

## CHAPTER – IX

### SCIENCE TECHNOLOGY & ENVIRONMENT

#### 9.1. SCIENCE & TECHNOLOGY

**9.1.1** The approved outlay for the Science & Technology sector of the State for the Tenth Five-Year Plan is **Rs. 515.00** lakhs. The actual expenditure incurred during the first three years of the Tenth Plan is **Rs 230.04** lakhs which worked out to 27.192%. The approved outlay for the Annual Plan 2005-06 is **Rs100.00** lakhs which is expected to be fully utilized. **The outlay proposed for the Annual Plan 2006-2007 is Rs.110.00 lakhs.**

Programmes implemented under this sector are briefly highlighted as below:

#### 1. POPULARIZATION OF SCIENCE PROGRAMME

This is one of the major programme of the Council and under this programme, a number of schemes are implemented to popularize and communicate science amongst the people of the State, particularly school children. The main objective of this programme is to inculcate a scientific temper and environmental consciousness amongst school children and also to popularize S & T at the grass-root level. This programme provides a forum for children to pursue natural curiosity and quench their thirst of creativity and to inculcate a scientific temper amongst them by practicing the method of science i.e. observation, collection of data, experimentation, analysis and arriving at a conclusion. It is also aimed at creating inquisitiveness and fun in learning science and to supplement classroom science teaching among school children. It also provides an opportunity to students, scientific community, voluntary agencies, etc. to interact with renowned scientists and help spread scientific awareness among the people.

The schemes regularly taken-up under this programme are

- (i) State-level Science & Block-level Science & Environment Fairs
- (ii) National Children's Science Congress, Science Awareness Camps
- (iii) Meet-the-Scientist Programme
- (iv) National Science Day Celebration
- (v) Celebration of Year of Scientific Awareness
- (vi) Celebration of International Year of Physics
- (vii) National Campaign on Energy Conservation.

An outlay of Rs. 30.00 lakhs is proposed for the Annual Plan 2006-07.

#### 2. INTRODUCTION OF APPROPRIATE TECHNOLOGY PROGRAMME

This programme is aimed at introducing various appropriate technologies for all round development of the State. At present, concentration is on societal technologies, technologies which could be applied for social upliftment of the common people in the society. In this regard, technologies applicable in different spheres of day-to-day life of the common people are identified, experimented and propagated. Such technologies include improved chulha, low-cost sanitation, low-cost water filter, low-cost storage, organic

compositing, low-cost oven, stabilized mud block, improved cement bricks, ferro-cement technology, rain-water harvesting, waste-paper recycling, fire retardant & life-extended house, hydraulic ram pump etc.

Under this programme, a number of schemes are implemented such as

- (i) Technology Initiation Programme
- (ii) Technology Training Programme
- (iii) Technology Experimentation Programmes
- (iv) Technology Demonstration Programmes
- (v) Procurement of Technologies/ Equipments Programme.

An outlay of Rs. 45.00 lakhs is proposed for the Annual Plan 2006-07.

### **3. SCIENCE & TECHNOLOGY ENTREPRENEURSHIP DEVELOPMENT PROGRAMME**

Under this programme, technology awareness camps and technology-oriented entrepreneurship development programmes are organized from time-to-time with a view to initiate commercialization of viable innovative technologies and generate employment opportunities to local youths. Such programme are organized in association with concerned research laboratories. An outlay of Rs. 3.00 lakhs is proposed for the Annual Plan 2006-07.

### **4. SPECIFIC PROJECTS PROGRAMME (SPP)**

Under this programme, a number of research-based projects and scientific studies/ surveys has been undertaken in the past. Such projects/ studies were aimed at tackling local specific problems and generating innovative technologies utilizing locally available resources. Utilisation of nettle nut husk, utilization of pine needles, etc. were such projects implemented. An outlay of Rs. 3.00 lakhs is proposed for the Annual Plan 2006-07.

### **5. SCIENCE CENTRES SCHEME (SCS)**

Under this scheme, science halls were constructed at Nongpoh and Williamnagar. Construction of these two halls was one mainly with the help of stabilized mud-block technology. An outlay of Rs. 13.00 lakhs is proposed for the Annual Plan 2006-07.

### **6. LIBRARY & DOCUMENTATION (L&DS)**

Under this scheme, the library of the State S & T Council is updated from time-to-time. The council also brings out a regular newsletter under this particular scheme. Also, technology oriented leaflets/ brochures are brought out from time-to-time under the scheme. An outlay of Rs. 2.00 lakhs is proposed for the Annual Plan 2006-07.

### **7. ADMINISTRATIVE COST**

An outlay of Rs. 14.00 lakhs is proposed for the Annual Plan 2006-07 for this purpose.

## 8. ASSOCIATED PROJECTS

The State S & T Council associates itself with any science & technology initiative/ projects taken-up by the State Government. Some of such projects are highlighted hereunder.

a. **Bio-Resources Development Centre:** This is a registered society established by the State Government with the main objective to promote the conservation and sustainable utilization of the bio-resources of Meghalaya. A project titled “Conservation & Sustainable Utilisation of Bio-Resources of Meghalaya, at BRDC” is being taken up by the Centre with the funding of Department of Bio-technology, Government of India.

b. **Shillong Science Centre:** This is a science centre being set up in Shillong by the National Council of Science Museums, Kolkata. This Centre will be handled over to the State Government as soon as it becomes operational. A society has already been formed by the State Government for the purpose of running the Centre. The Centre will be characterized by two channels of communications i.e., exhibits and activities. The capital cost of the Centre is being funded mainly by the central government and the operational cost of the Centre would be met by the State Government.

c. **North-Eastern Space Application Centre:** The State S & T Council has involved itself actively in the process of setting up of the North Eastern Space Application Centre (NESAC) at Umiam, in the outskirts of Shillong city by the Department of Space, Government of India. The Centre is now functioning with three main activities viz, remote sensing, space communication and space research.

### 9.1.2 The schematic expenditure/ anticipated expenditure/and proposed outlay for 2006-07 shown at Table I below:-

Name of the Scheme	Actual Expenditure 2003-04	Anticipated Expenditure 2004-2005	Proposed Outlay 2006-2007
1. Popularization of Science	33.00	23.00	30.00
2. Introduction of Appropriate Technology	48.00	41.00	45.00
3. Specific Projects	-	-	3.00
4. S&T Entrepreneurships Development	2.34	2.00	3.00
5. S&T Library and Documentation	NIL	1.00	2.00
6. Science Centres	11.25	10.00	13.00
7. S&T Cell/Council	19.00	13.00	14.00
<b>Total</b>	<b>113.59</b>	<b>90.00</b>	<b>110.00</b>

## **9.2. ECOLOGY AND ENVIRONMENT**

9.2.1. The projected Tenth Plan outlay for Ecology & Environment is Rs.275.00 lakhs. The actual expenditure incurred during 2003-04 and 2004-05 was Rs.30.56 lakhs and Rs.34.42 lakhs. The approved outlay during 2005-06 is Rs. 70.00 lakhs which is expected to be fully utilised. The proposed outlay for the year 2006-07 is Rs. 80.00 lakhs.

9.2.2. Various schemes of afforestation, roadside plantation, construction of public convenience and creation & maintenance of parks etc are taken up through the State Forest & Environment Department.