

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 EDUCATION & TRAINING

ICFRE is the premier National Council with the mandate of undertaking, aiding, promoting and coordinating forestry research and education in India. Its Directorates and Institutes are striving hard to give new directions to research and undertake pioneering research. The research being carried out during current financial year and research to be carried out in next year will help us in catering forestry research requirements of people of India is strategic research in the interest of the country. ICFRE also provide assistance to various agriculture universities for imparting forestry education.

The Directorate of Forest Education does not undertake any specific projects/programmes. The objective of the Directorate is to conduct regular training programme in three State Forest Service Colleges for newly recruited SFS officers and in Eastern Forest Rangers College, Kurseong for Range Officers. Besides, it also runs special theme based Refresher Courses and Computer Application Courses, Promotion linked training for ACFs and Rangers and Trainers Training Course in these colleges for in-service SFS/RFOs. A proposal for conducting refresher courses for in-service Deputy Rangers, Foresters and Forest Guard with 30-35 participants has been sent to the Ministry for approval. These courses will be conducted as and when approval is received from the Ministry. The primary objective is acquisition of appropriate skills in forestry related works and dissemination of knowledge in related fields.

The objectives of financial requirement mentioned above is to maintain, strengthen and improve quality of training to IFS probationers, senior IFS officers who are promoted from SFS and in service officers with seniority of 10 years, 17 years and 21 years. The proposed budget is oriented to give better infra-structural facility in the form of better library, communication equipment, computer, hostel facilities etc. and to inform the overall environment of training.

The Institute, as a Sectoral management Institute, imparts education in forest management which is a judicious combination of management, social and forestry sciences. The Institute constantly endeavours to keep in touch with the problems of people, especially the forest dwellers and undertakes need-based research. The Institute tries to serve as a reservoir of knowledge in forest management and ensures proper integration of external and indigenous knowledge suitable to Indian context. The specific objectives of the Institute are:

- * To provide training in management and related subjects to persons from Forest Services, Forest Departments, Forest Development Corporations and Forest related Industries;
- * To select and prepare outstanding and talented young persons for careers leading to management responsibilities in forestry and forest related systems; and
- * To meet the need of Indian forestry and forest related industry and commerce with respect to updating information on forestry management through research, consultancy and publications.

In addition to above, In-service Training of IFS Officers Scheme is being implemented by the Ministry. Under the Scheme one/two week compulsory training courses and 9-12 months advance training courses for IFS Officers are conducted, with the aim to upgrade the managerial skills in the changing

socio-economic scenario of the country also to expose them to the recent developments in the field of forestry and allied subjects.

Total outlay for Forestry Education & Training during 2004-2005 is Rs.12.33 crores on Plan side and Rs.5.89 crores on Non-Plan side.

FORESTRY RESEARCH

ICFRE is the premier National Council with the mandate of undertaking, aiding, promoting and co-ordinating forestry research and education in India. Its Directorates and Institutes are striving hard to give new directions to research and undertake pioneering research.

IPIRTI, Bangalore is an autonomous organisation of this Ministry and Centre of expertise in Mechanical Wood Industry Technology Sector and is equipped with modern facilities for research and training in saw-milling and plywood. The Institute will continue research extension, demonstration and training activities.

Total outlay for Forestry Research during 2004-2005 is Rs.34.50 crores on Plan side and Rs.12.50 crores on 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.

Forest Survey of India is carrying out the following activities under the scheme:

- Assessment and monitoring of forest and tree cover in the country on a two year cycle. The assessment is currently done using satellite based remote sensing data at 1:50,000 scale. The findings are published biennially as State Forest Report. Beginning 1987, eight cycles of assessments have taken place, the last being published as State of Forest Report 2001.
- Conducting field inventory of forest and tree resources inside and outside forest areas to estimate species distribution and growing stock. In addition, inventory of shrubs and herbs is carried out and carbon content in forest soils is recorded.
- Preparation of thematic maps, showing various classes of vegetation and land use, using aerial photography of forested regions of the country.
- Imparting training to forest officials from the State/UT Forest Departments in application of remote sensing, GIS, GPS and inventory techniques in forestry. Ten to twelve such courses of 1 to 2 weeks duration for different categories of officers (Forest Rangers to senior IFS Officers) are held annually catering to training needs of over 100 officials.
- Designing of methodologies pertaining to forest inventory, tree cover estimation, satellite data interpretation, data processing, ground verification, accuracy assessment and volume estimation.
- Taking up consultancies, special projects and R&D activities pertaining to forest resources assessment and monitoring changes in these.
- Assisting State/UT Forest Departments in establishing GIS units and in forest inventory works.

During 2004-05 a budgetary provision of Rs.5.00crores (Plan) and Rs.5.55 crores (Non-Plan) has been made for activities relating to survey of forest resources.

219. FOREST PROTECTION AND REGENERATION

Scope & Objectives:

The Integrated Forest Protection (IFP) Scheme will take a holistic view of issues related to forest protection and will seek to provide financial assistance to States and Union Territories for activities related to forest protection to supplement the efforts of State/UT Governments.

An outlay of Rs. 65.00 crores have been earmarked for the year 2004-2005 for the Integrated Forest Protection Scheme.

220. FOREST CONSERVATION

The Ministry has six Regional Offices located at Bangalore, Bhopal, Bhubaneswar, Lucknow, Shillong and Chandigarh with its headquarter unit in the Ministry of Environment and Forests at New Delhi.

The primary functions of the Regional Offices are to monitor and evaluate the ongoing forestry projects and schemes with specific emphasis on conservation of forests and follow up action on the implementation of conditions and safeguards laid down by the Ministry while granting clearance to development projects under FCA/EPA. The Regional Chief Conservators of Forest are empowered to decide cases for diversion of forest land for non-forestry purposes upto the extent of 5 ha except mining and regularization of encroachment. They have also been empowered to examine cases involving forest land 5 ha to 40 ha in consultation with the State Advisory Group (SAG).

An outlay of Rs. 6.00 crores have been earmarked for the year 2004-2005 under the Plan Scheme of Strengthening of Forestry Division.

221. STRENGTHENING OF WILDLIFE DIVISION AND CONSULTANCIES FOR SPECIAL TASKS

The major objective of this scheme are to strengthen the Central Wildlife organization and its existing regional offices, opening new regional Offices for better enforcement of Wildlife (Protection) Act, 1972 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 organization could not contribute to the expectation to the preservation of Wild life 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 boarder smuggling of wildlife produce.

The budget provision for 2004-2005 is Rs.4.00 crores on Plan side.

222. DEVELOPMENT OF NATIONAL PARKS AND SANCTUARIES

The objective of this scheme is to assist the States & Union territories in the development of national Parks and sanctuaries, to facilitate and encourage to expand the protected areas network, to create infrastructure facilities for better protection and management of these protected areas; and to provide financial assistant for Eco- development, training, capacity building and research studies. Wildlife research, monitoring and training component of the scheme will receive due emphasis during the Xth Plan period. There is need for substantial increase in the allocation under this scheme. An important provision

under this scheme is for relocation of villages falling within the protected areas to outside areas and settlement of rights.

The budget provision for 2004-2005 is Rs.38.00 crores on Plan side.

223. WILDLIFE INSTITUTE OF INDIA

The main mandate of the Institute is to impart training to government and non-government personnel to carry research and advice on the matter of conservation and management of wildlife resources. In April, 1986 the Institute was given autonomous status with an additional agenda to develop professionals in Bio-diversity conservation for South and South East Asian Region.

The Institute conducts two main courses for in-service officers viz., 3 months Certificate Course in Wildlife Management, 9 Month Post Graduate Diploma Course in Wildlife Management and one M.Sc. Course of 2 years in Wildlife Science on a regular basis.

The budget provision for 2004-2005 is Rs.10.00 crores on Plan side.

224. PROJECT TIGER

Objectives :

To ensure maintenance of a viable population of tiger in India and to preserve for all time, areas of biological importance as a National Heritage for the benefits, education and enjoyment of people.

Activities :-

- i) Policy and planning for the development and management of Tiger Reserves in the country.
- ii) To release Grants-in-Aid to the State Governments having tiger reserves in the country.
- iii) Research and long term studies in the field of Wildlife Management.
- iv) Eco-development activities so as to minimise interface problems and provide employment opportunities for communities living in and around the Tiger Reserves
- v) Village relocation programme. So as to make the Tiger Reserves inviolate of any biotic pressures and provide ideal habitat conditions for the tiger and its prey-base, along with providing better opportunities and standards for the villagers relocated outside the protected area.

At present there are 27 Tiger Reserves located in 17 States, covering an area of 37761 sq. km. The main thrust of the Project is protection and mitigation of deleterious human impacts with a view to comprehensively revive the eco-system in the reserves.

The pattern of funding for the scheme is 50% Central Assistance for expenditure under recurring items of work, and 100% Central Assistance for expenditure under non-recurring items of work

The budget provision for 2004-2005 is Rs.27.00 crores on Plan side.

225. PROJECT ELEPHANT

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.

During the year 2003-04 an amount of Rs. 12.85 crores (Rs.3.17 crores for North-Eastern States) was allocated to the elephant range states under Project Elephant. However, more funds would be required in order to provide financial assistance for habitat management, management of man-elephant conflict, payment of ex-gratia relief for loss of life etc., strengthening of anti-poaching measures, capture and translocation of problem elephant population etc.

The budget provisions for 2004-2005 is Rs.11.00 crores on Plan side.

226. CENTRAL ZOO AUTHORITY(CZA)

1. Development of Zoos

CZA has been providing financial assistance for capital works in the Zoos which requires considerable amount. The work of housing, upkeep and health care of the zoo animals are provided on 100% basis and other developmental works are provided on 50:50 basis. All the recurring expenditures are met by the State Government. Same funding pattern has been approved for 10th Plan period. The Plan Scheme of the National Zoological Park, Delhi (NZN) which were earlier funded directly from the Ministry of Environment and Forests is now merged with CZA Scheme. Therefore to meet the fund requirement of NZN Delhi, allocation of CZA is required to be enhanced.

2. Feeding and health care of rescued animals

CZA has already received 300 animals rescued from the various circus. The cost on feeding and health care of these animals is estimated as Rs. 300.00 lakhs per year. This is a committed liability which have to discharged by the Central Government.

3. Creation of the Rescue Centres

The CZA has so far created housing facility to rehabilitate 300 circus animals and considering the demand to rehabilitate more circus animals. A provision of Rs 50 lakhs has been kept to provide additional rescue facility for 50 more circus animals.

4. Research Projects

A) LaCONES: The Central Zoo Authority along with the CCMB & State Government of Andhra Pradesh is creating a Center of Excellence in DNA fingerprinting and assisted reproduction in wild animals at Hyderabad. During the 9th Plan period, the Central Zoo Authority had committed @ Rs. 40 lakhs annually for establishment of the Laboratory for Conservation of the Endangered Species(LaCONES) under CCMB, Hyderabad. As per the estimates, the CCMB would require Rs.734 lakhs for completion of the Laboratory and makes it fully functional. The requirement for completion of first phase is estimated at Rs.3.60 crores. During the year, Rs 180 lakhs would be required to complete the first phase of the laboratory.

B) Other research projects: Research projects involving designing of appropriate animal enclosure, behavioral needs of various species, biology, population dynamics etc. are crucial in overall animal welfare in the zoos. The Central Zoo Authority has been encouraging such projects through Universities, Institutions and NGO's. The Central Zoo Authority would continue supporting such research by Universities, Institutions and NGO's etc on tripartite basis during the 10th plan period also.

5. Strengthening facility in existing Veterinary Institution

The Central Zoo Authority had supported upgradation of diagnostic infrastructure at five veterinary institutions in the country, so that the Indian zoos can take benefit of the expertise available with these institutions for diagnosis of disease affecting wild animals. These institutions are to be supported for

sustaining their activities. During the year Rs 50 lakhs would be required for providing assistance to these institutions.

6. Training, Workshops & Conferences

For capacity buildings of the personnel manning zoos, regular training courses will continue to be organised during the 10th Plan period. The zoo personnel will be deputed abroad for taking advance training in zoo management. Conferences and Workshops (National & International) on various aspects of zoo management, will be required to be conducted on regular intervals.

7. Education and Awareness

Central Zoo Authority supports, Zoo Education and Outreach activities undertaken by the Zoos, NGOs etc. Various publications covering the subject of zoo education and awareness are also supported.

8. Operational Cost of CZA

Operational Cost of CZA consisting salary, contingent charges, TA on evaluation of Zoos, office expenses etc. is always kept at bare minimum, around 5-6 percent of the total allocation.

The budget provision for 2004-2005 is Rs.11.00 crores on Plan side.

227. NATIONAL ZOOLOGICAL PARK, NEW DELHI

The scheme of National Zoological Park is a continuing Scheme since 1955-56. The park has been set up in capital mainly with the objective to conserve wild animals in captivity and make aware people on wild life conservation.

The National Zoological park has been quite popular with the local as well as foreign tourist, It is quite successful in breeding indigenous exotic species such as Brown Antlered Deer, Rhino, tiger, White Tiger, Panther, African Wild Buffalo, Crocodile, Sambar, Spotted Deer, Hippo etc..

In order to run the zoo to carry the recommendation /modification as advised by Central Zoo Authority who has granted temporary recognition to National Zoological park, it is absolutely essential to get the required budgetary grant to carry out policies and programme as envisaged in the Scheme of National Zoological Park

The budget provisions for 2004-2005 is Rs.1.00 crores on Plan side.

228. PROTECTION OF WILDLIFE OUTSIDE PROTECTED AREAS

This scheme will be introduced in the selected areas which are in the high diversity or high risk categories. It is envisaged to establish 80 mobile patrolling units in these areas that will maintain strict vigil. One of the major activity in the scheme is to address man-animal conflict by creation of community crawls and providing compensation. As the Scheme is yet to be approved by the Planning Commission, the budget provision for 2004-2005 is Nil.

229. ANIMAL WELFARE DIVISION

The mandate of Animal Welfare Division is to prevent the infliction of unnecessary pain or suffering on animals. The Schemes being implemented by the Animal Welfare Division are as under:-

- Scheme for Shelter Houses for Looking After the Animals.
- Scheme for Animal Birth Control and Immunization of Stray Dogs.
- Scheme for Provision of Ambulance Services to Animals in Distress.
- Scheme for Relief to Animals during Natural Calamities and Unforeseen Circumstances.
- Scheme for Scholarships to Students for Studies Abroad in Animal Welfare Courses.

- National Institute of Animal Welfare (NIAW) – Statutory Body under Section 4 of the PCA Act.
- Animal Welfare Board of India (AWBI).
- Committee for Purpose of Control & Supervision of Experiments on Animals (CPCSEA).

The activities under the above Schemes would be continued during 2004-2005, for which a budget provision of Rs.14.00 crores on Plan has been provided.

230. NATIONAL AFFORESTATION & ECO-DEVELOPMENT BOARD

The 10th Five Year Plan has set a monitorable target of achieving 25% forest and tree cover by the end of 2007 and 33% cover by the end of 2012 in the country. These targets have been endorsed, and the Union Cabinet has decided that devising suitable interventions by Government agencies and NGOs to increase the forest cover to 25% by 2007 and 33% by 2012 will be a Thrust Area and Priority Item for 2003-04. The present forest and tree cover of the country, as per State of Forest Report 2001 of the Forest Survey of India, is 23.03%. In order to achieve those targets 6.5 million ha of additional lands have to be brought under forest and tree cover by 2007, and 33.6 million ha of additional lands by 2012. The current rate of tree planting in the country is around 1.16 million ha. Therefore, in order to achieve the 10th Plan targets, the efforts have to be significantly stepped up. The Annual Plan 2004-05 of National Afforestation & Eco-development Board reflects such endeavor. The major programmes of NAEB namely, National Afforestation Programme, and Grants-in-Aid for 'Greening India Programme' are proposed to be significantly enlarged in size and coverage. It is also proposed that under these two schemes the participation of voluntary sector would be one of the main focus areas. The details of the schemes are as under: -

1. National Afforestation Programme Scheme (NAP):

It will continue to be the flagship scheme of NAEB, in so much as it will provide support, both in physical and capacity building terms, to the Forest Development Agencies (FDAs) which in turn will be the main organ to implement Joint Forest Management. The FDA has been conceived as a federation of Joint Forest Management Committees (JFMCs) at the Forest Division level to undertake holistic development in the forestry sector with people's participation. This is a paradigm shift from the earlier afforestation programmes wherein funds were routed through the State Governments. This decentralized two-tier institutional structure (FDA and JFMC) allows greater participation of the community, both in planning and implementation, to improve forests and livelihood of the people living in and around forest areas. The village is reckoned as a unit of planning and implementation and all activities under the programme conceptualized at the village level. The two-tier approach, apart from building capacities at the grassroots level significantly empowers the local people to participate in the decision making process. Under Entry Point Activities, community assets are created with a 'care and share' concept.

Bamboo plantation, medicinal plants and Jatropha have been given adequate focus under NAP during the last two years State Governments have been advised to earmark 10% of the project area under NAP for Jatropha plantation. 515 FDAs have been operationalise so far at a cost of Rs1262.44 Crores to treat a total area of 7.61 lakhs ha. (as on 31.03.2004). Rehabilitation of jhumlands has been given specific focus under the programme, and so far 14 jhum projects have been sanctioned in NE States.

Similar thrust will continue to cover as many of the remaining FDAs in the country in the coming years under the NAP scheme. A provision of Rs.230 crores has been proposed for the scheme during 2004-05, which will cover the committed liabilities of 515 NAP projects sanctioned until 2003-04, and support to estimated 100 new NAP projects during 2004-05, covering an estimated area of around 1.2 lakh ha. The provision of Rs.230 crores also includes provision for maintenance of 9th Plan Scheme projects.

2. NAEB SECRETARIAT

This scheme will cover the administrative expenses of the Board Secretariat (salaries, wages, allowances, traveling expenses, and office & other expenses), Monitoring and Evaluation of the NAEB projects and schemes, Communication, Professional and Special Services, Support to Regional Centres, Grants-in-Aid for Greening India Programme, and National Action Programme to Combat Desertification. Brief description of these components are given below :-

(i) **Greening India Scheme (GI) (Proposed) :**

The proposed Greening India Scheme may cover the non-forest lands involving maximum involvement of the NGO sector as per the National Guidelines by the Planning Commission. To create and enabling environment for promoting tree plantation outside forest areas, this scheme may support tree planting in non-forest lands in association with the NGOs and the private sector. This scheme may have two components: - (a) Support to High-Tech Nurseries, and Improved Technology; and (b) Grants-in-Aid to Voluntary Agencies/NGOs.

It is proposed under the **first component** to establish High-Tech central and satellite tree-nurseries in various States to supply **quality planting material** to various users. In addition, adequate extension activity (publicity and awareness) may be undertaken to popularize use of quality planting material in plantation by government, NGO and private sector.

Under the **second component**, voluntary agencies and such other bodies may be supported to undertake plantations. Emphasis will be given to such voluntary agency efforts that encourage people's participation in a bottom-up development mode.

During the tenth five year, the procedure to provide Grants-in-Aid to Voluntary agencies has been simplified. The following categories are eligible for Grants-in-Aid: -

- Registered Non-profit organization.
- Registered Societies, Cooperatives, Companies or Trusts; and
- Registered Schools, Colleges and Universities.

At present the allocation for this scheme is nil. But it is proposed to merge Grants-in-Aid to Voluntary Agency component of NAEB Scheme and proposed Greening India Scheme.

(ii) **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 finalized 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 Second National report on implementation of UNCCD process in India was submitted to UINCCD Secretariat. India has joined TPN-1, TPN-4 and TPN-5. India is the host country for TPN-2 on "Agro Forestry and Soil Conservation in Arid Areas". In pursuance to COP-6 meeting of UNCCD, greater participation of Civil Society have been enhanced through extensions and capacity building measures during the year.

(iii) **Monitoring & Evaluation -**

It is proposed to undertake evaluation of the 9th Plan schemes implemented by NAEB (Integrated Afforestation & Eco-Development Project Scheme, Area Oriented Fuelwood & Fodder Project Scheme, Non-Timber Forest Produce including medicinal plant Scheme, Samanvit Granvanikaran Samriddhi Yojana and Association of Scheduled Tribes & Rural Poor schemes) in order to assess achievement against the set objectives, as well as evaluating strengths and weaknesses of various technologies used so that appropriate mid-term amendment in the current schemes of NAEB could be made for greater efficiency

It is also proposed to continue with :

- (a) Monitoring of NAP projects, and Grants-in-Aid to Voluntary Agencies;
- (b) Study of tree planting under 20-Point Programme in selected districts of India;
- (c) Increase in forest cover in the FDA areas (by Forest Survey of India);
- (d) Desertification mapping/status monitoring (by Space Application Centre, Ahmedabad); and
- (e) National level JFM study.

A sum of Rs. 2.65 Crores has been proposed for 2004-05.

(iv) **Regional Centers**

The Board has seven Regional Centers located in various universities/national level institutions. These centers 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 organize training programmes and workshops. These Centers, and the States they cover, are as follows:-

Regional Centers	State covered under each Regional Centre
University of Agriculture, Bangalore	Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Pondicherry, Lakshadweep
University of Horticulture & Forestry, Solan	Himachal Pradesh, Jammu & Kashmir, Punjab and Delhi
Agriculture Finance Corn., New Delhi	Haryana, Rajasthan, Uttar Pradesh, Uttaranchal and Delhi
Indian Institute of Forest Management, Bhopal	Madhya Pradesh, Chhattisgarh and Orissa
Agricultural Finance Corporation, Mumbai	Gujarat, Maharashtra, Goa, Daman & Diu, D&N Haveli
North-Eastern Hill University, Shillong	Arunachal Pradesh, Assam, Mizoram, Manipur, Meghalaya, Nagaland and Tripura
Jadavpur University, Calcutta	Bihar, Jharkhand, Sikkim, West Bengal and A&N Island

During the year 2004-05, an amount of Rs. 2.20 Crores has been proposed.

(v) **Communication**

New technology 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 document, such information, bring out publications and documents success stories will continue to support to Vigyan Rail project of Department of Science and Technology, which houses one coach on forest and environment. This will popularize tree planting and associated knowledge to the Indian masses. It is also proposed to develop and advertise, through TV info-mercials, etc. tree

planting to generate a mass movement. During 2004-05 an amount of Rs. 1.13 Crores has been proposed for the Scheme.

(vi) **Professional and Special Services**

The National Afforestation & Eco-Development Board undertakes special studies on important issues relating to policy formulation, programme implementation, etc. The Board engages expert professionals for taking up these assignments.

During 2004-05 an amount of Rs. 0.10 Crores has been proposed for undertaking studies on areas like, eco-development, Joint Forest Management, employment generation, reorientation of existing programmes etc.

3. 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 2004-05 is Rs. 8.00 Crores for the year 2004-05.

Indira Pravidarshini Vriksha Mitra Awards (IPVM):

The Board in addition to directly supporting activities relating to tree planting and afforestation is also encouraging private initiatives. For this IPVM Awards would continue to be given by the Board.

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.
- 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 decentralized 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 2000 have been announced. From the year 2002 the amount of award money has been raised to Rs. 1 lakh. Two new categories of Awards Women Category and State Govt. have been included.

Provision for NE States.

Adequate emphasis will be given to the development of North-Eastern States including Sikkim. Jhum areas in the North-East have been given special priority, and 7 number of jhum land development based National Afforestation Programme projects have been sanctioned so far. The Board is also supporting new initiatives and new technologies to support States' effort in tackling the problem of jhum land degradations. Alder – tree based jhum rehabilitation project is also being considered and if found suitable would be scaled up in the coming years. In view of the fact that a majority of forest lands in the North-East is owned by clans and communities, there will be given adequate emphasis on supporting projects proposed on these lands both under National Afforestation Programme and Grants-in-Aid to Greening India Programme. The increased budgetary allocation proposed for the North-

Eastern States for the year 2004-05 is as follows:-

	<u>Rs. in Crore</u>
(i) Greening India Scheme	00.00 *
(ii) Support to Regional Centres	00.25
(iii) Grants-in-Aid to Voluntary Agency	04.00
(iv) National Afforestation Programme	40.00 #

* Greening India Scheme is yet to be approved. Allocation for NE if made under Grants-in-Aid to Voluntary Agency component of NAEB Scheme for 2004-05 may be utilized for Greening India Scheme once it is approved.

Includes maintenance cost of IX Plan plantations.

Women/ SC/ST Component

While formulating proposals under National Afforestation Programme, States have been advised to give adequate representation to women/SC/ST in FDA and JFMC at village level. Women participation has been increased to 50%. Similarly in JFMC SC/ST participation have been suitably increased.

231. NATIONAL RIVER CONSERVATION DIRECTORATE

The Government of India had set up National River Conservation Authority with a view to ensure that the rivers are not being polluted and at the same time it would ensure that the waste that flows into the river are treated in the first instance before disposing in the river. Originally the scheme was taken up in river Ganga. It was a 100% Central scheme, the work was executed by the State Government. Subsequently, the funding pattern was changed. Presently the funding pattern is now shared between Centre and the States in the ratio of 70 : 30. In addition, the States have to ensure that at least a 10% i.e. one-third of their share to be contributed by the local authorities. The total outlay for the National River Conservation Directorate which includes National Lake Conservation Plan is fixed at Rs.1,670 crores by the Planning Commission for the Tenth Plan. Following are the year wise expenditure in the Tenth Plan:

Year	Approved Outlay	Actual/ Anticipated expenditure
2002-03	290.00	295.23
2003-04	295.00	245.74

The budget provision for 2004-2005 is Rs. 354.20 crores on Plan side.

ECOLOGY & ENVIRONMENT

232. 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 and 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 is compiling a National Data Base on Plant Resources of the country based on botanical explorations.

In addition to the above, BSI undertakes study of fragile ecosystems, sanctuaries, parks, Biosphere Reserves, EIA studies, Ethnobotanical and Geobotanical studies.

BSI is the custodian of the largest collection (over 4 million) of herbarium specimens in S.E. Asia which are being maintained for over a century. The scientists of the Survey undertake critical taxonomic study of the specimens collected and publish National, State and District Floras, Plant Diversity of India and Ethnobotanical Studies.

The budget provision for 2004-2005 is Rs.14.00 on Plan side and Rs.12.80 on Non-Plan side.

233. ZOOLOGICAL SURVEY OF INDIA

On-going Programmes
Programme No. 1. Exploration and survey of State Fauna (District-wise)
Programme No.2. Studies on some selected ecosystems of Indian region.
Programme No. 3. Survey of protected areas including Tiger Reserve.
Programme No. 4. Taxonomic studies on faunal components.
Programme No. 5. Status surveys of Endangered species.
Programme No. 6. Preparation of Red Data Book and Fauna of India Projects.
Programme No. 7. Computerization of data on faunal diversity including National Zoological Collections.
Programme No. 8. Documentation and Publication.
Programme No. 9. Training and Extension Services.

Targets & Performance:

The objectives and functions of ZSI were reviewed in 1987 and redefined in 1991. A revised time frame and priorities in the programmes of work were fixed by the Ministry of Environment & Forests with the target proposed up to 2000 A. D. This was further discussed in the Programme Advisory Committee set up by the Ministry recently in 2002 and the draft approved by the committee is incorporated in the Tenth Five Year Plan in the form of programmes to be taken up.

Relevance to the National Objectives :

During recent years, the scope and functions of the Zoological Survey of India have been considerably expanded, particularly in the light of the Convention on Biological Diversity, ratified by Govt. of India in 1994 with special reference to Articles 7, 8, 9, 10, 12, 13, 14, 17, 18, and 41 of the Convention.

Evaluation :

The projects taken up by the Department is evaluated at different levels.

Firstly at the level of the Scientific Section then at divisional level

Secondly at the level of the Scientific Monitoring Committee of Senior Officers of the Dept.

Thirdly at the level of the Director

Fourthly at the level of Programme Advisory Committee set up by the Ministry

The budget provision for 2004-2005 is Rs.10.25 on Plan side and Rs.9.45 on Non-Plan side.

234. 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 Eight & Ninth Plans respectively, while the Regional Museum at Bhubaneswar will be made operational by the middle of 10th Plan period.

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.

The budget provision for 2004-2005 is Rs.6.00 on Plan side and Rs.0.68 on Non-Plan side.

235. ENVIRONMENTAL EDUCATION, AWARENESS & TRAINING

1. Environment Education and 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 through 29 Regional Resource Agencies (RRA) working all over the country. 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 institutions and government departments. RRA 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 of these agencies are reimbursed by the Ministry.

(ii) Eco Clubs (National Green Corps)

A programme of raising “ National Green Corps” through the intensification of Eco-clubs developed during the last year of the Ninth Plan with the objective of spreading environmental awareness and to carryout action based programmes for protection and improvement of environment . Under this programme, it is decided to set up Eco-clubs in 150 schools of each district of the country. In all, about 75,000 Eco-clubs are being set up through out the country. These Eco clubs would organise and conduct a various activities on environmental themes which are immediate relevance to the area.

The Government of India will provide financial assistance for establishment of Eco-clubs @ Rs. 1000 per Eco-club , teachers training and distribution of resource materials. It is proposed that during the Tenth Plan period, the number of Eco-Clubs would be increased to 1,00,000. It is also proposed to extend the programme to colleges, through appropriate implementing mechanism. The programme is being implemented through State Governments. Each school will be given a financial assistance of Rs. 5000/- per annum instead of Rs. 1000.00 presently being given to them.

(iii) Seminars/Symposia/Workshops/Conferences

The main objective of this scheme is to provide a common forum to professional for sharing up to date knowledge and information 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 themes related to environment.

(iv) Grants in aid to professional societies & institutions and Publication of resource material

Under the scheme, efforts will be made to provide financial support to the appropriate institutions and organisations for promotion of museums, science centres in the field of environment, development of exhibition galleries and educational programmes relevant to ecology, wildlife and environment and also to utilise expertise available with professional societies, voluntary organisations, institutions etc. for printing

and publication of resource material for promoting environmental education and awareness The budget provision for 2004-05 of this scheme is included in the Environment Education & Training Scheme.

The budget provision for Environment Education & Training Scheme for 2004-05 is Rs.34.00 crores on Plan side and Rs.0.02 on Non-Plan side.

236. ENVIRONMENTAL INFORMATION SYSTEMS (ENVIS)

The ENVIS Network at present consists of 25 ENVIS centres, which have been set up on different subjects related to environment throughout the country with the Focal Point in the Ministry. All the Centres have developed their home pages and web sites in their assigned subject-areas. The websites of ENVIS Centres is to be linked with the ENVIS site hosted by the Ministry. In addition, under the World Bank assisted Environment Management Capacity Building (EMCB) Project for strengthening of ENVIS, 85 ENVIS nodes in State Government Department/Pollution Control Boards, Academic institutions, NGOs, etc. have been set up for wide dissemination of environmental information to all concerned. Five more ENVIS nodes are to be set up and linked to the ENVIS homepage. All the 65 ENVIS Nodes newly set up are to be supported under the Plan Scheme on the extended World Bank supported project will come to a close on 30.6.2004

The modified SFC of the ENVIS Scheme has also been drafted for approval.

The budget provision for 2004-2005 is Rs.3.00 crores on Plan side and 0.21 crores on Non-Plan side.

237. CENTRES OF EXCELLENCE

Under the Scheme, the Ministry is providing assistance to the nine 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 environmental 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 ethnobotany 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. Two new Centres in Madras School of Economics, Chennai and Foundation for Revitalization of Local Health Traditions(FRLHT), Bangalore have been set-up recently by the Ministry. While the Madras School of Economics will function in the field of Environmental Economics, the mandate of FRLHT is awareness generation and conservation of medicinal plants. The activities of all the Centres will be continued during the financial year 2004-2005.

An outlay of Rs.7.00 Crores on Plan side and Rs 1.48 Crores on Non-Plan side is earmarked for 2004-2005 for providing Central assistance to all the Centres.

238. 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 would be covered in a phased manner. Additionally new projects under four major thrust areas as identified by the National Natural Resource Management System (NNRMS) Standing Committee on Bio-resources in its meeting held on 21st January 2003 which inter-alia, include (i) Forest Type Mapping (ii) Mapping of Wildlife Sanctuaries and National Parks (iii) Coastal Studies including mangroves and coral reefs and (iv) Snow Glaciers Studies will also be covered.

The budget provision for 2004-2005 is Rs1.00 crores on Plan side.

239. ENVIRONMENT IMPACT ASSESSMENT

The objective of Impact Assessment is to assess the impact of development projects from environment angle which are referred to this Ministry. The projects are assessed by Expert Committees constituted for various sectors. There are periodical meetings for discussions with project authorities. Members undertake site visits to project area and make an on the spot assessment of the impacts. To meet the expenditure for TA and DA to members of the committees an amount Rs.60 lakhs has been asked for the BE 2004-2005. Besides an amount of Rs.1.20 lakhs have also been asked for under the Budget Head Grants-in aid which is provided to various institutions to carry out studies related to environmental impact assessment.

The budget provision for 2004-2005 is Rs. 2.00 crores on Plan side.

240. CLEAN TECHNOLOGY

As a part of sustainable development strategies, studies were initiated on carrying capacity based regional development planning, natural resource accounting, life cycle analysis etc. In this direction, the ongoing studies on carrying capacity of Greater Kochi Region have been completed. The follow-up workshop for taking further necessary action on the findings of the study was organized. The State Government has been requested to take necessary follow-up action on the recommendations made in the study report.

The study on life cycle analysis (LCA) in steel sector involving three major steel plants has been completed and the report has been prepared by National Metallurgical Laboratory, Jamshedpur. Another LCA Study in the coal/lignite based thermal power sector has also been completed. LCA studies in respect of pulp and paper sector is underway and is progressing well. LCA studies in cement sector have also been initiated.

The ongoing studies on (i) market based instruments for Kavas-Hazira Region and (ii) industrial ecological opportunities in the Ankleswar and Nandesari Industrial Estates, Gujarat have been completed and follow-up workshops have been organized for taking further necessary action on the findings of these studies.

The other on-going projects namely; (i) development of bamboo based composite panels for housing in North-East, (ii) technology up-gradation in utensil industry, (iii) identification, development and utilization of Natural Dyes from the Forest Plants of Uttaranchal and (iv) application of UASB system and energy recovery in CETP are progressing well.

Another project of two year duration on Utilization of Anode Mud and Chips - the solid wastes generated in the zinc industry for making value added products at a total cost of Rs. 10.75 lakhs has been sponsored to RRL, Bhopal.

Proposals for undertaking demonstration projects relating to promotion of clean technology received from CSIR and other agencies are being examined for financial grant under this scheme.

The budget provision for 2004-2005 is Rs.2.00 crore on Plan side.

241. INDUSTRIAL POLLUTION ABATEMENT THROUGH PREVENTIVE STRATEGIES

During the X Plan, the three on-going schemes of the IX Plan namely; Environmental audit, Environmental Statistics & Mapping and Adoption of Clean Technologies in SSIs have been merged into one scheme known as Industrial Pollution Abatement through Preventive Strategies with the proposed outlay of Rs. 5 crores. The objective of the scheme is to promote preventive strategies through introduction of cleaner production technologies, Environmental Management system etc.

The budget provision for 2004-2005 is Rs.1.00 crore on Plan side.

242. ASSISTANCE FOR ABATEMENT OF POLLUTION AND ENVIRONMENT POLICY AND LAW.

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.

Environment Policy and Law

I. Environment Policy & Law Scheme under the Assistance for Abatement of Pollution, 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. Draft amendments proposed are under examination in the Ministry. Once the same is finalised, comments of relevant Ministries/Departments will be called for.

(ii) Formulation of National Environment Policy

Work in this regard has already been initiated. TERI, New Delhi, is being entrusted the job for co-ordinating the formulation of National Environment Policy to harmonise the demands of development and environment. Once this is done, the work on formulation of NEP will get into full swing.

(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 inputs on policy matters with respect to environment vis-à-vis trade. Workshops / seminars and symposia are also organised on the subject.

(v) **ISO 14001**

The ISO 14001 Series provide guidelines to the industry which help ensure an Environmental Management System on environmental aspects such as eco-labelling, life-cycle analysis and product standards. For awareness building, programmes are being organised for the government, private industry, NGOs and others. BIS is the nodal agency, which represents India in ISO negotiations. MoEF plays the role of facilitative and awareness building agency.

The budget provision for above two schemes for 2004-2005 is Rs. 4.00 crores on Plan side.

243. CIVIL CONSTRUCTION UNIT

During the year 2004-2005, the Civil Construction has set a target of completion of total 12 major works for which a provision of Rs. 16.75 crores has been made in the Budget Estimates for 2004-2005. Some of the above works are on going works where as the remaining are new works.

244. CENTRAL POLLUTION CONTROL BOARD (CPCB)

I. Pollution Assessment - Survey and Monitoring

CPCB in consultation with State Pollution Control Boards (SPCBs) /Pollution Control Committees (PCCs) has set-up Water Quality and Ambient Air Quality monitoring network. The expenditure incurred by the SPCBs is reimbursed by CPCB. Besides, Water and Air Quality monitoring, there are number of on-going programmes which includes survey of polluted river stretches and preparation of river pollution abatement action programmes & its implementation, assessment of non-point pollution, bio-monitoring of national aquatic system and assessment of pollution from point sources, assessment of health survey and impact of pollution on human health. State specific surveys are also taken up through Zonal Offices of CPCB.

II Laboratory Management – Operation, Maintenance and R & D :

CPCB has set up a laboratory facility at its Head Office and Zonal Offices have also been provided 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 analysis of the bio-medical wastes, plastic wastes, municipal solid wastes, hazardous wastes (water and air pollution) etc. CPCB has also proposed R & D schemes relating to various aspects of prevention and control pollution. The regular analytical quality control tests and training to the staff of SPCBs/PCCs are also proposed.

III. Development of Standards, guidelines and Eco-mark :

CPCB has already developed standards for disposal of treated liquid effluents and gaseous emissions in respect of major category of polluting industries. Some of the standards need to be reviewed from time to time taking technological improvement into considerations. It is proposed to

undertake review of standards in respect of those categories of industry which have already been covered.

IV. Training :

CPCB is proposing to undertake training programmes for the benefit of SPCBs/PCCs, regional training programmes would be conducted through expert institutions and Zonal Offices. The important areas include: bio-medical waste, plastic wastes, municipal solid wastes, cleaner technologies, vehicular pollution and noise pollution control etc.

V. Information (Data-Base) Management and Library :

This is an on-going programme under which major expenditure is on the operation and maintenance of LAN/Internet network. A number of softwares such as software for water and air quality reports and EDB are also proposed to be developed. Some of the documents and important notifications are placed at CPCB's Website.

VI. Pollution Control Enforcement :

The important activity under the pollution control enforcement is to ensure compliance of 17 categories of polluting industries and industries located along the rivers and lakes. The action point prepared for restoration of environmental quality in the critically polluted area is under implementation through the concerned SPCBs. During this year, one of the major activity under this head is to implement the Charter on "Corporate Responsibility of Environmental Pollution (CREP)". Besides, the ongoing activity such as Environment Surveillance Squad (ESS) would continue to have inspections/visits of polluting industries and also to undertake compliance of various court's directives. Further, an emphasis would be on implementation of bio-medical waste (BMW), municipal solid waste (MSW), and plastic waste management (PWM) through SPCBs/PCCs.

IV. Pollution Control Technology :

Under this project head, emphasis would be given to develop/review the various treatment technologies for abatement of pollution at BATNEEC method. The important ongoing programmes include; performance evaluation of sewage treatment plants, risk assessment in chemical industries, vehicular pollution and noise control in DG Sets and treatment technologies for plastic wastes, municipal solid wastes and bio-medical wastes.

V. Mass Awareness, Publication and NGOs :

This is an ongoing project under which programmes relating to mass awareness are taken-up. The activity also includes : publication of reports, documents, newsletters on various topics/subjects. Besides, a number of other activities such as organising exhibitions, putting stalls in various exhibition and sale of publication, distribution of water testing kits to NGOs/Schools etc. would also be taken-up.

VI. Hazardous Waste Management :

This is also a continuous activity and projects under this head includes: identification of hazardous wastes streams in various industries, inventorization of hazardous waste generating units in various sectors in different States. Schemes for grant of registration of recycling industries, preparation of guidelines for recycling and reprocessing of waste/used oil and non-ferrous metals, Implementation of standards for leachate in hazardous waste dumpsites, assessment & development of hazardous waste disposal facilities in the States, organising training programmes/workshop and follow-up of the recommendations of various Committees constituted for management of hazardous wastes/chemicals.

The budget provision for CPCB for 2004-2005 is Rs. 22.00 crores on Plan side and Rs. 7.49 crores on Non-Plan side

245. ASSISTANCE TO BOTANIC GARDENS

This scheme was launched in 1991-92 to promote ex-situ conservation and propagation of rare and endemic plant resources in various parts of the country. Under this scheme one time grant is given to the existing botanic gardens for strengthening their infrastructural facilities to facilitate conservation and propagation of such species. The proposals are considered by an Expert Group which examines and recommends the proposals.

The budget provision for 2004-2005 is Rs. 1.50 crores on Plan side.

246. RESEARCH & ECOLOGICAL REGENERATION

Ministry of Environment and Forests has been funding research in multi-disciplinary aspects of environmental and ecosystems protection. Conservation and management at various universities, institutions of higher learning, national research institutes and non-governmental organizations. The primary objectives are to develop strategies, technologies and methodologies for better environment management and also create infrastructure and a pool of trained manpower to shoulder the responsibilities of environment management in the country. Environmental Research particularly aims at attempting solutions to the practical problems of resource management and provides necessary inputs for the twin objectives of conservation of natural resources and restoration of environmental quality.

The Environmental Research in the Ministry of Environment & Forests is being supported under various sub-schemes, which are given below:-

- i) Environment Research Programme (ERP)
- ii) Ecosystem Research Scheme (ERS)
- iii) Research Programme for Eastern and Western Ghats
- iv) Pitambar Pant National Environment Fellowship Award
- v) B.P.Pal National Environment Fellowship Award for Bio-diversity.

THE SUB-SCHEMES

Environment Research Program specifically deals with brown agenda i.e. problems related to pollution, chemical, biochemical and engineering investigations, technology development for waste minimization, waste recycling, resources recovery, to pollution control, development of instruments for pollution measuring and control, development of eco-friendly and cleaner technologies etc.

Ecosystem Research Scheme is an inter-disciplinary programme of research, which emphasizes ecological approach for studying all the relationship between man and environment. The objective of the programme is to develop a basis within the field of natural and social sciences for national use and conservation of resources for general improvement of the relationship between man and its environment. The programme seeks to provide a scientific basis to solve the practical problems of resource management. The programme also seeks to provide scientific knowledge and trained personnel needed to manage the natural resources in a rational and sustainable manner. Ecosystem studies becomes even more important as the Earth's environmental systems are increasingly being affected at all levels. Ecological understanding and research in this area offer tangible hope for addressing extremely complex and potentially devastating assaults on local, regional and global ecosystems. Under the scheme emphasis is laid on multidisciplinary aspects of environmental conservation with emphasis on eco-system approach consistent with the identified thrust areas and orientation.

The Eastern and Western Ghats Research Programme addresses itself to location specific problems of resource management in the Eastern and Western Ghats regions of other country. Under this programme, studies relating to Bio-diversity, land use, impact of developmental activities etc. are taken up.

Pitambar Pant National Environmental Fellowship Award has been instituted to encourage and recognize excellence in any branch of research related to the environmental sciences. The Fellowship is awarded every year. The Fellowship is intended to encourage talented individuals to devote themselves whole time to R&D pursuit in the field of environmental sciences for a period of two years being the Fellowship duration. The Fellowship was instituted in 1978. So far, 25 scientists have been given this award. Similarly a Fellowship on Bio-diversity was instituted in the year 1995 in honor of the great scientist, Dr. B.P.Pal to attract talented individuals to work on a specific issue of environment which would enhance our understanding for conservation and management of bio-diversity. So far, 8 scientists have been given this award.

EVALUATION OF THE SCHEME

Monitoring of the on going projects are achieved through assessment of Annual Progress Reports departmentally and also through organization of Annual Review and Monitoring Meetings with the assistance of experts in relevant subject areas. The important feature of these meetings is the involvement and participation of concerned and potential user agencies of the outcome of the research & investigations, with a view to enhancing the utility of the funding.

The findings of the research projects are brought out as departmental publications. Besides, then result both the academic and practical importance are disseminated by means of research publications brought out by the investigators of the project in the leading national and International journals which are widely consulted by the scientists and the other user agencies. The executive summaries of the completed research projects are prepared by the Division and put on the web site of the Ministry. The Scheme of R&D has made significant contribution towards the development of scientific capabilities and has also led to establishment of adequate infra-structural facilities for research. Apart from the general research. Projects, which are of interest only to local areas or specific subjects in a local area, the Ministry also formulates few countrywide studies to meet its other requirements. These programmes are generally of coordinated nature.

Sanctioned	1997-98	1998-99	1999-2000	2000-2001	2001-2002	2002-2003	Total
ERS	13	14	7	11	11	20	76
ERC	7	25	8	3	19	20	82
E&W Ghats	4	6	6	7	11	9	41
Completed							
ERS	16	18	8	14	9	10	75
ERC	--	17	13	11	3	9	43
E&W Ghats	--	6	7	5	3	6	31

The budget provision for 2004-2005 is Rs.3.00 on Plan side.

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

The Planning Commission of India has placed emphasis on the development of the Indian Himalayan region (IHR). 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 Xth 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 that 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 and initiation of various awards, prizes in the IHR. In addition to the above documentation 6 of traditional technologies and cultural practices from the Himalayan region need to be encouraged. Facilities that require specific attention include strengthening of electronic connectivity, library and documentation, video/documentary and photography, workshop for instrumentation, fabrication, maintenance, routine repairs, etc., R&D laboratories, landscaping, 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 as per recommendation of the review committee chaired, us Prof. K.S. Valdiya work study team (MOE&F), 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.

Integrated Action Oriented Eco-Research Programme in the Himalayan Region.

The programme in the Tenth Five Year Plan with approved goals will continue integrating scientific, social, economic and cultural ingredients for achieving the objectives of socio-economic development together with environmental regeneration/conservation with sufficient funding. Total funding of the programme in the 10th Plan period is proposed to be enhanced. It is proposed to use this also for the extension of Institute activities/testing and demonstration of technology packages developed etc. in a concerted manner.

The budget provision for 2004-2005 for above Schemes is Rs.7.00 on Plan side.

248. HAZARDOUS SUBSTANCES MANAGEMENT

The HSM Division had initiated and implemented various programmes and activities under the Central Plan Scheme "Creation of Management Structure for Hazardous Substances" during the VIII and IXth Five Year Plans. The thrust areas on which these activities were focussed upon during the IXth Five Year Plan (1997-2002) included Notification of new Rules and Amendments to existing Acts and Rules, identification of sites for setting up of common TSDFs, remediation of contaminated sites, setting up of pilot plants for management of municipal solid waste, implementation of bio-medical wastes Rules, carrying out of hazard analysis and rapid safety audits in various industrial pockets and districts of the country, conduct of training programmes and workshops on management of chemical accidents, preparation of off-site emergency plans, setting up of emergency response centres, emergency preparedness and chemical safety.

The need to promote safe management and use of hazardous substances including hazardous chemicals and hazardous wastes in order to avoid damage to health and environment is well recognized. Towards this end, the following 3 thrust areas have been identified on which the activities of the Division would be focussed during the Xth Plan period (2002-2007);

1. Chemical Safety
2. Management of Hazardous Wastes with emphasis on waste minimization and re-cycling
3. Environmentally Sound Management of Solid Wastes, including flyash & plastic wastes.

The important programmes and activities proposed to be carried out under the above mentioned thrust areas during the Xth Plan period are as follows:

- Continuation of Hazard Analysis studies and preparation of off-site plans (including mock-drills, crisis alert system etc.)
- Setting up of Emergency Response Centres as per modifications.
- Providing support to Poison Control Centres.
- Preparation of National & State Inventories on hazardous wastes
- Inventorization of illegal dump sites & preparation of remediation plans for the same
- Provision of support to atleast 10 common facilities for Treatment, Storage and Disposal of Hazardous wastes (TSDF) in different parts of the country.
- Harmonization of hazardous wastes in the EXIM Policy
- Banning the import & export of hazardous wastes listed in Annexure 8 of the Basel Convention.
- Promoting recycling/reprocessing of identified wastes through the Registration Scheme.
- Setting up of Demonstration Plants for Management of Municipal Solid Wastes including Plastic Wastes.
- Projects on Fly-ash utilization.
- Strengthening of SPCBs/PCCs
- Continuation of on-going projects and studies on the 3 identified thrust areas as well as initiation of new need based studies.
- Organization of training programmes and workshops to build capacity and to disseminate information about various Rules and Amendments to concerned stakeholders.
- Fulfilling of national obligations under the 3 international conventions handled by the Division.
- Strict and effective implementation of the various Rules on hazardous substance management notified and amended from time to time.
- Preparation of guidelines/guidance documents on identified thrust areas
- Implementation of all time-bound tasks & activities in the area of hazardous waste management, contained in the directions of the Hon'ble Supreme Court in the matter of WP657/95, delivered on 14th October, 2003.

The budget provision for 2004-2005 is Rs. 7.00 crores on Plan side.

249. BIO-DIVERSITY CONSERVAITON

The scheme envisages to promote projects pertaining to Bio-diversity Conservation Bio-safety and follow up on Bio-diversity Act. Projects are sanctioned to promote sensitization of Bio-diversity issues through workshops and Bio-diversity monitoring projects. These projects require annual financial target of Rs.3 Crores. Similarly the National Bio-diversity Authority set up under the Bio-diversity Act and funded under the scheme will require an annual grant of Rs.1 crore.

The budget provision for 2004-2005 is Rs. 3.50 crores on Plan side.

250. CONSERVATION AND MANAGEMENT OF MANGROVES AND CORAL REEFS

An amount of Rs. 6.00 crore for wetlands and Rs. 4.50 crores for mangroves & coral reefs has been proposed for the financial year 2003-04. The main activities will revolve around release of Central assistance to the concerned State Governments for conservation of wetlands, mangroves & coral reefs for activities like mapping, survey & demarcation, landscape planning, hydrology, control of encroachment, eutrophication, pollution abatement, aquatic weed control, wildlife conservation, fisheries development, research on coastal and marine diversity associated with mangroves & coral reefs, eco-development activities, environmental awareness, etc. under MAPs of identified wetlands, mangroves & coral reef areas in the country. The research projects in the field of wetlands, mangroves & coral reefs will be sanctioned as per the guidelines prepared on priority areas of research. The meetings of National Wetland Committee and National Mangrove Committees and their Research sub-Committee will be convened during the year. Organisation of Workshop for evaluation of progress of on-going research projects and completed research

projects in the field of wetlands, mangroves & coral reefs, 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 along with ground truth data and adding more wetlands where enough information is available on various aspects. Process has been initiated to designate more wetland sites from India in the list of Ramsar sites.

Activity-wise Physical targets for 2004-05 are given below :

(Rs. in Crores)

Name of the Activity	Physical Target
<p>Wetlands :</p> <p>1. MAPs on Wetlands</p> <p>2. MAPs on wetlands of North-East</p> <p>3. Research</p> <p>4. Other activities</p>	<p>25 MAPs on Wetlands</p> <p>3 MAPs</p> <p>19 on-going and 4 new research projects</p> <p>2 Meetings of National and Research sub-Committees on Wetlands and domestic travel for monitoring progress of implementation of MAPs</p>
<p>Mangroves and Coral Reefs</p> <p>1. MAPs on Mangroves & Coral Reefs</p> <p>2. Research projects</p>	<p>35 MAPs on mangroves and 4 MAPs on coral reefs</p> <p>On-going and new research projects</p>

The budget provision for 2004-2005 is Rs. 11.00 crores on Plan side.

251. BIOSPHERE RESERVES

This scheme was initiated in 1986 as a Centrally Sponsored Scheme with the objective of facilitating in situ conservation of major bio-geographic zones. Under this scheme, the Management Action Plans (MAPs) for the thirteen designated Biosphere Reserves are sent by the respective State Governments. The MAPs are considered by the Indian National Man and Biosphere (MAP) Committee and are recommended for financial assistance. An amount of Rs.5 Crores (approx.) is required annually for implementation of the MAPs. Besides this scheme also has a component for research projects. Research projects submitted by various institutions, organizations and individuals in the designated and potential sites for Biosphere Reserves are also considered by Indian National Man and Biosphere (MAB) Committee and are recommended for financial assistance.

The budget provision for 2004-2005 is Rs. 6.00 crores on Plan side.

252. INTERNATIONAL COOPERATION

IC&SD Division coordinates 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.

During 2004-05, an amount of Rs.1.2 crore have been provided for international activities like participation in various convention relating to environment, Global Environment Facility, bilateral cooperation and for making India's annual contribution to international bodies. An amount of Rs.1.0 crores has been provided in the financial year for undertaking activities under the UNDP-CCF-II project in environment sector.

253. STATE OF ENVIRONMENT PROJECT

A new programme has been incorporated in the Tenth Five Year Plan for preparation of State of Environment (SoE) reports/products at the State/UT level with an objective to highlight the upstream and downstream linkages with environmental issues besides creating a baseline document for each State & UT. An allocation of Rs. 6.00 crores has been made for the programme for the entire Tenth Plan duration.

This Ministry has identified 4 national host institutes (NHIs) for preparation of SOE at State/UT level. These NHIs assist/build capacity in States/UTs allocated to them in preparation of SOE in each state/UT. These NHIs are as indicated below:

- (i) Development Alternatives, (DA), New Delhi
- (ii) The Energy and Resources Institute (TERI), New Delhi
- (iii) Environment Protection, Training and Research Institute (EPTRI),
Hyderabad
- (iv) Administrative Staff College of India (ASCI), Hyderabad

To guide, supervise and monitor the programme of SoE a National Steering Committee under the chairmanship of JS (SD) has been constituted with members drawn from Planning Commission, CPCB, State Governments, MOEF and 4 NHIs. The Committee meets from time to time.

Activities under the programme have been started from FY 2002-03 and will be continued till the end of the Tenth Five Year Plan. Out of the total allocation of Rs. 6.00 crores, Rs. 2.43 crores has so far been released to these NHIs for carrying out the above programme. The activities for the FY 2004-2005 are as under:

- Preparation of Draft SoE Report/Product for various States
- Regional consultations on draft SoE Report
- Review of the draft SOE Report/Product
- Facilitating States/UTs in organizing stakeholder Consultations
- Preparation of final Report/Product
- Printing of final report
- Dissemination of Reports/Product
- Action plan for the next Report/Product

The budget provision for 2004-2005 is Rs. 1.00 crore on Plan side.

254. ADAPTATION AND CAPACITY BUILDING PROJECT ON CLIMATE CHANGE

This Scheme was initiated during the year 2002-2003. India hosted the Eighth Conference of Parties to the United Nations Framework Convention on Climate Change from 23rd October to 1st November, 2002 at Vigyan Bhawan, New Delhi. Over 4300 delegates from all over the world attended the Conference, making it one of the biggest international event of its kind ever held in the country.

In the year 2003-04, Climate Technology Bazaar and International Conferences on Adaptation, Technology Transfer, Climate & Development and CDM is proposed to be held in November, 2003. The conferences on Adaptation & Technology Transfer would be held with UNEP and UNFCCC.

The budget provision for 2004-2005 is Rs1.00 crores on Plan side.

255. ESTABLISHMENT OF ENVIRONMENT AUTHORITIES, COMMISSIONS AND TRIBUNALS

For the National Environment Appellate Authority the yearly rent for the accommodation occupied by the Authority in Jawahar Lal Nehru Stadium comes to Rs.1.5 crores approximately. Hence the total expenditure for the year 2004-05 has been estimated to be about Rs.2 crores including Rs.0.5 crores for office expenses, salary, etc. For the Loss of Ecology (Prevention & Payments of Compensation) Authority of the State of Tamil Nadu the yearly expenditure approved by the Cabinet is Rs.0.75 crores. The Authority is presently on extension upto 30.9.2004. If it is given further extension and continues to exist for the full financial year 2004-05, the expenditure estimated is about Rs.0.75 crores. The financial requirement for the Environment Pollution (Prevention & Control) Authority for the National Capital Region is estimated as Rs.0.15 crores for its functioning.

The budget provision for 2004-2005 is Rs. 4.00 crores on Plan side.

256. THE WORLD BANK AIDED INDUSTRIAL POLLUTION PREVENTION PROJECT

The Project has ended on 30.11.2002. The residual activities of the Project have been included in the EMCBTA Project.

257. 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 Government.

An amount of Rs. 25.00 crores has been approved by the Planning Commission for the above Scheme for the whole period of X Five Year Plan 2002-2007.

The budget provision for 2004-2005 is Rs. 4.00 crores on Plan side.

258. REIMBURSEMENT OF WATER CESS (Non-Plan Scheme)

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 2004-2005 is Rs. 76.52 crores on Non-Plan side.

259. TAJ PROTECTION MISSION

The Environmental Management of heritage, pilgrimage and tourism centers is proposed to be taken up to prevent environmental degradation of these areas. In compliance with the Supreme Court orders dated 4.9.1996 in the Writ Petition No.13381/84, the Planning Commission estimated (in consultation with the State Government) an amount of Rs.600 crores on a 50:50 per cent (Centre-State) matching basis to implement various schemes relating to protection of the Taj Mahal.

The Ministry of Environment and Forests has vide Notification S.O.No.350(E), dated 17.5.1999 constituted an Authority known as the Taj Trapezium Zone Pollution (Prevention and Control) Authority

for monitoring the implementation of various projects undertaken under Taj Protection Mission Scheme. A Mission Management Board under the Chairmanship of the Chief Secretary, Government of UP has also been constituted for overseeing the implementation, monitoring and reviewing of the various programmes/schemes formulated for the protection of the Taj Mahal. Schemes were submitted relating to uninterrupted power supply, augmentation of water supply, improvement of drainage and sanitation etc. in the context of environmental protection of the Taj Mahal. MoEF so far sanctioned 10 projects as a part of the Taj Protection Mission.

The budget provision for 2004-2005 is Rs. 1.00 crores on Plan side.

260. ALL INDIA COORDINATED PROJECT ON TAXONOMY (AICOPTAX)

(Rs. in crores)

Name of the Activity	Physical Target
All India Coordinated Project on Taxonomy Capacity Building.	Servicing of ongoing projects. New projects

The budget provision for 2004-2005 is Rs. 2.00 crores on Plan side.

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

Under the project for strengthening the country's Environmental Management Plans and capacity building several sub-components have been included for funding. These are Environmental Research, Environmental Standards, Environmental Economics, and 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 slippages. Closer monitoring is also done periodically by the Ministry at senior level to ensure that execution of the project is not restarted. The initial problems have been overcome. The Mid Term Review of the Project commenced in June 1999 and upto June, 2001. It was found that there had been shortfalls both in terms of physical and financial achievements. 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 interest transfer funds to components demonstrating better performance. The IDA Mission last reviewed the project during 7th- 11th October, 2002, and found that there was need to extend the project which has, in fact, been extended upto 30.6.2004 with the approval of the Cabinet Committee on Economic Affairs and activity plan for the extended period finalized & sent to the World Bank within the restructured outlay of US\$ 29.62 million of the project.

The budget provision for 2004-2005 is Rs. 25.26 crores on Plan side.