

CHAPTER-II A
REVIEW OF PERFORMANCE DURING VII FIVE YEAR PLAN AND
GOAL SET FOR VIII PLAN

FOREST AND WILDLIFE

Under Forest and Wildlife sector, a number of central and centrally sponsored schemes were implemented during the 7th Plan. Most of these schemes will be continued in VII Plan. Besides, some new schemes like Central Zoo Authority of India, Project Elephant, Eco-development in and around protected areas etc., have been introduced during 1991-92.

VII Plan Outlay	Expenditure	Physical Achievements during VII Plan	Goals for VIII Plan
Forestry Education & Training Rs. 20.00 crores	Rs. 9.92 crores	14 State Agricultural Universities Were provided financial assistance to support B.Sc. (Forestry Course). IFS Probationers, State Forest Service Officers, Range Officers were given training. Compulsory training for IPS Officers started. Two years P.G. Diploma in Forestry Management started.	An outlay of Rs. 12.50 crores has been provided in VIII Plan upgradation of SFS colleges into, Regional Forest Academy, starting of refresher courses for SFS Officers, strengthening of training facilities in various institutes.
Forestry Research Rs. 44.50 crores	Rs. 19.96 crores	Forestry Research was reorganised after an indepth review and Indian Council of Forestry Research and Education (ICFRE) was established in December, 1986 by restructuring of Forest Research Institute and Colleges. 5 new research institutes were established in March, 1989 to look after the research needs of different ecogeographical regions. The Indian Plywood Industries Research Institute came on transfer to this Ministry from the Department of Industrial Development w.e.f. 1-5-90. Various projects for research and development in respect of plywood and allied products Were taken up.	An outlay of Rs. 91.50 crores has been provided in the VIII Plan for the following objectives: The existing Centre at Shimla and Ranchi would be upgraded as full fledged research institute for temperate forest research and forest productivity research respectively setting up of 2 advanced centre for: (a) wasteland and deciduous forest, (b) forest ecology and environment, launching of three All India Coordinated Research Schemes on forests and tribals, oil seeds of tree origin and bamboo and cane. A comprehensive Forestry Research Extension and Training programme would also be taken up under ICFRE.
Survey and Utilisation of Forest Resources Rs. 11.00 crores	Rs. 10.25 crores	Forest inventory is prepared for 1,39,836 sq. km., data processing for 2.02,079 sq. km., 1,139 sheets of thematic mapping, 774 sheets of vegetation mapping, 387 persons were trained, special studies were undertaken in 15 areas.	An outlay of Rs. 10.50 crores has been provided in VIII Plan Forest inventory will be prepared for 81,000 sq. km., 7 data processing for 86,000 sq. km., 1,295 sheets of thematic mapping, 905 sheets of vegetation mapping, 3450 persons will be trained, special studies will be undertaken in 10 States. Digital cartography and other new systems

			will be introduced,
Forest Conservation Rs. 2.00 crores	Rs. 3.07 crores	6 Regional offices were set up to monitor and evaluate ongoing forest development projects and schemes and environmental management projects.	An outlay of Rs. 4.50 crores has been provided in VIII Plan. Regional offices Forest Conservation and Research and Training Divisions in the Ministry will be strengthened.
Forest Protection Rs. 3.50 crores	Rs. 6.11 crores	Assistance was provided to 5 states in 1986-87, 5 States in 87-88, 10 states in 88-90 and 10 states in 89-90 under protection offorest from Biotic interference scheme. Modern forests fire control project was launched with the assistance of UNDP. The fire could be reduced remarkably in the demonstration area of Haldwani (UP) and Chandrapur (Maharashtra). The economic evaluation indicated that fire can be controlled by introducing fire control methods.	An outlay of Rs. 8.25 crores has been provided in VIII Plan. The Scheme of Protection of forests from Biotic-interference with an outlay of Rs.3.25 crores has since been transferred to States. Based on the success of the scheme taken up in VII Plan for Modern Forest Fire Control, the scheme will be continued in all States with particular attention to most fire hazard districts. 100% Central assistance will be provided for non-recurring items with a view to developing necessary infrastructure in the States for prevention, detection control and suppression of forest fire. The outlay for the said scheme is Rs. 5.00 crores,
Forest Policy Rs. 3.50 crores	Rs. 0.05 crores	A scheme named Beneficiary oriented Scheme for tribal development was started. However, no significant development could be achieved as the scheme was started towards the end of VII Plan, i.e. 1989-90.	An outlay of Rs. 8.00 crores has been provided in VIII Plan. A new scheme named Association of Scheduled Tribes and Rural Poor in regeneration of degraded forests on usufruct sharing basis has been started. The objective of the scheme is to associate Scheduled Tribes and rural poor in afforestation in order to provide gainful employment and sustainable economic base to these people. The scheme "Beneficiary Oriented Scheme for Tribal Development" has been transferred to Wildlife Division as the objective of the scheme is to relocate the villagers from wildlife protected areas.
Wastelands Development Rs. 295.00 crores	Rs. 254.45 crores	140 crores seedlings were raised under the Decentralised People's Nursery Scheme against VII Plan targets of 129.88 crores. 336 afforestation projects involving 245 voluntary agencies were sanctioned under grants-in-aid scheme. 2000 ha. Of wasteland was developed under the Area Oriented Fuelwood Fodder scheme for raising the	During 1992-93, the Government decided to set up a new Department of Wastelands Development under which the National Wastelands Development Board has been located. Under the Ministry of Environment & Forests, National Afforestation and Eco-development Board has been set up. An outlay of Rs. 275 crores has been approved for the National Afforestation & Eco-development Board to achieve

		<p>fuel wood and fodder species in the fuelwood deficit districts. 10,200 ha. Was covered under the Margin Money assistance scheme for afforestation. 5700 ha. Was developed for raising plantation of minor forest produce including medicinal plants. 4. 15 lakh ha. Was covered under the Rural Fuelwood plantation scheme. The scheme has been discontinued from 1990-91. 1.56 lakh ha. Were treated for plantation under the Operation Soil Watch Scheme. This scheme has also been discontinued from 1990-91. 1700 ha. Were covered for silvipastoral development.</p>	<p>the following objectives :-</p> <ul style="list-style-type: none"> - Regeneration of degraded forest lands and lands adjoining forest areas, National Parks and Sanctuaries and other protected areas. -Evolving appropriate mechanisms for ecological restoration and for expanding work of eco-development in degraded forest areas. -Microplanning exercise in the districts for integrated development of degraded lands will be expanded. -Voluntary action in the field of afforestation and degraded lands development will be strengthened. -Special emphasis will be given to the ecologically fragile areas like Western Himalayas, Aravallies, Western Ghats etc. -Efforts to reduce the gap between demand and supply of fuelwood and fodder especially in areas which face acute shortage of fuel and fodder will be intensified. -Inaccessible areas, ravine lands and special problem lands will be covered under aerial seedling programmes. -Tribal cooperatives and people living in and around forests will be involved to bring larger areas under Minor forest Produce.
Wildlife Preservation Rs. 30.90 crores	Rs. 43.47 crores	<p>Assistance was provided to 150 Sanctuaries and National Parks under the Scheme, "Development of National Parks and Sanctuaries". 24 States got assistance for Control of Poaching, 3 new tiger reserves were notified and brought under purview of Project Tiger Scheme. Thus 18 Tiger reserves got assistance under this scheme-during the VII Plan.</p> <p>Activities relating to implementation of provision of prevention of cruelty to Animals Act and Rules made there to were undertaken</p>	<p>An outlay of Rs. 108.25 crores has been provided in the VIII Plan. Two schemes. Control of Poaching and Illegal Trade in Wildlife (Outlay Rs. 75 lakhs) and Conservation of Rhinos in Assam (Outlay Rs. 75 lakhs) have since been transferred to States. A new scheme-'Strengthening of Management Planning Capabilities' will be introduced during the VIII Plan. The objective of the Scheme is to provide training on Eco-Development Planning and Management planning for the protected areas. The scheme Eco-Development In and around protected areas and Project</p>

		through Animal Welfare Board of India.	Elephant' introduced in Annual Plan 1991-92 and other schemes of VII Plan would be continued during the VIII Plan.
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Environment and Ecology

The following broad activities are covered under Ecology and Environment-Conservation and Survey, Environment Education and Awareness, Research and Eco-regeneration. Control and Abatement of Pollution. Impact Assessment and International Cooperation. The Ganga Action Plan also forms a part of the Ecology and Environment programmes.

SURVEY

Rs. 19.50 crores	Rs. 11.40 crores	BSI : Survey and exploration work was COMpleted in Manipur, Mizoram, Nagalarld; Nilgiri and Nandadevi Biosphere Reserves. Enumeration and listing of specimens and live collections of all -plants grown in Indian Botanic Garden and other Gardens was completed. Wark oh ide:ntlfu:atioh, writing of descriptions of mangroves species of Andaman & Nicobar Islands, Godavari Delta, Krishna Estuaries, Pitchavaram and Vembanad Lake has been completed- to a large extent. Ethnobotanical studies under AU India Coordinated Research Project Phase-I were completed and reports finalised. 3 Volumes of Red Data Book on Endangered Species of Indian Plants were published. Data on 25 less known economic plants was completed. Geobotanical studies of Plants of Singhbhu in Bihar and Khetri in Rajasthan were completed.	An outlay of Rs. 35.00 crores has been approved during the VIII Plan for achieving the following : BSI : Remaining survey and texonomic work of 35% or the country will be completed during the VIII Plan.
		ZSI; A total of 180 faunistic surveys covering about 100 districts were completed. Taxonomic studies respect of 23 phyala collection out of 39 were completed. Marine Aquarium-cum-Research Centre at Digha was completed. A number of scientific publications were also brought out.	ZSI : Besides completion of 30% more areas, status surveys of endangered species and publication of another 24 volumes of Fauna of India is to be completed. Computerisation of Faunal data will also be completed.
Environment Education/Awareness/ Training Rs. 13.00 crores	Rs. 11.03 crores	More than 550 organisations comprising of NGO's schools, colleges, universities, research institutions, professional Bodies, women & Youth Organisations, Government Departments etc. from various States and UTs have been involved in organising various programmes under the Environment	An outlay of Rs. 37.00 crores has been approved for Eighth Plan for activities like seminars, training programmes, films/slides shows, telecast, essay competition. rallies, pad yatras, performing arts etc. for increased public participation in

		Education Awareness Campaign.	environmental awareness/ education.
		Environmental Information System (ENVIS) under the ENVIS Programmes, 13 Centres were set up on different subject areas of Environment including Pollution Control, Toxic Chemicals, Occupational Health, Energy & Environment, etc. A quarterly magazine entitled 'Paryavaran Abstracts' on Environmental Sciences is also being regularly published.	The existing ENVIS Centres would be Strengthened by providing modern technology so as to make them a potential source of information.
		National Museum of Natural History (NMNH) Four new public facilities have been added to the museum, namely. a gallery on "Conservation and Cell the Basic Unit of Life", an Activity Room for pre-school children and a Bio-Science Computer Room for the benefit of high school students. An exhibition Cell was set up at NMNH to look after the growing need of Organizing exhibitions to promote environmental awareness. It organised a major exhibition "Our Environment Our Future" at Pragati Maidan New Delhi. It has also conducted regular educational activities such as Environmental Awareness Campaign, Mobile Museum Services including publication of literature on environmental education.	Establishing the NMNH on a firm footing at the permanent location in a new building. (ii) Completion of the organisation of the Regional Museum of National History at Mysore and opening it to the public. (iii) Organisation of Regional Museum of Natural History at Bhubaneswat, Orissa and Bhopal, Madhya Pradesh. (iv) Setting of the National Photographic index on the flora, fauna and eco- system of India at the NMNH. (v) Development of Natural History sections in Indian Museums for the promotion of environmental education by providing financial assistance and technical advice. (vi) Organisation of temporary exhibitions from time to time on topics related to environment and Conservation. (vii) Promotion of environment education activities at the NMNH and the Regional Museum including Mobile Museum Service, school loan service. special programmes for various target groups and the production of environmental education resource material.
Centres of Excellence Rs. 5.00 crores	Rs. 7.74 crores	There are in all 5 Centres of Excellence at present : (i) Centre for Mining Environment, Indian School of Mines, Dhanbad. (ii) C.P.R. Environmental Education Centre (CPREEC), Madras. (iii) Centre for Environment Education (CEE), Ahmedabad. (iv) Ecological Sciences Research and	An outlay of Rs. 15.00 crores has been provided for Centres of Excellence Scheme during VIII Five Year Plan. The activities of all the 5 Centres in their Respective areas will be continued and strengthened during the VIII Five Year Plan.

		<p>Training Centre, Indian Institute of Science, Bangalore.</p> <p>(v) Salim Ali Centre for Ornithology and Natural History (SACON).</p> <p>The following Centres were set up during the VII plan:</p> <p>(i) Centre for Mining Environment, Dhanbad.</p> <p>(ii) C.P.R. Environmental Education Centre. Madras.</p> <p>(iii) Salim Ali Centre for Ornithology and Natural History.</p>	<p>More such centres will be set up during VIII Plan.</p>
<p>Conservation (Biosphere Reserves)</p> <p>Rs. 6 crores</p>	<p>Rs. 5.36 crores (Including expenditure on wetlands and Mangroves programmes)</p>	<p>(i) Seven Biosphere Reserves were set up and action plans in respect of 6 Biosphere Reserves were sanctioned.</p> <p>(ii) On the basis of the National Wetland Management Committee recommendation, 16 Wetlands were identified and action plans for 10 Wetlands were sanctioned.</p> <p>(iii) 19 research projects on Wetlands and 13 on Mangroves were funded. A wetland directory was also published.</p> <p>(iv) Based on the recommendations of the National Mangroves Committee, 15 areas were identified and action plans for 14 have been sanctioned.</p>	<p>(i) An outlay of Rs. 12 crores has been provided under the Eighth Plan for the following :</p> <p>(ii) Implementation of action plans for the existing Biosphere Reserves.</p> <p>(iii) Establishment of a few more Biosphere Reserves.</p> <p>(iv) Strengthening of the scientific activities under the schemes for Conservation of Wetlands and Mangroves.</p>
<p>Research & Development</p> <p>Rs. 36.50 crores</p>	<p>Rs. 35.61 crores</p>	<p>197 new research projects were sanctioned under Research and Development Programme and 124 projects under Integrated Action Oriented Research Programme :</p> <p>-Eco-restoration activities were undertaken : in 4650 hectares of area covering 3 States of Uttar Pradesh, Rajasthan and Jammu & Kashmir .</p> <p>-8 field demonstration projects in the States of Punjab, Tamil Nadu, Rajasthan. Karnataka, Uttar Pradesh, West Bengal</p> <p>-G.B. Pant Institute of Himalayan Environment and Development, an autonomous Institute was set up in 1988 for management of natural resources and sustainable development of Himalayan Region.</p>	<p>An outlay of Rs. 38.38 crores has been provided to take up 150 projects On following areas :</p> <ol style="list-style-type: none"> 1. Long term research on selected eco- systems. 2. Climate change on response of living organisms. 3. Effect of pollutants on man and materials. 4. Health and Toxicology studies. 5. Coordinated programmes for regions covering Satpura and Vindhyas and some selected river ecosystem. 6. To take up field demonstration project dealing with mixed area reclamation, restoration, of degraded watersheds, etc.
<p>Control of Pollution</p> <p>Rs. 22 crores</p>	<p>Rs. 44.48 crores</p>	<p>(i) The Central Pollution Control Board completed, status reports on Class I & II cities.</p> <p>(ii) Riverbasin studies for 7 rivers completed and studies in respect of 6 other rivers are continuing.</p>	<p>An outlay of Rs. 75.00 crore has been provided in the VIII Plan.</p> <p>(i) For 17 identified problem areas, time- targeted action plans for restoring environmental degradation will</p>

		<p>(iii) 15 problem areas were identified and field surveys in respect of heavily polluted areas were completed.</p> <p>(iv) 400 water quality monitoring stations and 220 ambient air quality monitoring stations were set up.</p> <p>(v) Comprehensive documents on 16 types of industries were prepared and 17 effluent/emission standards evolved.</p> <p>(vi) 6% zonal offices were set up to coordinate the activities of the State Pollution Control Boards.</p> <p>(vii) Assistance was released to State Governments and State Pollution Control Boards for laboratory equipment and staff salaries, in order to strengthen their set up.</p>	<p>be evolved and implemented through State Pollution Control Boards. National inventory on large and medium industries and ongoing river basin studies will also be completed before commencement of VIII Plan. During the VIII plan, activities relating to surveys, noise pollution survey, green house gases, inventory of industries, vehicular pollution surveys, river basin studies, water quality monitoring and ambient air quality monitoring will be undertaken.</p> <p>(iii) Steps to evolve liquid effluent and gaseous emission standards for 18 categories of industries will be initiated. Study of 'ECOMARK' schemes and development of criteria for certain types or products manufactured by industries will be carried out. The main task would be to identify the specific products for classifying as 'Environment friendly' and criteria for this will be developed based on the nature of product manufacturing process and materials, etc.</p> <p>(iv) The environmental auditing will be done in each State in collaboration with State Boards.</p> <p>(v) Guidelines on specific hazardous waste disposal and mode of disposal will also be prepared. On demonstration basis, one incineration plant will be installed.</p> <p>(vi) A World Bank aided project for Industrial pollution covering activities such as establishment of Common Effluent Treatment Plants and introduction of clean technologies for minimum generation of wastes and support of safe operations and products will be taken up in major industrialised estates. Two demonstration plants for wastewater and gaseous</p>
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			emission treatment will be set up for study purposes.
Environmental Policy and Law Rs. 1.50 crores	Rs. 4.15 crores	<p>Under the Scheme, grants were released to State Pollution Control Boards, Environment Department of State Governments with the aim to strengthen technical capabilities in terms of both manpower and equipment. Assistance was also provided for various pollutionally relevant schemes. Assistance was provided for hazardous substances management to State Boards and State Governments. A number of amendments were also made in various environmental Acts and Rules to make them more comprehensive.</p>	<p>An amount of Rs. 7.00 crores has been provided for Environment Policy and Law for abatement of pollution and Rs.2 crores for Environmental Commission/ Tribunal. With this outlay, the objectives for VIII Plan are fixed as:</p> <ul style="list-style-type: none"> -Follow up of court cases/writ petitions concerning Environment (Protection) Act. Legislation for setting up of an Environmental Tribunal and Environmental Commission. -The products and criteria for labelling of Environment Friendly Products will be notified from time to time and appropriate measure will be taken to launch a country-wide mass awareness campaign, including encouraging consumer groups. <p>Financial assistance will be given to Central and State Pollution Control Boards for arranging workshops on Environmental laws for providing training to the officers of the Ministry and State Boards handling pollution and related matters. This is being done at the instance of the Ministry of Law.</p>
Management of Hazardous Substances		<ul style="list-style-type: none"> (i) A system to handle hazardous chemicals/ microorganisms and to prevent accidents has been evolved. (ii) Guidelines have been issued to State Governments for management of accidents. (iii) A Central Crisis Group has been set up to deal with chemical accidents. (iv) Rules have been framed to regulate hazardous chemicals, micro organisms and genetically engineered organisms. 	<p>An amount of Rs. 15 crores has been provided in the VIII Plan for achieving the following goals :</p> <p>For Implementation and effective management of hazardous substances, certain thrust areas have been identified for VIII Five Year Plan.</p> <p>These include support to State Governments for strengthening hazardous substances management structure, pilot projects for urban solid waste management, incinerators and secured landfills for hazardous wastes, commissioning of some research and training</p>

			programmes and establishment of Emergency Response Centres in 5 States.
		(i) Studies were completed in regard to generation of baseline data. (ii) Procedure of environmental appraisal of projects has been streamlined and a single window clearance from environmental and forestry angle has been devised.	An outlay of Rs. 15.00 crores has been provided in the VIII Plan for the following objectives: (i) Appraisal of 1250 projects in various sectors is to be undertaken. (ii) Strengthening or Impact Assessment agencies at Centre and State levels. (iii) Case studies on completed projects in respect of 13 cases and carrying capacity of selected areas are to be taken up. (iv) Modelling and siltation studies for preparation of effective disaster Management plans will be taken up, (v) Studies on assessment and analysis of water quality in deep reservoirs with a view to develop remedial and control measures for maintenance or quality to be taken up in three climatic region. vi) Training/ Workshops/ Seminars will be organised in industries/mining/ thermal power and river valley sectors.
International Cooperation Rs. 50 lakhs	Rs. 69 lakhs	Contribution of Rs. 52 lakhs was made to various international organisations. Several international seminars, workshops, conferences were organised, A number of bilateral agreements were signed with a number of countries. India participated actively in various international negotiations on environment such as Climate Change Convention, Convention on Biological Diversity and Preparatory Committee meetings for United Nations Conference on Environment and Development.	An outlay of Rs. 2.50 crores has been provided in the VIII Plan for international cooperation in the field of environment particularly on global environmental issues, SAARC cooperation and bilateral agreements. Contribution to various international organisations will also continue.
Ganga Action Plan Rs. 240 crores	Rs. 192.21 crores	Ganga Action Plan works were taken up in the towns of Haridwar, Rishikesh, Farrukhabad, Fatehgarh, Kanpur Urban Area, Allahabad, Mirzapur and Varanasi in UP, Patna, Chapra, Munger-Bhagalpur, Barauni-Makameshin Bihar and Behrampur, Nawabdwip and Calcutta Metropolitan District including Calcutta Municipal Corporation, Howrah Municipal Corporation and 12	An outlay of Rs. 350 crores has been provided for the following objectives in the VIII Plan:-- Ganga Action Plan Phase-II for tributaries of Ganga i.e. Yamuna, Gomti and Damodar alongwith National River Action Plan (NRAP) aimed at taking up pollution abatement work in grossly polluted

		<p>other Class-I towns in West Bengal. During Seventh Plan 261 Schemes were sanctioned in the Sectors of interception and diversion, Sewerage treatment low cost sanitations, electric crematoria, river front facilities such as Shauchalaya and related improvement and other schemes for biological conservation of aquatic species - river quality monitoring, etc. 192 schemes were completed.</p> <p>As regards scientific and technological application under the University research programmes, supported by this Ministry. 49 studies have been carried out in 14 Universities. As a result of these studies physio-chemical and biological profiles of the entire stretch of Ganga have been compiled into a document entitled "Ganga - A scientific study" had Published.</p>	<p>stretches of major rivers would be unertaken. Besides this, pollution abatement schemes on tributaries of the Ganga Schemes in Class II and Class III town on the main streams of the river Ganga and also other schemes designed but not taken up in 25 Class I town cwill also be taken up. In addition, incomplete schemes of Phase I would also be continued.</p> <p>The programme for construction and redevelopment of Ghats, renovation of Kunds/Talabs, improvement of lanes/ bylanes leading to Ghats, traffic regulations of route segements and re-location. of Dhobihats etc; would be continued. Public awareness campaign and participation activities like telecast films over Doordarshan network etc. 'would be continued.</p>
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