

# CHAPTER 9

## ENVIRONMENT & FOREST

### ENVIRONMENT

#### State of Environment

It is essential to maintain a sustainable environment which has to be regularly monitored with a view to minimizing the detrimental effects of various economic activities. While efforts have been made to reduce pollution by addressing the lacunae in legislation/implementation of various measures, the quality of air and underground/surface water has not improved in the country to the extent desired. In Delhi, the levels of Suspended Particulate matter (SPM) have decreased considerably after conversion of diesel-driven buses and petrol-driven 3-Wheelers to Compressed Natural Gas (CNG). However, these measures are required to be extended to other cities in the country also. Even after implementing a number of schemes under the National River Conservation Plan (NCRP), pollution in rivers has not been reduced much. In the Small Scale Industries (SSI) sector, many units especially in the chemical sector are continuing to pollute rivers in the vicinity. Many of these units have not set up Common Effluent Treatment Plants (CETP). Wherever the CETPs have been set up, many are not functioning properly. These issues have to be addressed immediately.

### SCHEMES

#### On going schemes

2. Most of the schemes for the Annual Plan 2002-03 are *continuing ones* from the Ninth Plan. Some of these schemes are of *long term* in nature, but in majority of them including those under the National River Conservation Plan (NRCP), the spill-over is due to slow progress of work. Details of major on-going schemes are given ahead.

### ABATEMENT OF POLLUTION

#### Central Pollution Control Board (CPCB)

3. CPCB has been created to discharge regulatory functions as stipulated under Water Act (1974), Air Act (1981), Water Cess Act (1977), Environment Protection Act (1986), Hazardous Waste Rules, (1989), Hazardous Chemical Rules, (1989), Bio-Medical Wastes (1998), Municipal Solid Wastes Rules, 2000 etc. Apart from this main function, the Board carries out Surveys and Monitoring activities, R&D, Development of Standards and Guidelines and Studies on Pollution control technologies etc. This organisation has got 9 Zonal offices to assist its activities spread over the entire country. The Annual Plan 2002-2003 outlay is Rs. 22.00 crore.

### **Common Effluent Treatment Plants (CETPs)**

4. This scheme provides support to a cluster of small scale industries for setting up *Common Effluent Treatment Plants* to meet the standards set for liquid effluent discharge at a manageable cost. Under the scheme, both State Government and Centre provides 25% of the cost each as a grant. Industry has to meet only 20%, the balance 30% is received from the financial institutions as a *loan*. In the Tenth Plan, the scope has been enlarged to provide support for modernisation of CETPs also. The outlay for Annual Plan 2002-2003 is Rs. 2.47 Crore.

### **Environment Management of Heritage Centres including Taj Protection**

5. To comply with the Supreme Court order of 1996, Taj Trapezium Zone Pollution (Prevention and Control) Authority has been set up for monitoring and implementing various schemes under Taj Protection Mission estimated to cost around Rs. 600 crore. This project will be implemented with 50:50 share between Centre and State. As a part of this scheme, so far 10 projects have been sanctioned and another six are under consideration. The outlay for Annual Plan 2002-2003 is Rs. 25.00 Crore.

### **Establishment of Environment Protection Authorities, Commission & Tribunals**

6. Under the various Environment Protection Acts, three authorities have been created - National Environment Appellate Authority, Loss of Ecology Authority for the State of *Tamil Nadu* and *Environment Pollution Authority for NCR of Delhi*. In addition, there is need to set up *Benches* for National Environment *Tribunal* under the Environmental Tribunal Act of 1995. The first tribunal bench will be set up at New Delhi. The outlay for Annual Plan 2002-2003 is Rs. 2.50 Crore.

### **Clean Technologies**

7. For sustainable development, both for conservation of resource as well as to avert man made effect on the environment, cleaner technology for power and industrial production, transport etc. is going to be unavoidable. Ministry of Environment & Forests has taken up a few schemes to increase awareness like Life Cycle Assessment (LCA), Carrying Capacity based Regional Development Planning, Natural Resource Accounting etc. as well as Promotion of Cleaner Technology. LCA Studies for steel plants , lignite / coal based thermal power plant have been completed. LCA studies for pulp and chemical industry is undergoing. Other sectors will be taken up in the coming years. The outlay for Annual Plan 2002-2003 is Rs. 4.00 Crore.

## **CONSERVATION & SURVEY**

### **Botanical Survey of India**

8. This Institute was established in 1890 with the objectives of making survey and inventory of floral resources of the country. During the Ninth Plan, 3 per cent additional geographical areas (un-surveyed) were taken up. Activities during the Tenth Plan include establishment of a *Botanical Garden at Noida*. The outlay for Annual Plan 2002-2003 is Rs. 10.00 Crore.

## **Zoological Survey of India**

9. This institute surveys the fauna of the country through its 16 regional and field stations spread all over the country. It was established in 1969. During Ninth Plan, 258 surveys were undertaken by them. Similar activities will be taken up during Tenth Plan including *status survey of endangered species, taxonomic study, publication of Red Data Book and Fauna of India Series* and computerisation of data on Faunal Diversity including National Zoological Collections. The outlay for Annual Plan 2002-2003 is Rs. 8.00 Crore.

## **G.B. Pant Institute of Himalayan Environment and Development**

10. It undertakes R&D activities on the fragile eco-systems of the Himalayan region and provides valuable inputs on the conservation plan of the Bio-Diversity. The outlay for Annual Plan 2002-2003 is Rs. 6.00 Crore.

## **Bio-sphere Reserves (BR)**

11. It is a Centrally Sponsored Scheme to facilitate conservation of major biogeographical areas of the country, terrestrial or coastal as recognised within the UNESCO's framework of Man and Biosphere. During Ninth Plan, 4 new BRs were designated bringing total number of BRs to 12. During 10<sup>th</sup> Plan, 14 additional sites in different zones will be taken for designation as additional BRs. The outlay for Annual Plan 2002-2003 is Rs. 6.00 Crores.

## **Conservation and Management of Mangroves, Coral Reefs and Wetlands**

12. Coral Reefs and Mangroves in the coastal regions is an important chain for the productivity of commercially important fisheries in the region and also sets as a protection to the shore lines. Coral Reefs and Mangroves are under severe threat due to natural calamities, anthropogenic activities and various biotic factors. A National Committee on Mangroves and Coral Reefs was constituted in 1986 and on the advice of this Committee, 30 Mangroves and 4 Coral Reefs areas in the country have been identified for intensive conservation and management. State Level Steering Committees have been constituted for formulation of specific Management Action Plans for each area. During the Ninth Plan, area under Mangroves in the country has increased by 618 sq. kms. During Tenth Plan, 30 identified Mangroves and 4 Coral reefs areas will be taken up for intensive conservation and management. The scheme of wetland conservation is also an on-going scheme and shall continue during Tenth Plan.. The outlay for Annual Plan 2002-2003 is Rs. 9.00 Crore.

## **Institute of Bio-diversity**

13. A new Institute is going to be set up at *Itanagar* in Arunachal Pradesh for documentation of traditional ecological practices for long term conservation of the bio-diversity of the North Eastern Region of the country. The outlay for Annual Plan 2002-2003 is Rs. 1.00 Crore.

### **National Museum of Natural History**

14. This museum was established in New Delhi in 1978 and is devoted to *non-formal* environmental education. It has got three *regional* museums at Mysore, Bhopal and Bhubaneshwar. The fund requirement is partly for *acquisition of land and construction of new building at Delhi* as the present building is a rented one and is not suitable for expansion. Funds are also required for phase III of the Bhubaneshwar Museum and staff quarters for Bhopal and Bhubaneshwar museums. The outlay for Annual Plan 2002-2003 is Rs. 6.00 Crore.

### **Environmental Information System(ENVIS)**

15. It is a Central Sector scheme continuing since 1982 based on the concept of distributed network of databases to enable integration of national efforts in environmental information collection, collation, storage, retrieval and dissemination to a wide range of users. Under the scheme a network of 25 centres (ENVIS) have been established and a dedicated website ( <http://enfor.nic.in> ) designed. ENVIS also acts as a national focal point and regional service centre for South Asia Sub-Region countries for the INFOTERRA, a global information network of UNEP. World Bank has agreed in principle to provide assistance for strengthening ENVIS network through Environmental Management Capacity Building Project under progress since January, 2002. The outlay for Annual Plan 2002-2003 is Rs. 2.00 Crore.

### **Centres of Excellence**

16. The scheme is in operation since 1983 and it sets up or supports various areas of environmental science and management. 8 Centres of Excellence have already been created (Ahmedabad, Chennai, Bangalore, IIT Bangalore, Dhanbad, Coimbatore, Delhi and Thiruvanthapuram). Ministry provides one time grant as well as annual recurring support to these Centres of Excellence. The outlay for Annual Plan 2002-2003 is Rs. 8.00 Crore.

## **POLICY & LAW**

### **Industrial Pollution Prevention Project (Externally Aided Project) (EAP)**

17. This project is in operation since 1994 with the world bank financial support (IDA grant of Rs. 100 crore sanctioned for Ninth Plan) to strengthen State Pollution Control Boards, encourage use of green technologies, resource recovery and adoption of cost effective pollution abatement measures. During Ninth Plan, Rs. 18 crore towards upgradation of regional laboratories, Rs. 22 Crore towards analytic and monitoring equipments, Rs. 12 crore for use of Information Technology for environmental activities and Rs. 2.5 crore towards environmental awareness activities have been spent. The project was expected to expire by March, 2002 but as half of the grant is still to be utilised extension of the project by two years is being sought. The outlay for Annual Plan 2002-2003 is Rs. 10.00 Crore.

## **INTERNATIONAL COOPERATION**

### **India Environment Capacity Building Project (EAP)**

18. This project was initiated in August, 1997 with the help of IDA credit of \$ 50 millions. It focuses on filling up of gaps on all aspects of environment management i.e. structural, legislative and administrative ones. Due to slow progress of the work, the project outlay has been brought down to \$29.62 millions and is now expected to culminate in June, 2003. One of the major achievements under the project will be Industrial Siting i.e. Zoning Atlas Programme under which local level mapping of many districts has been undertaken to indicate suitability of sites for industrial estates. The outlay for Annual Plan 2002-2003 is Rs. 38.00 Crore.

### **Indo-Canada Environment Facility (ICEF) (EAP)**

19. ICEF has been established as a registered society under joint funding by the Government of India (GOI) and Canadian International Development Agency (CIDA) to support projects in areas of forest conservation, eco-restoration, watershed management, water harvesting, environment education, sewerage and sanitation, renewable energy sources and environment health. There are 21 on-going projects out of which 2 projects have been completed and balance are under progress. It is expected to receive EAP funding of Canadian \$ 11 million during Tenth Plan. The outlay for Annual Plan 2002-2003 is Rs. 0.01 Crore.

### **Government of India-UNDP-CCF Programme (EAP)**

20. It is a UNDP supported programme under the Country Cooperation Framework-I with focus on equity, poverty alleviation and human resource development and is on-going since 1997. This External Aided Project (EAP) has total outlay of US \$ 8.1 million. The funds are routed through budget and UNDP gives this amount as grant. An outlay of Rs. 3 crore has been allocated for the Annual Plan 2002-2003.

### **Global Environment Facility (GEF) (EAP)**

21. This EAP scheme is a financial mechanism to achieve global environment benefits in the areas of Bio-Diversity, Climate Change, International Waters & Ozone layer depletion and Land Degradation. It is a cooperative venture among national governments, World Bank, UNEP, FAO, ADB etc. and is functional since 1994. A fund of US \$ 167 million has been programmed for India. The outlay for Annual Plan 2002-2003 is Rs. 0.01 Crore.

### **Canada Assisted Centre for Excellence in Environmental Science, Technology and Policy (EAP)**

22. A new scheme launched with the objective of setting up of a Centre of Excellence to strengthen India's capacities to address science, policy and technology aspects of global, trans-boundary and national environmental issues. It is expected to receive CIDA assistance of US \$ 2 lakhs initially for this project. The outlay for Annual Plan 2002-2003 is Rs. 0.10 Crore.

### **Indo-German Technical Co-operation Project (EAP)**

23. A new scheme on Advisory Services in Environmental Management launched with assistance of GTZ with an initial funding of Rs. 6 crore for the period 2001-2004. An outlay of Rs. 50 lakh has been provided for the Annual Plan 2002-2003.

### **Information Technology (IT)**

24. As a policy, Government of India has prescribed 2-3% of the plan budget should be ear-marked for Information Technology. The Ministry of Environment & Forest, besides investment on ENVIS has taken up various IT related networking activities in the environmental field including *e-governance*. The outlay for Annual Plan 2002-2003 is Rs. 3.00 Crore.

### **NATIONAL RIVER CONSERVATION DIRECTORATE**

#### **National River Conservation Plan (NRCP) (EAP)**

25. NRCP is a major scheme of the Ministry under which cleaning of 27 rivers has been taken up in 153 towns across the country. The scope of the scheme mainly covers construction of Sewage Treatment Plants, provide proper diversions of open drains to treatment plants, construction of public toilets on the banks of rivers etc. so as to prevent discharge of untreated water and other wastes into the major rivers. River Cleaning Action Plans for the river Ganga were initiated as early as 1985. Various pollution abatement works under the Ganga Action phase I have been completed. Ganga Action Plan Phase II (merged with National River Conservation Plan since 1996) is in progress. National River Conservation Plan also includes schemes for other rivers i.e. tributaries of Ganga like Gomti, Damodar, Yamuna and other rivers like Godavari, Cauvery, Narmada, Krishna, Mahanadi, Tapti, Satluj etc. taken up mainly during Ninth Plan. The progress of river cleaning programmes, however, has been slow due to delay in site allocation by the State Government and other administrative reasons. To give impetus to River Cleaning Programmes, one of the monitorable targets for the Tenth Plan has been set as **“Cleaning of major polluted rivers by 2007 and other notified stretches by 2012.”** The outlay for Annual Plan 2002-2003 is Rs. 259.00 Crore including Rs. 75 Crore of External Aid.

#### **National Lake Conservation Plan (NLCP)**

26. In addition to cleaning of rivers, action has been initiated to clean and maintain the major lakes of the country. Originally 10 lakes were selected for this scheme but more lakes have been added to the list based on the availability of the funds and priority attached to cleaning of other un-identified lakes. The outlay for Annual Plan 2002-2003 is Rs. 30.00 Crore.

The brief status on the various projects undertaken till date is given below :

	<b>Lake</b>	<b>Project cost (Crore)</b>	<b>Status</b>
1.	Powai	6.62	Project approved and work started.
2.	Ooty	1.95	Project approved and work started.
3.	Bellandur lake, Bangalore	5.54	Under approval
4.	Other Bangalore lakes	12.32	Project approved and work started.
5.	Kodai Kanal	6.33	Project approved and work started.
6.	RabindraSarovar, Kolkata	6.96	Under approval
7.	Mansagar Lake, Jaipur	22.89	Under approval
8.	Nainital lakes	100.00	Project under consideration.

#### **New schemes:**

27. The major task of the Ministry of Environment and Forests has been regulatory, monitoring and capacity building, all of which require no major outlays. Some new schemes have been proposed by the Ministry for Tenth Plan like Environmental Health, Climate Change, State of Environment project, Strengthening of Plan Co-ordination, etc. However, all these schemes require small outlays and, in line with the existing dispensation of Zero Based Budgeting (ZBB), these schemes would be merged with on-going schemes wherever feasible.

#### **Financing of the schemes**

28. Most of the schemes require budgetary support. Only a few schemes have spill-over of external aid which will continue during the Annual Plan. It is also expected that additional external funding will be available for the projects under NRCP. A summary of the external funding for the Annual Plan 2002-03 is given below.

**Rs Crore**

	<b>External Aid component</b>	<b>NBS</b>	<b>GBS</b>
Industrial pollution prevention project	10.00	0	10.00
India Environment Capacity Building Project	38.00	0	38.00
Indo Canada Environment Facility	0.01	0	0.01
GOI-UNDP Env. Mgmt. Project	3.00	0	3.00
Global Env. Facility	0.01	0	0.01
INDO-German Tech. Coop. Project	0.50	0	0.50
State of Environment Scheme	1.25	0	1.25
NRCP	75.00	184.00	259.00
<b>Total</b>	<b>127.77</b>	<b>184.00</b>	<b>311.77</b>

## **FORESTRY AND WILDLIFE**

### **Forestry**

29. Forests play an important role in environmental and economic sustainability. They render numerous goods and services, and maintain life-support systems so essential for life on earth. However, forests are consistently and seriously undervalued in economic and social terms. For example, the contribution of the forestry sector to GDP was only 1% in 1996-97 (measured at constant prices of 1980-81). A latest estimate of gross value of goods and services provided by forestry sector fixes its contribution to GDP at 2.37%.

30. The forest resource of our country is under tremendous pressure. Intensified shifting cultivation, indiscriminate removal of timber, fuel-wood, fodder and other forest produce, forest fire and encroachments are attributed to forest degradation and deforestation. Forests meet nearly 40% of the energy needs and 30% of the fodder needs of the country. It is estimated that about 270 million ton of fuel-wood, 280 million ton of fodder, over 12 million m<sup>3</sup> of timber and countless non-wood forest products are removed from forests annually. The future management strategy must, therefore, take into account this compelling need for meeting the requirements of the community.

31. Ministry of Environment and Forests is the nodal agency for planning, promotion, coordination and overseeing the implementation of various forestry programmes in the country. The outlays under the forestry and wildlife sector in state plans are around 1 per cent. It includes externally aided projects.

32. Based upon the Zero Based Budgeting Exercise, 12 ongoing schemes of the Forestry Sector in the Ninth Plan have been merged/weeded out to 9 schemes. No new scheme in the Forestry Sector has been incorporated in the Tenth Plan. The major schemes of the Forestry Sector are :

## **FORESTRY RESEARCH, EDUCATION AND TRAINING**

### **Indian Council of Forestry Research & Education (ICFRE), Dehradun**

33. ICFRE is the premier Forestry Research Organisation of the country with the mandate to formulate, organise, direct, and manage forestry research, transfer of technology to states and other user agencies and impart forestry education. The Council has eight research institutes and three advanced centres to cater to the research and extension needs of different bio-geographical regions of the country. A comprehensive National Forestry Research Plan (NFRP) has been prepared and research priorities have been identified in co-ordination with State Forest Research Institutes.

34. There are a number of research facilities outside the ICFRE network under the auspices of different agencies such as the Kerala Forest Research Institute (Peechi), Indian Plywood Industries Research and Training Institute (Bangalore), and forestry faculties of State Agriculture Universities. In addition, State Forest Departments have research divisions to address their practical problems. An increasing number of private companies and non-government organisations (NGOs) are funding their own research in areas such as



tree breeding, medicinal plants and NWFPs. The Budget Estimate of ICFRE for Annual Plan (2001-02) was Rs 46.00 crore. The outlay for Annual Plan (2002-03) is Rs 35.00 crore.

### **Indian Plywood Industries Research & Training Institute (IPIRTI), Bangalore**

35. IPIRTI, an autonomous body of Ministry of Environment & Forests, is a premier institute engaged in research and training activities on mechanical wood industries technology. The Institute, over the years has built up excellent facilities for carrying out research in wood based panel materials as well as for imparting training to the aspirants of mechanical wood industries.

36. IPIRTI has successfully developed technologies for Bamboo Mat Board (BMB) and Bamboo Mat Veneer Composite (BMVC), which are not only environment friendly but also people friendly (as mat weaving creates additional employment opportunities for rural/ tribal women). The Institute has also developed technology for bamboo mat corrugated sheets under a project sponsored by Building Material Technology Promotion Council (BMTPC) of India, having immense potential as alternative roofing material. The Budget Estimate of IPIRTI for Annual Plan (2001-02) was Rs 0.90 crore. The outlay for Annual Plan (2002-03) is Rs 2.00 crore.

### **Indian Institute of Forest Management (IIFM), Bhopal**

37. IIFM an autonomous institute of Ministry of Environment & Forests, has established itself as a pioneer institute in the area of environmental management, forestry and allied sectors not only in the Indian subcontinent but internationally. It is one of the nodal institutes in Information Technology for natural resource management and other sectors like environmental management and rural development.

38. The Institute undertakes two educational programmes: Post-Graduate Diploma in Forestry Management (PGDFM), and Post Master Course in Natural Resource Management (PMCNRM). It provides an excellent forum to serve the requirements of in-service managers from government departments, industries, academic institutions, financial institutions and voluntary organisations associated with natural resource development. The Institute undertakes collaborative research with national institutions, organisations and overseas governments and institutions. The multidisciplinary nature of the Institute enables it to offer consultancy services to organisations in the field of environment, forestry, natural resource management and rural development. The Budget Estimate of IIFM for Annual Plan (2001-02) was Rs 2.80 crore. The outlay for Annual Plan (2002-03) is Rs 3.00 crore.

### **Forestry Training**

39. Indira Gandhi National Forest Academy (IGNFA), Dehradun, is a premier institute for imparting professional training to the Probationers of the Indian Forest Service (IFS). The Academy also conducts professional courses and compulsory training courses for the IFS officers on varied subjects.

40. Government of India has been sponsoring compulsory in-service training courses for IFS officers in various disciplines for their capacity building and knowledge updation in the

modern tools of development in the premier institutes located throughout the country. The Directorate of Forestry Education is a subordinate office of the Ministry of Environment & Forests and is responsible for imparting basic training in forestry to State Forest Service Officers and the induction training of Ranged Forest Officers promoted as Assistant Conservator of Forests in the State Forest Service Cadres. It also organises special training courses in the forestry and allied subjects for the serving State Forest Service Officers and Ranged Forest Officers of the States and Union Territories. The total Budget Estimate for the Annual Plan (2001-02) was Rs 7.38 crore. The outlay for Annual Plan (2002-03) is Rs 10.00 crore.

### **Forest Survey of India (FSI)**

41. Forest Survey of India (FSI), Dehradun is entrusted with the responsibility of survey of forest resource in the country. FSI assesses the forest cover biennially using remote sensing technology. The first report of FSI was published in 1987 using Landsat data of US satellite through visual interpretation technique on 1:1 million scale. The latest State of the Forest Report 1999 is the seventh in the series. In the present assessment, digital method of interpretation has been used for 13 states. This method could not be applied to the entire country due to inadequate infrastructure. The introduction of the advanced digital image processing system has helped in reducing the time lag between preparation of the report and procurement of satellite data. The Budget Estimate for Annual Plan (2001-02) was Rs 5.00 crore. The outlay for Annual Plan (2002-03) is Rs. 7.00 crore.

### **Forest Protection**

42. The scheme on 'Introduction of Modern Forest Fire Control Methods' later restructured as Forest Fire Control and Management Scheme' is being implemented since the 8<sup>th</sup> plan period. The other scheme 'Forest Protection' is under implementation since 9<sup>th</sup> plan period. These two schemes have been merged since the 10<sup>th</sup> Plan and the new scheme is called as 'Integrated Forest Protection Scheme'. The scheme includes the components such as forest fire control and management, survey and demarcation, and infrastructure development. The outlay for Annual Plan (2002-03) is Rs. 65.00 crore.

### **WILDLIFE**

43. Based upon the Zero Based Budgeting Exercise, 11 ongoing schemes of the Wildlife Sector in the Ninth Plan have been merged/weeded out to 7 schemes. One new scheme namely Protection of Wildlife outside Protected Areas has been incorporated in the Tenth Plan. The major schemes of the Wildlife sector are as below:

### **Eco-development around National Parks and Sanctuaries - EAP**

44. India Eco-development Project is being implemented in seven Protected Areas with the assistance of International Development Agency (IDA) and Global Environment Fund (GEF). The Budget Estimate for Annual Plan (2001-02) was Rs 64.75 crore. The outlay for Annual Plan (2002-03) is Rs 45.00 crore.

### **Project Tiger**

45. 'Project Tiger' is a Centrally Sponsored Scheme. The states receive 100% financial assistance for non-recurring items and 50% for approved recurring items. The scheme was launched in 1973 on basis of the recommendations of a special task force of the Indian Board for Wildlife. At present, there are 27 tiger reserves spreading over 14 states and covering about 3.77 million ha area. The Budget Estimate for Annual Plan (2001-02) was Rs.19.00 crore. The outlay for Annual Plan (2002-03) is Rs 26.00 crore.

### **Project Elephant**

46. 'Project Elephant' is a Centrally Sponsored Scheme to assist States having free ranging population of wild elephant to ensure long term survival of identified viable populations in their natural habitats. States are provided financial as well as technical and scientific assistance. The scheme is being implemented since 1991 and nine elephant reserves have so far being constituted. The Budget Estimate for Annual Plan (2001-02) was Rs 9.00 crore. The outlay for Annual Plan (2002-03) is Rs. 9.00 crore.

### **Development of National Parks and Sanctuaries**

47. It is a Centrally Sponsored Scheme to facilitate better management of National Parks and Sanctuaries. There are 90 National Parks and 490 Sanctuaries in the country covering an area of 1.56 lakh sq. kms. . 100% financial assistance is provided for non-recurring items and 50% for recurring items. Eco-development support to Protected Area Management has helped to improve the socio-economic condition of the local communities and also made them sensitive to the needs of conservation. The Budget Estimate for Annual Plan (2001-02) was Rs 21.70 crore. The outlay for Annual Plan (2002-03) is Rs 31.00 crore.

### **Wildlife Institute of India (WII), Dehradun**

48. WII, an autonomous institute of Ministry of Environment & Forests conducts research on the ecological, biological, socio-economic and managerial aspects of wildlife conservation. The research projects generate valuable scientific data, help evolve study techniques relevant to the Indian ground condition, and also create a group of trained field biologists, socio-economist and wildlife managers. The Institute imparts training to government and non-government personnel and provides suggestions on matters of conservation and management of wildlife. The Budget Estimate for Annual Plan (2001-02) was Rs 5.00 crore. The outlay for Annual Plan (2002-03) is Rs 7.00 crore.

### **Central Zoo Authority**

49. The Central Zoo Authority (CZA) was created in 1992 to check the mushrooming of ill planned and ill conceived Zoos, monitor and evaluate the existing Zoos and to suggest ways and means for improvement of Zoos. The Authority has been given the mandate of providing technical and financial assistance to the Zoos to enable them to attain the stipulated standards under the Zoo Recognition Rules and de-recognise the Zoos which are found to be non- viable. The grant-in-aid to National Zoological Park , an ongoing scheme

in the Ninth Plan has been merged with the CZA. The Budget Estimate for Annual Plan (2001-02) was Rs 13.95 crore. The outlay for Annual Plan (2002-03) is Rs 11.00 crore.

### **National Afforestation and Eco-development Board (NAEB)**

50. NAEB has the mandate of promoting afforestation, tree planting, ecological restoration and eco-development of degraded forests and lands adjoining forest areas, national parks, sanctuaries and other protected areas. Based upon the Zero Based Budgeting Exercise, 12 ongoing schemes of the National Afforestation and Eco-development Board (NAEB) in the Ninth Plan have been merged/weeded out to 3 schemes. Two new scheme namely Greening India and National Action Plan to Combat Desertification have been incorporated in the Tenth Plan. Major schemes of the NAEB are as below:

### **National Afforestation Programme**

51. National Afforestation Programme has been evolved by merging a number of ongoing schemes viz. Integrated Afforestation and Eco-development Projects Scheme (IAEPS), Area Oriented Fuelwood and Fodder Projects Scheme (AOFFPS), Conservation and Development of Non-Timber Forest Produce including Medicinal Plants ( NTFPS ) and Association of Scheduled Tribes and Rural Poor in Regeneration of Degraded Forests ( ASTRP ). The programme is to be implemented through a two-tier set up comprising Forest Development Agencies ( FDAs ) and Joint Forest Management Committees (JFMCs). FDA will be constituted at the territorial/ wildlife forest division in all 775 such divisions in the country by the end of the Tenth Plan. The new scheme was implemented in the first phase as pilot project for the years 2000-01 and 2001-02 in some states. Based on the experience and wide acclamation of the project, it has been decided to implement the new scheme universally from the Tenth Plan. The outlay for the Annual Plan ( 2002-03 ) is Rs. 175.25 crore.

### **Eco-development Forces**

52. These comprise of ex-servicemen and are commanded by serving JCOs and Commissioned Officers. Forest Departments of the State Governments, in which these are located, provide technical support. The activities undertaken include afforestation, pasture development, soil and water conservation and other restorative works. The Budget Estimate for the Annual Plan (2001-02) was Rs. 9.75 crore. The outlay for the Annual Plan ( 2002-03 ) is Rs. 10.00 crore.

### **Animal Welfare**

53. The scheme of Animal Welfare , an ongoing scheme of the Ninth Plan has been transferred from the Ministry of Statistics and Programme Implementation to the Ministry of Environment & Forests from the year 2002-03. The outlay for the Annual Plan (2002-03) is Rs. 20.00 crore. The Annual Plan 2002-2003 outlays for all schemes under the Environment and Forest Sector are given in Annexure.

## Annexure-9.1.1

<b>Sector</b>	<b>10<sup>th</sup> Plan Outlay</b>	<b>2000-01 Actual</b>	<b>2001-02 Outlay</b>	<b>2001-02 Anticipated Expdr.</b>	<b>2002-03 Outlay</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Environment	1200.00	106.13	212.82	130.84	229.00
National River Conservation Directorate (NRCD) & others	1670.00 #	86.70	190.95	255.95	295.00
Forests	800.00	61.26	118.43	45.45	129.00
Wildlife	800.00	54.18	141.15	68.56	136.00
National Afforestation & Eco- Development Board (NAEB) & others	1300.00	101.47	136.65	149.80	201.00
<b>Total</b>	<b>5770.00</b>	<b>470.94*</b>	<b>800.00</b>	<b>651.50 **</b>	<b>990.00</b>

\* Includes Rs. 1.2 crores for Tree and Pasture Seed Development Scheme (TPSDS) and Rs. 60 crores as Lump Sum for North East.

\*\* Includes Rs. 0.9 Crore for TPSDS

# Rs. 70 Crores approved for conservation of Nainital Lakes under NLCP

**Schemewise Break-Up Of Outlay And Expenditure For  
Environment Sector and NRCD Schemes**

Rs. Crore

Sector	10 <sup>th</sup> Plan Outlay	2000-01 Actual	2001-02 Outlay	2001-02 Anticipated Expdr.	2002-03 Outlay
1	2	3	4	5	6
<b>ENVIRONMENT SCHEMES</b>					
Abatement of Pollution	334.67	47.99	30.90	49.90	55.57
Environmental Impact Assessment	38.00	2.83	11.10	8.60	6.00
Conservation & Survey	307.00	26.47	34.29	33.76	45.00
Research & Eco-Regeneration	24.00	3.57	19.10	3.33	4.00
Environmental Education Training and Environmental Information	231.00	18.33	19.55	23.13	37.00
Policy & Law	80.00	2.40	40.55	4.05	19.00
International Cooperation	95.03	1.25	39.13	1.15	42.52
Information Technology	25.00	1.99	5.00	5.00	3.00
Civil Engineering	12.00	1.30	0.00	1.92	2.00
New Schemes	53.30	0.00	0.00	0.00	14.91
Capital Provisions for ecology and environment	0.00	0.00	13.20	0.00	0.00
<b>Total (Environment Schemes)</b>	1200.00	106.13	212.82	130.84	229.00
<b>NRCD SCHEME</b>	1670.00	86.70	190.95	255.95	295.00
<b>OTHERS (Tree &amp; Pasture Seed Dev. Scheme)</b>	0.00	1.20	0.00	0.90	0.00
<b>GRAND TOTAL (ENV. + NRCD + OTHERS)</b>	2870.00	194.03	403.77	387.69	524.00

**Scheme-wise break-up of Outlay and Expenditure of the Forestry,  
Wildlife and NAEB Sectors**

Rs. Crore

<b>Sector</b>	<b>10<sup>th</sup> Plan Outlay</b>	<b>2000-01 Actual</b>	<b>2001-02 Outlay</b>	<b>2001-02 Anticipated Expdr.</b>	<b>2002-03 Outlay</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Forestry Research, Education & Training	286.00	51.71	57.08	33.35	50.00
Forest Survey of India	35.00	4.00	5.00	6.00	7.00
Forest Policy		0.15	7.35	0.20	-
Forest Protection	445.00	-	17.25	-	65.00
Strengthening of Forest Division	34.00	5.40	6.00	5.90	7.00
Forestry Infrastructure (NE)	-	-	25.75	-	-
<b>Forestry -Total</b>	800.00	61.26	118.43	45.45	129.00
<b>Wildlife-Total</b>	800.00	54.18	141.15	68.56	136.00
<b>National Afforestation &amp; Eco-Dev. Board (NAEB)-Total</b>	1300.00	101.47	136.65	149.80	201.00
<b>Grand Total</b>	2900.00	216.91	396.23	263.91	466.00