraging Ramie cultivation in the State by supplying planting materials free of cost through demonstrations in the farmers' field.

## **Integrated Pest Management of Plant Diseases and Pests**

Pest Control has been done exclusively by means of the use of chemical pesticides which has proved successful in the prevention and control of insect pest and diseases of crops. They are easy to apply but also have disastrous effects on the environment as well as the health of the consumer on the form of residual effects throughout the food chain in the eco-system. The hazards of chemicals pesticides is a global phenomenon and many countries have imposed stringent laws to curb the use of chemicals pesticides. The Scheme therefore, is targeted to the use of alternate methods of control such as the use of various Biological Control Methods like Bio-agent, Bio-pesticides, predators and parasites which would serve to keep pests below the economic Threshold Level (ETL). IPM also includes the use of other cultural methods as well as use of improved varieties of seeds etc. The friendly population on the agrarian eco-system in such a manner that nominal use of chemicals would suffice to keep the pest population well below the ETL in harmony with other components of the eco-system. The implementation of this scheme would therefore create a healthy atmosphere for man and plant to survive.

### **iii) NATIONAL PROJECT ON MANAGEMENT OF SOIL HEALTH AND FERTILITY:**

The Government is promoting soil test-based balanced and judicious use of chemical fertilizers, bio-fertilizers and locally organic manures to maintain soil health and its productivity. The Centrally Sponsored Scheme "*National Project on Management of Soil Health and Fertility*", provides for the promotion of soil test-based application of chemical fertilizers, strengthening of soil testing facilities in the country.

In this regard, under the ambit of the above scheme, the GOI, Ministry of Agriculture, has released the fund of ` 60.0 lakh (Sixty lakh) only for implementation of the scheme in Meghalaya during 2009, as a 1st installment for the purchase & equipping of 3 (Three) Mobile Soil Testing laboratories (MSTL) & strengthening of existing Soil Testing laboratories. The above MSTLs are to be stationed at Shillong, Tura and Jowai, catering to the need of the Districts of Khasi Hills, Garo Hills & Jaintia Hills.

iv) STATE EXTENSION PROGRAMMES FOR EXTENSION REFORMS:

The Scheme "Support to State Extension Programmes for Extension Reforms" is the main scheme to operationalize agricultural extension reforms across the country. The objective of the Scheme " Support to State Extension Programmes for Extension Reforms" is to make extension system farmer-driven and farmer accountable by way of new institutional arrangements for technology dissemination. The ultimate objective of both research and extension system is to increase agricultural production. Formulating research and extension agenda based on producer' requirement results in technology that will be more acceptable to users. This also helps in allocation of resources to both research and extension activities to be taken up in the district. Therefore, the strategic research and extension plan (SREP) for each district is the need of the hour to address then specific problems of the farming community especially resource poor and other disadvantaged groups.

**1.1.12 The expenditure during the 11th Five Year Plan and the tentative budget provision for 2013-14 under Crop Husbandry is indicated in the table below: -**

(` in lakh)

Sl. No	Name of Schemes	Eleventh Plan 2007-2012 Projected Outlay at 2006-07 prices	Actual Expd. during the 11 <sup>th</sup> Five Year Plan	Annual Plan 2011-12		12 <sup>th</sup> 2012-2017 Plan Projected outlay	Annual 2012-13		Proposed Outlay for the Annual Plan 2013-14
				Agreed Outlay	Actual Expr.		Approved outlay	Anticipated expenditure	
1	2	3	4	5	6	7	8	9	10.
	<b>CROP HUSBANDRY:</b>								
1	Direction and Admn	750.00	763.41	170.00	196.53	2500.00	151.50	151.50	173.00
2	Seeds	2000.00	358.63	82.00	64.98	1000.00	56.00	56.00	56.00
3	Manure & Fertilizers	1500.00	226.81	47.00	40.38	570.00	45.00	45.00	45.00
4	Plant Protection	400.00	132.20	20.00	25.00	300.00	25.00	25.00	25.00
5	Commercial Crops	1000.00	4418.58	1300.00	1342.06	18120.00	1651.53	1651.53	1686.75
6	Extension and Training	1000.00	626.83	156.00	167.06	1500.00	227.99	227.99	267.25
7	Agril Eco & Stats	75.00	161.29	31.00	40.99	250.00	41.25	41.25	43.00
8	Corpus fund on crop insurance (RKVY)		0	0	0	750.00	0	0	0
9	Agril Engineering(Mech)	1200.00	830.04	199.00	183.51	2510.00	143.25	143.25	177.00
10	Assistance to farming Cooperatives	100.00	134.00	35.00	55.00	0.00	45.00	45.00	45.00
11	Assistance to SF & MF	560.00	981.40	210.00	210.00	0.00	210.00	0.00	210.00
12	Other Expenditure including dev for Border Areas	600.00	1520.72	185.00	89.84	2500.00	80.00	80.00	102.00
13	Housing Resi Bldg	300.00	193.02	53.00	27.07	750.00	30.00	30.00	30.00
14	Capital Outlay	400.00	246.03	40.00	45.82	1100.00	38.48	38.48	0.00
15	CO on Crop Husbandry-Admn. bldg	115.00	359.55	72.00	32.61	1100.00	55.00	55.00	40.00
16	One Time Assistance under ACA/SPA for integrated Infrastructure for Agriculture & Allied Sectors		1000.00	0	0		0.00	0	0
	<b>TOTAL</b>	<b>10000.00</b>	<b>11952.51</b>	<b>2600.00</b>	<b>2520.85</b>	<b>32950.00</b>	<b>2800.00</b>	<b>2590.00</b>	<b>2900.00</b>

### **1.1.13 AGRICULTURAL RESEARCH AND EDUCATION**

The projected outlay for the 12<sup>th</sup> Five Year Plan is ` 1500.00 lakh. The approved outlay for the Annual Plan 2012-13 is ` 115.00 lakh, which is anticipated to be fully utilized. **The proposed Outlay for the Annual Plan 2013-14 is ` 120.00 lakh.**

During the 11<sup>th</sup> Plan period the actual expenditure was ` 337.16 lakh against the outlay of ` 500.00 lakh

The Department's Research Wing is engaged in adaptive trials of crop varieties and is not equipped for crop research and development (R&D) activities. Since research goes hand in hand with developmental planning, it is imperative to upgrade and modernize the research wing of the department to equip it with capacity for undertaking research in varietal selection etc. It is also proposed to set up crop specific research station in each district in order to strengthen the existing crop research system and creating expertise and knowledge base at specific agro-ecological zones.

### **1.1.14 AGRICULTURAL FINANCIAL INSTITUTIONS**

The Schemes aims at providing investment opportunities in Agricultura Financial Institution like the MCAB. The Scheme benefits the Govt. by way of receiving dividend amount on share annually and also financial institution is benefited by way of loans etc. to the cooperatives which in turn help the farmers of the state to purchase agriculture inputs like fertilizer, plant protection materials, seeds etc for increasing food production.

The 12<sup>th</sup> Five year Plan projected Outlay is ` **200.00 lakh** and the approved Outlay of ` **30.00 lakh** for the Annual Plan 2012-13 is expected to be fully utilized. **The The proposed Outlay for the Annual Plan 2013-14 is ` 30.00 lakh.**

### **1.1.15 RASHTRIYA KRISHI VIKAS YOJANA (RKVY)**

Rastriya Krishi Vikas Yojana (RKVY) is an additional Central Assistance Scheme introduced by the National Development Council that incentivized states to increase public investment in agricultural and allied sectors. During the 11<sup>th</sup> Plan, growth in the agriculture & allied sectors averaged 4.41 %. The Meghalaya Small Farmers Agri Business Consortium (MgSFAC) has been notified as the nodal agency for RKVY funds.

The total investment during the 11<sup>th</sup> Five Year Plan was Rs 104.38 Crore. The 12<sup>th</sup> Year Plan proposed outlay is Rs 30000.00 lakh and during 2012-13, an amount of Rs 8445.00 as an ACA has been provided for RKVY, which is expected to be fully utilized. **The proposed outlay of Rs 8445.00 lakh as an ACA has been provided for the annual Plan 2013-14.**

Besides the existing sectors, The Government has decided to also include Sericulture and allied activities in Rastriya Kristi Vikas Yojana (RKVY) to be eligible for funding under RKVY .

The benefits of the RKVY can now be availed for improvement of sericulture extension system, enhancement of soil health development of rain fed sericulture and for integrated pest management. The benefits available will be for improving silkworm seeds base and for mechanization of the sector. The decision will help provide support for development of market infrastructure and promotion of Seri enterprise. Projects can be taken

up to support non farm activities and special schemes can be sanctioned to beneficiaries of land reforms such as marginal small farmers etc. to maximize return to the Sericulture farmer. Thus the Scheme will cover Sericulture up to the stage of cocoon production along with extension system for cocoon production and silk yarn production in agri-enterprise up to the marketing.

## 1.2 HORTICULTURE

**1.2.1** The topography of the State of Meghalaya is such that only 12% of the geographical area is suitable for the purpose of food grain production . However, the climatic condition of the State is suitable for the development of different varieties of horticultural 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 Major horticulture produces during the 11<sup>th</sup> Plan period are Fruits crops 228.406 thousand tones, Vegetables - 176.814 thousand tones, Tuber Crops - 198.827 thousand tones, Spice Crops -69.352 thousand tones, Plantation Crops - 41.940 thousand tones. Having realized this potential, the State Government assigned priority to horticulture during the 12<sup>th</sup> 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.

With the development of markets, in addition to cultivating traditional crops, the State is also venturing into high value low volume crops namely, Strawberry and commercial floriculture like Rose, Liliun, Anthurium, Carnation, Bird of paradise which shows a very promising trend. High value vegetables like Broccoli and Capsicum are also being expanded through the Technology Mission Scheme for export to neighbouring markets and the rest of the country.

**1.2.2** The 12<sup>th</sup> Five Year Plan (2012-17) projected outlay is **Rs 28500.00 lakh**. During 2012-13, an amount of **Rs 3800.00 lakh** has been provided against which an amount of **Rs 3600.00 lakh** is expected to be utilized. The proposed Outlay for the Annual Plan 2013-14 is **Rs 3950.00 lakh** which includes **Rs 950.00 lakh** of TFC Award for infrastructure and **Rs 100.00 lakh** for Horticulture Mission under IBDLP .

### 1.2.3 Thrust area :

- **Fruit Sector:** - Khasi Mandarin – rejuvenation and area expansion; area expansion and processing of pineapple.
- **Temperate Fruit sector:** - plum, peaches, pears, kiwi 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 emphasis 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 has been taken up intensively and extensively during the Eleventh Plan. The Department sponsor 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. This will be intensified during the 12<sup>th</sup> Plan.

#### **1.2.4 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.

#### **1.2.5 A shift in the approach towards development of the sector during 2013-14 is proposed as follows :**

- 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.
- Moreover, there is an urgent need for modernization of agriculture. Almost any effort to increase productivity will require phasing out jhumming and replacing it with settled cultivation . Production of horticulture and floriculture products will also require modernization of farming techniques and expansion of irrigation facilities.

- Establishment of a cold chain along major arterial highways is critical if Meghalaya is to exploit its rich horticulture potential and to market these products to the rest of the country.

- An efficient transport network allows farmers of the State to expand their business horizon resulting in specialization in production and trade.

**1.2.6.** The break-up of the expenditure for the 11<sup>th</sup> Plan and the proposed Outlay for the Annual Plans 2013-14 is as indicated below:

(` in lakh)

Sl No.	Major Head/ Minor Head of Development (Scheme - Wise )	Eleventh Plan (2007-12) Projected outlay (at 2006-07 prices)	Eleventh Plan 2007- 2012- Actual Expenditure	Annual Plan2011- 12- Actual expenditure	12th Five year Plan- Projected Outlay	Annual Plan(2012-13)		AnnualPlan - 2013-14- Proposed Outlay.
						Approved Outlay	Anticipated expenditure	
1	2	4	5	6	7	8	9	10
	<b><u>HORTICULTURE</u></b>							
	<b>Crop Husbandry</b>							
1	Direction and Administration.	600.00	449.49	137.31	1084.00	137.69	137.69	180.00
2	Manure & Fertilizer.	5951.00	164.28	41.24	434.00	42.70	42.70	8.00
3	Plant Protection.	350.00	213.52	59.63	486.00	62.00	62.00	65.00
4	Commercial Crop.	2210.00	1720.59	423.08	5870.00	487.31	487.31	510.00
5	Extension and Training.	410.00	167.75	30.00	423.00	39.00	39.00	90.00
6	Agril. Economics Statistics		14.23	10.00	124.00	6.00	6.00	6.00
7	Hort & Vegetable Crop.	10479.00	5316.17	2104.58	11944.00	2450.30	2250.30	2471.00
8	Other Expenditures		822.20	527.20	2105.00	525.00	525.00	50.00
9	One time Assistance under SCA/APA for Integrated Infrastructure for Agriculture & Allied sectors.		4309.00	0.00				0.00
	<b>Total Horticulture</b>	<b>20000.00</b>	<b>13177.23</b>	<b>3333.04</b>	<b>22470.00</b>	<b>3750.00</b>	<b>3550.00</b>	<b>3380.00</b>
<b>10</b>	Capital Outlay on Crop Husbandry	0.00	1661.11	108.60	3000.00	50.00	<b>50.00</b>	570.00
	<b>Grand Total</b>	<b>20000.00</b>	<b>14838.34</b>	<b>3441.64</b>	<b>25470.00</b>	<b>3800.00</b>	<b>3600.00</b>	<b>3950.00</b>

### 1.2.7

### AGRICULTURAL MARKETING.

Agricultural Marketing plays a vital role in the development of rural economy. The priority of the Twelfth Plan under Agricultural Marketing is to establish marketing infrastructure. Farmers markets will be expanded to cover more areas within the state where such markets will be tried on the hub & spoke model - large central markets and Satellite markets in their hinterland.

The farmers need to be well equipped to handle the changing needs of the buyers and incoming products. In this regard, the facilities like cold storages, banking facilities, support services, as well as civil and recreational amenities need to be available in every market.

The effective functioning of farmer's markets depends to a large extent on the flow and easy availability of market related information to enable farmers to take proper and profitable market decision based on reliable data. Market information system is thus crucial and urgent intervention that would be made to make farmers markets viable and vibrant entities leading to the evolution of a much more transparent marketing system.

**The Projected Outlay for the 12<sup>th</sup> Five Year Plan Period is ` 6000.00 lakh and the Approved Outlay during 2012-13 is ` 800.00 lakh, which is expected to be fully utilized. The proposed Outlay for the Annual Plan 2013-14 is ` 850.00 lakh .**

The Broad break-up of the expenditure during 11<sup>th</sup> plan, the projected outlay for the 12<sup>th</sup> Plan and the proposed outlay for 2013-14 is indicated in the table below:-

(` in lakh)

Name of the Scheme	Projected 11 <sup>th</sup> Five Year Plan outlay 2007-2012	Actual Expd. during the 11 <sup>th</sup> Five Year Plan	Actual expenditure 2011-12	Proposed outlay for the 12 <sup>th</sup> Plan	Proposed Outlay for the Annual Plan 2012-13	Anticipated expenditure during 2012-13	Proposed Annual Plan 2013-14
2	3	4	5	6	7	8	9
<b>Agricultural Marketing.</b>	1250.00	1202.34	695.78	6000.00	800.00	800.00	850.00
<b>TOTAL:</b>	<b>1250.00</b>	<b>1202.34</b>	<b>695.78</b>	<b>6000.00</b>	<b>800.00</b>	<b>800.00</b>	<b>850.00</b>

### 1.3. SOIL AND WATER CONSERVATION

**1.3.1.** Meghalaya, a hilly state with its diverse agro-climatic ecological conditions characterized by high rainfall and endowed with potentially rich natural resources, is at present under intense pressure and threat due to the depletion of the three basic resources of life supporting system, that is, land, water and vegetation induced by natural and human and livestock, over exploitation of natural resources, ill/inadequate land management practices, etc., which are further exerting pressure on the natural environment. This has led to further deterioration of the ecosystem leading to an increase in the incidence of flash floods, sedimentation of streambeds and water reservoirs, land degradation, emergence of wastelands and eventually the aggravation of poverty and socio-economic fragility. In view of emerging policies, there was a felt need to bring about convergence, networking and harmonization through the adoption of compatible soil and water conservation practices to improve the productivity of natural resources in a sustained manner.

To ensure sustainable development schemes like terracing and reclamation. Erosion control, afforestation, cash and horticulture crops development as well as water harvesting works are being taken up so as to reduce soil erosion hazards and land degradation and also as environmental awareness..

**1.3.2** The projected Outlay for the 12<sup>th</sup> Five Year Plan (2012 -17) is ` 95500.00 lakh. Out of the Approved Outlay of ` 15380.00 lakh during the Annual Plan 2012-13, ` 15220.00 is expected to be utilized. The proposed Outlay for the Annual Plan 2013-14 is ` 13900.00 lakh.

**1.3.3** It may be mentioned that the actual expenditure under Soil & Water Conservation sector during the Eleventh Five Year Plan was ` 27434.75 lakh against the Outlay of ` 18922.00 lakh. The achievements made during the Eleventh Five Year Plan were as follows:

During the Eleventh Plan Period, under Soil & Water Conservation Schemes in General Areas, 1225 hectare of land was brought under Erosion Control Works with 663 nos. of structures being constructed; 423.22 hectare was covered under Afforestation; 1495

hectare was brought under Irrigation, 1830.05 hectare with 663352 nos nursery was brought under Cash Crop Plantations and 611 nos. of Water Harvesting Works were constructed. Under Jhum Control Scheme, 541.61 hectare and 225059 nos. nursery was covered under Cash Crop Plantations and 23.89 hectare under Afforestation and the expenditure incurred under this scheme is ` 148.80 lakh. Also, under the Watershed Management Scheme, 120.05 hectare was covered under Afforestation and 297.69 hectare with 201413 nos nursery under Cash Crop Plantations and the expenditure incurred under this scheme is ` 103.96 lakh. The Department is also implementing Watershed Development Project in Shifting Cultivation Areas (WDPSCA) and the area covered during the 11<sup>th</sup> Plan is 29185 hectare and the expenditure incurred under this scheme is ` 3002.40 lakh. Under Soil and Water Conservation Scheme under NABARD Loan, 8360 hectare was covered during the 11<sup>th</sup> Plan and the expenditure incurred under this scheme is ` 3201.42 lakh. 1606 hectare was covered under Improved Shifting Cultivation and the expenditure incurred under this scheme is ` 363.96 lakh. 20402 hectare was covered under Accelerated Irrigation Benefits Programme (AIBP) and the expenditure incurred under this scheme is ` 12693.30 lakh. 1865 hectare was covered under Integrated Watershed Management Programme (IWMP) and the expenditure incurred under this scheme is ` 279.75 lakh and 1823 hectare was benefited under Cherrapunjee Ecological Project – Restoration of Degraded Land under Sohra Plateau and the expenditure incurred under this scheme is ` 3400.00 lakh.

#### **1.3.4 Achievement during 2012-13 :-**

During 2012-13, under Soil & Water Conservation Schemes in General Areas, 100 nos. structures were constructed under Erosion Control Works; 88.22 hectare was covered under Afforestation; 82 nos. Water Conservation and Distribution Works were constructed; 2137.23 hectare was brought under Cash Crop Plantations; 10 nos. structures were constructed under Conservation Works in Urban Areas; 91 nos. Water Harvesting Works structures were constructed and 150,000 nos. seedlings were raised under Avenue Plantation. The total expenditure under the above schemes is ` 369.19 lakh. 9 nos. structures were constructed under Construction and Maintenance of Departmental Non-Residential Buildings and the expenditure incurred is ` 351.70 lakhs. Under Watershed Management Scheme, 18.24 hectare was covered under Afforestation; 211.70 hectare was covered under Cash Crop Plantations and the expenditure incurred is ` 12.69 lakh. With support of NABARD Loan, 9 nos. River Valley Projects under RIDF-XV were implemented and the expenditure incurred is ` 1200.00 lakh. 7700 hectare irrigation area was created under the scheme Accelerated Irrigation Benefits Programme (AIBP) and the expenditure incurred is ` 10600.00 lakh, 2667 hectare was covered under Integrated Watershed Management Programme (IWMP) and the expenditure incurred is ` 400.00 lakh. 1913.50 hectare was benefitted under Cherrapunjee Ecological Project – Restoration of Degraded Land under Sohra Plateau and the expenditure incurred is ` 1535.00 lakh.

#### **1.3.5 Schemes/Projects for 2013-14 :-**

(i). **Soil & Water Conservation Works in General Areas** : The activities taken up under this programme are those which are not identified within a major package programme or watershed management scheme. Such activities are taken up in an individual farmer's field or in the community land based on the individual/community approach taking into consideration the felt need and are spread through-out the entire area of the State. Farmers could avail the financial assistance from the Department for different construction works like dams, retaining walls, water harvesting structures, cash crop development works,

etc. Keeping in view the popularity of the programme, particularly for the small farmers of the State, this programme needs to be continued during 2013-14..

**(ii) Soil & Water conservation Projects under RIDFs of NABARD Loan:-**

The Department was availing loan from NABARD under various tranches of RIDFs started from the year 2000-2001. the basic objective of the scheme is to enhance the productivity of the agricultural crops in the small river valleys of the state, thereby improving the socio economic condition of the people in the rural areas.

Number of projects sanction under various tranches of RIDFs are indicated below:-

SL No	Tranches	No of schemes Approved / Sanctioned	Amount involved (` in lakh)
1	RIDF-XIII (2007-2008)	7 River Valley Projects	757.15 719.30
2	RIDF-XIV (2008-2009)	10 River Valley Projects	1718.31 1632.39
3	RIDF-XIII (2009-2010)	9 River Valley Projects	3060.98 2907.93
4	RIDF-XIII (2010-2011)	5 River Valley Projects	2211.57 2101.00

**(iii) SPA- Cherrapunjee Ecological Project – Restoration of Degraded land under**

**Sohra Plateau :** The Government of Meghalaya through the Department has initiated a programme known as Cherrapunjee ecological Project – Restoration of Degraded Land under Sohra Plateau. This programme encompasses an area of about 11092 hectare covering a total of 45 villages. This scheme aims at :-

- Ameliorate the ecology and environment of Sohra Plateau.
- Restore degraded lands.
- Strengthen village level institution on Natural Resource Management.
- Minimize human activities detrimental to the environment.
- Create avenues for sustainable livelihood.

As per the Detailed Project Report the total Project cost is ` 8716.898 lakh and the project is phased out for a period of 6 (six) Years starting from 2010-2011 up to 2015-2016. The physical targets include among others treatment of 365 hectare Arable Land, treatment of 2449 hectare Non-Arable Land, Construction of 3268 structures for drainage line treatment and creation of 18795 units of livelihood and eco-tourism activities. The total fund released till date for the project is `.4935.00 lakh and the detail is as follows:-

During the year 2010-2011, and amount of `.1600.00 lakh was released as Special Plan Assistance. During the year 2011-2012, an amount ` 1335.00 lakh and `.465.00 lakh was released as Special Plan Assistance and Special Central Assistance respectively and during the year 2012-2013 an amount of `.1535.00 lakh was released as Special Plan Assistance.

The cumulative achievement till date, (i) 311 hectare area under Arable Land Treatment, (ii) 2049 hectare area under Non-Arable Land Treatment, (iii) 1111 Nos. structures in Drainage Line Treatment and (iv) 10607 units under livelihood and eco-tourism activities. During 2013-14, more fund is required for implementation of this scheme.

(iv) **Accelerated Irrigation Benefits Programme (AIBP)** : This is a Central Assistance scheme sponsored by the Ministry of Water Resources, Government of India. The central share to state share ratio is 90% : 10%. The main thrust of the programme is to increase the area under irrigation thereby increasing the productivity and production of the cultivated area for improving the socio-economic condition of the farmers.

In the State of Meghalaya, Surface Minor Irrigation (MI) schemes are of both individual schemes benefitting irrigation potential of at least 20 hectare and group schemes benefitting a total ultimate irrigation of at least 50 hectare or more within a radius of 5 kilometers. The projects are earmarked to be completed within a time period of 2 (two) to 3 (three) years.

During the year 2008-09, 9 nos. of Projects were sanctioned by the Ministry of Water Resources, Government of India with a total financial outlay of ` .1325.58 lakh to create a potential irrigation area of 2338 hectare. During the year 2009-10, ` .455.00 lakh was incurred by the end of March 2010 for creating irrigation area of 829 hectare. During 2010-11, ` .866.078 lakh was incurred for creating irrigation area of 1497 hectare. During 2011-12, ` .4.502 lakh was incurred for creating irrigation area of 12 hectare. The cumulative expenditure upto 2011-12 is ` .1325.58 lakh and the irrigation area created so far is 2338 hectare. Thus, the projects have been completed during 2011-12.

During the year 2009-10, 23 nos. of Projects were sanctioned by the Ministry of Water Resources, Government of India with a total financial outlay of ` .11367.73 lakh to create a potential irrigation area of 18064 hectare. During the year 2009-10, ` .455.00 lakh was incurred by the end of March 2010 for creating irrigation area of 787 hectare. During 2010-11, ` .4633.922 lakh was incurred for creating irrigation area of 7362 hectare. During 2011-12, ` .6278.808 lakh was incurred for creating irrigation area of 9915 hectare. The cumulative expenditure upto 2011-12 is ` .11367.73 lakh and the irrigation area created so far is 18064 hectare. Thus, the projects have been completed during 2011-12.

During 2012-13, the Department has forwarded 42 nos. New Projects under AIBP to the Ministry of Water Resources, Government of India and sanction for the above projects is awaited.

A tentative outlay of ` .11600.00 lakh is proposed during 2013-14 for implementing the above 42 nos. new projects under AIBP.

(v) **Integrated Watershed Management Programme (IWMP)** : The Integrated Watershed Management Programme is the result of the new and unified approach for treatment and development of the new generation watersheds in a realistic and holistic manner. The Government of India through the National Rainfed Area Authority has evolved the Common Guidelines for implementation of the Watershed Development Projects constituted during the year 2008. The major area in which paradigm shift has been made under the programme are inter-alia, empowerment to the State Government through the State Level Nodal Agency at the State Level, constitution of District Project, levels institutions for implementation of the projects as the Participatory Watershed Projects with financial, social and economic empowerment to the watershed communities in close coordination with the local institutions. Another aspect in which great thrust is laid under the programme is the equity and participatory resources management with due regards to the economically weaker section within the village community.

After the approval of the State Perspective & Strategic Plan and the Preliminary Project Report by the State Level Nodal Agency and the National Level Steering Committee of the Department of Land Resources, Ministry of Rural Development,

Government of India, during 2009-10 the Government of India (DoLR) has accorded approval and sanction for treatment of 30,000 Hectares under the 18 projects spread across all the Districts for which the total project cost is ` .45.00 crore. The State Government has to bear 10% of the total project cost as the corresponding matching State share.

**IWMP Batch-I** :During 2009-10, the DoLR Government of India has released 6% as part of the 1<sup>st</sup> installment of the Central share amounting to ` .2.43 crore and the State Govt. had released ` . 0.27 crore being the matching state share for preparation of DPR, Entry Point Activities, Administrative Expenses and Institution and Capacity Building.

During 2010-11 the DoLR Government of India has released 14% of the 1<sup>st</sup> installment of the Central share amounting to ` 5.67 crore and the State Govt. had released Rs.0.63 crore being the matching state share for Administrative cost, Monitoring, Evaluation, Institution & Capacity Building and Watershed work phase.

**IWMP Batch-II** : In the year 2010-11 the Government of India (DoLR) has accorded approval and sanction for treatment of 52,000 Hectares under the 29 projects spread across all the Districts for which the total project cost is ` 78 crore. The State Government has to bear 10% of the total project cost as the corresponding matching State share.

During 2010-11, the DoLR Government of India has released 6% as part of 1<sup>st</sup> installment of Central Share amounting to ` 4.212 crore and the State Govt. had released Rs.0.468 crore being the matching state share for preparation of DPR, Entry Point Activities, Administrative Expenses and Institution and Capacity Building.

During 2011-12, the DoLR Government of India has released 14% of the 1<sup>st</sup> installment of the Central share amounting to Rs.9.828 crore and the State Govt. had released ` 1.092 crore being the matching state share for Administrative Cost, Monitoring, Evaluation, Institution & Capacity Building and Watershed work phase.

**IWMP Batch-III** : In the year 2011-12, the Government of India (DoLR) has accorded approval and sanction for treatment of 37,500 Hectares under the 14 projects spread across all the Districts for which the total project cost is ` 56.25 crore. The State Government has to bear 10% of the total project cost as the corresponding matching State share.

During 2011-12 the DoLR Government of India has released 6% as part of 1<sup>st</sup> installment of Central Share amounting to ` 3.0375 crore and the State Govt. had released ` 0.3375 crore being the matching state share for preparation of DPR, Entry Point Activities, Administrative Expenses and Institution and Capacity Building.

During 2012-13, the DoLR Government of India has released 14% of the 1<sup>st</sup> installment of the Central share amounting to ` 7.0875 crore and the State Govt. had released ` 0.7875 crore being the matching state share for Administrative Cost, Monitoring, Evaluation, Institution & Capacity Building and Watershed work phase.

**IWMP Batch-IV**: In the year 2012-13 the Steering Committee, Government of India (DoLR) has accorded approval for treatment of 38,870 Hectares under the 12 projects spread across all the Districts for which the total project cost is Rs.58.305 crore. The State Government has to bear 10% of the total project cost as the corresponding matching State share.

During 2012-13 the amount of Central Share due for release under IWMP Batch-I, Batch-II & Batch-IV is ` 38.99898 crore. However, after deduction of interest accrued and unspent balance as on 1.4.2012 the Government of India had released the Central Share amounting to Rs.30.3461311 crore. And the amount of Central Share for utilization during the year 2012-13 is ` 38.99898 crore. The State Government had released ` 3.899898 crore being the matching State Share for implementation of IWMP Batch-I, Batch-II & Batch-IV.

A tentative outlay of ` 400.00 lakh under State Share is proposed during 2013-14 for treating an area of 2667 hectare.

**(v) Commercial Crop Development Board :** The Meghalaya Commercial Crops Development Board (MCCDB) came into being vide an Act call the Meghalaya Commercial Crops Development Board Act, 1996 effected from 1<sup>st</sup> June, 1997. However, the MCCDB actually formally inaugurated its office on the 3<sup>rd</sup> August, 2001 and its nucleus Branch at Tura was inaugurated on the 21<sup>st</sup> May, 2002.

The aims and objectives of the Meghalaya Commercial Crops Development Board are to promote Horticultural Plantation and other Commercial Crops in the State, so as, to bring about general prosperity and to bring to an end the uneconomic, but destructive agricultural practices like Jhum and Bun. It will have within its purview all plantation and horticultural crops and will provide assistance to the farmers in all their requirements like getting loans, technical advice, obtaining, promoting and assisting in implementations and adoptions of new technologies, procuring inputs including improved seeds, finding outlets for the produce, finding linkages with processing units, etc. The Board will lay emphasis on developing infrastructure for producing raw materials and processing units and marketing infrastructures for the produces. It will motivate farmers to take up such farming activities which can give good yield, are eco-friendly and find a proper market. The Board will thus link the farmer with financial institutions, technical services and agencies providing with quality inputs on the one hand and with processing units and market on the other. Today, one of its main programmes is the Group Rubber Planting Scheme which it has taken up by the Soil & Water Conservation Department.

The activities of the Board include the promotion of commercial crops cultivation, processing and marketing of commercial crops in the State. The expenditure on the scheme during during 2012-2013 is ` 35.00 lakh only. A tentative outlay of ` 35.00 lakh is proposed during 2013-14 as financial assistance (grant-in-aid) to the Meghalaya Commercial Crop Development Board (MCCDB) for running of the Board Office.

**(vii) Construction & Maintenance of Departmental Non-residential Buildings :** The objective of the scheme is to provide necessary infrastructure to the different establishment both at the directorate and the district level. The Department is planning to construct new office buildings in newly created districts.

**(viii) Construction & Maintenance of Government Residential Buildings :** The scheme is meant for the purpose of provide accommodation facilities to the officers and staff of the Department in order to achieve effective services from them especially in the matter of execution of different types of works in the field.

The broad break-up of the expenditure during 2012-13 and the tentative outlay proposed during 2013-14 is as indicated in the table below :-

(` in lakh)

Name of Scheme	11 <sup>th</sup> Plan (2007-2012) Projected Outlay	11 <sup>th</sup> Plan (2007-2012) Expenditure	Actual expenditure 2011-12	12 <sup>th</sup> Plan (2012-2017) Projected Outlay	Approved Outlay 2012-13	Anticipated Expenditure 2012-13	Tentative Outlay for the Annual Plan 2013-14
Direction & Administration	1446.00	2188.66	602.84	350.00	117.00	117.00	48.00
Soil Survey & Testing	34.00	30.00	7.33	2.00	0.00	0.00	0.00
Soil Conservation Scheme	3209.35	1366.81	84.13	12300.00	815.33	805.33	190.70
Extension & Training	270.00	364.87	89.64	25.00	11.00	11.00	7.00
Other Expenditure	13802.65	23444.13	10112.89	81802.00	14134.45	13984.45	13472.00
Agricultural Research & Education	10.00	10.81	2.20	21.00	2.22	2.22	2.30
Housing-01-Govt. Residential Building	150.00	29.47	0.00	1000.00	300.00	300.00	180.00
<b>Total</b>	<b>18922.00</b>	<b>27434.75</b>	<b>10899.03</b>	<b>95500.00</b>	<b>15380.00</b>	<b>15220.00</b>	<b>13900.00</b>

## 1.4 ANIMAL HUSBANDRY

**1.4.1.** Animal Husbandry & Veterinary sector plays an important role for increasing production of animal origin food like milk, meat and eggs. Every effort has been made to bring about an all round improvement of livestock and poultry farming, development of infrastructure and also to generate self employment to the people, increasing the production of meat, milk and eggs and other products and by-products, improving the marketable quality of the products including processing for long storage and better acceptability to the consumers and arrangement for an efficient marketing of the products. The target fixed for production of meat & egg during the Eleventh Plan Period is 42,000 tonnes and 110 million Nos and the actual achievement during Eleventh plan is 38,240 tonnes and 102.06 million Nos respectively.

**1.4.2.** The approved outlay for the Eleventh Plan is ` .10500.00 lakh. The actual expenditure during the 11<sup>th</sup> Plan is ` .10134.09 lakh. The approved outlay for 2012-2013 is ` .3400.00 lakh which include ` .1300.00lakh as NABARD Loan and 320.00lakh under Livestock mission. The anticipated expenditure during 2012-13 is ` .3180.00 lakh.

**1.4.3.** Achievement during the 11<sup>th</sup> Plan: The key items for assessment of achievement under this sector during the 11<sup>th</sup> Plan are as indicated in the table below:-

Items	Units	11 <sup>th</sup> Plan Target	11 <sup>th</sup> Plan Actual Achievement	2011 -12 Actual Achievement
<b><u>A.H. Products</u></b>				
1. Meat	000' tonnes	42.00	38.24	40.00
2. Eggs	Million Nos	110.00	102.06	103.00

<b>A.H. Programmes</b>				
1.Artificial Insemination	000' Nos annually	136.5	135.4	27.62
2.Cattle & Buffalo Farm	Nos	5	4	4
3.Veterinary Hospital (Cumulative)	Nos	4	4	4
4.Veterinary Dispensary (Cumulative)	Nos	94	97	97
5.Veterinary Aid Centre (Reduced due to Upgradarion)	Nos	52	47	47
6.Students trained under VFA Training Institute	Nos.	125	125	125
7.Students sponsored for B.V.Sc. and A.H. Degree Course	Nos.	50	54	10
8.Farmers trained under VTC	Nos.	5740	5937	956

#### **1.4.4 PROGRAMME FOR THE TWELFTH PLAN (2012-17) & ANNUAL PLAN 2013-14**

The Department is fully utilizing its services in the activities relating to development of cattle, buffaloes, pig, sheep, goats, rabbit, poultry, feed & fodder, treatment and prevention of animal diseases, livestock census and development of dairying in the State. Keeping in view the socio-economic development in the State and consequent upon the marked improvement in such services, the approach of the Department under long term perspective would be to match its services to the modern technologies and upgrade the existing status as early as possible in phase manner with the development that takes place elsewhere in the country as well as in advanced countries.

Due to its peculiar topography, climatic situation and socio-economic conditions the people of Meghalaya depends more on Animal Husbandry activities, Horticulture etc, as traditional agriculture in hilly areas occupies only about 10% of the land in the State. Heavy rainfall in sloppy hill not only causes soil erosion but also make it acidic by removing the soluble basic part of the soil by the solvent action of the run-off water and loss of productivity. Indiscriminate mining of stones, gravels, coal, etc. diminishes the area under cultivation, forest land and grass cover. Under such situation, livestock farming is the only occupation that the villagers can rely upon for a subsidiary living and drive for effecting quick improvement is needed by the State by adopting a comprehensive plan for livestock and poultry production, processing and marketing of livestock and livestock products through judicious application of modern technologies on breeding, feeding, management, disease control, processing, and marketing.

Adoption of scientific fodder production and conservation by using local grasses, improved seeds and root slips supplied by reputed organizations would bring in better availability situation and optimum production of fodder for livestock.

Utilization of manure of livestock and poultry for setting up of Bio-gas units would solve the fuel problem in the remote areas and further depletion of forest could be halted with consequence re-generation of forestry cover which will go a long way for economic development in these areas.

**1.4.5.** The per capita availability of milk, meat and eggs as shown below indicates a dismal picture and thus greater effort is needed for the Animal Husbandry sector to make a holistic approach in the Twelfth Five Year Plan.

**PER CAPITA AVAILABILITY (2011 – 12)**

Sl. No.	Product	Production	Human Population	Per Capita Availability
1.	Milk (in '000' tonnes)	79.7	29.64 lakh	74 gm/day
2.	Meat (in '000' tonnes)	38.2		35.22 gm/day
3.	Eggs (Million Nos)	102.06		34 nos/years

The picture depicted above indicates the need for taking up the activities with all sincerity and services in future plans. The action proposed to be taken for further development and thrust areas for overall development of livestock resources is for :-

- a) Qualitative improvement of livestock and poultry to increase the productivity and thereby increase the per-capita availability of milk, meat & egg.
- b) Creation of adequate infrastructure for animal, health coverage, input supplies, processing of animal products and organizing efficient marketing system to match the production so envisaged. Establishment/strengthening of Poly-clinic/hospital in each district will be taken up, including establishment of new dispensaries in rural areas as per norms and upgradation of existing Veterinary Aid Centres/Stockman Centres/Key Village Centre to full-fledged Veterinary Dispensaries.
- c) Production of fodder and balanced livestock feed will receive high priority in order to make animal production activities cost effective and remunerative to the farmers. Participation of farmers for livestock farming and for this purpose organization of farmer's co-operative, involvement of NGOs in various activities will be encouraged. Breeding facilities like artificial insemination of cattle will be at farmer's doorsteps besides imparting of training to local farmers and demonstration of latest system of farming.
- d) Encourage establishment of commercially viable projects by private entrepreneurs, co-operative societies and big business houses of repute on equity participation basis, if required.
- e) Additional employment opportunities for un-employed rural youths, commercial rearing of improved pigs, goats & poultry (both for eggs & meat) will be encourage by giving assistance in the form of Grant-in-Aid/Subsidy, providing feed in the form of subsidy and other incentives. Rural Cluster Approach will be encouraged for poultry and piggery development.
- f) Establishment of medium/small Slaughter Houses in each and every district/Sub-division for clean and hygienic meat.

- g) To sponsor suitable candidates to different Institute/Universities in the Country for undergoing studies in Degree Courses on B.V.Sc & A.H and B.Sc (Dairy Technology) wherever allotted seat(s) is available, which would match with the envisaged demand considering the present attrition rate of technical personnel. In-service technical officers will be deputed for post graduate studies or specialized in different disciplines wherever required by the Department on regular basis.
- h) Conducting training for production of skilled para-veterinarian who will assist the veterinarian in treatment, prevention of diseases as well as management, feeding, etc. of farm animals. Workshop, seminar and training-cum-exposure trip will be organized on regular basis at State/District/Sub-Divisional/Block level for technical person and farmers. Training of entrepreneur for taking up of livestock on commercial basis for which Entrepreneurship Development Programme (EDP) will be one of the prime thrust areas in the Twelfth Plan.

#### **1.4.6. PROPOSED OUTLAY FOR THE 12<sup>th</sup> PLAN (2012 – 17) and ANNUAL PLAN 2013-14**

The Projected outlay for the 12<sup>th</sup> Plan Period under A.H Sector is ` 28800.00 lakh (including ` 10000.00 lakh NABARD Loan) and the approved outlay for Annual Plan 2012-13 is ` 3400.00 lakh (including ` 1300.00 lakh NABARD Loan and ` 320.00 lakh Livestock Mission). The anticipated expenditure during 2012-13 is Rs3180.00 lakh. The Projected Outlay for the Annual Plan 2013 – 14 is ` 3550.00 lakh (including ` 1300.00 lakh NABARD Loan and ` 100.00 lakh Livestock Mission).

The main programmes for A.H Sector for 2013 – 14 are indicated below :

1. **Direction & Administration** : An amount of ` 159.46 lakh is proposed for maintenance of Administrative offices at Directorate, District, Sub-Divisional, Engineering and other establishments, including rent, rates & taxes and State Share to Centrally Sponsored Scheme, viz, State Veterinary Council.
2. **Veterinary Services & Animal Health** : For maintaining and providing medicines, chemical, re-agents, equipments and appliances to the existing hospitals, dispensaries, aid centres and clinical laboratories located in different parts of the State including contribution to Centrally Sponsored Scheme, namely, Assistance to State for Control of Animal Diseases (ASCAD), an amount of ` 307.48 lakh is proposed during 2013 – 14. The Department has also earmarked State's Share under NABARD loan for establishment of new Veterinary Dispensaries & Poly-clinic in State.
3. **Cattle Development** : For improvement of existing Cattle farms and Buffalo farm, replacing the old and unproductive stock and purchase of feed, etc, an amount for ` 174.32 lakh has been earmarked which includes State Share as State Contribution for establishment of Slaughter Houses under NABARD Loan.
4. **Poultry Development** : An amount of ` 335.54 lakhs has been proposed for maintenance and strengthening of all poultry farms in the State, replacement of parent stock of breeding birds, increasing the capacity of birds in the farms in order to meet the requirement for supply of inputs to the farmers. The above amount includes Assistance to farmers/Self-Help Group/Co-operative Societies for poultry rearing in the form of subsidy.

5. **Sheep, Goat & Rabbit Development** : Under this programme, an amount of ` 8.75 lakh has been proposed which include implementation of subsidy schemes for goat rearing.
6. **Piggery Development** : This programme includes maintenance and strengthening of existing pig breeding farms in the State and implementation of subsidy schemes for general farmers/Educated Un-employed Youth/SHGs/Co-operative Societies. It is proposed to replace the old parent stock of pigs for breeding programme so as to improve and increase production of piglets in order to meet the requirement in the State. An amount of ` 331.17 lakh is proposed for 2013 – 14.
7. **Feed & Fodder Development** : An amount of ` 29.36 lakh is proposed for maintenance of existing fodder farms and feed mills in the State and Feed Analytical Laboratory for analyzing of feed samples.
8. **Administrative Investigation & Statistics** : An amount of ` 40.00 lakh is proposed as State Share for implementation of Integrated Sample Survey for estimation of Major Livestock Products in the State.
9. **Research & Education** : This programme includes maintenance of existing clinical laboratories for diagnosis and testing of diseases, purchase of vaccines, sponsoring candidates for undergoing degree course, specialization, conducting certificate course to VFA, vocational training to farmers, workshop, etc. Hence, an amount of ` 93.24 lakh is proposed for the above expenditure.
10. **Infrastructures Development/including Improvements** : An amount of ` 506.91 lakh is proposed for maintenance of existing infrastructure which have been created during the 7<sup>th</sup> Plan period onwards.

#### **1.4.7 NEW STATE PLAN SCHEMES**

1. **Establishment of District Veterinary Information Units in Khasi, Jaintia & Garo Hills** :- With the objective to provide the detailed information on the activities of A.H. & Dairy Sector, initially the Department has proposed to establish 3 (three) District Veterinary Information Units in the main District of Khasi, Jaintia & Garo Hills at an estimated amount of ` 290.00 lakh with a proposed outlay of ` .25.17 lakh during 2013-14.
2. **Setting up of new Cattle Breeding farm in East Garo Hills District** :- The Department with the objective to increase Milk production and also to meet the requirement of breeding stock of cattle it is proposed to establish 1 (one) cattle farm at Rongdona in East Garo Hills District and ` 30.05 lakh is proposed during 2013-14.
3. **Setting up of A.I Production Centre** :- With the objective to introduce A.I services to pigs as a mean to improve production at different level especially after taken into consideration the high maintenance of keeping boars, the A.I producing centre will be established at Upper Shillong at an estimated cost of ` 114.74 lakh and also proposed an amount of ` 57.99 lakh during 2013-14.
4. **Livestock Demonstration Farm** :- From the Bio-Security point of view of livestock, the Department will set up Livestock Demonstration Farms at the Vocational Training Centres at Kyrdemkulai and Tura so as to avoid free movement of Trainees of both in- service and farmers at the different Livestock & Poultry farms. An amount of ` 20.56 lakh is proposed for 2013 – 14.

5. **Scheme for State Awareness Programme to the farmers on Annual Diseases :-**  
For extension of A.H Services, it is proposed to conduct awareness programmes in the rural areas where the State Veterinary Dispensaries are located to highlight people on the importance of A.H Programme, threat of diseases, availability of improved breeding stock for economic upliftment of the people. An amount of ` 30.00 lakh is proposed during 2013 – 14.

**1.4.8. Livestock Mission under Integrated Basin Development & Livelihood Programme :**

Livestock Mission is one of the flagship programme of the Government of Meghalaya under the Integrated Basin and Livelihood Development Programme (IBLDP) with an aim to generate employment opportunity to the local population using the available technology and resources. The programme offers lots of scope to augment production of meat, egg and milk, thereby bridging the gap between demand and supply. The State as of now imports more than 9 thousand tonne of meat & 33 millions eggs every year from outside the state besides large quantity of milk by products. With the increase of human population, it is expected that the demand for all the above protein requirement of animal origin will increase many folds. However, the State has a congenial climate and resources suitable for Livestock & Poultry farming. Hence, a committed programme like “Livestock Mission” is expected to bring lots of changes to enhance the economy of the State and provide employment opportunity to many. The goals of this Livestock Mission is designed to be implemented through the Group/Societies/Individual as given below and to cover all the 39 blocks of the State in 5(five) years. The financial support system will be shared between the Government, Bank and Beneficiaries in the ratio of 60:30:10 respectively.

**PROJECTED FINANCIAL IMPLICATION AND GOVERNMENT CONTRIBUTION**

Sl. No.	PROGRAMME	No.of SHG/ Group/ Society	Estimated Expenditure (lakhs)	60% Government contribution
1.	Dairy Development	82	1767.10	1060.26
2.	Pig Breeding	780	14352.00	8611.20
3.	Pig Fattening	1137	13644.00	8186.40
4.	Poultry Layer	176	6575.79	3945.47
5.	Kuroiler rearing	722	15104.68	9062.81
6.	Goatery Development	793	11228.88	6737.33
7.	Fodder development	-	10623.80	10623.80
8.	Marketing unit of Live animals	78	374.40	224.64
9.	Clean butcher shop	80	320.00	192.00
10.	Capacity building /Mass Media/Data collection/Emergency relief/ Administrative charges etc		5300.00	5300.00
	<b>Total</b>	<b>3848</b>	<b>79290.65</b>	<b>53943.91</b>

**Unit size of each programme**

Sl. No	Name of programme	Amount per unit	No.of animal/ birds per unit	Total Amount (in lakh)
1.	Dairy Cattle	21,55,000.00	10 milch cows	1767.10
2.	Pig Breeding	18,40,000.00	12 piglets (2:10)	14352.00
3.	Pig Fattening	12,00,000.00	40 piglets	13644.00
4.	Poultry Layer	37,36,240.00	1000 birds	6575.79

5.	Low in-put Kuroiler	20,92,060.00	1000 birds	15104.68
6.	Goatery	14,16,000.00	42 goats(2:40)	11228.88
7.	(i)Strengthening of existing Govt.Fodder Farm	41,00,000.00	4 units	164.00
	(ii)Setting up Fodder Demonstration plot	12,70,000.00	74 units	939.80
	(iii)Fodder production unit	3,40,000.00	2800 units	9520.00
8.	Marketing unit of live animals	4,80,000.00	78 units	374.40
9.	Setting up of clean butcher shop	4,00,000.00	80 units	320.00
10.	Capacity building/Mass Media/Datacollection/Emergency relief/Administrative charges etc	-	-	5300.00
	<b>Grand Total</b>	-	-	<b>79290.65</b>

(1) With the implementation of the above programmes, the State is expected to increase the production as follows:

Sl.No.	I T E M S	Estimated production
1.	Milk	25 lakhs litres per year
2.	Piglets	4,24,320 nos in 5 years
3.	Pork	8914.08 MT in 5 years
4.	Eggs	18 million per year
5.	Chicken	1900 MT per year
6.	Mutton	190 MT per year

- (2) Under the Livestock Mission, about 3848 Group/Society will be covered in five years, thus giving direct and indirect employment to about 40 thousand people.
- (3) Livestock Mission encourages all stake holders to acquaint themselves with scientific knowledge & skill through proper guidance and training, thus ensuring sustainability of the programme.
- (4) The idea of involving SHG/Societies is to cover maximum number of participation, besides it will safeguard the viability of the programme.
- (5) The implementation will have a cluster approach to be able to take proper health care, supervision and marketing.

**Strategy:** The overall strategy is to augment production of meat, milk and eggs with due consideration to the marketing facilities. It also envisages transfer of technology on the concept of demand-driven.

**Mode of implementation:** All programmes will be implemented through the State Implementing Agency to be headed by the Chief Executive Officer (CEO). At the District level, all District A.H & Vety.Officer will be the implementing officer and to be assisted by the Programme Manager at the Block level. At the village level, Livestock Development Committee will be constituted from amongst the member of SHG/Society, where A.H & Vety. Officer, C&RD Block will be the ex-officio member.

**Funding & Management of Fund:** The Implementing Agency will tie up with any Commercial Bank for back ended subsidy, and each Group or Society shall have to open their bank account accordingly. The consolidated fund will be created with the Financial Bank.

**Monitoring & Evaluation:** Separate committee will be constituted for this purpose for the successful implementation of all programmes under the Livestock Mission.

**1.4.9.** The broad break - up of the actual expenditure for the 11<sup>th</sup> Plan, anticipated expenditure 2012-13 and the Projected Outlay for the 12<sup>th</sup> Plan and Annual Plan 2013- 14 in respect of Animal Husbandry and Veterinary Sector is indicated in the Table below:-

( ` . in lakh)

Sl. No.	Schemes	11 <sup>th</sup> Plan 2007-12 Projected Outlay	11 <sup>th</sup> Plan Actual Expenditure	Annual Plan 2011-12	12 <sup>th</sup> Plan 2012-17	Annual Plan 2012-13		Annual Plan 2013-14
				Actual Expenditure	Projected Outlay	Approved Outlay	Anticipated Expenditure	Proposed Outlay
1.	Direction & Administration	520.00	758.66	189.82	1431.00	133.28	133.28	159.46
2.	Vety. Services & Animal Health	2135.00	2535.42	705.07	5199.00	249.28	249.28	307.48
3.	Cattle and Buffalo Development	940.00	609.57	274.36	1684.00	124.69	124.69	174.32
4.	Poultry Development	1160.00	701.10	193.60	2299.00	198.48	198.48	335.54
5.	Sheep & Goat Development	80.00	76.83	18.66	200.00	5.50	5.50	8.75
6.	Piggery Development	1100.00	729.63	192.54	2305.00	196.62	196.62	331.17
7.	Fodder & Feed Development	395.00	259.20	48.65	360.00	24.46	24.46	29.36
8.	Administrative Investigation and Statistics	150.00	80.51	35.17	236.00	34.80	34.80	40.00
9.	Research	80.00	67.69	15.78	125.00	12.44	12.44	14.93
10.	Education	309.00	320.73	88.07	660.00	67.97	67.97	78.31
11.	Infrastructure	3631.00	1647.89	442.04	3327.00	732.48	732.48	506.91
12.	RKVY		578					
13.	New Schemes				974.00			163.77
	<b>TOTAL</b>	<b>10500.00</b>	<b>8365.23</b>	<b>2203.76</b>	<b>18800.00</b>	<b>1780.00</b>	<b>1780.00</b>	<b>2150.00</b>
14.	NABARD Loan	-	768.86	768.86	10000.00	1300.00	1300.00	1300.00
15.	SPA	-	1000.00		-	-	-	-
16.	Livestock Mission	-	-		-	320.00	100.00	100.00
	<b>GRANDTOTAL</b>	<b>10500.00</b>	<b>10134.09</b>	<b>2972.62</b>	<b>28800.00</b>	<b>3400.00</b>	<b>3180.00</b>	<b>3550.00</b>

#### **1.4.10. CENTRALLY SPONSORED AND CENTRAL SECTOR SCHEMES:**

The following are the Centrally Sponsored Schemes to be continued during 2013-14:-

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 control of Brucellosis (NPCB).
7. National Animal Disease Reporting System (NADRS).
8. Rural Backyard Poultry Development Component.
9. Assistance to Grassland Development including Grass Reserve.
10. Assistance to State for strengthening of existing farms.

## 1.5 DAIRY DEVELOPMENT

**1.5.1** The Approved Outlay for Dairy Development Sector for the 11<sup>th</sup> Plan is `2200.00lakhs. The actual expenditure during the 11<sup>th</sup> Plan is `366.30. The approved outlay for the Annual Plan, 2012-2013 is `450.00lakh and the anticipated expenditure is `525.00 lakh. The actual achievement during the 11<sup>th</sup> plan in production of milk is 97.67 thousand litres and the proposed target to be achieved during the 12<sup>th</sup> Plan is 85.00 thousand litres.

In Dairy development, priority will be given for production of milk, processing and pasteurizing of milk or milk products & creating a market for sale to the towns / cities of Meghalaya and the adjoining States preferably through co-operative consumers in the rural as well as urban areas. Private entrepreneurs willing to establish milk plants will be encouraged.

**1.5.2.** The Projected Outlay for the 12<sup>th</sup> Plan (2012 – 17) is `4850.00 lakh and the Proposed outlay for the Annual Plan (2013 – 2014) is `480.00 lakh. The programmes under Dairy Sector proposed to be taken up during 2013 - 2014 are summarized below :-

- 1. Direction and Administration :** Scheme under Direction and Administration at State and District level will continue during 2013 – 2014 which includes maintenance, strengthening and improvement of the administrative set up both at the State and District level. An amount of `46.07 lakh is proposed during 2013 – 2014.
- 2. Cattle cum Dairy Development :-** An amount of `.292.38 lakh is proposed for the Annual Plan 2013-14 for maintenance of Dairy Plants, Chilling Plants. Policy in respect of procurement & marketing of milk is now being handled by the Registered District Societies in Shillong, Tura and Jowai. In order to encourage & involve people for increasing milk production, the Subsidy Scheme for rearing of dairy cows and distribution of feed subsidy to educated unemployed youth and general farmers will continue during 2013-14.
- 3. Education :** An amount of `. 4.07 lakhs is proposed for 2013-14 for payment of scholarship/stipend to the sponsored student undergoing studies in Dairy Technology outside the State. The above amount includes other expenditure like advertisement, publicity and other charges.
- 4. Infrastructures Development :** An amount of `.87.25 lakhs is proposed for 2013-14 for construction work and improvement of existing building, water supply, fencing, extension under Dairy Sector.
- 5. New State Plan Scheme :** An amount of `.50.23 lakh has been proposed during 2013 – 2014 to revive the Chilling Plant at Gangdubi.

**1.5.3.** The broad break up of the Actual Expenditure for the 11<sup>th</sup> plan, Approved Outlay and Anticipated Expenditure for the annual plan 2012-13 and the Proposed Outlay for 2013-14 in respect of Dairy sector is indicated in the table below:

Sl. No.	Major Heads/MinorHeads of Development	Eleventh Plan 2007-12 projected outlay (at 2006-07 prices)	Eleventh Plan 2007-12 Anticipated expenditure (at current prices)	Annual Plan 2011 -12	Twelfth Plan 2012-17 Tentative projected outlay	Annual Plan 2012-13		Annual Plan 2013-2014 Proposed outlay
				Actual expenditure		Approved Outlay	Anticipated expenditure	
0	1	2	3	4	7	5	6	8
<b>1</b>	<b>ONGOING STATE PLAN SCHEMES</b>							
	<b>2404 - DAIRY DEVELOPMENT</b>							
1	001 - DIRECTION & ADMINISTRATION	30.00	125.24	34.53	297.00	33.98	33.98	46.07
2	102 - CATTLE-CUM-DAIRY DEVELOPMENT	1470.00	1098.98	302.51	2678.00	256.12	256.12	292.38
3	2415- AGRICULTURAL RESEARCH & EDUCATION 04 - DAIRY DEVELOPMENT 277 - EDUCATION	0.00	0.99	0.99	25.00	3.39	3.39	4.07
4	INFRASTRUCTURE DEVELOPMENT 800 - OTHER EXPENDITURE - HOUSING NON - RESIDENTIAL BUILDINGS ETC.	500.00	384.72	28.27	200.00	81.82	81.82	51.37
5	800 - OTHER HOUSING RESIDENTIAL BUILDINGS ETC.	200.00	56.96		150.00	60.00	60.00	35.88
	<b>GRAND TOTAL - 2404</b>	<b>2200.00</b>	1666.89	<b>366.30</b>	<b>3350.00</b>	<b>435.31</b>	<b>435.31</b>	<b>429.77</b>
<b>2</b>	<b>NEW STATE PLAN SCHEMES</b>							
1	102 CATTLE-CUM-DAIRY DEVELOPMENT PROJECTS						75.00	50.23
2	INFRASTRUCTURE DEVELOPMENT 800 - OTHER EXPENDITURE - HOUSING NON - RESIDENTIAL BUILDINGS ETC.				1500.00	14.69	14.69	
	<b>Total - 800</b>				<b>1500.00</b>	<b>14.69</b>	<b>89.69</b>	<b>50.23</b>
	<b>GRAND TOTAL - 2404 - Dairy Development (Ongoing State Plan Schemes &amp; New State Plan Schemes)</b>	<b>2200.00</b>	<b>1666.89</b>	<b>366.30</b>	<b>4850.00</b>	<b>450.00</b>	<b>525.00</b>	<b>480.00</b>

## 1.6 FISHERIES

**1.6.1** Meghalaya is a land-locked state with no scope for marine fisheries. However, the state is fortunate in that it has vast land, water and human resources that could be rapidly exploited for fresh water fish production. With a view to plugging the huge annual demand-supply gap of more than 15,000 M.T. of fresh water table fish, the case for increasing the production base in the state has become that much urgent and hence the state government has decided to make a special effort to undertake the fresh water fish production in a Mission mode.

**1.6.2.** During the 11<sup>th</sup> Five Year Plan period (2007-12), fishery development in the State has shown a significant improvement and most people are taking up fish culture as a mean of livelihood.

**1.6.3** During the 12<sup>th</sup> Five Year Plan, the State Government has decided to accord high priority to fisheries sector and a new scheme namely the Meghalaya State Aquaculture Mission was launched on 05.03.2012 for implementation from the Annual Plan 2012-13 onwards.

**1.6.4** The projectd outlay for the Twelfth Five Year Plan (2012-17) is ` 52900.00 lakh The approved outlay during the Annual Plan 2012-13 is ` 6275.00 lakh which includes i) ` 1000.00 lakh for Aquaculture Mission and ii) SPA of ` 5000.00 lakh for infrastructure for Pisciculture – Fish ponds for Aquaculture and the anticipated expenditure is ` 6305.00 lakh which includes i) ` 1000.00 lakh for Aquaculture Mission and ii) SPA of ` 5000.00 lakh for infrastructure for Pisciculture – Fish ponds for Aquaculture and iii) ` 30.00 lakh of SCA for PG College for Fisheries. During the Annual Plan 2013-14. an amount of ` 3300.00 lakh is proposed for the Sector which includes ` 3000.00 lakh for Aquaculture Mission.

**1.6.5** A large percentage (90%) of the investment has been earmarked for the Mini Mission-I, Area Expansion) in the first year of the Mission to immediately increase the fish production.

**1.6.6** The Eleventh Plan (2007-12) outlay for Fisheries sector was ` 4500.00 lakh and the actual expenditure incurred was ` 2953.41 lakh and the achievements during the 11<sup>th</sup> Plan period were:

a) During the 11<sup>th</sup> Plan Period (2007-08 to 2011-12) an additional water area of 495.55 Ha. with 2336 nos. of fish farmers have been covered under the scheme “Aquaculture Development for 1000 Ponds” scheme.

(ii) 181.00 Ha with 826 nos of fish farmers have been covered under the scheme “RKVY – Area Expansion” . Further, under RKVY, 4 nos. of Departmental farms have been upgraded alongwith construction of hatcheries in 2 farms, to meet the demand of fish seeds.

(iii) The actual achievement of fish production during the 11<sup>th</sup> Plan period was 21,413 Metric tonnes and the number of fish seeds produced was 9.46 million. There is a huge demand-supply gap in the production of fish and the State has to adopt a mission mode approach to bridge the gap as soon as possible.

(v) Altogether 1385 nos. of fish farmers have been imparted technical training by the Department and 354 nos. have been sent for Training at the National Institute of Rural Development (NIRD), Guwahati.

- (iv) Further, 85 nos. of Field Officers have been sent for short term training to the Central Institute of Fresh water Aquaculture (CIFA) at Bhubaneswar and 119 nos. of fish farmers have gone for exposure visit to CIFA, Bhubaneswar.

During 2010-11, a Special Plan Assistance of ` 32.40 crore was allotted for the Department of Fisheries, for Area Expansion and the same amount has been fully utilized. A total of 5618 fish farmers have been assisted through this support. The Mission has envisaged credit linkage in all these cases with the Meghalaya Cooperative Apex Bank and the support is limited to 60% as back-ended subsidy to the Bank. 25% of the unit cost is advanced as Loan and 15% of it is own contribution. The production out of this support will commence from April, 2014. Further assistance provided through the Value Chain Management of ` 5.00 crore during 2010-20 II have been invested in the Mini Mission-I (Area Expansion). The Special Plan Assistance of ` 50 Cr allotted during 2012-2013 will also be utilized for this purpose.

The above plan investments, including the additional support received from the RKVY (2011-12) will lead to the creation of an additional 11473 fish farmers in the state by 31.3.2014 and the production would have increased by 2300 M.T. Even though this capacity addition will contribute to the current production of fish within the state, it will still not be sufficient to meet the current demand which will also anticipated to increase. So, there is a case for increasing the investments in the Fisheries sector further. So, the Department of Fisheries has been seeking support from various sources. The State government has, on its part extended complete support to the Department of Fisheries during the last two years of the 11th Plan and it is expected that the same support will continue during the 12<sup>th</sup> Plan period.

#### **1.6.7. Anticipated achievement during the Annual Plan 2012-13:**

During the Annual Plan 2012-13, it is anticipated to produce 8.01 million tonnes of fish and 46.25 million nos fish seed.

#### **1.6.8 Programmes for the Annual Plan 2013-14**

##### **I. Direction & Administration**

This is a continuing scheme which is meant for strengthening and streamlining the activities by providing guidance / instructions to the Districts and sub-divisional levels for effective implementation of the scheme.

##### **II. Inland Fishery**

###### **1. Fishseed Production and Demonstration Centre**

This is a continuing scheme which envisages fish seed production for distribution to the private fish farmers for stocking in ponds and tanks.

###### **2. Development of Reservoirs & Lakes**

This is a continuing scheme which aims at developing and replenishing the fish stock with fast growing varieties in impounded water/ reservoirs to boost up fish production. During the 12<sup>th</sup> Plan period, it is proposed to develop some selected lakes/ bheels which have the potential for fish culture in addition to Nongmahir and Kyrdemkulai.

### 3. State Aquaculture Mission-

The State of Meghalaya is predominantly a fish consuming State, the supply of fish is inadequate to meet its growing demand, making the State import fish from Andhra Pradesh. The Government of Meghalaya has identified fisheries as a key sector and has implemented the Meghalaya State Aquaculture Mission (MSAM) with the following major objectives:

- a) Development of existing water bodies and creation of additional water area for large scale fish production, including reclamation/rehabilitation of marshy and swampy lands,
- b) Conservation of native, endangered and traditional species of Meghalaya and developing breeding farms of commercially potential species on a large scale,
- c) Creation of mass awareness, capacity building, exposure training and skill development of all the stakeholders and technical support for long term sustainability of fishery sector,
- d) Capturing emerging opportunities in the fisheries sector.

Given the wide canvas, the Aquaculture Mission is divided into six Mini Missions for better focus and ease of implementation. Mini Mission I is related to “Area and Productivity Expansion”, which will be achieved through four sub components, viz., individual pond construction, community pond construction, development of marshy and swampy areas and bheels and reservoir fishery development. A large percentage (90%) of the investment has been earmarked for the Mini Mission-I - (Area Expansion) in the first year of the Mission to immediately increase the fish production.

Mini Mission II is for “Critical infrastructure development”, which has five components: fish seed production, fish feed production, fish disease management, pre and post harvesting infrastructure and creation and strengthening of fishery and multi-purpose co-operatives. Fish seed production will be achieved through Government and private hatcheries utilizing FRP technology as also inducting Israeli technology.

Establishing sanctuaries for conserving indigenous and endemic species of fish is the focus of Mini Mission III. Surveys for identifying the endangered species, orientation workshops and media campaigns will be organised under the Mission. The Mission will collaborate with the Department of Tourism for boosting the objectives and targets of the Mission related to Mahaseer and other native species conservation.

Mini Mission IV is for “Capacity Building” of farmers as well as officials, programme managers, multi-service providers, co-operators, etc. Mass mobilization campaigns and skill trainings for unemployed youth will be organised under this mini mission.

Mini Mission V is titled “Mass media campaigns, documentation and outreach”, which will take care of two important activities, viz., awareness building about the Mission and publicity among the public and process documentation of the implementation and preparation of success stories.

Mini Mission VI deals with “Emerging opportunities in the fisheries sector”, which is an exclusive visionary component envisaged for tapping the emerging opportunities and addressing them with scientific backstopping. Ornamental fisheries, trout farming, introduction of freshwater prawn culture and new table species of fish and aqua tourism/ aqua parks/ sport fisheries will be the components under this mini mission.

The Aquaculture Mission will have functional convergence with programmes like MGNREGS, RKVY, NRLM, etc and thematic convergence with line departments like Water Resources, Soil and water conservation, Tourism, etc. The Mission proposes to develop a Management Information System vested with the responsibility to collect, store and retrieve relevant and timely information for planning, executing, monitoring and evaluating the Mission. Monitoring and evaluation will be an integral part of the project design, as they provide an opportunity for intervention during implementation and mid-course corrections. The approach of the Mission to engage civil society players can help serve the interests of the people of the state.

The scheme aims to create an additional water area of 10,000 hectares of individual ponds during the 12<sup>th</sup> Plan period to increase fish production in the State with the intention to reduce the gap of demand and supply. That will call for massive jump in the investment to the Fisheries sector. The following sources are being explored for support for Area Expansion during the 12<sup>th</sup> Plan period.

- State Plan Assistance
- SPA
- ACA (RKVY)
- IFAD (separate grant support for Fisheries sector indicated by the DAHD &F)
- Department of Animal Husbandry, Dairying and Fisheries (Government of India)
- National Fisheries Development Board
- North Eastern Council.

The development of critical infrastructure required for making the Area Expansion happen is essential. By critical infrastructure we mean the provision of fish seed, fish feed and disease management infrastructure. The Aquaculture Mission provides for each of these aspects in Mini Mission-II investments for which have already been made in the year 2012-13. Most critical investments under the Mini Mission-II have been directed toward the Fish Seed Hatcheries, both the eco-hatcheries as well as the more decentralized Fibre Reinforced Plastic (FRP) Hatcheries, developed by the CIF A, Bhubaneswar. A total 21 Eco hatcheries with a production capacity of 24 lakh fingerlings each and 32 FRP Hatcheries each with a production capacity of 10 lakh fingerlings will have been set up in the state in two years time. The production of fingerlings will commensurate with the new demand arising out of the interventions in Area Expansion and will eventually plateau at 14 crore fingerlings by the end of the 11<sup>th</sup> Plan period. Likewise, the MSAM envisages setting up 3 Feed Mills in the state each with a production capacity of 300 Kgs/day. All these initiatives are going to be triggered in the private sector, through subsidy support as well as credit linkages.

Investments relating to the capacity building of the farmers, officers of the department as also the entrepreneurs, are a part of the Mini Mission-IV. The Department has tied up with the NIRD, Guwahati for a systematic intervention to train the potential fish farmers and to create a demand among them for seeking support. The state owned Training Infrastructure at Mawpun, Ri Bhoi District has been upgraded so there will be a systematic upgrading of the knowledge base among the fish farmers of the state. The support received from RKVY has been used for this purpose.

#### **4. Development of Fish seed hatchery – Israel project**

Israel technology is ideal for large scale, low cost production of premium quality

fresh fish. The technology offers a total project approach from the design, construction and operation of scientific fish farming. Israeli's technology will be tried in two farms viz. Digrichiring Fish Farm in Tura and Mawpun Fish Farm in Ri-Bhoi District. Infrastructure, growing methods etc. will be developed in these two farms.

### **III. Capital outlay on Housing:**

#### **i) Construction and Maintenance of Departmental Residential building**

This is a continuing scheme which aims at construction and maintenance of Departmental Residential buildings for officers and staff.

#### **ii) Construction & maintenance of Departmental Non- Residential Quarter.**

This is a continuing scheme which aims at construction of new office building of the Directorate including District office at Fish Dale, Shillong so as to provide better accommodation to officers and staff and buildings for officers and staff.

### **IV. Agricultural Research and Education**

#### **Fish seed production –cum- Research Centre –**

The scheme aims at conducting Research work on Inland Fisheries Development work and production of fish seeds. Modernisation/ Upgradation of the existing infrastructure and setting up of a Training centre is proposed to be taken up at Mawpun Research Centre.

#### **1.6.9 Central Sector Scheme**

#### **1. Development of Inland Fisheries and Aquaculture:**

The Scheme is a Central Sector Scheme of the 12<sup>th</sup> Plan period. The cost of the development under the scheme will be shared between the State and Central Government at 75:25 basis. The components under the scheme are as follows:

- (a) New construction of ponds @ ` 4.00 lakhs per Ha. in the Hill State/District and North Eastern region. Subsidy @ 25% with a maximum ceiling of ` 1.00 lakh per Ha. for SCs/STs for 100 Ha.
- (b) Purchase of fish seed, feed, fertilizers, manures, preventive measures etc. @ ` 0.50 per Ha. Subsidy @ 25% with a maximum ceiling of ` 0.125 lakh per Ha. for SCs/STs for 100 Ha.
- (c) ` 12.00 lakhs for a fish seed hatchery with 10 millions (fry) capacity for plain areas and ` 16.00 lakhs for same capacity in the hill State/District and North East Region. Subsidy @ 10% with a ceiling of ` 1.2 lakhs and ` 1.6 lakhs in the plain and hilly areas respectively to entrepreneurs only.
- (d) 50 units of Training programmes proposed to be conducted to the fish farmers at a unit cost of ` 3.00 lakh per unit. Each unit will comprise 40 nos. of farmers.

## 1.6.10 Centrally Sponsored Scheme

### 1. National Fisheries Development Board

The main objectives of the scheme is to enhance fisheries development through Area Expansion and to setup infrastructure in fish seed and fish feed production. Further the proposed funding from NFDB is to build up the capacity of the partners of the Meghalaya State Aquaculture Mission through training and demonstrations.

To conclude, the "Fisheries sector has long-held the promise for building rural livelihoods and boosting rural economy - an opportunity that had not been fully exploited over the years. Time for the sector has come now and it does seem that if the momentum continues over the Plan period, the state will not just become self-sufficient in fresh water fisheries, but it can also help in the import substitution in the North Eastern Region itself.

**1.6.11** The broad break up of the expenditure during the 11<sup>th</sup> Five Year Plan , the proposed outlay for the 12<sup>th</sup> Plan period and the proposed Annual Plan 2013-14 is as indicated in the table below :-

(` in lakh)								
Sl. No	Name of the Scheme	Projected 11 <sup>th</sup> Five Year Plan outlay 2007-2012	Actual Expd. during the 11 <sup>th</sup> Five Year Plan	Actual Expd. during the 2011-12	Proposed outlay for the 12 <sup>th</sup> Plan	Annual Plan 2012-13		Tentative Budgeted outlay 2013-14
						Approved outlay	Anticipated expenditure	
1	2	3	4	5	6			9
1.	Direction & Administration	370.00	251.81	70.67	985.00	7.00	7.00	8.80
2.	Inland Fisheries :- Fish seed production & Demonstration Centre	100.00	177.49	17.12	165.00	56.00	56.00	56.00
3.	Assistance to Pisciculturist.		0.00			0.00	0.00	
4.	Development of Reservoirs & Lakes	100.00	132.67	28.92	250.00	2.00	2.00	-
5.	Conservation & Legislation for protection of Fisheries	100.00	50.00	-	0.00	0.00	0.00	-
6.	Extension & Training	75.00	57.63	4.00	0.00	0.00	00.00	-
7.	Research & Education- Fishseed Production cum Research centre	25.00	15.78	2.29	-	0.00	0.00	27.20
8.	Fish Farmer Development Agency (State Share)	160.00	0.00	-	0.00	0.00	0.00	-
9.	Community Fishery Development Project	100.00	105.42	-	0.00	0.00	0.00	-
10.	Aquaculture Development for 1000 Ponds	2700.00	867.75	-	0.00	0.00	0.00	-
11.	Culture & Development of Mahaseer Fisheries	170.00	8.00	--	0.00	0.00	0.00	-
12.	Culture & Breeding of Ornamental fishes	200.00	36.25	-	0.00	0.00	0.00	-
13.	Establishment of fish seed production centre for private pisciculturist.	-	12.00	-	0.00	0.00	0.00	-
14.	Welfare of Fishermen (State share)	200.00	5.89	-	0.00	0.00	0.00	-
15.	Marketing & Transport of	100.00	57.02	10.00	0.00	0.00	00.00	-

Sl. No	Name of the Scheme	Projected 11 <sup>th</sup> Five Year Plan	Actual Expd. during the	Actual Expd. during the	Proposed outlay for the	Annual Plan 2012-13		Tentative Budgeted outlay
16.	fish and fish seed National fisheries fishseed Dev. Board (state share)		0.00			0.00	0.00	-
17.	Construction & Maintenance of Departmental Residential Building	50.00	19.12	-	100.00	10.00	10.00	98.00
18.	Construction & Maintenance of Departmental Non – Residential Building	50.00	57.58	38.66	1400.00	200.00	200.00	110.00
19.	Upgradation & modernization of Umsning & Gasuapara fishseed Farm(RKVY)	-	99.00	-	-	0.00	0.00	-
20.	Special Plan Assistance of infrastructure for Pisciculture- Fish ponds for aquaculture		0.00	-		5000.00	5000.00	-
21	Value Chain Management under Special Plan Assistance	-	500.00	0.00	-	0.00	0.00	-
22.	State Aquaculture Mission	-	500.00	500.00	50000.00	1000.00	1000.00	1000.00
23.	Aquaculture promotion-Enterprise Development Livelihood Mission	-	0.00	-	-	0.00	0.00	2000.00
24.	SCA for PG College for Fisheries	-	0.00	-	-	0.00	30.00	-
<b>TOTAL</b>		<b>4500.00</b>	<b>2953.41</b>	<b>671.66</b>	<b>52900.00</b>	<b>6275.00</b>	<b>6305.00</b>	<b>3300.00</b>

## 1.7 FOOD STORAGE & WAREHOUSING

**1.7.1** The Twelfth Plan (2012-17) projected outlay for food storage and warehousing sector is ` 1200.00 lakhs. The approved outlay for the Annual Plan (2012-13) is ` 130.00 lakhs and the anticipated expenditure is ` 205.00 lakhs. The proposed outlay for the Annual Plan 2013-14 for implementation of the programmes viz., construction of new warehouses in places like Khanapara, Tura and Shillong for buffer stocking of food-grains is ` 130.00 lakhs.

**1.7.2** The Corporation has a total storage capacity of 13,800 M.T. During the Twelfth Plan, an additional capacity of 9000 M.T. is projected to be created out of which 4500 M.T. capacity is proposed to be created during the Annual Plan (2013-14). The achievement of the projected capacity creation is solely dependent on timely release of financial assistance for the construction of warehouses by Government of India and the State Government.

## 1.8 COOPERATION

### DRAFT ANNUAL PLAN 2013-14 & PROGRAMMES

**1.8.1** Cooperative movement in Meghalaya has not yet been able to play an effective role in the promotion of equity, social justice and economic development, because of the structural weakness that prevailed in majority of the cooperative societies. During the first year of the Twelfth Plan particularly in the latter half, it is noticed that there is a growing realization and genuine desire among the members/promoters of the cooperative societies to make the societies vibrant units of economic activity capable of meeting the felt-needs of the members in particular and the society in general. This positive change is the result of the intensive promotional works launched by the Department in association with State Level Cooperative Bodies which is proposed to be continued more vigorously during the Twelfth Plan (2012-17).

Problems of the majority of cooperative societies in the State can be grouped into 2 (two) categories – structural weaknesses i.e lack of cooperative spirit, managerial inefficiencies. In case of rural cooperatives, another important problem is the non-involvement of Village Durbar which has a very strong say in socio-economic issues of the village.

Liberalization of the economy and the implementation of plethora of beneficiary oriented developmental programmes by the Central and State Governments posted new challenges to the cooperative movement in the State. Cooperative spirit is inherent in tribal societies and it is unfortunate that we have not been able to capitalize this inherent strength and in-spite of the best efforts of the Department. Special effort need to be made to strengthen the existing cooperatives and to create new Integrated Village Cooperatives during the Twelfth Plan.

**1.8.2** The projected outlay for the Twelfth Plan (2012-17) is ` 8000.00 lakhs. The approved outlay during 2012-13 is ` 1125.00 lakhs and the anticipated expenditure is ` 1125.00 lakhs. The proposed outlay for the Annual Plan 2013-14 is ` 1225.00 lakhs.

Attempt has been made to address the problems of cooperatives and improve their working / functioning while formulating the programmes and proposals for Annual Plan 2013-14.

### **1.8.3 Programmes for the Annual Plan 2013-14:**

#### **(i) Direction & Administration:**

The proposed outlay of ` 205.00 lakhs under the Direction & Administration has been earmarked specifically to meet the requirement under salary head for the Head Quarter and District Organizations etc., to enable the Government to bring administration closer to the people and ensure speedy and smooth services towards the socio-economic development especially in rural areas.

**(ii) Training:**

Departmental Officers and Executive Level Officers of the State Level cooperative societies are required to be exposed to training outside the State for skill up-gradation and for familiarizing them with the latest developments in the cooperation sector. It is also proposed to upgrade and improve the training facilities of the Meghalaya Cooperative Training Institute.

An outlay of ` 13.00 lakhs for the Training Programmes is earmarked for the Annual Plan (2013-14).

**(iii) Research & Evaluation:**

in the present day, Cooperatives are taking up newer and more technical activities like food processing reusable energy, tourism etc., and the departmental officers do not have the technical competence to provide expert advice on such matters. It is proposed to hire consultants both from within and outside the State for the purpose for which an amount of ` 5.00 lakhs has been earmarked during 2013-14.

**(iv) Information & Publicity :**

Keeping in view the priority given in the plan period on cooperative education and motivational programmes for making the common people fully aware of the cooperative principles and ideals, it is proposed to intensify the existing publicity programmes and start motivational programmes right up-to village level. Publicity of the departmental schemes is another area on which proper attention will be given.

An outlay of ` 12.00 lakhs is proposed for the Annual Plan 2013-14 period to carry out the various programme of the Department.

**(v) Assistance to Multipurpose Rural Cooperatives:**

The main thrust of the schemes of this Sub-Sector would be to revitalize the Primary Agricultural Credit Cooperative Societies (PACS) which form the backbone of Cooperative credit structure at the grass roots level by giving new orientation to their activities.

It is proposed to encourage and strengthen the Multipurpose Village Cooperatives which have been organized in the identified pockets where Primary Agricultural Credit Cooperative Societies (PACS) are relatively weak and have not been able to deliver the goods and further to take all possible steps to forge functional linkage of both Primary Agricultural Credit Cooperative Societies (PACS) and Multipurpose Village Cooperatives with Meghalaya State Cooperative Marketing & Consumers' Federation Ltd., (MECOFED) for marketing of agricultural produce and supply of agricultural inputs and consumer articles for retail distribution.

An outlay of ` 231.00 lakhs is proposed for the Annual Plan 2013-14 to support the ongoing schemes for development of this sub-sector.

**(vi) Assistance to Credit Cooperatives:**

The over-dues at the ultimate borrowers' level are rising menacingly and threaten to choke the line for flow of fresh credit to farmers for raising farm production. On the other hand, 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 over-dues and adjustment of the same in the Profit & Loss Account and Balance Sheet of the Banks concerned. The Meghalaya Co-operative Apex Bank Ltd., in particular is functioning very satisfactorily. Unless special assistance is given to the Meghalaya Co-operative Apex Bank Ltd. and Urban Banks to absorb the losses, as was given by the Government of India to the Commercial Banks to which also the same norms are applicable, the banks' very existence will be threatened.

The revival package for Rural Credit Cooperative Institutions on the recommendation of **Task Force on "Revival of Rural Cooperative Credit Institution"** (Vaidyanathan Committee Report) has been sanctioned by the Government of India in order to revitalize the whole credit structure for ensuring adequate flow of credit to the needy grass root level farmers /growers.

An outlay of ` 32.00 lakhs is proposed for the Annual Plan 2013-14 to support all the above programmes.

**(vii) Assistance to Other Cooperatives:**

Marketing, Processing, Consumer and Livestock Cooperatives which have very vital role to play in improving the livelihood of the rural poor are being given priority and a sizeable of assistance is being proposed.

A Plan Outlay of ` 257.00 lakhs is proposed for the Annual Plan 2013-14.

**(viii) Other Expenditures:**

The handloom activity has a vast potential for development in the State for income and employment generation in the rural sector. If proper infrastructural support with improved facilities for supply of quality yarns training and marketing of finished products is provided, handloom production output and coverage of weavers by handloom cooperatives can be substantially increased. As a mean to achieve these objectives, it is proposed to assist the Meghalaya Apex Handloom Weavers & Handicrafts Cooperative Federation for setting up a few weavers' service centers in the selected pockets where Primary Handloom Weavers Cooperatives are not so strong.

It cannot be denied that there is vast scope and potential in the State for development of Agriculture and allied activities like Dairy, Poultry, Piggery, Fishery, Tourism, Goatery, Rabbitry, Forestry etc. The State has to import large quantity of eggs, fish, chicken, cows, etc., to meet the demand of the consumers. There is however a growing realization among the people that they should set up their own poultry, piggery, rabbitry, fishery and dairy farms to meet the domestic needs of eggs, meats, milk and also to enhance the income base through self employment and hence the demand for organizing of Cooperative Societies has increased significantly in the last few years. Quite a good number of such Societies have also been

formed by unemployed youth. Adequate provisions are therefore kept in the plan to encourage and support the Cooperative enterprises in the above areas.

Another very important programme accommodated in this broad Sub-Sector is assistance to Women Cooperatives, which has been set up in all districts in good number for giving opportunity to Women for Self-employment in the economic activities like knitting, embroidery, handicrafts, tailoring, floriculture, mushroom culture etc.

In order to support all the above initiatives, an outlay of ` 405.00 lakhs is proposed for the Annual Plan 2013-14

#### **(ix) Education:**

As indicated earlier emphasis be given for educational and motivational programmes in rural areas to raise the cooperative consciousness of the people which hitherto has been identified as the biggest constraint for the proper growth of rural cooperatives. The Meghalaya State Cooperative Union Ltd., is the frontal organization to take up and fulfill this task. The Union is therefore required to be assisted in a continuous manner to do the work satisfactorily with new direction and renewed vigor and strategies.

The Cooperative Development Fund has been activated and a number of promotional and training programmes have already been funded out of it with satisfactory results. This fund is proposed to be further strengthened during the Twelfth Plan period to support various initiatives to up-lift the Cooperative Movement in the State.

An outlay of ` 65.00 lakhs is proposed for the Annual Plan 2013-14 for supporting the programmes of this sub-sector.

**1.8.4** The break up of the projected outlay for the 12<sup>th</sup> Plan, approved outlay and anticipated expenditure during 2011-12 and the proposed outlay for 2013-14 are indicated below:-

in lakh.

Sl. No.	Name of scheme	Projected outlay for 12 <sup>th</sup> Plan	Actual expenditure 2011-12	Approved outlay 2012-13	Anticipated expenditure 2012-13	Proposed outlay 2013-14
1	Direction & Administration	1580.00	302.19	308.90	308.90	205.00
2	Training	125.00	4.99	5.00	5.00	13.00
3	Research & Evaluation	20.00	-	5.00	5.00	5.00
4	Information & Publicity	80.00	6.00	8.60	8.60	12.00
5	Assistance to Multipurpose Rural Cooperation	875.00	125.00	200.00	200.00	231.00
6	Assistance to Credit Cooperatives	315.00	140.83	13.00	13.00	32.00
7	Assistance to Other Cooperatives	2065.00	246.35	218.50	218.50	257.00
8	Other expenditure	2485.00	673.00	316.00	316.00	405.00
9	Agri. Credit Stabilization Fund	25.00	-	-	-	-
10	Education	430.00	63.37	50.00	50.00	65.00
	<b>Total</b>	<b>8000.00</b>	<b>1561.73</b>	<b>1125.00</b>	<b>1125.00</b>	<b>1225.00</b>

### 1.8.5 Centrally Sponsored / Central Sector Schemes:

**Centrally Sponsored Schemes:** The 100% Centrally Sponsored Scheme under the Ministry of Tribal Affairs viz., “Minor Forest Produce Operation” has been under implementation in the State through the Meghalaya State Consumer and Marketing Federation Ltd. The scheme is purposely meant for procurement of Minor Forest Produce and surplus agricultural produce by the tribal farmers by way of offering better and remunerative prices for the produce like wild pepper, jute, mustard seed, turmeric, black pepper which will immensely help the poor tribal farmers living in far flung rural villages. An amount of ` 277.50 lakh is projected during 2013-14.

**Central Sector Schemes:** The Central Sector Scheme of National Cooperative Development Corporation under its normal and integrated Cooperative Development Projects / Schemes had been availed by the State Government for development and strengthening of Cooperative Societies in the State in the recent years. The Normal schemes as well as Integrated Cooperative Development Projects of the NCDC now could not be availed for want of State Government guarantee on the loan portion proposed to be sanctioned to the State Government for strengthening the Cooperative Societies in the State.

**The break up of Central share release, expenditure & proposed outlay (Centrally Sponsored / Central Sector schemes) is indicated below:**

` In lakhs.

Sl. No.	Central share during the XI Plan (2007-2012)		Central share for the year 2012-2013		Proposed outlay of Central share for 2013-2014.
	Release	Actual expenditure	Release	Anticipated expenditure	
<b>1</b>	<b>Centrally Sponsored Schemes (Govt. of India)</b>				
i.	188.00	188.00	20.00	277.50	277.50
<b>2</b>	<b>Central Sector Schemes (NCDC)</b>				
i.	278.32	278.32	0.00	573.12	573.12