

## CHAPTER-V

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

#### **1.0. FOREST EDUCATION AND WILDLIFE**

##### **1.1. FOREST EDUCATION AND TRAINING**

The Indian Council of Forestry Research and Education (ICFRE), an autonomous organisation 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.

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 programme for Indian Forest Service Probationers, State Forest Service Colleges take care of training needs of State Forest Service Officers. Training of Range Officers is conducted in Rangers college. 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 in forestry management. Total outlay for Forestry Education and Training during 1999 -2000 is Rs.8.35 crores on the plan side and Rs.6.69 crores on the non-plan side.

##### **1.2. FORESTRY RESEARCH**

Intensification of Forestry Research towards fuller development of the Forestry Resources and their proper utilisation is one of the important objectives of this Ministry.

Forest Research Institute (FRI), Dehradun, under the ICFRE, is a Centre of Excellence in Forestry Research.

The World Bank aided project viz. Forestry Research Education and Extension Project had been taken up for a period of five years starting from 30th September, 1994. The total outlay of the project is US \$ 56.4 million.

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 sawmilling and plywood. The Institute will continue research extension, demonstration and training activities.

The budget estimate for research is Rs.69.95 crores and Rs.12.20 crores on the non-plan side

##### **1.3. SURVEY & 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 objective.
- To assess the extent of forest cover and monitor on a two year cycle the broad changes in forest vegetation cover of the country by using multi satellite data on 1:250,000 scale to prepare area

thematic maps through use of remote sensing data with maximum essential ground truth verification on a ten year cycle (Most ground truth verification would be done by respective states).

- To collect, store and retrieve necessary forestry and forestry related data for National and State level Planning and to create a computer based National Basic Forest Inventory system (NBFIS).
- 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.
- To impart training in application of remote sensing techniques etc. in Modern Forest Survey Techniques to foresters at various levels of responsibility in the States/UTs/ Govt. of India.
- 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 alongwith development of new algorithms and software for both image processing and general application.
- To support and, oversee techniques/inventory work undertaken by States/UT Forest Department.

During 1999-2000 budget provision of Rs.3.00 crore (Plan) and Rs.4.40 crore (Non-Plan) has been made.

#### **1.4. FOREST POLICY**

The project "Formulation of National Forestry Action Programme" was started with assistance from UNDP and FAO. Outlay for the year 1999-2000 is Rs.10.00 lakhs.

#### **1.5. FOREST PROTECTION AND REGENERATION**

The scheme viz., Association of Scheduled Tribes and Rural Poor in Regeneration of Degraded Land aims at improving the forest cover of degraded forests with the association of tribals and rural poor, alongwith providing the wage employment and usufructs, but simultaneously, an economic resource base for sustained self employment. The outlay for the scheme during 1999-2000 is Rs.2.10 crores.

The Scheme Introduction of Modern Forest Fire Control Methods" is under implementation since the 7th Plan period. The scheme aids at developing well-knit organised program for each State to protect forests from fire. During 1999-2000, outlay is Rs.3.10 crores.

#### **1.6. CENTRAL ZOO AUTHORITY**

Funds are required for improving the existing infrastructure of zoos and improving their management. Training and research on the management aspects of zoos is a high priority items of the Central Zoo Authority.

Enforcement of the minimum prescribed standards and norms has to be strengthened. Sub standard zoos are to be closed and animals therein can be accommodated in rescue centres. The Authority proposes to create at least four centres in different parts of the country. An amount of Rs. 12.00 crores has been provided for CZA during 1999-2000.

## **1.7. NATIONAL ZOOLOGICAL PARK**

The National Zoological Park is a continuing scheme since 1955-56. Funds are required to meet the changes that would need to be made as a result of the modifications suggested by the Central Zoo Authority under "Recognition of Zoo Rules, 1992" and also for the ongoing activities. Animal exchanges with Indian and foreign zoos were made.

## **1.8. WILDLIFE INSTITUTE OF INDIA**

For ensuring better management of the protected areas, Wildlife Institute of India conducts training courses to train park managers and biologists. The Institute also conducts research in wildlife. The budget estimate is Rs.4.00 crores on the plan side and Rs.1.45 crores on the non-plan side.

## **1.9. PROJECT TIGER**

The objective of the scheme is to ensure maintenance of a viable population of tiger in India and to reserve for all time, areas of biological importance as a National Heritage for the benefits Education and enjoyment of people. The activities of the Scheme are:-

- 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 who have tiger reserves;
- iii) Research and long term studies in the field of wildlife management.

At present there 23 Tiger Reserves located in 14 States, covering an area of 33126 sq. km. The main thrust of the Project is protection and mitigation of deleterious human impacts with a view to comprehensively revive the natural eco-system in the reserves. The IX Plan outlay of the scheme is Rs. 75 Crores. It is proposed to include six new Tiger Reserves in IX Plan. The pattern of funding for the scheme is 50 % central assistance for expenditure under recurring items of work, and 100% central assistance for expenditure on non-recurring items of work.

## **1.10. NATIONAL AFFORESTATION & ECO-DEVELOPMENT BOARD**

An outlay of Rs.105.705 crores is proposed for the year 1999-2000 for the schemes/programmes including Board Secretariat of National Afforestation & Eco-Development Board which are listed below:

1. Integrated Wastelands Development Projects Scheme.
2. Fuelwood/Fodder Projects Scheme.
3. Non-Timber Forest Produce (including Medicinal Plants) Scheme.
4. Seed Development Scheme.
5. Grants-in-Aid Scheme (for Voluntary Agencies).

Schemes/Activities.

The following schemes/activities on wastelands development will be implemented by the NAEB during 1999-2000:

### **1.10.1. Integrated Afforestation and Eco-Development Projects Scheme**

Under implementation since 1989-90, this scheme promotes afforestation and development of degraded forests and adjoining lands through an integrated approach for managing these areas on a watershed basis. The objectives of the schemes are to:

- (a) securing peoples participation in regeneration of degraded forests and adjoining areas;
- (b) augment the availability of biomass, fuelwood and fodder;

- (c) extent the disseminate proven afforestation and management technologies to fulfil the larger objectives of sustainability, equity and environmental conservation with participation of the local people;
- (d) generate employment.

The scheme funds projects, formulated by using micor-planning technique to ensure the integration of various activities and resources.

This is 100% Centrally Sponsored Scheme with a Central Sector component.

For 1999-2000, an allocation of Rs.41.00 crores, at current prices, has been proposed for this shceme. The physical targets for the year is to cover an area of 49261 hectares.

#### **1.10.2. Grants in Aid to Voluntary Agencies**

The NAEB has a mandate to promote peoples' participation through active involvement of non-governmental organisations, voluntary agencies and the public at large. To this end, appropriate voluntary agencies non-governmental organisations are identified, encouraged and assisted to raise nurseries for free planting on forest lands and adjoining areas and related activities, which we are financed from the plan funds of the Board. For 1999-2000 an amount of Rs.2 crores (at current prices) has been proposed for this scheme. It is envisaged to sanction projects to the voluntary agencies for taking up afforestation & eco-development work.

In addition to normal monitoring by the Board Secretariat, evaluation of ongoing and completed projects is carried out through independent agencies. So far, 160 projects have been got evaluated from 1992-93 to 1996-97. From the eveluation reports, it is seen that performance in respect of about 75% of the projects ranges from good to excellent. More projects would be undertaken for evaluation.

#### **1.10.3. Area Oriented Fuelwood and Fodder Project Scheme**

This Scheme is meant to augment the production and availability of fuelwood and fodder in identified fuelwood deficient districts of the country. A total number of 229 districts have been identified as fuelwood-deficient. The expenditure under this Scheme is shared on a 50:50 basis between the Centre and the States.

For 1999-2000 an amount of Rs.40 crores (at current prices) has been proposed for the scheme. It is proposed to cover 73045 hectares area during 1999-2000.

#### **1.10.4. Scheme for Non-Timber Forest Produce (NTFP) including Medicinal Plants:**

The objective of this scheme is to survey, conserve as well as to increase production of non-timber forest produce, including medicinal plants, with a view to improve and replenish the stock of indigenous forest produce and perennial medicinal plants, which are fast depleting due to over exploitation. Concomitantly, the scheme also aims at augmenting the income of the tribal and rural poor living in and around forest areas.

During 1999-2000 an amount of Rs.15.00 crores (at current prices) has been proposed for the scheme to cover an area of 13387 hectares.

#### **1.10.5. Seed Development Scheme**

The State Governments are assisted to develop facilities for collection, testing, certification, storage and distribution of quality seeds by this scheme. The objective is to generate quality seeds, which would lead to the growth of healthy and better quality trees.

During 1999-2000 an amount of Rs.3 crores (at current prices) has been proposed for the scheme.

#### **1.10.6. Other Activities/Programmes:**

#### **1.10.7. Monitoring and Evaluation**

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 Organizations (NGOS) and Institutions/Experts are engaged by NAEB for carrying out these evaluations.

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 9<sup>th</sup> Plan Period.

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

- (a) The State Governments are asked to provide Block and Village level afforestation data annually. This information is kept in the Library of the Parliament as well as in the Library of moored to enable elected representatives' ready access to the data.
- (b) 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 analysed in NAEB. A copy of the report is sent to the concerned State Governments and districts for information and for taking necessary remedial measure.

#### **1.10.8. Regional Centres**

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 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:

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.

During 1999-2000 an amount of Rs.1.50 crores (at current prices) has been proposed for the Scheme.

#### **1.10.9. 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 1999-2000 an amount of Rs.0.40 Crores (at current prices) has been proposed for the Scheme.

#### **1.10.10. 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.

During 1999-2000 an amount of Rs.0.10 Crores (at current prices) 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.

#### **1.10.11. Indira Priyadarshini Vriksha Mitra Awards (IPVM):**

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/tribal/co-operatives in afforestation and tree planting;
- setting up grass-roots level institutions like the Tree Growers' Co-operatives; and
- social fencing of community woodlots and pasture lands.

The Awards for the year 1994 and 1995 have been announced. The selection of Awardees for 1996-1997 Awards are under finalisation.

#### **1.10.12. Mahavriksha Puruskar**

Mahavriksha Puruskar, instituted in 1994 is given every year to people/organisations for tree having largest girth and height and having good health & vigor. The Awards for 1994 & 1995 have been announced. The selection of the Awardees for 1996 & 1997 Awards are under finalisation.

#### **1.10.13. Eco-Task Force**

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 1999-2000 is Rs.14.75 crores.

### **1.11. 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, bioecology, Wildlife, animal population and animal behaviours.

During 1999-2000, the Zoological Survey of India proposes to continue exploration and surveys (a total of 56 surveys) in priority areas such as Tropical Rain Forest Ecosystem, Himalayan ecosystem, Estuarine, Freshwater and Marine Ecosystems including coral reefs. In addition, survey in 6 states namely Bihar, Andhra Pradesh, Madhya Pradesh, Tamil Nadu, Kerala and Uttar Pradesh and two states surveys of endangered species will be undertaken. Further, survey to 6 conservation areas will be conducted to inventories the fauna of those areas.

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 1999-2000 is Rs.3.25 crores on the plan and Rs.8.95 crores on the non-plan side.

### **1.12. BOTANICAL SURVEY OF INDIA**

The Botanical Survey of India conducts explorations and surveys to collect, identify and record the entire plant resources of the country. Botanical Survey of India will conduct 72 surveys, collect specimens of Ca 15000 and preserve specimens of Ca 12000. The BSI has regional offices spread over all regions in the country. The provision earmarked for BSI during 1999-2000 is Rs.4.10 crores on the plan side and Rs.10.00 crores on the non-plan side.

### **1.13. NATIONAL MUSEUM OF NATURAL HISTORY**

The National Museum of Natural History (NMNH) was set up in New Delhi on 5th June, 1978. It is devoted to environmental education. The NMNH has set up regional museums at Mysore, Bhopal and Bhubaneswar. The Regional Museum at Mysore has become functional during the Eighth Plan while the Regional Museums at Bhopal and Bhubaneswar will be operationalised during the Ninth Plan Period. The budget provision for the NMNH and the Regional Museums for 1999-2000 is Rs.2.50 Crores on the plan side and Rs.0.70 Crores on the non-plan side.

### **1.14. G.B. PANT INSTITUTE OF HIMALAYAN ENVIRONMENTAL & DEVELOPMENT**

The G.B. Pant Institute of Himalayan Environment & Development was established in August 1988 to carry out research activities connected with environmental problems of the Himalayan region. The Institute has established two Centres at Gangtok (Sikkim) and Kullu in (HP). The construction work at these centres is in progress. During 1999-2000, budget provision of Rs. 5.40 Crores as grants-in-aid to the Institute has been made including grant of Rs.0.40 Crores for Integrated Action Oriented R&D and extension projects in Himalayan Region.

## **1.15. ENVIRONMENTAL EDUCATION, AWARENESS & TRAINING**

### **1.15.1. Environment Education and Training:**

The non-formal environmental education programmes are being implemented under the scheme. The main programmes are as under:

### **1.15.2. 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 27 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 on Non-Governmental Organisations, professional bodies educational institutions and government departments. RRAs are responsible to disburse money on be held 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.

### **1.15.3. Eco clubs**

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

The Ministry encourages educational institutions, NGOs, and other organisations to act as co-ordinating agencies. One co-ordinating agency generally looks after 20 to 50 Eco clubs but in exceptional cases this limit is waived. The co-ordinating agencies receive grant in aid from this Ministry for disbursement to clubs formed @ Rs.900/- per club and @ Rs.100/- per club for their fee. Ministry has kept provision for awards and every year 3 awards are given to the best eco-clubs being co-ordinated by an agency. This scheme is exceptionally popular in the schools and every year the targets have been exceeded.

### **1.15.4. Seminars/Symposia/Workshops**

The main objective of this scheme is to provide a common forum to professionals for sharing up to 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.

### **1.15.5. Centres of Excellence**

Centres of Excellence would be continuing their efforts for creation of environmental awareness. Besides, the 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., in addition to other related activities.

## **1.16. ENVIRONMENTAL IMPACT ASSESSMENT AND PROMOTION OF CLEANER TECHNOLOGIES**

### **1.16.1. ENVIRONMENTAL AUDIT**

The objective of the scheme is to promote environmental audit as a management tool by the industries for continual improvement of environmental performance.

The scope of the scheme include promotion through training and awareness programmes, preparation of sector-specific manuals and sectoral analysis of information given in the environmental audit statements.

### **1.16.2. ENVIRONMENTAL STATISTICS AND MAPPING**

The objective of the scheme is to prepare Environmental Maps depicting pollution data relating to air, water, soil and noise pollution along with trend analysis in metro and other major cities. The scope of the scheme include preparation of environmental atlas for the metro cities and other major cities in the country depicting polluting data and their trend analysis. Also preparation of district wise zoning atlas for siting of industries in selected districts in the country.

### **1.16.3. ADOPTION OF CLEAN TECHNOLOGIES IN SMALL SCALE INDUSTRIES**

The objective of the scheme is to promote the development and adoption of clean technologies including waste reuse and recycling in small scale industries. The scope of the scheme include demonstration of already proven cleaner technologies/techniques preparation of sector-specific manuals on waste minimisation, and award of studies on waste minimisation and demonstration in selected sectors and training and awareness programmes on pollution prevention and waste minimisation through DC:SSI.

### **1.17. ENVIRONMENTAL INFORMATION SYSTEMS (ENVIS)**

The ENVIS network at present consist of 24 centres which have been set up on different subject areas of environment. The networking all the centres have been undertaken and E-mail services with Local Area Network and Wide Area Network would be installed in the network not only to link with the network partners but also to liaise with various other international databases in the fields of environment and its associated areas for easy and quick accession of desired information by ENVIS to its users. Besides, some more new ENVIS centres on the subject areas, not covered so far, are also proposed to be set up in phases to make the network comprehensive.

Keeping these activities into consideration, a sum of Rs. 1.50 Crores would be required for the scheme during 1999-2000.

### **1.15. NATIONAL NATURAL RESOURCE MANAGEMENT SYSTEM (NNRMS)**

Out of 56 priority areas identified for undertaking the research projects under the scheme, about 17 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 Governments, State Government Departments/Agencies and various other research organisations in a more comprehensive way. A sum of Rs.1.00 Crores would, therefore, be required to achieve this objective.

### **1.19. CIVIL CONSTRUCTION UNIT**

During the year 1999-2000, the Civil Construction Unit has set a target of total 86 Major Works for which a provision of Rs.19.55 Crores has been made in the Budget Estimates. Some of the above works are on-going works whereas the remaining are the new works.

### **1.20. NATIONAL RIVER CONSERVATION DIRECTORATE**

The Cabinet Committee on Economic Affairs in its decision on 9.11.1998 approved the 100% funding of the River Action Plans by the Government of India from 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. As a result of the change in the funding pattern, the share of the Government of India has increased by Rs.687.73 crores from Rs.1088.45 crores to Rs.1776.18 crores and the share of the State Governments has decreased by Rs.774.69 crores. The Ganga Action Plan and the National River Conservation Plan have assumed enormous importance in view of the large budgetary outlays for their implementation. Financial assistance from the Government of India on such a large scale is prompted by the concern to protect the major fresh sources in the country. The State Governments have been requested to fulfil the following conditions to be eligible for assistance here afterwards:

- (i) Projects involving land acquisition will be sanctioned only after land acquisition proceedings have been initiated by the State Governments.
- (ii) The Detailed Project Reports shall be accompanied by the resolution of the concerned local body approving the proposal they are recommending to the Government of India by the State Government.
- (iii) A fifteen-year design period shall be adopted for structures under the GAP/NRCP. The first module equivalent to design requirements for five years will be funded by the Government of India while the cost of the second and the third modules will be borne by the State Governments.
- (iv) Any savings in the implementation of the schemes in one town can be used to offset escalation of costs in other towns of the same state. However, escalation in costs beyond the CCEA approved costs for a state will have to be borne by the concerned State Governments.
- (v) All treated water discharged from the sewage treatment plants will be utilised for irrigation for which the State Governments will have to take up the programmes for providing channels from the treatment plants to onwards. This will be checked when examining detailed project reports in NRCD. State Governments are also requested to provide for this component additionally for the relevant schemes already sanctioned and under implementation, before they approach the Ministry for the release of funds.

### **1.21. CENTRAL POLLUTION CONTROL BOARD(CPCB)**

During 1999-2000, CPCB has identified the schemes, which will be operated under the Nine major Project Heads. The important schemes identified under each major project head are summarised:

Pollution Assessment – Survey and Monitoring  
Laboratory Management and R&D Schemes  
Development of Standard Guidelines and Ecomark  
Training  
Information (Data Base Management and Library)  
Pollution Control Enforcement  
Pollution Control Technologies  
Mass Awareness, Publication and activities relating to NGO  
Hazardous Waste Management

### **1.22.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.

### 1.23.REIMBURSEMENT OF WATER CESS

As per the existing water cess reimbursement formula, 50% of the total collection is reimbursed to them straightaway and 25% at the time of achieving the target of the financial year. The present reimbursement formula is under revision and it is proposed to reimburse upto 80% of the cess collected amount to the SPCBs/UT PCCs and upto 20% to the CPCB for the projects of national importance. However, the formula is expected to be finalised shortly. Hence, an amount of Rs.45 crores has been kept for RE 1998-99 and Rs.50 crores in the BE 1999-2000.

### 1.24. TAJ PROTECTION MISSION

Environmental protection of the Taj Mahal was the subject of a writ petition in the Supreme Court. In this petition, namely, M.C. Mehta vs. Union of India and Others (writ petition (civil) No.13381/84), the Supreme Court had passed the following orders on September 4, 1996:

“We have suggested to Mr. K.M. Lal that the Planning Commission should consider having a separate planned allocation for the environmental protection of Taj Mahal which is a world heritage and one of the wonders of the world. Lot of money is required to protect the environment, save the Taj from pollution and for growth of tourism. For this purpose, it would be advisable that a separate allocation should be made which should be utilised under the supervision of the Central Government. Even a special cell can be created to look after Taj Mahal. This is only a suggestion for the consideration of the Planning Commission and the Government of India”

As per the above orders, meetings were held in the Planning Commission on 18.10.96 and 6.11.96. It was agreed in these meetings that as protection of the Taj Mahal is a national priority, it was necessary for the Planning Commission to provide additional funds to the State Government for this purpose. Consequently, it was agreed that the Central Government and the State Government to cover the estimated cost of Rs.600 crores on 50:50 cost sharing basis to implement various schemes relating to uninterrupted power supply to the industrial units of Agra, construction of Gokul Barrage and Agra Barrage and improvement of drainage and sanitation in Agra city in the context of environmental protection of the Taj Mahal.

Out of Rs.300 crores of the Central share, the Planning Commission has allocated an amount of Rs.200 crores for the Ninth Plan. A sum of Rs.50 crores has been provided from the Budget of the Ministry of Environment & Forests in 1998-99 for different schemes in the context of Protection of the Taj Mahal.

In order to implement the Hon'ble Supreme Court's suggestions, Taj Mission Management Board has been formed under the Chairmanship of the Chief Secretary, Government of Uttar Pradesh. The Mission Management Board has to approve the schemes for the protection of the Taj Mahal and request the Ministry of Environment & Forests for release of funds.

The Expenditure Finance Committee of the Ministry of Environment & Forests approved the EFC Memo for 10 schemes costing Rs.222.21 crores as approved by the Mission Management Board and the State EFC (Government of Uttar Pradesh). These schemes are:

	(Rs. in crores)
1) Improvement in Electric Supply at Agra Part-II	9.11
2) Improvement in Electric Supply in and around the rural areas of Agra and Fatehpur Sikri.	39.09
3) Water Supply Agra	72.80
4) Water Supply Agra	42.00
5) Gokul Barrage	12.50
6) Solid Waste Management	7.49
7) Storm Water System Agra	6.59
8) Construction of one part of Agra Bye-pass	10.65
9) Widening of Agra Bye-pass	0.75

10)	Improvement of Master Plan of roads of Agra city	21.22
	Total	222.11

### 1.25. CLEAN TECHNOLOGY

As part of sustainable Development Strategies, studies have been initiated on Regional Carrying Capacity Planning, Natural Resource Accounting, Life Cycle Assessment and Demonstration of Cleaner Technologies etc.

#### (a) Carrying Capacity Studies

All development projects utilise natural resources in one form or the other and also generate wastes. It is necessary to develop alternate strategies for sustainable development in the context of developing countries like India. Carrying Capacity based Regional Planning takes into account not merely availability of Natural Resources but also the environmental quality of the eco-systems so that the welfare of the human being is not impaired. To demonstrate the viability of the Carrying Capacity based planning process, studies have been taken up in selected areas to be representative of similar problematic areas in the country. Regions selected for the studies are:

1. Doon Valley
2. National Capital Region
3. Damodar River Basin
4. Tapi Estuary
5. Greater Kochi

#### (b) Life Cycle Assessment in Steel Sector

For optimal utilisation of resources, Life Cycle Assessment Study in the Steel Sector has been initiated with joint funding by this Ministry and three identified steel plants. Life Cycle Assessment is a new management tool which examines from 'cradle to grave' various environmental issues associated with production use, disposal and recycling of products to identify interventions to improve the output, reduce the waste, recycle the wastes in the same or ancillary units, conserve raw materials and energy etc. LCA starts with extraction of raw materials and ends with reuse of scrap.

#### (c) Natural Resource Accounting

A study covering the Upper Yamuna Basin has been taken up to prepare Natural Resource Accounting corresponding to the Economic Accounts which reflect contributions to GNP without accounting for wastage of resources. NRA leads to proper measure being devised for technological and management interventions to ensure more consistent and better stream of benefits from the same resource base. This study is multi-disciplinary and multi-institutional. Findings of the study are now to be debated among planners, economists and other so that the methodology is adopted leading to presentation of Resource Accounts at the time of presenting the Financial Budget every year.

#### (d) Demonstration Projects

The Ministry sponsored a study to develop Gasification Technology and its Demonstration for effective treatment of distillery wastes. The Project has been completed.

### 1.26. HAZARDOUS SUBSTANCES MANAGEMENT

Hazardous Substances Management Division will continue various programmes outlined below and monitor the implementation of this programme. In addition, intensive interactions with State Departments of Environment, State Pollution Control Boards are envisaged for effective implementation

of rules on Management of Hazardous Substances and Chemical Crisis arising due to chemical disaster. It is also proposed to implement the remediation of the contaminated sites and establishment of Treatment, Storage and Disposal Facilities for Hazardous Wastes. Proposed activities are outlined below:

Proposed activities:

1. Strengthening of Hazardous Substances Management Structure in States.
2. Strengthening of crisis management structure in the country including setting up of Emergency Response Centres.
3. Accident prevention and emergency preparedness.
4. Augmentation of training facilities and conduct of training courses for training in accident prevention and emergency preparedness and hazardous waste management.
5. Prepare reports of status on compliance to international Conventions and stand on upcoming Conventions.
6. Formulation and implementation of Acts/Rules including amendments.
7. Developmental projects/studies and pilot plants.
8. Setting up/augmentation of Centres/Institutes for hazardous substances management.
9. Implementation of various provisions of Biomedical Waste Rules, 1998.
10. EIA studies for hazardous wastes disposal sites and setting up of two Treatment Storage and Disposal Facilities (TSDF) in the country.
11. Implementation of the Project on Remediation of the contaminated sites and identification of new sites for remediation.
12. Evolve policies and programmes for sound management of hazardous waste.
13. Evolve policies and programmes for sound management of solid waste.
14. Establishment of Databases and activities related to Agenda 21, UN Expert Committee on Transportation of Dangerous Goods.

For implementation of these activities in 1999-2000, the budget outlay is proposed to the tune of Rs.7.00 crores.