

CHAPTER-V

NARRATIVE EXPLANATIONS OF THE FINANCIAL REQUIREMENTS GIVING THE SCOPE AND OBJECTIVE OF INDIVIDUAL PROJECTS PROGRAMME/SCHEMES, THEIR ESTIMATED COST ETC. PROGRAMME CONTENT

FOREST EDUCATION AND WILDLIFE

217. FOREST RESEARCH, EDUCATION AND TRAINING

The Indian Council of Forestry Research and Education (ICFRE), an autonomous organization of the Ministry, is the focal point for forestry research, education and extension development in the country. Its directorates and institutions are striving hard to give new directions to research and undertake pioneering research. The main activities of forestry research, education and training, conservation and extension and awareness are broadly classified as Core Programmes of ICFRE. Institutions under the fold of the Indian Council of Forestry Research and Education (ICFRE), Dehradun work in their respective fields of specialisation. The Forest Research Institute (FRI), Dehradun, under the ICFRE, is a Centre of Excellence in Forestry Research. To ensure proper forestry education in Universities, financial assistance is provided to State Agricultural Universities through the ICFRE. Purpose of the assistance is to support B.Sc. forestry courses.

The Indira Gandhi National Forest Academy (IGNFA) conducts training programmes for Indian Forest Service Probationers. State Forest Service Colleges take care of the need of State Forest Service Officers. Training of Range Officers is conducted in Rangers Colleges.

The Indian Institute of Forest Management (IIFM), Bhopal, an autonomous body of the Ministry, is involved in imparting education and training in forest management aimed at inculcation of professionalism. Intensification of Forestry research towards fuller development of the Forestry Resources and their proper utilization is one of the important objectives of this Ministry. The Indian Plywood Industries Research and Training Institute (IPIRTI), Bangalore is an autonomous organisation of this Ministry and a Centre of expertise in Mechanical Wood Industry Technology Sector. It is equipped with modern facilities for research training in saw-milling and plywood. The Institute will continue research, extension, demonstration and training activities.

In the Xth Plan it has been proposed to have a new Scheme for in-service training of IFS Officers, to enable focus on this activity. Earlier training was being provided but there was no separate Scheme.

The total outlay for Forestry Education and Training during 2002 -2003 is Rs.13.00 crores on the plan side and Rs.7.06 crores on the Non-Plan side. The outlay for Forestry Research is Rs.37.00 Crores on Plan side and Rs.11.34 crores on the Non-Plan side.

218. SURVEY AND UTILISATION

To conduct forest resources survey, the scheme "Forest Survey of India including Application of Remote Sensing techniques" is under implementation through Forest Survey of India - a subordinate office of this Ministry.

The scheme aims to achieve the following objectives:

- (i) To assess the extent of forest cover and monitor on a two year cycle the broad changes in the forest vegetation cover of the country by using multi satellite data on 1:250,000 scale to prepare area thematic maps of remote sensing data with maximum essential ground truth verification a ten year cycle (Most ground truth verification would be done by the respective states).
- (ii) To collect store and retrieve necessary forestry and forestry-related data for National and State level Planning and a computer based National Basic Forest Inventory system (NBFIS).

- (iii) To design methodologies relating to forest surveys and subsequent updating. This would include methodologies for:
 - (a) Vegetation mapping including thematic maps through the use of satellite imageries/aerial photographs;
 - (b) Ground truth verification; and
 - (c) Growing stock and volume assessment.
- (iv) To impart training in application of remote sensing in modern forest survey techniques, to foresters at various levels of responsibility in the States/UTs Govt. of India.
- (v) To keep abreast of the achievements in remote sensing technology and also build up a strong research and development base in remote sensing in the field of forestry along with development of new algorithms and software for both image processing and general application.
- (vi) To support and oversee techniques/inventory work undertaken by States/UT Forest Department.

During 2002-2003 a budgetary provision of Rs.7.00 crores (Plan) and Rs.5.49 crores (Non-Plan) has been made for activities relating to survey and utilisation of forest resources.

219. FOREST PROTECTION AND REGENERATION

The Integrated Forest Protection Scheme of the X Plan is an amalgamation of the IX Plan Schemes "Forest Fire Control and Management", "National Forestry Action Plan" and "Infrastructure Development". It envisages the following main objectives:

- i. To protect and conserve forests and facilitate implementation of the National Forestry Action Plan.
- ii. To develop infrastructure for forest protection and regeneration.
- iii. To prevent and control forest fires and devise, test, demonstrate and implement, principles and techniques of prevention, detection and suppression of forest fires with the help of watch towers, wireless sets, hand tools etc. and by setting up an effective communication network.
- iv. To improve the productivity of forests by reducing the incidence and extent of fire damage.
- v. To monitor the impact of forests fire prevention, research on fire damages, data generation on forests fire and encourage participation of people in forest fire control.

The outlay for the year 2002-2003 is Rs.65.00 Crores on Plan side.

220. CENTRAL ZOO AUTHORITY(CZA)

The main objective of CZA is to stop mushroom growth of unplanned and ill-conceived Zoos and to ensure the development of Zoos on scientific lines besides overseeing and monitoring their development and management. The CZA continued to perform its statutory functions of evaluating the Zoos with reference to the norms and standards prescribed under the Recognition of Zoo Rules, 1992. A number of training courses and workshops are organised for capacity building of the Zoo personnel. Recently the Recognition of Zoo Rules have been revised to include provision for all animals. Implementation of these rules in an effective manner would require increased grants-in-aid to the CZA. The CZA provides assistance and technical guidance to Zoos of the country and preparation of literature and material for providing information to public as also making of films.

The National Zoological Park (NZP), New Delhi is mainly involved in promotion of education and awareness among people regarding conservation of wildlife, conservation and breeding of rare and endangered indigenous and exotic species and in conducting research on behaviour, reproduction and management of animals in captivity. In the Ninth Plan, the NZP was funded through a separate scheme but, in the Tenth Plan this Scheme is being merged with the existing scheme of the CZA.

The outlay for the year 2002-2003 is Rs.11.00 Crores on Plan side.

221. PROJECT ELEPHANT

The objective of this project is to assist elephant range States in ensuring long term survival of identified viable populations of elephants in their natural habitat. Inadequate allocation under the scheme has been a major hurdle that hindered the conservation of this mega-herbivore that inhabits large home ranges.

The elephant continues to be an endangered species and there is an urgent need for sustaining efforts for protecting the species against ivory poaching and habitat loss. Project Elephant is at present the only conservation initiative in forest areas outside the Protected Area network. In fact, out of about 1,10,000 sq.km. of elephant habitat in India, only 25,000 sq.km. is covered under National Parks and Sanctuaries. This is the only scheme for providing relief to the rural and tribal communities suffering due to depredation by elephants. Habitat improvement works for elephants are useful for other wild animals as well. Corridors set up for elephants are used by other wild animals also. Anti-depredation measures for elephants are also effective against a number of other species of wild animals. Elephant capturing squads can be utilised for dealing with many other wild animals. Hence, Project Elephant should not be seen as an exercise in isolation. There is no other scheme which can take care of the special management needs of elephants, both in the wild and in captivity. Hence, there is adequate justification for continuation of Project Elephant.

In the Tenth Plan this scheme would require greater attention for effectively implementing its various components.

The outlay for the year 2002-2003 is Rs. 9.00 Crores on Plan side.

222. PROJECT TIGER

The scheme aims to ensure maintenance of a viable population of tigers in India for scientific, economic, aesthetic, cultural and ecological values and to preserve areas of biological importance as a national heritage for the benefit, education and enjoyment of the people. It is also envisaged to provide grants-in-aid to State Governments for establishing and managing tiger reserves and promote research and long term studies in the field of wildlife management.

At present there are 27 Tiger Reserves located in 14 States, covering an area of more than 37,000 sq. km. The main thrust of the Project is protection and mitigation of human impacts with a view to comprehensively revive the natural Eco-system in the reserves. The scheme will lay emphasis on anti-poaching camps, mobile squads, capacity building of frontline staff in intelligence gathering, detection and successful prosecution of cases and providing necessary infrastructure to them.

The BE 2002-2003 for the Project Tiger Scheme is Rs.26.00 crores on Plan side.

223. PROTECTION OF WILDLIFE OUTSIDE PROTECTED AREAS

While there have been Schemes for covering protected areas, a need has been felt for protection of Wildlife outside the protected areas. A new Scheme "Protection of Wildlife outside Protected Areas" has been proposed in the Xth Plan. An outlay of Rs.5.00 Crores has been earmarked for 2002-2003.

224. DEVELOPMENT OF NATIONAL PARKS AND SANCTUARIES

The objective of this scheme in the IX Plan is to assist the States in the development of National Parks and Sanctuaries; to facilitate and encourage the States to expand the protected area network; to create infrastructure facilities for better protection and management of these protected areas; and to provide financial assistance for training capacity building and research studies.

It has been observed that the IX Plan Schemes “Development of National Parks and Sanctuaries”, “Ecodevelopment in and around Protected Areas” and “Beneficiary Oriented Tribal Development” have overlapping objectives, so these are being merged in the X Plan into the umbrella Scheme “Development of National Parks and Sanctuaries”, which now incorporates eco-development activities within the framework of general management of National Parks and Sanctuaries.

A review of the working of the scheme in the initial IX Plan period revealed that financial assistance to different protected areas was released to the States on the basis of annual action plan submitted by them rather than on the basis of scientifically prepared long term management plans. This deficiency has been substantially removed by ensuring a holistic strategy for habitat improvement etc. under the newly prepared Protected Area management plans. This process will be further strengthened in the X Plan period. Wildlife research, monitoring and training component of the scheme have not received due emphasis in the States so far which requires to be corrected in the Tenth Plan period. There is need for substantial increase in the allocation under this scheme and also to develop an appropriate mechanism for smooth flow of Central funds directly to different Protected Areas. At least 60% of funds are to be made available to high risk and high bio diversity areas while remaining 40% may be distributed among the rest of the areas. Another important provision is for relocation of villages falling within the protected areas to out side areas and settlement of rights.

The budget provision for 2002-2003 is Rs.76.00 Crores.

225. STRENGTHENING OF WILDLIFE DIVISION AND CONSULTANCIES FOR SPECIAL TASKS

The major objectives of the scheme are to strengthen the Central Wildlife organisation and its existing Regional Offices, opening new Regional Offices for better enforcement of Wildlife (Protection) Act and Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) etc. Due to inadequate availability of field staff the Regional and Sub-Regional offices, the organisation could not contribute effectively to the prevention of Wildlife crimes which is on the rise and rampant in the border areas. It is, therefore, necessary to strengthen the Regional and Sub-Regional offices and to open additional Regional offices to check cross border smuggling of Wildlife produce.

The budget provision for 2002-2003 is Rs.2.00 Crores on Plan side.

226. WILDLIFE INSTITUTE OF INDIA

Grants-in-aid is provided to WII for training managers and biologists in Wildlife, and conservation and management techniques as well as for Wildlife research. Three principal courses - 3 month certificate for rangers, 9 month post graduate diploma and 2 year M.Sc. in Wildlife biology- have been conducted on a regular basis. This and the research fellowship under WII's research projects, have become effective and significant means of building up a pool of capable Wildlife research personnel in both biological and human aspects.

A review of the scheme shows the manifold increase in the role of WII, which covers not only wildlife research and training but promotes development of Socio-economic aspects of wildlife conservation such as eco-development and integration of wildlife conservation with development on landscape/regional scale. A matter of concern is that the Institute's facilities of training lately remained grossly under utilized because State Governments have been unable to meet the cost of training at the WII. Therefore, it is necessary to build the cost element into the grants-in-aid to the Institute. WII is also required to help the MoEF in evaluating the impact of management practices implemented through various Centrally sponsored Programmes. This should be a regular part of the Institute's Annual Action Plan and funds have to be provided for this purpose.

The budget provision for 2002-2003 is Rs.7.00 Crores on Plan side and Rs.1.65 Crores on Non-Plan side.

227. NATIONAL AFFORESTATION & ECO-DEVELOPMENT BOARD

An outlay of Rs.201.00 Crores is proposed for the year 2002-03 for the schemes/programmes and Board Secretariat of National Afforestation & Eco - Development Board which are listed below:-

- National Afforestation Scheme (NAS).
- Greening India Scheme (GIS).
- National Action Plan to Combat Desertification .
- Maintenance of 9th Five Year Plan Plantations.
- Grants-in-Aid Scheme for Voluntary Agencies (GIA).

Schemes/Activities:

The following schemes/activities for the development of degraded forest lands and adjoining areas will be implemented by the NAEB during 2002-03 :-

National Afforestation Schemes:

With the convergence of major afforestation schemes viz. IAEPS, NTFPS and ASTRP, EDNPS funds will be channeled through Forest Development Agencies (FDA) to be set up in 775 Territorial Forest/Wildlife Division in the country. It is proposed to cover 1.73 lakhs forest fringe villages through J.F.M. Committees in X Five Year Plan. During the year 2002-03, an amount of Rs. 163.25 crores have been proposed for the scheme for covering an area of 82000 ha.

The Greening India Programme:

This would include tree planting in degraded non-forest lands over 1.25 mha and tree planting under agro-forestry/farm forestry over 0.20 mha per year amounting to a total of 1.45 mha per annum. Non-forest land under these will have to be brought under tree cover mainly by the private sector. While the government is not expected to provide budgetary support entirely, it is imperative for the government to create the necessary policy environment to enable large scale tree planting activity to be taken up in non-forest lands so that private tree growers are assured of remunerative prices.

A provision of Rs. 3.00 crores has been proposed for the programme during the year 2002-03 for covering an area of 1500 ha. This will be a 100% Central Sector Scheme.

National Action Programme to Combat Desertification

The UN Convention to Combat Desertification (UNCCD) was adopted on 17th June 1994 and India is a party to the Convention. The MoEF is the nodal agency and a national focal point for the implementation of the UNCCD in the country. Accordingly, a National Action Programme (NAP) has been finalised which is planned to be implemented over a period of 20 years with the following objectives:-

- community based approach to development
- activities to improve the quality of life of the local communities
- awareness raising
- drought management preparedness and mitigation,
- R & D initiatives and interventions which are locally suited,
- Strengthening local self governance leading to empowerment to the local communities.

The first five years of the NAP will be experimental and include pilot projects and activities. For the Tenth Five Year Plan, an amount of Rs. 100.00 crores is proposed to be allocated . Activities like assessment and mapping of land degradation, drought monitoring and early warning system groups,

drought preparedness contingency plans, and on-farm research activities for development of indigenous technology, etc will be taken up. This would be a 100% Central Sector Scheme. During the year 2002-03, Rs. 3.00 crores has been proposed for the scheme for taking up an area of 600 ha.

Grants in Aid to Voluntary Agencies

In tune with the philosophy of eliciting and nurturing people's participation, the Board provides financial assistance to Non-governmental organisations (NGOs) and Voluntary Agencies (VAs) for afforestation and tree planting activities under this scheme. The objectives of the scheme are as follows:

- (a) development of wastelands adjoining forest areas through afforestation and soil and moisture conservation measures;
- (b) development of grasses and fodder including silvipasture;
- (c) promoting involvement of people in the afforestation programme.

For 2002-03 an amount of Rs. 4.50 crores has been proposed for this scheme. It is envisaged to sanction around 70 projects to the voluntary agencies for taking up afforestation & Eco development work.

Other Activities/Programmes :

Monitoring and Evaluation-

3.1.1. There is a provision for concurrent evaluation of the projects implemented under Centrally Sponsored Schemes of Integrated Afforestation and Eco-Development Projects Schemes (IAEPS), Area-Oriented Fuelwood and Fodder Projects Schemes (AOFPP), Non-Timber Forest Produce Schemes (NTFP) and other schemes of NAEB. Reputed Non-Governmental Organisations (NGOS) and Institutions/Experts are engaged by NAEB for carrying out these evaluations.

3.1.2. Integrated Afforestation and Eco-Development Project Scheme, Area Oriented Fuelwood and Fodder project Scheme and Non- Timber Forest Produce (including Medicinal Plants) Scheme have been evaluated by National Centre for Human Settlements and Environment, Bhopal. The Evaluation Report has been examined in the Board and based upon the findings, the guidelines for implementation of NAEB Schemes viz. IAEPS, AOFPP & NTFPS have been revised for the 9th Plan Period.

3.1.3. In addition to the monitoring carried out by the State Government agencies, two kinds of monitoring is done at the Central level:-

(a) Every year 10% (approximately 50) districts of the country are selected, with appropriate regional distribution, for evaluation of the afforestation activities taken up in the previous year by autonomous institutions/Egos/Vas/Regional Centres of NAEB/Retired Forests officials. The evaluation reports are analyzed in NAEB. A copy of the report is sent to the concerned State Governments and districts for information and for taking necessary remedial measure. For 2002-03 an allocation of Rs.0.60 crores has been kept for this activity.

3.2 Regional Centres-

3.2.1. The Board has seven Regional Centres located in Universities National level Institutions. These Centres help NAEB in promoting extension of replicable technologies and for dissemination of research findings. They provide technical and extension support to the State Forest Departments in preparing projects for regeneration of degraded forests and adjoining lands with people's participation, and also act as a forum for the exchange of ideas and experiences amongst the States of the region as well across the regions. In addition, these centres carry out problem-specific studies as well as evaluation of NAEB's programmes in the field, and organise training programmes and workshops. These Centres, and the States they cover, are as follows:-

Sl.No.	Regional Centres	States covered under each Regional Centre
1.	University of Agriculture, Bangalore	Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Pondicherry, Lakshadweep
2.	University of Horticulture & Forestry, Solan	Himachal Pradesh, Jammu & Kashmir, Punjab and Chandigarh
3.	Agricultural Finance Corn., New Delhi	Harlan, Rajasthan, Uttar Pradesh and Delhi
4.	Indian Institute of Forest Management, Bhopal	Madhya Pradesh and Orissa
5.	Agricultural Finance Corporation, Mumbai	Gujarat, Maharashtra, Goa, Daman & Diu, D & N Haveli
6.	North-Eastern Hill University, Shillong	Arunachal Pradesh, Assam, Mizoram, Manipur, Meghalaya, Nagaland and Tripura
7.	Jadavpur University, Calcutta	Bihar, Sikkim, West Bengal and A&N Island

3.2.2 During 2002-03, an amount of Rs. 1.60 crores has been proposed for the Scheme.

3.3. **Communication**

New technologies and methodologies of participatory management, eco-development and regeneration of degraded forests are being progressively developed. In order to share such experiences and technologies widely, NAEB documents such developments and information brings out publications, makes films and shares these with State Governments, NGOs and all those concerned with these issues. The Board has Commissioned/produced 12 films and has brought out a number of publications for the purposes of dissemination. During 2002-03 an amount of Rs. 0.45 Crores has been proposed for the Scheme.

3.4 **Professional and Special Services**

The National Afforestation & Eco-Development Board takes up special studies of important issues relating to policy formulation, programme implementation, etc. The Board also engages special consultants for taking up a variety of assignments.

3.4.1 During 2002-03 an amount of Rs. 0.05 crores has been proposed for the scheme to undertake studies on the areas like Eco-development, Joint Forest Management, employment generation, reorientation of existing programmes etc.

3.5 **Indira Priyadarshini Vriksha Mitra Awards (IPVM):**

3.5.2. IPVM awards are presented annually to the following categories:-

- * Individual
- * Panchayats
- * Educational Institutions
- * Voluntary Agencies
- * Government Agencies
- * Corporate Sector
- * Government Servants (Individuals)
- * Municipalities/Municipal Corporations/Cantonment Boards have been added.

Note: Last two categories have been included since 1996 Awards.

- The awards are given on the basis of innovative efforts and outstanding work in afforestation, with special reference to wastelands development and involvement of the people. The following activities are kept in view while deciding the awards:
- establishing decentralised nurseries;
- tree planting on wastelands/farm lands;
- awareness-raising, motivation and extension work;
- involving the rural poor/tribals/cooperatives in afforestation and tree planting;

- setting up grass-roots level institutions like the Tree Growers' Cooperatives; and
- social fencing of community woodlots and pasture lands.

The Awards up to the year 1998 have been announced.

3.6 **Mahavriksha Puruskar**

Mahavriksha Puruskar, instituted in 1994 is given every year to people/organisations for trees having largest girth and height and having good health & vigor. The Awards up to the year 1998 have been announced.

3.7 **Eco-Task Forces**

Ecological Task Forces (ETFs) of ex-servicemen are employed in remote and difficult areas to undertake restoration of degraded ecosystems through afforestation, soil conservation and water resource management techniques. The scheme also serves as a mechanism to rehabilitate the ex-servicemen on productive work and to create employment for retired army personnel mainly in the rural areas.

The proposed provision of the scheme for the year 2002-03 is Rs. 10.00 crores.

228. **ZOOLOGICAL SURVEY OF INDIA**

The Zoological Survey of India (ZSI) concentrates on the exploration and survey of faunal resources of the country and research on taxonomy, distribution, bio-ecology, Wildlife, animal population and animal behaviors.

During 2002-2003, the Zoological Survey of India proposes to continue exploration and surveys (a total of 81 surveys) covering states of Andaman & Nicobar Islands, Arunachal Pradesh, Andhra Pradesh, Bihar, Goa, Gujarat, Gulf of Kutchch, Himachal Pradesh, Kerala, Rajasthan, Ladakh (J&K), Orissa, Tamil Nadu, Maharashtra, Madhya Pradesh, Karnataka, Uttar Pradesh, Uttaranchal, West Bengal. The ZSI also proposes to undertake status surveys of four endangered species during the year.

The regular publication, viz., Records of Zoological Survey of India, Annual reports of ZSI, Bibliography of Indian Zoology will be brought out.

The provision earmarked for ZSI for the year 2002-2003 is Rs. 8.00 Crores on the Plan and Rs.9.74 Crores on the Non-Plan side.

229. **BOTANICAL SURVEY OF INDIA**

The primary function of Botanical Survey of India is to conduct survey, exploration and identification of the plant resources of the country, listing of all endangered species, collection and maintenance of germplasm and creation of gene-bank of endangered, threatened and vulnerable species and to undertake measures for the effective conservation of such species. BSI also identifies, collects and preserves specimens of plants which are economically and medicinally beneficial to human beings and it is compiling a National Data Base on plant resources of the country based on botanical exploration.

In addition to the above, BSI undertaken study of fragile ecosystems, sanctuaries, parks, Biosphere Reserves, EIA studies, Ethnobotanical and Geo-botanical studies.

BSI is the custodian of the large collection (over 4 million) of herbarium specimens in SE Asia which are being maintained for over a century. The scientists of the Survey undertake critical taxonomic study of the specimens collected and published National, State and District floras, Plant Diversity of India and Ethnobotanical studies.

A botanic garden of international standards is to be established in the region of the national capital at NOIDA. Although there are some botanic gardens located at various places in the country, they do not have a national character, i.e., they do not represent the flora of the entire country. This garden would inter-alia serve the purposes of Ex-situ conservation and propagation of important economic and threatened plants of the country; serve as a 'centre of excellence' for research and training and thereby cater to the need for conservation of endangered species in the region and build public awareness on the conservation needs through education on conservation of plant diversity.

The budget provision for 2002-2003 is Rs.10.00 Crores on Plan side and Rs.12.39 Non Plan.

230. NATIONAL MUSEUM OF NATURAL HISTORY

The National Museum of Natural History was set up in New Delhi on 5th June, 1978. It is devoted to non-formal environmental education. Consequently, it has set up three Regional Museums at (1) Mysore, (2) Bhopal and (3) Bhubaneswar. The Regional Museums at Mysore & Bhopal have become fully functional during the Eighth & Ninth Plans respectively, while the Regional Museum at Bhubaneswar will be made operational by the beginning of 10th Plan period. The budget provision proposed for the NMNH and its Regional Museums for 2002-2003 is Rs. 6.00 Crores under Plan (including capital works).

The main objective and programme of the NMNH and RMNH is targeted towards the overall objective of creating 'environmental awareness' and 'conservation education' to prepare conscious citizenry and sensitize them towards the environmental issues and prepare them to halt and reverse the negative trends of environmental exploitation. The establishment of NMNH and its Regional Museums fits very well into the broader objectives laid down by the Ministry of Environment & Forests. Since its inception, the NMNH along with its Regional Museums of natural History have definitely contributed to make the young generation aware towards the environmental issues.

231. RESEARCH & ECOLOGICAL REGENERATION

During the 9th Plan Period (1997-2002) 112 new research projects were launched and provided financial assistance under the above mentioned schemes. 109 research studies initiated during VIII and IX Plans were completed.

Out of an allocation of Rs. 18.38 crores for the Ninth Plan (1997-2002) so far an expenditure of Rs. 16.00 crores has already been incurred. The remaining amount will be utilized during the current financial year.

The basic approach during the 9th Plan had been to provide support to projects of applied value consistent with the broad framework of objectives of the constituent sub scheme. Under the Environment Research Programme, the thrust was on studies related to air and water quality, development of Eco-friendly technologies for treatment of industrial effluents and resource recovery, instrumentation development, pollution problems related to groundwater, biodegradation of petroleum oils, heavy metals, waste recycling, detoxification of hazardous pollutants, social and ecological issues, restoration of mine affected areas, aero-biopollution and human health, Eco-friendly alternatives to chemical fertilizers and pesticides, etc. As a result of extensive research, four patents were secured, out of which two are being commercially exploited.

Under the Ecosystem Research scheme, emphasis was laid on study of the ecology of important rare, endangered animals species like south Indian primates, monitor lizards, germplasm collection, propagation and improvement of forest plants of Thar desert, studies on sea level rise, methane measurements in the country, studies on insect plant inter relationships in forestry ecosystems, vertebrate diversity on the Great Nicobar Biosphere Reserve, man-wildlife interactions in protected areas, rare endemic avi-fauna of Andaman & Nicobar Islands, non-human primate of India, human nature interactions in and around National parks and Ethno-biology etc.

In the Eastern and Western Ghats Research Scheme, the projects were supported on soil and water management impact of mining and environment, conservation of bio-diversity, impact of human

activities and industrialization on local river eco-systems, sacred groves of Kerala and Maharashtra, effect of plantation crops and the soil erosion, rehabilitation of degraded areas, grasslands, tropical montane flora of Eastern and Western Ghats with reference to its north temperate affinities, ecosystem analysis of Kodyar forest, environmental impact of monoculture plantation, study on the flora and vegetation of Kolli hills, ecology of mammalian avifauna resources of Eastern Ghats, development and management of Eco-hamlets in the Eastern Ghats, edible mushrooms of Western Ghats, impact of tourism, waste recycling (raw coir pith), reproductive biology of endemic palms, augmenting natural and artificial regeneration of sandal in south Kannada, bauxite mining, impact of effluent discharge from aqua-culture ponds on environment and so on.

The budget provision for 2002-2003 is Rs.4.00 Crores on Plan side.

232. G.B. PANT INSTITUTE OF HIMALAYAN ENVIRONMENTAL & DEVELOPMENT

The Planning Commission of India has placed emphasis on the development of the Indian Himalayan region. The Institute will continue to function within its approved mandate and conduct R&D Programmes. Some of the activities which require strengthening and/or are planned to be initiated during the Ninth Plan period are as follows.

All existing programmes at Head Quarter/units need strengthening in terms of infrastructure, support facilities and adequate manpower. Facilities and activities which need to be initiated include editorial/publications/translation cell, planning and coordination cell, establishment of new units (2), exchange programme of scientists and other professionals at the National and International level related to Mountain Agenda, creation of a Himalayan chair, programme of visiting professionals and experts, specialized and work oriented courses, environmental education cell, public relation cell, microbial culture collection section concentrating exclusively on the Himalayan region, a network programme on the bio-resource inventory of the Himalayan region, facilities for mass propagation and hardening/ex situ and in situ conservation of Himalayan species, expansion of GIS/GPS/RS cell, etc. creation of sports recreational, primary schooling and medical dispensary facilities within the campus is essential in view of its remote location. In addition documentation of traditional technologies and cultural practices from the Himalayan region needs to be encouraged. Facilities which require specific attention include electronic connectivity, library and documentation, video/documentary and photography, workshop for instrumentation, fabrication, maintenance, routine repairs, etc., R&D laboratories, land scaping, campus security and transport, etc., in view of the remote location of the Institute.

Significant increase in the manpower (Scientific, technical, support and other staff) is required, commensurate with the increasing activity. Projected budget requirements need to be released at enhanced level during the Plan period, excluding external support from National and International agencies. Provision of sufficient funds is to be assured to fulfill the envisaged/approved goals and programmes. In this regard MOE&F has constituted a high level expert committee to review the functioning of the Institute since its inception. The chairperson of the Institute Review Committee, Prof. K.S. Valdiya, has already submitted report to the Secretary, MOE & F which may also be seen.

The budget provision for 2002-2003 is Rs.6.00 Crores on Plan side.

233. ENVIRONMENTAL EDUCATION, AWARENESS & TRAINING

The main programmes being implemented under this scheme are as under:

(i) National Environment Awareness Campaign (NEAC)

This is an annual event being organised every year through Regional Resource Agencies (RRAs) spread all over the country. At present, 28 RRAs are working. The prime aim of this campaign is to create awareness about environment at all levels of society. The campaign is conducted with the active participation of Non-Governmental Organisations, professional bodies, educational

institutional and government departments. RRAs are responsible to disburse money on behalf of the Ministry to participants selected by the Regional Committees and also monitor the campaign in their areas. Expenses incurred by the RRAs for NEAC are reimbursed by the Ministry.

(ii) **Eco-clubs**

This is a scheme especially designed for involving school students from class VI to X in environmental activities. Schools all over the country are encouraged to form clubs enrolling students from these classes.

In order to extend the coverage of this programme to the entire country, Eco-clubs are being set up in at least 100 schools in each district of the country during the current year. The members of the Eco-clubs would constitute 'National Green Corps'. Financial assistance is being provided to the concerned State/UT Nodal Agency appointed by the State/UT Government to meet the expenditure on Master Trainers @ Rs. 990/- per Master Trainer, Training of In-charge teachers @ Rs. 335/- per teacher, Financial assistance to Eco-clubs @ Rs. 1000/- per Eco-club, production of locally relevant resource material @ Rs. 50/- per Eco-club and administrative expenses to the Nodal agencies @ Rs. 50/- of the total expenditure. Besides this, centrally identified resource material in local languages @ Rs. 150/- per Eco-club is also provided.

(iii) **Seminars/Symposia/Workshops**

The main objective of this scheme is to provide a common forum to professionals for sharing upto date knowledge on various technical issues related to environment and to create environmental awareness about specific issues. Financial assistance is provided under this scheme to Universities, other academic and research institutions, professional bodies, NGOs etc. to organise seminars/symposia/workshops on specific issues related to environment.

The budget provision for 2002-2003 is Rs.19.00 Crores on Plan side and Rs.0.75 on Non-Plan side (including budget provision of Grants -in-aid to Professional Societies S.No.238) .

234. CENTRES OF EXCELLENCE

Under the Scheme, the Ministry is providing assistance to the eight Centres of Excellence in different areas of environment. The Centre for Mining Environment, Dhanbad imparts training to in-service field personnel in environment Science and Technology with particular reference to Environment Management in Mining Areas and conducts research in the field of Mining Environment. The Centre has initiated a regular academic programme leading to M.Tech Degree in Environment Science & Engineering. The Centre for Environment Education, Ahmedabad and CPR Environmental Education Centre, Chennai, would be continuing their efforts in environmental awareness, creation and production of resource material. Besides, these Centres will also focus major attention in organising several environment al education and training programmes for various groups like students, teachers, NGOs, rural people etc. Publication of newsletter on environmental education databank etc. would also be carried out by both the Centres in the field of environment education and awareness. The TBGRI, Thiruvananthapuram, is a Centre of Excellence for Conservation and sustainable utilisation of tropical plants diversity. The thrust areas on which the Centre will focus upon are: tropical plant diversity, tropical medicinal plant diversity and ethno-botany and R&D in medicinal and herbal formulations and preparations. The SACON was set up in 1991-92 to design and conduct research in ornithology covering all aspect of bio-diversity and to disseminate knowledge on the subject. The Centre for Ecological Science, Bangalore, is a Centre of Excellence in the field of Ecological Research, applied environmental problems and extension programmes with particular reference to Western Ghats. The Ministry provides grant to the Centres for conducting research and organising training & extension programme in specified fields. The Thrust areas in respect of the Centre of Excellence at CEMDE, Delhi are: Biological reclamation of mined areas in coal fields and iron ore mines, Afforestation and reforestation technologies for wasteland and Technologies for soil amelioration and protection and the

main objectives of the Centre are to: develop low-input and cost effective biological technologies useful in the biological reclamation of mined sites, evolve appropriate technology packages for enhancing the biological productivity of marginal lands, undertake research and developmental activities relevant to the sustainable development of forest ecosystems and prepare the inventory of biological resources and to formulate strategies for their utilisation and conservation. The activities of all the Centres will be continued during the financial year 2002-2003. An outlay of Rs.8.00 Crores on Plan side and Rs 1.74 Crores on Non-Plan side is earmarked for 2002-2003 for providing Central assistance to all the Centres.

235. INDUSTRIAL POLLUTION ABATEMENT THROUGH PREVENTIVE STRATEGIES

During the tenth Plan the three on-going schemes in the ninth plan viz.. Environmental Audit, Environmental Statistics & Mapping and Adoption of Clean Technologies in SSIs, have been merged into one scheme as 'Industrial Pollution Abatement through Preventive Strategies' with a proposed outlay of Rs. 0.60 Crores on Plan side.

The objective of the scheme is to promote Preventive Strategies for Abatement of Industrial Pollution through Environment Audit, Waste Minimisation, Cleaner Production and Environmental Management Systems

The scope of the scheme include:

- Sectoral evaluation of Env. Statements, Waste Minimisation Demonstration studies, Bringing-out Env. Audit Update,
- Sector-wise Training and Awareness programme.
- Preparation of Env. Maps depicting the Pollution Data related to Air, water, Soil and Noise along with the trends in different polluted areas, river basins , Metro and other major cities.
- Establishing & running Waste Minimisation Circles in clusters of Small Scale Industries.

The budget allocated for the three schemes Environmental Audit, Env. Statistics & Mapping and Adoption Clean Technologies is Rs.10 lakhs per annum for each scheme during the IXth Five Year Plan. During the year 2002-2003, an amount of Rs.60 lakhs has been proposed for the renamed scheme "Industrial Pollution Abatement Through Preventive Strategies" by amalgamating the on-going three schemes viz., Environmental Audit, Environmental Statistics and mapping and Adoption of Clean Technologies in SSIs.

236. ENVIRONMENTAL INFORMATION SYSTEMS (ENVIS)

The ENVIS network at present consists of 25 centres, which have been set up on different subject areas of environment throughout the country and the Focal Point in the Ministry. The networking of all the centres have been undertaken. All the Centres have initiated to develop their home pages and web sites in their assigned subject-areas. Web-sites of each Centre would be linked with the Ministry's web-site so that user could get the desired information directly from the Website. Besides, some more new ENVIS centres on the upcoming subject areas, not covered so far, are also proposed to be set up in phases to make the network comprehensive. In addition, under World Bank assisted Environment Management Capacity Building (EMCB) Project for strengthening of ENVIS, a large number of ENVIS nodes in State Government Departments, Pollution Control Boards, academic institutions, corporate bodies, NGOs, etc., are being planned to be set up for wide dissemination of environmental information to all concerned.

Keeping these activities into consideration, a sum of Rs. 2.00 Crores on Plan side has been provided for the scheme during 2002-2003.

237. NATIONAL NATURAL RESOURCE MANAGEMENT SYSTEM (NNRMS)

Out of 56 priority areas identified for undertaking the research projects under the scheme, about 30 areas have been covered and it is expected that remaining areas as identified by the Bio-resource Committee would be covered in a phased manner so that information generated through various projects under the scheme are used by Central Government, State Governments/Agencies and various other research organisations in a more comprehensive way.

A sum of Rs. 1.00 Crores has been earmarked during 2002-2003 to achieve these objectives.

238. GRANTS -IN-AID TO PROFESSIONAL SOCIETIES

Under the scheme, efforts will be made to provide support to the appropriate institutions and organisations, museums and science centres for developing activities and projects in the field of environment as well as develop exhibition galleries and educational programmes relevant to ecology, wildlife and environment.

A new guideline and the proforma of the scheme has been finalized and distributed to all concerned so that the appropriate organizations/institutions are considered for support to enhance their activities and projects in the field of environment as well as develop exhibition galleries, etc., relevant to ecology and wildlife.

The budget provision for 2002-2003 of this scheme is included in the Environment Education & Training scheme (S.No.233)

239. ENVIRONMENTAL POLICY & LAW

1. The Environment Policy and Law Scheme

The following programmes are being handled under this Scheme :

(i) Amendment to the Environment (Protection) Act, 1986

The Environment (Protection) Act, 1986 was enacted with a view to ensure that environment related offences are not only dealt with speedily and effectively, but that they also act as a deterrent. The existing Act is proposed to be amended in order to strengthen its impact. A draft Bill has been prepared which is currently under examination in the Ministry. Thereafter, comments of various Ministries will be called for.

(ii) Water (P&CP) Cess Amendment Bill, 1995

The existing rates of Water Cess were revised in 1991 because with the rapid expansion of industries and towns, the responsibility and workload of the Pollution Control Boards have increased considerably and the funds available with these Boards had not kept pace either with increase in costs or with the overall commitment in involving heavy financial liabilities. There is a proposal to revise afresh, the existing Cess rates. The proposed amendment seeks to augment the resources of the Central Pollution Control Board and SPCBs by enhancing the rates of Cess nearly three-fold and also seeks to rationalise the categories and rates of Water Cess.

(iii) Labelling of Environment Friendly Products

The Government has instituted - ECO-MARK - a scheme of labelling of environment friendly products with a view to provide accreditation and labelling for household and other consumer products which meet certain environmental criteria along with quality requirements of the Indian Standards Institutes for that product. Any product, which is made, used or disposed of in a way that significantly reduces the harm, it would otherwise cause the environment, could be considered as Environment Friendly product.

(iv) Trade & Environment

As far as the trade & environment is concerned, the nodal ministry is the M/o Commerce. This Ministry is contributing in this area as a co-ordinator for providing in-puts on policy matters with respect to environment vis -à-vis trade. The UNCTAD Project on 'Strengthening Capacities for Trade & Environment Policy' in India is under completion. Some workshops / seminars and symposia have been organised on the policy matters.

(v) ISO 14001

The ISO 14001 Series provide guidelines to industry in the matter that an environmental management system should have as well on supporting technologies and environmental aspects such as eco-labelling, life-cycle analysis and product standards. For awareness building some programmes are being organised for government, industry NGOs and others. So far, 186 industries have taken ISO 14001 certification.

The budget provision for 2002-2003 of this scheme has been included in Assistance for Abatement of Pollution scheme (S.No.245).

2. The Environmental Commission & Tribunal Scheme

The National Environmental Tribunal Act, 1995 provides for strict liability for damages from any accident occurring while handling any hazardous substance and for the establishment of a national Environment Tribunal for effective and expeditious disposal of cases arising from such accidents. With a view to giving relief and compensation for damages to persons, property and the environment and for matters connected therewith or incidental thereto. The Act could not be enforced, as the financial implications for setting up of the Tribunal are higher. The Ministry is in the process of operationalising the Act.

The budget provision for 2002-2003 is Rs.2.50 Crores on Plan side.

240. THE WORLD BANK AIDED INDUSTRIAL POLLUTION PREVENTION PROJECT

The objective of IPPP is to promote cost-effective pollution abatement from industrial sources. The project focuses on the most polluting industrial sectors as defined by GOI (17 industrial sub-sectors) and will comprise of three components, viz., (i) Industrial (ii) Investment (iii) Technical Assistance in Andhra Pradesh, Gujarat, Karnataka, Rajasthan & Madhya Pradesh which, as a group, account for one of the largest concentration of industrial sources in the country. Under this Scheme, funds released by GOI is reimbursed by the World Bank. This scheme, which started in 1994, will continue upto March 2002. The Scheme is likely to be extended for two years beyond March 2002. The Scheme is being evaluated at regular intervals by the World Bank authorities.

(i) Institutional Development Component

This component is designed to strengthen monitoring and enforcement abilities of the SPCBs in the project states of Andhra Pradesh, Gujarat, Karnataka, Rajasthan and Madhya Pradesh through equipment, laboratory facilities, Geographical Information System and training.

(ii) Investment Component

Provision of credit to individual firms for pollution abatement with focus on Waste Minimisation and adoption of cleaner methods of production consisting of (a) loan assistance to large and medium industries for installing pollution control equipment. This component is being handled by

ICICI and IDBI under the over-all supervision of D/o Economic Affairs and MoEF (b) establishment of CETPs and

Industrial Waste Water Recycling Plants for clusters of small scale units. Funds have already been provided to one IWRP and two CETPs in this financial year.

(iii) Technical Assistance Component

This is for carrying out feasibility and free investment studies for CETPs, IWRPs and other facilities to be financed under part 2 of the Project including provision of Consultancy Services. Two training programmes have been conducted and 39 Waste Minimisation Circles have been established till date.

The budget provision for 2002-2003 is Rs.10.00 Crores on Plan side.

241. CIVIL CONSTRUCTION UNIT

Rs. 2.00 Crores has been earmarked for 2002-2003 to undertake minor works.

242. NATIONAL RIVER CONSERVATION DIRECTORATE

The main objective of the river action plans is to improve the water quality of the rivers to acceptable standards by preventing pollution load reaching the river by undertaking works like (i) interception & diversion works to capture the raw sewage flowing into the river through open drains and divert them for treatment, (ii) sewage treatment plant for treating the diverted sewage, (iii) low cost sanitation works to prevent open defecation on river banks, (iv) electric and improved wood based crematoria to conserve the use of wood and help in ensuring proper cremation of bodies brought to the burning ghat, (v) river front development works such as improvement of bathing ghats etc. and (vi) other minor misc. works.

The Government approved 100% funding of the River Action Plans w.e.f. 1.4.1997 with a condition that land cost will be entirely borne by the State Government after 1.4.1997. The centages on the project cost will be 8% as against 14% under 50:50 funding pattern. Earlier, the projects were being implemented on a 50:50 sharing pattern between the Centre and the States. The approved project outlay for the NRCP (including GAP-II) has now increased to Rs. 3318 crore. The funds released by GOI up to 2001-2002(till 31-10-01) totals to Rs. 805.27 crore. A provision of Rs.295.17 crore has been made for the NRCD in 2001-2002. It may be possible to utilize the entire amount. The Annual Plan outlay for 2002 – 2003 has been proposed as under;

	(Rs. in crore)
NRCD(Estt.)	6.00
NRCP	254.00
NLCP	30.00

A requirement of Rs.2000 crore has been projected for the X Plan. The following allocations have been proposed for the three schemes of NRCD:

	(Rs. in crore)
NRCD (Estt.)	40.00
NRCP	1700.00
NLCP	260.00
Total (NRCD)	2000.00

The Ministry of Environment & Forests had identified 10 polluted urban lakes for conservation and management in 1994. In July 1997, the Planning Commission conveyed the approval of NLCP as a

100% Centrally Sponsored Scheme. Accordingly, a note covering the aforesaid 10 polluted urban lakes at an estimated cost of Rs. 637 crore was put up for approval of Govt. The approval of the Govt. was accorded on 31st May, 2001 for conservation and management plans of Powai Lake in Mumbai(Maharashtra) and Ooty and Kodaikanal lakes in Tamil Nadu under the NLCP.

A provision of Rs. 25 crore were made for NLCP in the IX Plan. An amount of Rs. 1.25 crore have been spent in preparation of the DPR for Dal Lake Conservation Plan. The DPRs for Dal Lake Conservation Plan have been sent to the state government of J&K for their concurrence. It is proposed to utilise the available allocations in the current plan for the conservation of the aforesaid 3 lakes. The estimated cost of the project is Rs. 14.90 crore. An amount of Rs. 4.00 crore for Powai and Rs. 1.00 crore for Ooty has been released in July 2001. Funds for conservation of these lakes will be provided out of the Plan allocations of the Ministry of Environment & Forests. The Ministry is now receiving new proposals for conservation of lakes from various states. It is proposed to pose the remaining identified lakes of the NLCP along with the new lakes to Govt. during the X Plan.

243. WETLAND CONSERVATION PROGRAMME

The main activities will revolve around release of Central assistance to the concerned State Governments for wetland conservation for activities like mapping, landscape planning, hydrology, control of encroachment, eutrophication abatement, aquatic weed control, wildlife conservation, fisheries development, environmental awareness, etc. for MAPs of identified wetlands in the country. The research projects will be sanctioned as per the guidelines prepared on priority areas of research. The meetings of National Wetland Committee and Research sub-Committee will be convened during the year. Organisation of Workshop for evaluation of progress of on-going research projects, completed research projects and MAPs will be undertaken. Circulation of guidelines for monitoring mechanism in regard to MAPs will be completed. Two directories on wetlands were published earlier. Work on third directory will be initiated updating the earlier work using remote sensing technology alongwith ground truth data and adding more wetlands where enough information is available on various aspects. This is more relevant as India alongwith Japan have been elected members of the Standing Committee on Ramsar Convention for this triennium and as such our country has to play a major role in all convention activities for the present triennium. Process has been initiated to designate more wetland sites from India in the list of Ramsar sites. Follow up action for preparation of COP8.

The budget provision for 2002-2003 has been included in Conservation & Management of Mangroves scheme (S.No.256).

244. CENTRAL POLLUTION CONTROL BOARD(CPCB)

An outlay of Rs.1200.00 lakhs is proposed for Plan expenditure. The activities of CPCB are grouped into nine Project Heads. Salient features of each project is summarized as under:

Pollution Assessment-Survey and Monitoring

CPCB in collaboration with State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) has set-up Water Quality and Ambient Air Quality Network. The expenditure incurred by the State Boards is reimbursed by CPCB. Besides Water and Air Quality Monitoring, there are number of on-going programmes which include; survey of polluted river stretches, rive of primary water quality criteria, assessment of non-point pollution sources, bio-monitoring of national aquatic system and assessment of pollution from point sources. State specific surveys are also taken up through the Zonal Offices of CPCB.

Laboratory Management -Operation Maintenance and R&D

CPCB has set-up a laboratory facility at its Head Office and the Zonal Offices have also been provided with minimum laboratory facilities. The strengthening of laboratories is an on-going activity

and the laboratories are to be strengthened from time to time for undertaking analysis of critical pollutants. The new parameters have been added-up for analyzing the bio-medical waste, hazardous waste and other important toxicants like Polychlorinated, biphenyl. CPCB has also proposed R&D schemes relating to various aspects of prevention and control of pollution. The regular analytical quality control tests and training to the staff of Pollution Control Boards is proposed.

Development of Standards, Guidelines and Eco-mark

CPCB has already developed Standards for disposal of treated liquid effluents and gaseous emission in respect of major polluting categories of industries. Some of the standards need to be reviewed from time to time taking technological improvement into consideration. It is proposed to undertake review of standards in respect of those categories of industry which have already been covered.

Training

CPCB is proposing to undertake training programmes for the benefit of SPCBs/PCCs, Regional training programmes would be conducted through Expert institutions and Zoos. The important areas, which will be covered under the training, include; Bio-medical waste, Municipal solid waste, Cleaner technologies, Vehicular noise pollution control and others.

Information (Date -base) Management

This is an on-going programmes under which major expenditure is on the operation and maintenance of existing network. Some of the documents of CPCB are placed at internet facility.

Pollution Control Enforcement

The important activity under the Pollution Control Enforcement is to ensure compliance of 17 categories of polluting industries and industries discharging waste water into rivers and lakes. The Action Point prepared by restoration of environmental quality in the critically polluted area is also under implementation through the concerned SPCBs. As an on-going activity under the Environment Surveillance Programme it is proposed to have regular inspection/visits of polluting industries and also undertake compliance to the various Court's directive. The other on-going programmes include; Preparation of Zoning atlas, chlorine use and optimization in India, Environmental Audit, Noise pollution control, monitoring of compliance for bio-medical and municipal solid waste and others.

Pollution Control Technology

Under the project head, studies on existing treatment technologies and performance of technologies for cleaner production are taken up. The important on-going programmes include; performance evaluation of sewage treatment plants, risk assessment in chemical industries, control of noise levels from generator sets, treatment technology for distillery effluent, root zone treatment and others.

Mass Awareness, Publication and NGOs

This is an on-going project under which programme relating to mass awareness are taken up. The activity also include; Publication of reports on various aspects relating to prevention and control of pollution.

Hazardous Waste Management

The important on-going programmes under this project head include; inventorisation of hazardous waste in various States, development of Standards for leachate from hazardous waste dump site, assessment of hazardous waste disposal facilities in industries, organising training and workshop, follow-ups of Committees constituted for hazardous wastes/chemicals.

The budget provision for 2002-2003 is Rs.22.00 Crores on Plan side.

245. ASSISTANCE FOR ABATEMENT OF POLLUTION

Financial assistance is being provided to various SPCBs/PCCs, national institutions etc. for specific projects, studies, purchase of equipment, salary components in respect of Pollution Control Committees of UTs etc. This is being provided on the basis of the requirements made by these units. Before, extending financial assistance, the demands are considered in the Ministry in consultation with the Central Pollution Control Board.

An amount of Rs.8.75 crores has been approved by the Planning Commission for the above Scheme for the whole period of IX Five Year Plan 1997-2002. Out of this, only an amount of Rs.3.50 crores (upto the end of current financial year 2001-2002) has been allocated by the PC Division and has been utilised fully.

The budget provision for 2002-2003 is Rs.3.00 Crores on Plan side which includes provision for Environment Policy & Law scheme (S.No.239(I))

246. COMMON EFFLUENT TREATMENT PLANTS (CETPs)

The scopes of the CETP projects are to construct the CETPs in the clusters of small and medium scale industries. It would also be difficult to give the estimated cost of individual projects as the proposals submitted by the proponent would have the details of the financial estimates duly appraised by the financial institutions and approved by the State Governments.

The budget provision for 2002-2003 is Rs.2.47 Crores on Plan side.

247. REIMBURSEMENT OF WATER CESS

As per revised formula effective from 1.4.1998 of water Cess reimbursement to SPCBs/UT PCCs, upto 80% of the Cess amount collected by SPCBs/PCCs will be reimbursed to them in accordance with Section 8 of the Water Cess Act, 1977 for meeting their approved expenditure requirements. Of the Cess amount collected, upto 20% will remain with the Central Government for undertaking specific projects in any part of the country through the Central Pollution Control Board (CPCB) subject to approval by the Central Government.

The budget provision for 2002-2003 is Rs.50.11 Crores on Non-Plan side and

248. TAJ PROTECTION MISSION

The scopes of the Taj Protection Mission projects are to implement the projects as suggested and submitted by the UP Government India for the protection of the environment in around the Taj monument. It therefore, would be difficult to give the details of the projects that would be funded as the funding of the central share would depend on the project proposals received, release of the state share and the approval of the MoEF. However, MoEF has so far received six proposals as stated in Chapter 1 and an estimate of total cost Rs.220.088 crores have been projected out of which 50% share would be of the MoEF.

The budget provision for 2002-2003 is Rs.25.00 Crores on Plan side.

249. BIO-DIVERSITY CONSERVATION

The outlay proposed for Biodiversity Conservation for the year 2002-2003 is Rs. 100 lakhs. Description of the activities alongwith their tentative budget requirements are as follows:

◆ Enactment of legislation on bio-diversity

The Biodiversity Bill is presently before the Parliamentary Standing Committee for examination and report. After submission of the report by the Parliamentary Committee, the Bill will be revised based on the recommendations of the Committee. Thereafter, it will be submitted to the Cabinet for

approval. The tentative expenditure for establishing the regulatory body for implementing the Act is Rs. 100 lakhs.

◆ **Organisation of consultations**

Biodiversity is a complex subject and issues are still evolving and emerging. It is therefore required that consultations/brainstorming session be organised on specific issues such as biosafety, IPRs, traditional knowledge, benefit sharing, ex-situ collections etc.

◆ **Biosafety Protocol**

After obtaining necessary approvals, the Biosafety protocol will be ratified.

Other activities to be undertaken during the year include : matters relating to GEAC commissioning of studies relating to specific aspects of bio-diversity, conservation of medicinal plants, conservation and management of sacred groves, and conservation of coastal and marine bio-diversity.

The budget provision for 2002-2003 is Rs.2.00 Crores on Plan side.

250. HAZARDOUS SUBSTANCES MANAGEMENT

The Hazardous Substance Management Division will continue various programmes of the current financial year and monitor the implementation of these programmes. In addition, the Division has also identified the critical gaps during the implementation of the hazardous substance activities in 9th Plan, particularly in the areas of chemical safety, hazardous waste and solid waste management. The programmes have been amended based on the field experience and will be proposed to be undertaken in the financial year 2002-2003. In addition, intensive interactions with the State Departments of Environment, State Pollution Control Boards are envisaged for effective implementation of rules of management of hazardous substances and chemical emergencies arising due to chemical disasters. The Division will also implement programmes on implementation of the provisions of the bio-medical wastes, hazard analysis studies/off-site emergency plans, training for management of hazardous substances, municipal solid waste management, strengthening of the State Pollution Control Boards, remediation of contaminated site and establishment of common facilities for disposal of hazardous wastes in the States on cost sharing basis. To fulfil the national obligations under the Stockholm Convention on Persistent Organic Pollutants (POPs), the Division will also initiate programmes on enabling activities, namely, awareness raising, monitoring and assessment including capacity building, inventorisation of stockpiles of POPs chemicals etc. In this context, a project will be undertaken to prepare National Implementation Plan in 2002-2003 with assistance from Global Environment Fund Programme. Proposed major activities are summarized below:

I Chemical Safety Programme/Accident Prevention and Crisis Management

- i) Implementation of various provisions of Acts and Rules gazetted, establishment of ERCs, hazard analysis study, preparation of off-site plans, preparation of guidelines, manuals on the hazardous substance management, Notification of new rules and regulations, PIC, POPs Convention and activities relating to Agenda 21.
- ii) Developmental projects/studies on hazardous substance management, including selected toxic chemicals, pesticides for possible phase out, isolated storage, safety in transportation, GIS based risk assessment
- iii) Identification and upgradation of training institutions for first responders in emergency preparedness, and awareness raising programmes.

II HW Management

- iv) Implementation of the HW Rules and other rules, Notification of new rules, re-inventorisation of hazardous wastes, court cases, visit for field monitoring of the hazardous wastes generating units;
- v) Establishment of common TSDF in States

vi) Capacity and capability building in ports/customs/State Board laboratories, training in hazardous waste management, publication of guidelines on hazardous wastes management and awareness raising programmes.

III SW Management

vii) Strengthening of SPCBs/PCCs with respect to SWM Rules, establishment of Solid Waste Management Cell.

The budget provision for 2002-2003 is Rs.9.00 Crores on Plan side.

251. ENVIRONMENTAL MANAGEMENT CAPACITY BUILDING TECHNICAL ASSISTANCE PROJECT (WORLD BANK AIDED)

Under the project for strengthening the country's Environment Management Plans and capacity building several sub-components have been included for funding. These are Environmental Research, Environmental Standards, Environmental Economics, introduction of Environmental Education in school system, NGO Environmental Action Fund, Environmental Law, Mining Sector, Zoning Atlas, Ambient Air Quality Monitoring, Coastal and Marine Area Management, Institutional Strengthening and Gujarat State Environmental Action Plan.

The progress of implementation of the project is reviewed periodically by a team of experts from the World Bank and suggestions made to overcome slippage's. Closer monitoring is also done periodically by the Ministry at senior level to ensure that execution of the project goes on as speedily as possible. The initial problems have been overcome. The Mid Term Review of the Project commenced in June 1999 and upto June, 2001, there have been eight reviews of the progress of the Project. It was found that there had been shortfalls both in terms of physical and financial achievements. The expenditure recorded upto June 2000 was only 5.82 million dollars. Another IDA Mission visited India in October 2000 to give final touches to the amendments in the Development Credit agreement. The amendment letter restructuring and streamlining the project was signed by all concerned parties during May-June, 2001 to pave the way for accelerated implementation of the project in all the areas and allowing new components included in the project to take off. An 'envelope approach' has also been adopted for the project allowing inters transfer of funds to components demonstrating better performance.

The budget provision for 2002-2003 is Rs.38.00 Crores on Plan side.

252. INTERNATIONAL COOPERATION

IC Division is the nodal Division for coordinating all matters relating to multilateral, bilateral Programs, training abroad, National Environment Council, matters relating to international regional bodies like SACEP, SAARC, EU etc. and projects under Global Environment Facility (GEF) and Government of India/UNDP CCF programme on Environment. An amount of Rs.1.50 crores have been provided for international activities like participation in various convention/meetings relating to environment, Global Environment Facility, bilateral cooperation and for making India's annual contribution to international bodies. An amount of Rs.3 crores has been provided for undertaking activities under the GoI/UNDP-CCF Environment Support Programme. An amount of Rs.1 crore has been provided for assisting State Governments for preparation of State of Environment Report.

253. TAXONOMY CAPACITY BUILDING PROJECT

During the year 2002-2003 the activities started under the Taxonomy Capacity Building Project will continue in the existing Centres of Research. In addition, more Centres are to be added in the areas where work is continuing. Also, new subjects (areas of research) are to be added to the project to widen its scope and to cover the groups of organisms, which are presently not covered. While at the initial stage of the project it was envisaged to establish 'Chairs' in Taxonomy to encourage

excellence. So far it has not been done. In the year 2002-2003 these Chairs will be established. Groundwork in this regard has been done.

To undertake these activities, budget provision for 2002-2003 is Rs.1.00 crores on Plan side.

254. ENVIRONMENTAL HEALTH

The scopes of the Environmental Health is to formulate, initiate and implement the studies/investigations in the problematic areas, with reference to specific pollutants, industries etc.

Environmental pollution (air, water & noise) affects the health of human being. Environmental Health is an inter-disciplinary and inter-agency subject which need to be integrated alongwith other responsible Ministries/agencies.

A National Environmental Health profile is urgently needed to be developed so as to prepare a National Environmental Health Action Plan. This would require more environmental epidemiological studies and investigations that need to be commissioned with respect to:

- Critically polluted/heavily polluted areas.
- Specific pollutants (e.g. Lead, Arsenic, Benzene, particulate matters)
- Water Pollution.
- Air Pollution (including vehicular pollution).
- Environmental toxins.
- Indoor Pollution.
- Industrial accidents.
- Urban planning & waste (municipal, medical and hazardous) disposal.

Specific environmental health profiles need to be initiated on the above mentioned broad areas. Action plans to be developed to mitigate the driving forces and pressures therefrom.

The budget provision for 2002-2003 is Rs.1.00 Crores on Plan side.

255. ENVIRONMENT IMPACT ASSESSMENT

For ensuring optimal utilization of natural resources, Environmental Impact Assessment has been made mandatory for 30 categories of developmental activities since January 1994. The appraisal procedures have been streamlined for facilitating expeditious decisions on developmental projects. Various studies pertaining to policy matters such as Sectoral policies, demonstration projects etc. have been proposed. For evolving strategy for Integrated Coastal Zone Management, studies have been proposed which inter alia include digitization of coastal stretches earmarked for special economic zones, special tourism areas etc.

As a part of sustainable development strategies, studies were initiated on carrying capacity based regional development planning, natural resource accounting, Life Cycle Analysis (LCA) etc. LCA study involving three major steel plants is getting completed by the end of the current financial year. A similar study for lignite/coal is also scheduled to be completed by the end of the current financial year. This activity would be extended to other sectors also.

Carrying Capacity Studies for five regions were initiated namely; Damodar Valley, National Capital Region, Doon Valley, Tapi Estuary and Kochi Region. Of these, four studies have been completed and the study pertaining to Kochi region will be completed by end of current financial year. Other initiatives include a project on use and application of Market Based Instruments (MBI) for Regional Environmental Management in Hazira, Gujarat as a case study which will be completed during the current year. To set up demonstration projects for implementation of Cleaner Technologies, a programme was undertaken to provide partial funding. A project for utilization of distillery spent-wash for energy generation was funded at a cost of Rs.45 lakhs. Establishment of a Centre for Environment Technology Verification involving expert institutions and user agencies in the country is

under consideration. Establishment of a Centre of Excellence for fostering the identification, verification, adoption and development of environmental technologies has also been proposed.

256. CONSERVATION AND MANAGEMENT OF MANGROVES AND CORAL REEFS

This covers activities related to implementation of Management Action Plans (MAPs) on 32 identified Mangrove and 4 Coral Reef areas in the country. This also covers release of grants to various research institutes in the country for the ongoing and new research projects related to Mangroves and Coral Reefs.

For the scheme the budget provision for 2002-2003 is Rs.9.00 Crores on Plan side (including for Wetlands Conservation Programme – S.No. 243)

257. INDIAN INSTITUTE OF BIODIVERSITY

Grants will be provided for initial requirements of buildings and infrastructural facilities for the institute. In addition, process for recruitment of staff will be initiated. This will, however, depend on approval of the scheme by the Government.

The budget provision for 2002-2003 is Rs.1.00 Crore on Plan side.

258. ASSISTANCE TO BOTANIC GARDENS

Grants are provided for in improvement of infrastructural facilities in existing Botanical Gardens to promote ex-situ conservation of rare endemic plants. During the year it is also proposed to initiate financial support for establishment of new smaller gardens during initial stage of establishment, provided some institutions take initiative and responsibility to maintain such gardens in future. The activities under the scheme are overseen by a Committee and monitored by regional offices of Botanical Survey of India.

The budget provision for 2002-2003 is Rs.2.00 Crores on Plan side.

259. BIOSPHERE RESERVES

The budget provision for 2002-2003 is Rs.6.00 Crores to cover the activities related to Management Action Plan (MAP) of 13 Biosphere Reserves and research projects in these Reserves. The MAP covers activities relating to alternate livelihood options for communities living within the reserves and research projects to monitor landscape and bio-diversity changes. The data generated helps in better management of these reserves. These activities are overseen by State level/Central level Committees.