

CHAPTER – IX

SCIENCE TECHNOLOGY & ENVIRONMENT

8.1 SCIENCE & TECHNOLOGY

8.1.1 The Eleventh Plan (2007-12) projected outlay for this sector is **Rs1500.00** lakhs. The Agreed Outlay during 2009-10 was **Rs.280.00 lakhs** out of which the total expenditure was **Rs. 286.36 lakhs**. The Agreed Outlay for Annual 2010-11 is **Rs.250.00 lakhs** which is anticipated to be fully utilized. The Proposed Outlay for 2011-12 is **Rs.335.00 lakhs**. Implementation of all S&T Programmes and Schemes in the State is being carried out by the State Council of Science, Technology & Environment, an autonomous society of the State Government for promotion of Science & Technology in the State.

Some important projects under this sector are as below:-

8.1.2 Popularisation of Science Programmes:- This Programme is implemented with the objective of inculcating a scientific temper amongst the people of the State and ultimately generate scientific minded citizens by organizing schemes such as Meet the Scientist Programme, Children's Science Congress, Science Awareness Camps, Environmental Awareness Programmes etc.

8.1.3 Science Centres Programme: The Shillong Science Centre is functioning as an autonomous society of the State Govt. Currently, it is being supported for its day-to-day functioning through the State Plan. During 2011-2012, the regular support to the Centre would continue

8.1.4 Bio-Resources Development Programme: A Bio-Resources Development Centre has been set-up in the State which is operating as an autonomous society of the State Government. Currently the Centre is implementing a project with the financial assistance from the Department of Bio-Technology, Govt. of India. The Centre is being looked after by a Scientist-in-Charge, currently assisted by 11 (eleven) scientific, technical and administrative personnel. During 2011-12 it is proposed to strengthen the activities of the Centre through a number of projects under this Programme .

8.1.5 Remote Sensing: A project on survey and identification of the science and technology needs of the State is currently being taken up by the State S & T Council with the funding from the Department of Science & Technology, Govt. of India. The project has been carried out utilizing remote sensing application based techniques. Considering the potential for remote sensing application in various developmental sectors in the State, a number of remote sensing application projects have been proposed in 2011-12.

8.1.6 Other Programmes proposed for promotion of Science & Technology in the State are .

1. **Introduction of Appropriate Technology Programme**
2. **Specific Projects Programme**
3. **S&T Entrepreneurship Development Programme**
4. **S&T Library & Documentation Programme**
5. **State Science & Technology Cell/Council**

8.1.7 The schematic broad break up during the 11th Plan and Annual Plan (2011-12) is shown in the table below :-

Rs. In lakhs.

Sl. No	Name of the Scheme	Eleventh Plan 2007-12 Projected Outlay (at 2006-07 prices)	Annual Plan 2009-10 Actual Expenditure	Annual Plan 2010-11		Annual Plan 2011-12	
				Agreed Outlay	Anticipated Expenditure	Proposed Outlay	Tentative Budget Provision
1.	2.	3.	4.	5.	6.	7.	8.
1.	Popularization of Science	300.00	50.00	50.00	50.00	50.00	50.00
2.	Introduction of Appropriate Technology	500.00	90.00	56.25	56.25	80.00	80.00
3.	Specific Projects Programme	50.00	6.76	6.75	6.75	8.00	8.00
4.	Student Projects Programme	20.00	Nil	Nil	Nil	Nil	Nil
5.	S&T Entrepreneurships Devt.	50.00	6.00	Nil	Nil	7.00	7.00
6.	S&T Library and Documentation	30.00	2.40	Nil	Nil	3.00	3.00
7.	Science Centres Schemes	150.00	25.00	25.00	25.00	27.00	27.00
8.	State S&T Cell/Council	200.00	48.60	58.00	58.00	75.00	75.00
9.	Bio-Resources Dev. Programme.	150.00	54.00	54.00	54.00	80.00	80.00
10	Remote Sensing Application Programme.	50.00	3.60	Nil	Nil	5.00	5.00
	TOTAL	1500.00	286.36	250.00	250.00	335.00	335.00

8.2. INFORMATION TECHNOLOGY

8.2.1 The projected Eleventh Plan (2007-2012) outlay in respect of Information Technology Department is **Rs.6307.00** lakhs. The Department during 2009-10 implemented State Plan Schemes with a total expenditure of **Rs. 300.00 lakhs** which includes Rs.100.00 lakhs for IT Education, while ACA for implementation of various programmes under NeGAP was however not released during the year. The approved outlay for the Annual Plan 2010-11 is **Rs.500.00 lakhs** which includes ACA of Rs.287.00 lakhs for implementation of NeGAP and the anticipated expenditure is **Rs.855.00 lakhs**. **The proposed Plan Outlay for 2011-12 is Rs.1000.00 lakhs.**

8.2.2 During 2010-11, the Government had conducted an IT Business Summit, conducted CISCO CCNA training and provided broadband internet connectivity to educational institutions. Besides these, the Department has also consolidated and augmented the IT infrastructure in all Govt. departments and the State GIS laboratory. Land measuring 80 acres for the IT Estate with an IT SEZ at New Shillong Township has been earmarked while allotment of the same by Urban Affairs Department is awaited. The CSC projects under PPP vehicle has been rolled out in phases all over the State while the technical evaluation of SWAN bidders has been completed and the contract to the lowest bidder will be issued during the current financial year. The Department has awarded laptops to toppers of MBOSE, ICSE and CBSE and the same will be continued during 2011-12. The Department has tied up with Symantec Asia Pacific Pte. Ltd., Singapore & NIIT, Kolkata for providing HRD training to the youths to increase their employability potential.

8.2.3 The following are the schemes to be taken up as State Plan Schemes during 2011-12:-

(Rs. in lakhs)

Sl. No.	Items	Eleventh Plan 2007-12 Projected Outlay	Annual 2009-10 Actual Expenditure	Annual Plan 2010-11		Proposed Outlay for 2011-12
				Agreed Outlay	Anticipated Expenditure	
1.	2.	3.	4.	5.	6.	7.
1.	Development of IT Infrastructure	500.00	150.00	0.00	0.00	293.00
2.	Development of e-Governance	100.00	25.00	0.00	0.00	20.00
3.	Other Promotional Activities	125.00	25.00	13.00	13.00	72.00
4.	Contribution to ICT Institutions/ IT Society	175.00	25.00	0.00	0.00	15.00
5.	HRD Training with international certification	500.00	75.00	200.00	50.00	200.00
6.	ACA for NeGAP	4907.00	-	287.00	792.00	400.00
	Total:	6307.00	300.00	500.00	855.00	1000.00

Besides the above, setting up of an IT Estate with an IT Special Economic Zone (SEZ) would be encouraged under infrastructure development. Other ICT programmes of the Government would be accessed and implemented vigorously during 2011-12.

8.3. ECOLOGY AND ENVIRONMENT

8.3.1. The projected outlay for Ecology & Environment for the Eleventh Five Year Plan (2007-2012) is Rs.700.00 lakhs. **The expenditure incurred during the year 2009-10 was Rs.74.88 lakhs. The approved outlay during 2010-11 is Rs.75.00 lakhs and the anticipated expenditure is Rs. 100.00 lakhs. The anticipated expenditure for the period from 2007-08 to 2010-11 is Rs.343.89 lakhs and the amount proposed for 2011-12 is Rs.135.00 lakhs.**

8.3.2 The State Government through the State Forest & Environment Department is taking up various schemes of afforestation, roadside plantation, construction of public convenience and maintenance of parks etc in different parts of the State during the Eleventh Plan. Improvement of ecology and environment with participatory approach with traditional Institution /NGO's is also proposed to be taken up during 2011-12 under this programme.

8.4. FORESTRY AND WILDLIFE

8.4.1. The projected outlay for the Eleventh Plan period is Rs.16000.00 lakhs. The actual expenditure incurred during 2009-10 was Rs.3733.17 lakhs. The approved outlay for the Annual Plan 2010-11 is Rs.3025.00 lakhs and the anticipated expenditure is Rs.3500.00lakhs which includes Rs.2101.00 lakhs under TFC award for Protection of Forests. **The proposed outlay for the Annual Plan 2011-12 is Rs 4200.00 lakhs** which includes TFC Award of Rs 2101.00 lakhs for maintenance of forest, Zoological Parks and Botanical Gardens.

8.4.2. Achievements made during the Annual Plan 2009-10 :--

i) During the Annual Plan 2009-10 period, plantations were taken up in the blank areas in the Reserved Forests covering an area of 2,732 hectares. The target during 2010-11 is 3000 hectares which is expected to be fully achieved. Tending operations were carried out by way of weeding, fire protection and maintenance. The target during 2011-12 for nurseries and plantation works is 3000 ha.

ii) The number of seedlings distributed to the public under 20-Point programme was 14,11,000 nos. during 2009-10 and during 2010-11, 19,50,000 nos is expected to be distributed. The target for 2011-12 is 20,00,000 nos.

iii) Under Communication & building programme, 30 kms. of forest roads were maintained through construction of bridges, culverts, retaining walls etc and 2 kms. were covered under new roads during 2009-10 and the same is expected to be covered during 2010-11. The same length span of road is proposed for 2011-12. A total of 10 nos. (ten) buildings were constructed both Govt. non-residential and residential buildings for accommodation of staff .

8.4.3 Schemes proposed for 2011-12:-

During the Annual Plan 2010-11, normal schemes of Forest & Wildlife sector will be continued during the Annual Plan 2011-12 as follows :-

- Education & Training.
- Survey of Forest Resources.
- Communication and Buildings.
- Statistical Planning & Evaluation.
- Forest Conservation and Development.
- Plantation schemes.
- Preservation of Wildlife and maintenance of Zoological Park & Public Garden.
- Forest Research

Twelfth Finance Commission Award :- Rs. 65.00 crores was awarded during the Twelfth Finance Commission period 2005-2010 for Maintenance of forests, Zoological Park and Botanical Garden.

Thirteenth Finance Commission – The 13th Finance Commission has recommended a grant of Rs.168.08 crores for the for maintenance of forest.

(14) New Schemes:

It is proposed to take up 2 (two) new innovative schemes for preservation of wildlife habitats as well as to promote forestry for commercial purpose during 2011-12 viz.,:

- Wildlife Sanctuaries Under PPP Mode
- Promotion of Forestry on commercial lines

Besides the State Plan schemes, Centrally Sponsored Schemes will also be implemented during 2011-12 viz., Integrated Forest Protection Scheme

New Schemes under CSS

The following new schemes are proposed to be taken up during 2011-12 viz.,

- Management of plastic waste.
- National Afforestation Programme .
- Environmental Awareness & Capacity Building.

8.4.4. 11th Plan, Annual plan 2010-11& Annual Plan 2011-12 outlays:-

The break up of the outlay proposed for the 11th Plan, anti. expenditure 2010-11 and the proposed outlay for Annual Plan 2011-12 is as indicated in the table below:-

(Rs. lakhs)

Name of scheme	Proposed Outlay 11 th Plan	Actual expenditure 2009-10	Approved outlay 2010-11	Anticipated expenditure 2010-11	Proposed outlay 2011-12
Direction & administration	1200.00	187.30	200.00	233.00	280.00
Education & Training	500.00	76.13	25.00	55.00	80.00
Survey of Forest Resources	270.00	48.63	30.00	40.00	45.00
Statistical Plg & Evaluation	150.00	21.41	12.00	15.00	25.00
Communication & Bldg	300.00	176.84	30.00	75.00	150.00
Forest Conservation & Dev.	1000.00	194.71	150.00	185.00	250.00
Social & Farm Forestry-Plantation	3000.00	482.06	224.00	450.00	650.00
Preservation of wildlife	2500.00	173.33	154.00	200.00	300.00
Zoological Park	200.00	13.55	12.00	16.00	30.00
Public Garden	200.00	18.24	15.00	20.00	40.00
Bamboo Mission	1500.00	0.00	-	-	-
Scheme under TFC Award	4100.00	1202.22	2101.00	2101.00	2101.00
L.A. for Mawpalai Afforestation		1000.00	-	-	
Contribution to Eco-Dev. Society	200.00	61.03	35.00	40.00	62.00
Forest Research & Education	100.00	15.60	10.00	15.00	20.00
Asstt. to public sector	300.00	56.00	25.00	50.00	90.00
Comm. & Bldg- Maintenance of PCCF office	480.00	6.12	2.00	5.00	12.00
Wildlife Sanctuaries Under PPP Mode					15.00
Promotion of Forestry on commercial lines					10.00
(State Share on CSS).					40.00
Grand Total	16000.00	3733.17	3025.00	3500.00	4200.00