

Role of the Ministry

The Ministry of Environment and Forests is primarily concerned with the implementation of policies and programmes relating to conservation of the country's natural resources including lakes and rivers, its biodiversity, forests and wildlife, ensuring the welfare of animals and prevention and abatement of pollution. While implementing these policies and programmes, the Ministry is guided by the principle of sustainable development and enhancement of human well-being. The Ministry also serves as the nodal agency in the country for the United Nations Environment Programme (UNEP), South Asia Co-operative Environment Programme (SACEP), International Centre for Integrated Mountain Development (ICIMOD) and for the follow-up of the United Nations Conference on Environment and Development (UNCED). The Ministry is also entrusted with the issues relating to multilateral bodies such as the Commission on Sustainable Development (CSD), Global Environment Facility (GEF) and of regional bodies like Economic and Social Council for Asia and Pacific (ESCAP) and South Asian Association for Regional Co-operation (SAARC) on matters pertaining to environment.

The broad objectives of the Ministry are:

- ◆ Conservation and survey of flora, fauna, forests and wildlife,
- ◆ Prevention and control of pollution,
- ◆ Afforestation and regeneration of degraded areas,
- ◆ Protection of the environment, and
- ◆ Ensuring the welfare of animals.

These objectives are well supported by a set of legislative and regulatory measures, aimed at the preservation, conservation and protection of the environment. Besides the legislative measures, a National Conservation Strategy and Policy Statement on Environment and Development, 1992, National Forest Policy, 1988, a Policy Statement on Abatement of Pollution, 1992 and a National Environment Policy, 2005 has also been evolved.

The organization structure of the Ministry indicating various Divisions and its autonomous and subordinate offices is given at Annexure- I-A & I-B.

Mandate of the Ministry

Allocation of Business

- ◆ Environment and Ecology, including environment in coastal waters, in mangroves and coral reefs but excluding marine environment on the high seas.
- ◆ Environment research and development, education, training, information and awareness.
- ◆ Environmental Health.
- ◆ Environmental Impact Assessment.
- ◆ Forest Development Agency and Joint Forest Management Programme for conservation, management and afforestation.
- ◆ Survey and Exploration of Natural Resources particularly of Forest, Flora, Fauna, Ecosystems etc.
- ◆ Bio-diversity Conservation including that of lakes and wetlands.
- ◆ Conservation, development, management and abatement of pollution of rivers which shall include National River Conservation Directorate.
- ◆ Wildlife conservation, preservation, protection planning, research, education, training and awareness including Project Tiger and Project Elephant.
- ◆ International co-operation on issues concerning Environment, Forestry and Wildlife.
- ◆ Botanical Survey of India and Botanical Gardens.
- ◆ Zoological Survey of India.
- ◆ National Museum of Natural History.
- ◆ Biosphere Reserve Programme.
- ◆ National Forest Policy and Forestry Development in the country including Social Forestry.
- ◆ All matters relating to Forest and Forest Administration in the Andaman and Nicobar Islands.
- ◆ Indian Forest Service.
- ◆ Wild Life Preservation and protection of wild birds and animals.
- ◆ Fundamental and applied research and training including higher education in forestry.
- ◆ Padmaja Naidu Himalayan Zoological park.
- ◆ National Assistance to Forestry Development Schemes.

Ministry of Environment & Forests

- ◆ Indian Plywood Industries Research and Training Institute, Bangalore.
- ◆ Afforestation and Eco-development which shall include National Afforestation and Eco-Development Board.
- ◆ Desert and Desertification.
- ◆ Forest Survey of India.
- ◆ Indian Institute of Bio-diversity, Itanagar.
- ◆ Central Pollution Control Board.
- ◆ G.B. Pant Institute of Himalayan Environment & Development.
- ◆ Wildlife Institute of India and Indian Board for Wildlife.
- ◆ Indian Institute of Forest Management.
- ◆ Central Zoo Authority including National Zoological Park.
- ◆ Indian Council of Forestry Research & Education.
- ◆ Andaman and Nicobar Islands Forest and Plantation Development Corporation Limited.
- ◆ Prevention of Cruelty to Animals.
- ◆ Matters relating to pounds and cattle trespass.
- ◆ Gaushalas and Gausadans.
- ◆ The Prevention of Cruelty to Animals Act, 1960 (59 of 1960).
- ◆ The National Environment Tribunal Act, 1995 (27 of 1995).
- ◆ The National Environment Appellate Authority Act, 1997 (22 of 1997).
- ◆ The Water Prevention and Control of Pollution Act, 1974 (6 of 1974).
- ◆ The Water (Prevention and Control of Pollution) Cess Act, 1977 (36 of 1977).
- ◆ The Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981).
- ◆ The Indian Forest Act, 1927 (16 of 1927).
- ◆ The Wildlife (Protection) Act, 1972 (53 of 1972).
- ◆ The Forest (Conservation) Act, 1980 (69 of 1980).
- ◆ The Environment (Protection), Act, 1986 (29 of 1986).
- ◆ The Public Liability Insurance Act, 1991 (6 of 1991).



**Progress/Achievements
during 2005-06**

Progress/Achievements under various programmes made during the year

Natural Resources – Survey and Exploration:

Survey of Flora:

Botanical Survey of India

Exploration of the plant resources of the country and to identify the plant species with economic virtues is carried out by the Botanical Survey of India (BSI), an attached office of this Ministry. The activities of BSI are coordinated by Conservation and Survey Division in the Ministry. The BSI with its headquarter in Kolkata and 16 other circles throughout the country, was established on 13th February 1890.

Progress/Achievements made during the year by BSI:

- ◆ Forty four field/explorations/collection tours were undertaken by different Circle Offices and Units of BSI covering various parts of the country including national parks, sanctuaries and wetlands.
- ◆ Twelve herbarium consultation tours/study tours were also undertaken in connection with the revisionary and floristic studies under National/State/Regional flora.
- ◆ Four thousand five hundred specimens were collected including lower groups of plants, namely, Algae, Fungi, Lichens, Bryophytes and Pteridophytes during the field exploration and surveys.
- ◆ About 3500 specimens belonging to 385 species were identified by different circles/units of BSI.
- ◆ Taxonomic studies of 125 aromatic plants and cosmetic yielding plants were completed.
- ◆ New species/variety belonging to different genera were discovered and new records for India and for States were also identified.
- ◆ A rare, endangered and threatened Pteridophytic species of Peranemataceae family from Uttaranchal, Apocynaceae family from Maharashtra and Ericaceae family from Sikkim were collected after 93 years from Uttaranchal, 50 years from Maharashtra and 30 years from Sikkim respectively.
- ◆ The Deccan Circle of BSI was opened in Hyderabad on 15th December 2005.

Survey of Fauna:

Zoological Survey of India

The Zoological Survey of India (ZSI), an attached office of this Ministry undertakes survey, exploration and research of the rich faunal diversity of the country. The activities of ZSI are coordinated by the Conservation and Survey Division in the Ministry. The ZSI was



Fig 1. *Pecteilis gigantea* – a beautiful ground orchid in deciduous forests



Fig 2. (*Trachypithecus Geei*) Golden Langur – an endangered species

established in 1916 with its Headquarter in Kolkata and 16 Regional Stations located in different parts of the country.

Progress/Achievements made during the year by ZSI:

- ◆ One hundred and one extensive faunal surveys were undertaken to different States/UTs of the country including important ecosystems and some selected conservation/protected areas.
- ◆ Two status surveys; one for Tibetan Wild Ass and another for Himalayan Marmot of Ladakh were carried out.
- ◆ The National zoological collection was further enriched by the addition of 11,294 identified specimens belonging to 592 species.
- ◆ During the year, various taxa belonging to Pteromalidae family, Eurytomidae family and Daphniidae family were discovered as new cuisines.
- ◆ Several fauna of desert ecosystems, himalayan ecosystems, freshwater/wetland ecosystems and coastal/marine ecosystems were studied and determined.
- ◆ As a result of studies conducted on the seasonal variation and faunal composition of Pulikat Lake in South-Eastern Coast, a total of 22 species belonging to seven groups of Zooplanktons, 15 species of Mollusca and six species of pisces were determined.
- ◆ Some special publications of State Fauna series, Fauna of Conservation Area and Wetland Ecosystem series were published during the year.

Forest Resources and Survey

Forest Survey of India

Forest Survey of India (FSI), set up in June 1, 1981 and an attached office of this Ministry, is engaged in generating information and database on forest cover and forest resources in the country besides providing services of training, research and extension. The headquarter of FSI is at Dehra dun. The activities of the FSI are coordinated by Survey and Utilization Division of the Ministry.

Progress/Achievements made during the year

- ◆ The State of Forest Report (SFR), 9th in the series, was published on 19th July, 2005. As per SFR, the forest cover in the country has been assessed as 678,333 Km², which constitutes 20.64% of the country's geographical area.

Table-1. Comparison of Forest Cover from 1987 to 2003

State/UT	1987	1989	1991	1993	1995	1997	1999	2001	2003
	Forest cover	Forest cover	Forest cover	Forest cover	Forest cover	Forest cover	Forest cover	Forest cover	Forest cover
Andhra Pradesh	49,573	47,290	47,290	47,256	47,112	43,290	44,229	44,637	44,419
Arunachal Pradesh	64,132	69,002	68,757	68,661	68,621	68,602	68,847	68,045	68,019
Assam	25,160	24,832	24,751	24,508	24,061	23,824	23,688	27,714	27,826
Bihar	28,482	26,668	36,668	26,587	26,561	4,832	4,830	5,720	5,558
Jharkhand	-	-	-	-	-	21,692	21,644	22,637	22,716
Delhi	15	22	22	22	26	26	88	111	170
Goa	1,240	1,255	1,255	1,250	1,250	1,252	1,251	2,095	2,156
Gujarat	11,991	11,921	11,907	12,044	12,320	12,578	12,965	15,152	14,946
Haryana	513	513	513	513	603	604	964	1,754	1,517
Himachal Pradesh	12,480	12,480	12,480	12,502	12,501	12,521	13,082	14,360	14,353
Jammu & Kashmir	20,905	20,449	20,449	20,443	20,433	20,440	20,441	21,237	21,267
Karnataka	32,268	32,104	32,199	32,343	32,382	32,403	32,467	36,991	36,449
Kerala	10,292	10,292	10,292	10,336	10,336	10,334	10,323	15,560	15,577
Madhya Pradesh	130,099	135,541	135,541	135,396	135,164	74,760	75,137	77,265	76,429
Chhattisgarh	-	-	-	-	-	56,435	56,693	56,448	55,998
Maharashtra	45,616	44,044	44,044	43,859	43,843	46,143	46,672	47,482	46,865
Manipur	17,475	17,685	17,685	17,621	17,558	17,418	17,384	16,926	17,219
Meghalaya	16,466	15,645	15,875	15,769	15,714	15,657	15,633	15,584	16,839
Mizoram	19,084	18,170	18,853	18,697	18,576	18,775	18,338	17,494	18,430

Nagaland	14,394	14,399	14,321	14,348	14,291	14,221	14,164	13,345	13,609
Orissa	53,253	47,227	47,205	47,145	47,107	46,941	47,033	48,838	48,366
Punjab	943	1,338	1,343	1,343	1,342	1,387	1,412	2,432	1,580
Rajasthan	12,758	12,884	12,889	13,099	13,280	13,353	13,871	16,367	15,826
Sikkam	2,756	3,041	3,041	3,119	3,127	3,129	3,118	3,193	3,262
Tamil Nadu	17,472	16,992	16,992	17,005	17,045	17,064	17,078	21,482	22,643
Tripura	5,953	5,535	5,535	5,538	5,538	5,546	5,745	7,065	8,093
Uttar Pradesh	31,226	33,627	33,609	33,961	33,986	10,751	10,756	13,746	14,118
Urratanchal	-	-	-	-	-	23,243	23,260	23,938	24,465
West Bengal	8,432	8,015	8,015	8,186	8,276	8,349	8,362	10,693	12,343
Andaman & Nicobar Islands	7,601	7,622	7,622	7,624	7,615	7,613	7,606	6,930	6,964
Chandigarh	2	5	5	5	7	7	7	9	15
Dadar & Nagar Haveli	238	206	206	206	204	204	202	219	225
Daman & Diu	0	0	0	0	0	0	0	6	8.34
Lakshadweep	0	0	0	0	0	0	0	27	23
Pondicherry	0	0	0	0	0	0	0	36	40
Grand Total	648,819	638,804	639,364	639,368	638,879	633,397	637,293	675,538	678,333
Percent (%)	19.49	19.43	19.45	19.45	19.43	19.27	19.39	20.55	20.64

◆ The State-wise comparison of forest cover of the country from 1987 to 2003 is given in Table-1.

◆ Special significance in the SFR 2003 are:

◇ Introduction of an additional class of forest cover by splitting the dense forest cover (canopy density above 40%) into two classes, namely, very dense forest (canopy density more than 70%) and moderately dense forest (canopy density between 40-70%) while the open forest cover having a density of 10-40% remain the same. The same criterion has been applied in the case of mangroves also.

◇ Another newly incorporated feature is the chapter on Growing Stock of wood, which provides the information on volumes of wood in forest and non-forest areas.

◇ The extent of water bodies within the forest cover have also been assessed.

◆ The Ministry has constituted an expert/advisory/working group on 26th May, 2005 to plan, guide and support implementation of an integrated National Forestry Database Management System (NFDMS) in a comprehensive manner including strengthening of the technological, institutional and human capabilities to ensure continuing and effective dissemination and use of forest statistics.

◆ A National working group/governing body has been constituted by the Ministry to frame the policy guidelines on “forest certification” as well as non-timber forest products. The sub-committees constituted under the working group will prepare the road map and the necessary criteria and processes for national certification of forests, timber and non-timber forest products in the country at par with the international standards

◆ The Ministry has constituted a Core Group to study the applied rates and the import duties for import of commodities including forestry products as well as in the multilateral / bilateral trade negotiations in respect of Preferential Trade Agreement, Free Trade Agreement, etc., under WTO negotiations. The first meeting of the Core Group was held on 6th September, 2005 and discussed the issues related to the applied rates and import duties. The International Tropical Timber Agreement (ITTA) has been finalized with various new inputs in January, 2006.

Conservation

Conservation of Biosphere Reserves

The aim for conservation of Biosphere Reserve is to facilitate conservation of representative landscapes and their immense biological diversity and cultural heritage, foster economic and human development which is culturally and ecologically sustainable and to provide support for research, monitoring education and information exchange. The activities of the programme is coordinated by Conservation and Survey Division in the Ministry.

Progress/Achievements made during the year

◆ Four Biosphere Reserves namely Sunderbans (West Bengal), Gulf of Mannar (Tamil Nadu), Nilgiri (Tamil Nadu, Kerala and Karnataka) and Nanda Devi (Uttaranchal) have been included in the World Network of Biosphere Reserves so far. Efforts are being made for getting remaining Biosphere Reserves included in the World Network of Biosphere Reserves.

◆ During the year five research projects were completed which provided baseline data helpful in the scientific management of these Reserves. Six new research projects were also initiated during the year.

◆ The stake holders consultations was held and required proposal received in re-

spect of Biosphere Reserve of Gulf of Kutchch (Gujarat). The notification is being issued after finalization of guidelines for regulatory regime.

- ◆ A series of regional workshops for review of progress and for identification of new sites continued to be held during the year. While works done by state of Madhya Pradesh, Chattisgarh, Orissa, and West Bengal was reviewed in the regional workshop held in Raipur, the performance of all Southern states was reviewed in the workshop held at Thiruvananthapuram following which the area of Agasthiyamalai Biosphere Reserve was expanded to include Tamil Nadu portion of the Agasthiyamalai hills.
- ◆ A workshop to assess work done by Biosphere reserves located in North East Region was held from 19-22 November, 2005 at Gangtok. A number of new potential sites were identified in Mizoram and Arunachal Pradesh. Nagaland, also assured to identify suitable sites for Biosphere reserve.

Conservation of Mangroves

The Ministry launched this conservation and manage programme in the country in the areas identified on the recommendation of National Committee on Mangroves and Coral Reefs on the basis of their unique ecosystems, biodiversity, etc. Cent percent central assistance is given under Management Action Plans (MAPs) for undertaking activities like raising mangrove plantations, protection, catchments area treatment, siltation control, pollution abatement, biodiversity conservation, sustainable resource utilization, survey & demarcation, education & awareness etc. The activities of this scheme are coordinated by the Conservation and Survey Division in the Ministry.

Progress/Achievements made during the year

- ◆ During the year six states viz. West Bengal, Orissa, Tamil Nadu, Karnataka, Goa, Gujarat have been financially assisted by the Ministry for intensive conservation and management of Mangroves. The draft guidelines of mangroves were discussed para-wise in detail. There was a broad consensus on the draft exhaustive guidelines which are being further refined and are under finalization.
- ◆ A National Management Genetic Resources Centre has been established by the Ministry in Orissa. Sunderbans (West Bengal) has been included in the World list of Biosphere Reserves by UNESCO.



Fig 3. The coral species (*Acropora intermedia*) requires conservation

Conservation of Coral Reefs

As per the recommendation of the National Committee on Mangroves and Coral Reefs, intensive conservation and management of corals in the four areas, namely, Andaman & Nicobar Islands, Lakshadweep Islands, Gulf of Kutch and gulf of Mannar, has been undertaken since 1987 by the Ministry. The various activities under the programme are coordinated by Conser-

vation and Survey Division in the Ministry.

Progress/Achievements made during the year

- ◆ Management Action Plans are under implementation in all the four areas through financial assistance extended by the Ministry to the respective States/UTs.
- ◆ In order to focus attention on various facets of Coral Reefs of India, the Ministry has constituted a working group with eminent scientists on its membership. The first meeting of the working group was held on 13th October, 2005 in the Ministry. The working group deliberated on various aspects of coral reef conservation and management in the country and made several recommendations.
- ◆ The National Coral Reef Research Centre at Port Blair was provided financial assistance for strengthening infrastructure of the Centre. The Centre is continuing its activities of bio-physical monitoring related to health of coral reefs.

All India Coordinated Project on Capacity Building in Taxonomy (AICOPTAX)

This project has been set up by the Ministry towards the implementation of commitment of capacity building in taxonomy as a signatory to the conventional biological diversity. The activities under the project are coordinated by Conservation and Survey Division of the Ministry.

Progress/Achievements made during the year:

- ◆ The project has been continued in 79 units during the year and financial assistance was provided to various units for undertaking taxonomic research work.
- ◆ The entire AICOPTAX scheme was reviewed through a review workshop organized on 19-20th May 2005 at Coimbatore and the Steering Committee reviewed the progress made under each and every project taken up earlier under the scheme.

Assistance to Botanic Gardens:

The scheme has been introduced in 1992 to augment *ex-situ* conservation of rare endemic plants. The activities under the Scheme are coordinated by the Conservation and Survey Division under the Ministry.

Progress/Achievements made during the year:

- ◆ During the year, 28 Botanical Gardens have been approved for funding taking the total number of Gardens to the level of 245.
- ◆ The guidelines for the scheme were comprehensively revised based on the perception of these gardens being centres of awareness creation, and not just research activities.

Conservation of Medicinal Plants:

This programme has been taken up and coordinated by the Conservation and Survey Division in the Ministry to undertake several activities and to provide assistance to organizations engaged in conservation of medicinal plants.

Progress/Achievements made during the year:

- ◆ A UNDP-CCF-II project is targeted to be implemented in nine states viz., Kerala, Tamil Nadu, Karnataka, Andhra Pradesh, Orissa, West Bengal, Rajasthan, Maharashtra, Madhya Pradesh, with the following objectives:
 - ◆ To assist nine project states to conserve wild population of medicinal plants.
 - ◆ To revitalize the indigenous health care knowledge.

- ◆ To enhance the health & livelihood security.
- ◆ Three projects are being implemented in the states of Gujarat, Rajasthan and Jammu and Kashmir in cooperation with State Forest Department/NGO. These projects are aimed towards documentation and conservation of medicinal plants.

Bio-Diversity Conservation:

A scheme on biodiversity conservation has been initiated by the Ministry to ensure coordination among various agencies dealing with the issues related to conservation of biodiversity and to review, monitor and evolve adequate policy instruments for the same. 17 countries have formed the group of Like Minded Mega-diverse Countries (LMMC) and this group holds nearly 70% of global biodiversity as well as is a duly recognized negotiating block in the United Nations and other international fora. India was invited to take over presidency of the LLMC on 19th February 2004 for a period of two years. The activities under the programme are coordinated by Conservation and Survey Division of the Ministry.

Progress/Achievements made during the year:

- ◆ The eighth meeting of Conference of the Parties (CoP) to the CBD is scheduled to be held in Curitiba, Brazil from March 20–31, 2006. In preparation of CoP-8, during the year, India has participated actively in the meetings organized under the aegis of the CBD.
- ◆ During the year, India has prepared the Third National Report to the Convention on Biological Diversity, following extensive consultations with the members of the Consultative Group on Biodiversity issues, other experts, concerned Ministries and other organizations.
- ◆ A National Workshop for preparation of the Third National Report was also organized in Gurgaon on May 20-21, 2005. This Report after obtaining necessary approvals will be submitted to the CBD Secretariat.
- ◆ India in its capacity as the Chair of the LMMCs, had organized an Expert and Ministerial level meeting of the LMMCs in New Delhi from 17-21 January 2005, under the patronage of the Hon'ble Minister of Environment & Forests as President of LMMC. The report of the LMMC meeting held in New Delhi was printed and released by the Minister of State for Environment & Forests, on the occasion of the World Environment Day on 5th June 2005.
- ◆ Report of meeting of LMMCs organized in New Delhi in January 2005 by India as President of LMMCs was printed and released.
- ◆ India is coordinating with the LMMCs for working out a common position for the negotiations for developing an international regime on access and benefit sharing of biological diversity.
- ◆ In order to facilitate implementation of the Biological Diversity Act, 2002 a National Biodiversity Authority has been set up at Chennai and Biological Diversity Rules have been notified. The Authority has held two meetings during the year and taken a number of decisions including setting up of expert committees to frame guidelines on various aspects of Access and Benefit sharing as related to Genetic Resources and Associated Knowledge.
- ◆ During the year Recruitment Regulations and format for Annual Report and Audit of the National Biodiversity Authority were finalized.

The Cartagena Protocol on Biosafety

The Cartagena Protocol on Biosafety, the first international regulatory framework for safe transfer, handling and use of Living Modified Organisms (LMOs) was

negotiated under the aegis of the Convention on Biological Diversity. The Protocol seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern bio-technology. India has signed the Biosafety Protocol on 23rd January 2001 and acceded to the Protocol on 17th January 2003. One hundred thirty one countries have ratified the protocol so far. The activities of the Protocol are coordinated by Conservation and Survey Division in the Ministry.

Progress/Achievements made during the year

- ◆ Pursuant to decision BS-I/13 of COP-MOP-I, the second meeting of the Conference of Parties serving as the meeting of the Parties to the Cartagena Protocol (COP-MOP-2) was held in Montreal, Canada from 30th May to 3rd June 2005 at the premises of the International Civil Aviation Organization (ICAO).
- ◆ The meeting was held back to back with the first meeting of the Ad Hoc Open Ended Working Group on Liability and Redress under the Protocol, which was held at the same venue from 25th - 27th May, 2005.

Genetic Engineering Approval Committee (GEAC)

A task force has been constituted by the Ministry on Recombinant Pharma Sector for streamlining the procedure for recombinant pharma industry. The recommendations of the task force were adopted in the inter-ministerial meeting held in January 2006. The activities of GEAC are coordinated by the Conservation and Survey Division in the Ministry.

Progress/Achievements made during the year

- ◆ During Kharif 2005, the GEAC has approved environmental release of 20 Bt Cotton hybrids for commercial cultivation.
- ◆ The GEAC has also approved large-scale trials of a number of Bt cotton varieties containing cry 1 Ac gene MON 531 developed by various companies. Bt cotton hybrids containing new genes for large-scale trials has also been approved by GEAC.

National Biodiversity Strategy and Action Plan (NBSAP)

Under NBSAP, a planning document relating to ecological security and livelihood depending on natural resources has to be prepared. The activities are coordinated by the Conservation and Survey Division in the Ministry.

Progress/Achievements made during the year

- ◆ A draft National Action Plan (NAP) has been prepared taking inputs from various sources for conservation of biodiversity and its sustainable use.
- ◆ The draft is being considered by the Ministry.

Conservation of Forests

Forest Conservation

The mandate of the Forest Conservation Division is to implement the Forest (Conservation) Act, 1980, which was enacted on 25th



Fig 4. Bt. Cotton (*Bacillus thuringiensis*) approved by GEAC for commercial cultivation in three zones in the country.

October, 1980. This Act deals with grant of forestry clearances for diversion of forest lands for non-forestry purposes in respect of development projects like power, roads, railways, irrigation, mining, schools, defence, drinking water, resettlement & rehabilitation of people etc. This Act is regulatory in nature, not prohibitory.

Progress/Achievements made during the year:

- ◆ 1070 developmental projects of various categories involving 85643.87 hectares of forest land, have been granted forestry clearance under the Forest (Conservation) Act, 1980 during the year (upto 31st December, 2005).
- ◆ Further, to boost the development of underdeveloped area, one time clearance has been granted on 3rd January, 2005 under Forest (Conservation) Act, 1980 for public utility developmental projects involving not more than one hectare of forest land, to be executed by Government Departments.
- ◆ In tribal areas, general approval under Section-2 for the Forest (Conservation) Act, 1980 has been accorded for underground laying of electric cable and wires to individual household, drinking water supply/water pipelines, telephone lines which involve felling of trees not exceeding 50 numbers per project and are outside the National Parks and Sanctuaries and are laid along the road and validity of the general approval has been extended up to 15th October, 2007.
- ◆ To provide better means of communication and accessibility to the nearest market to tribal and rural people, it has been conveyed to the State/Union Territory (UT) Governments through a set of detailed guidelines issued under this Act, that for up-gradation of roads constructed in forest areas prior to 1980, from 'Kutchcha to Pucca', without widening, prior permission of Central Government under Forest (Conservation) Act, 1980 is not required. However, if any such projects fall in a National Park/Sanctuary, prior permission of National Board of Wildlife (NBWL) and the Supreme Court is essential.
- ◆ The procedure for forestry clearance has been simplified by Forest (Conservation) Rules, 2003. Under the rules, Government has fixed time limit of 60 days to take decision on a proposal seeking forestry clearance.
- ◆ Regional Chief Conservators of Forests of the six regional offices of the Ministry located at Bangalore, Bhopal, Bhubaneswar, Lucknow, Shillong and Chandigarh are empowered to decide cases for diversion of forest land for non-forestry purposes upto an extent of 40 ha. except for mining and regularization of encroachment. The achievements and targets made by the Regional Offices are given in Table-2.

Forest Policy

The Forest Policy Division provides policy support in respect of forestry matters, and reviews the forest policy and its relations to policies of other relevant sectors. Various legal issues viz. the state/central bills related with the forestry matters that required the assent of the the President of India are examined by the Division.

Progress/Achievements made during the year

- ◆ The Ministry has provided comments/concurrence on the Indian Forest (Punjab) Amendment Act, 2004.
- ◆ The Ministry has prepared model States/UT Minor Forest Produce (Ownership of Forest Dependent Community) Legislation in consultation with the States/UT for all those people from the weaker sections who work in forests.
- ◆ The terms of the National Forest Commission constituted by the Ministry to review the working of forest and wildlife sector has been extended upto 31st March 2006.

Integrated Forest Protection Scheme

Integrated Forest Protection Scheme (IFPS) has been formulated by the merger of two schemes of the 9th Five Year Plan namely 'Forest Fire Control and Management' and 'Bridging up of Infrastructural Gaps in the Forestry Sector in the North Eastern Region and Sikkim'. It is operational from 2002-03. The scheme covers all the States and UT's for the 10th Five Year Plan period. The central sector component of the Scheme is implemented by the Forest Protection Division in the Ministry in association with other organizations.

Progress/Achievements made during the year

- ◆ The Central Assistance is provided for various activities which will help to protect and improve the existing forest. The major items include communication, mobility, fire fighting measures,

Table-2. Statement showing Region wise physical/financial targets and achievement for monitoring of approved project under FC (A) 1980 and EPA 1986 for the year 2005-06 (upto 31.12.2005)

(Rs. in crores)
Phy. in No.

	Physical Targets				Financial Target			
	FCA		EPA		Revenue		Capital	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
2005-06	735	100%	500	100%	4.60	100%	1.18	100%

Physical Targets Region-Wise

S.No.	Regional Offices	FCA	Achievement	EPA	Achievement
1	Bangalore	151	100%	151	100%
2	Bhopal	88	100%	100	100%
3	Bhubaneswar	152	100%	80	100%
4	Chandigarh	92	100%	67	100%
5	Lucknow	160	100%	112	100%
6	Shillong	88	100%	60	100%
Total		735	100%	570	100%

construction of offices and residences particularly of the front line staff, technology upgradation and skill development, survey and demarcation and writing of working plans, assistance to JFMC's etc.

Wildlife Conservation

Several activities through different programmes are coordinated by the Wildlife Division in the Ministry.

Progress/Achievements made during the year:

- ◆ The 2nd meeting of the National Board for Wildlife (NBWL) was held on 17th March 2005 at New Delhi, under the Chairmanship of Hon'ble Prime Minister. The important decisions taken during the meeting included setting up of a Tiger Task

Force; Setting up of a Task Force for Trans-boundary Protected Areas, Setting up of Committees for revision of floral and faunal species included in the Schedules of the Wildlife (Protection) Act, 1972; ban on gifting of wild animals by Heads of State; conservation of vultures in the country by phasing out the use of veterinary drug 'diclofenac' and setting up of a National Wildlife Crime Control Bureau.

- ◆ Financial and technical assistance was provided to 316 Protected Areas of the country under the Centrally Sponsored Scheme "Development of National Parks and Sanctuaries". A scheme for "Protection of Wildlife Outside Protected Areas" has been given in principal approval by the Planning Commission and will be implemented from 2006-07.
- ◆ The meeting of National Board for Wildlife held during March, 2005 under the Chairmanship of Hon'ble Prime Minister of India also recommended banning of the veterinary drug "diclofenac". An International Workshop on Vulture Conservation was organized for strengthening conservation efforts on a regional level for curbing this decline.
- ◆ The Ministry hosted an international conference at New Delhi from 10th to 13th June 2005, to discuss the draft Action Plan for the migratory birds of Central Asian Flyway and conservation of Siberian Cranes. The meeting was convened under the Convention on Conservation of Migratory Species (CMS). All range countries of the Central Asian Flyway and renowned International conservation agencies participated in the meeting.
- ◆ During the 29th Session of the World Heritage Committee held at Durban, inclusion of 'Valley of Flowers' National Park, Uttaranchal, to the list of World Heritage Sites was unanimously approved, as an extension to the Nanda Devi National Park, Uttaranchal.

Animal Welfare

The Animal Welfare Division in the Ministry is entrusted with implementation of the provisions of The Prevention of Cruelty to Animals Act, 1960 (59 of 1960). The Mandate of Animal Welfare Division is to prevent the infliction of unnecessary pain or suffering on animals. To accomplish this mission three-pronged approach is being adopted by the Division.

Progress/Achievements made during the year

- ◆ Thirty one shelter houses have been constructed during the year under Scheme for shelter house for looking after the animals.
- ◆ During the year, 66,000 dogs have been sterilized and immunized under Animal Birth Control and immunization of stray dogs scheme.
- ◆ Under educational programmes, two zonal training workshops for the Committee for the Purpose of supervision and Control of Experiments on Animals (CPSCEA) were organized in Chennai and Mumbai in the month of February and October 2005 respectively.
- ◆ A proposal to establish National Institute of Animal Welfare (NIAW) in village Sikri, District Faridabad, Haryana with the objective of imparting education and training in animal welfare on diversified basis comprising animal management, their behaviour and ethics has been mooted during the year.
- ◆ In recognition of the meritorious work of the Board in the last one year in the direction of mitigating animal sufferings, the National magazine "Public Sector Today" conferred the Rajiv Gandhi National Golden Award 2005 to the Animal Welfare Board of India.

Project Tiger

Project Tiger was launched in 1973 with an objective “to ensure maintenance of a viable population of Tigers in India for scientific, economic, aesthetic, cultural and ecological values, and to preserve for all times, areas of biological importance as a national heritage for the benefit, education and enjoyment of the people”. The Project has been successfully implemented, and at present there are 28 Tiger Reserves in 17 states, covering an area of 37,761 sq. km. as shown in Table-3. The selection of reserves was guided by the need to conserve unique ecosystem/habitat types across the geographic distribution of tigers in the country. All the activities under the project are coordinated by Project Tiger Division in the Ministry.

Progress/Achievements made during the year

- ◆ Protection, conservation and management of Tiger reserves in Tiger range states were undertaken.
- ◆ Primary data collection pertaining to all India Estimation of Tiger, co-predator and prey animals was carried out using the enhanced methodology standardized by the Project Tiger Directorate in collaboration with the Wildlife Institute of India (WII). Both internal as well external peers were involved in the process.
- ◆ The Tiger Reserves were monitored by a panel of experts using 45 criteria based on the format of World Commission on Protected Areas (IUCN), which was peer reviewed by the IUCN.

Project Elephant

Project Elephant was launched in February, 1992 to assist States having free ranging populations of wild elephants to ensure long term survival of identified viable populations of elephants in their natural habitats. The Project is being implemented in 13 States, viz Andhra Pradesh, Arunachal Pradesh, Assam, Jharkhand, Karnataka, Kerala, Meghalaya, Nagaland, Orissa, Tamil Nadu, Uttaranchal, Uttar Pradesh and West Bengal. States are being given financial as well as technical assistance in achieving the objectives of the Project. The activities under this project are coordinated by Project Elephant Division in the Ministry.

Progress/Achievements made during the year

- ◆ Financial assistance was provided to the elephant range states including NE States for the purpose of habitat management, mitigation of man-elephant conflict, payment of ex-gratia relief for loss of life human and crop caused by wild elephants, strengthening of anti-poaching measures, capacity building of the field staff, registration of domesticated elephants using microchips etc.
- ◆ Twenty five elephant reserves were notified by various state Governments till 2005.
- ◆ Enumeration of elephants in all elephant reserves were done with two sampling methods viz. “Block and line Transact” and “Dung Count”.
- ◆ Arrangements for refresher courses for elephant veterinarians were made with the help of Kerala Agricultural University (Trichur).



Fig 5. Elephant herd in Kaziranga National Park

Table-3. Tiger Reserves

Sl. No.	Year of creation	Name of Tiger Reserve	State	Total area (in Sq. Kms.)
1	1973-74	Bandipur	Karnataka	866
	1999-2000	Nagarhole-(extension)		643
2	1973-74	Corbett	Uttar Pradesh	1316
3	1973-74	Kanha	Madhya Pradesh	1945
4	1973-74	Manas	Assam	2840
5	1973-74	Melghat	Maharashtra	1677
6	1973-74	Palamau	Bihar	1026
7	1973-74	Ranthambore	Rajasthan	1334
8	1973-74	Similipal	Orissa	2750
9	1973-74	Sunderbans	West Bengal	2585
10	1978-79	Periyar	Kerala	777
11	1978-79	Sariska	Rajasthan	866
12	1982-83	Buxa	West Bengal	759
13	1982-83	Indravati	Madhya Pradesh	2799
14	1982-83	Nagarjunsagar	Andhra Pradesh	3568
15	1982-83	Namdapha	Arunachal Pradesh	1985
16	1987-88	Dudhwa	Uttar Pradesh	811
	1999-2000	Katerniaghat-(extension)		551
17	1988-89	Kalakad-Mundanthurai	Tamil Nadu	800
18	1989-90	Valmiki	Bihar	840
19	1992-93	Pench	Madhya Pradesh	758
20	1993-94	Tadoba-Andheri	Maharashtra	620
21	1993-94	Bandhavgarh	Madhya Pradesh	1162
22	1994-95	Panna	Madhya Pradesh	542
23	1994-95	Dampha	Mizoram	500
24	1998-99	Bhadra	Karnataka	492
25	1998-99	Pench	Maharashtra	257
26	1999-2000	Pakui	Arunachal Pradesh	862
28	1999-2000	Nameri	Assam	344
28	1999-2000	Bori, Satpura, Panchmari	Madhya Pradesh	1486
Total				37761

- ◆ Training programme for mahouts were organized in Assam and Kerala.
- ◆ List of Elephant Reserves with area and elephant population is given in Table-4.
- ◆ A Wildlife Crime Cell was set up under the Project Elephant Division to prepare a database on wildlife offences and strengthen informer network in some sensitive areas in the country. A training programme for the frontline staff of the State Forest Departments in criminal investigation techniques was organized with the help of National Institute of Criminology & Forensic Sciences in New Delhi in January, 2005.

Central Zoo Authority

The Central Zoo Authority (CZA) was created by the Government through an amendment of Wildlife (Protection) Act in 1992 to enforce minimum standards and norms for upkeep and healthcare of animals in Indian Zoos and to restrain mushrooming of unplanned and ill conceived zoos that were cropping up as adjuncts to public parks, industrial complexes and wayside.

Progress/Achievements made during the year

- ◆ In order to decide standards and norms for recognition of zoos and monitoring and evaluating their performance, the Zoos have been classified into four categories, namely, Large, Medium, Small and Mini on the basis of number of animals, species, endangered species and number of animals of endangered species exhibited.
- ◆ Out of 418 applications received by the Central Zoo Authority, only 342 qualified as Zoos. Among these 342 zoos, 159 has been recognized.
- ◆ More than 400 Lions and Tigers in addition to many Leopards, Bears and Monkeys from the Circuses have already been rehabilitated in the Rescue Centres. Around 100 more Lions and Tigers are in the process of rehabilitation.
- ◆ The CZA took initiative and coordinated with the CITES Authorities in India and South-East Asia in rescue operation of around 2,000 Star tortoises, which were smuggled out the country. These Tortoises were initially rehabilitated in the Nehru Zoological Park, Hyderabad. Strategy for their final rehabilitation in the wild has also been drawn up as per the IUCN protocol.
- ◆ A study on disease diagnosis and cure of wild animals in Indian Zoo has been negotiated to be awarded to the Indian Veterinary Research Institute, Bareilly.
- ◆ In order to infuse new technology in the field of assisted reproduction and molecular characterization of endangered species, a Laboratory (Laboratory for Conservation of Endangered Species – LaCONES) has been established at Hyderabad in collaboration with various organizations.
- ◆ During the year, three large zoos, two medium zoos, two small, 97 mini zoos/ rescue centres and one circus were evaluated. Recognition has been granted to 16 mini zoos/ rescue centres. Recognition has been suspended in case of two medium zoos, one small zoo and nine mini zoos.
- ◆ Rs.11.37 crore has been released to various zoos in the country for improvement of housing, veterinary and upkeep facilities for the wild animals.
- ◆ Some new species for their conservation breeding in Indian Zoos like Wild Dog, Mouse deer, Hoolock Gibbon, Snow Leopard etc. have been identified.
- ◆ During the year, 50 lions and tigers from the circuses were rehabilitated in the Rescue Centres being supported by the Central Zoo Authority.

Table-4. List of Elephant Reserves

Sl. No.	Elephant Range	Elephant Reserve	State	Total Area (Sq. Km)	P.A. (Sq. Km)	Elephant Population
I	Eastern India (South West Bengal- Jharkhand-Orissa)	1. Mayurbhanj ER (24.10.02)	W. Bengal	414	-	56
		2. Singhbhum ER (26.0.01)	Jharkhand	4530	193	300
		3. Mayurbhanj ER (29.9.01)	Orissa	3214	1309	512
		4. Mahanadi ER (20.7.02)	Orissa	1038	964	204
		5. Sambalpur ER (27.3.02)	Orissa	427	427	284
		6. Baitarni ER#	Orissa	1755	-	145
		7. South Orissa ER^	Orissa	4216	750	185
	Total			15594	3643	1650+
II	North Brahmaputra (Arunachal – Assam)	8. Kameng ER (19.6.02)	Arunachal	1892	748	377
		9. Sonitpur ER (6.3.03)	Assam	1420	420	577
	Total			3312	1168	954
III	South Brahmaputra (Assam – Arunachal)	10. Dihing-Patkai ER (17.4.03)	Assam	937	345	457
		11. Deomali (South Arunachal) ER^	Arunachal	900+		150+
		Total			1,837+	345
IV	Kaziranga (Assam – Nagaland)	12. Kaziranga – Karbi Anglong ER (17.4.03)	Assam	3270	1073	1000
		13. Dhansiri-Lungding ER (19.4.03)	Assam	2740		430
		14. Intanki ER (28.2.05)	Nagaland	202	202	28
		Total			6212	1275
V	Eastern Dooars (Assam – W. Bengal)	15. Chirang-Ripu ER (7.3.03)	Assam	2600	526+	807
		16. Eastern Dooars ER (28.8.02)	W. Bengal	978	484	165
	Total			3,578	1010	972
VI	E. Himalayas (Meghalaya)	17. Garo Hills ER (31.10.01)	Meghalaya	3,500	402	878
		18. Khasi Hills ER^	Meghalaya			
	Total					
VII	Nilgiri – Eastern Ghat (Karnataka-Kerala- Tamil Nadu-Andhra)	19. Mysore ER (25.11.02)	Karnataka	6724	3103	5838
		20. Wayanad Er (2.4.02)	Kerala	1200	394	961
		21. Nilgiri ER (19.9.03)	Tamil Nadu	4663	716	1938
		22. Rayala ER (9.12.03)	Andhra	766	525	74
	Total			13335	4738	8811
VIII	South Nilgiri (Kerala – Tamil Nadu)	23. Nilambur ER (2.4.02)	Kerala	1419	90	886
		24. Coimbatore ER (19.9.03)	Tamil Nadu	566	482	132
	Total			1985	572	1018
IX	Western Ghat (Tamil Nadu – Kerala)	25. Anamalai ER (19.9.03)	Tamil Nadu	1457	300	680
		26. Anamudi ER (2.4.02)	Kerala	3728	780	750
	Total			5185	1080	1430
X	Periyar (Kerala – Tamil Nadu)	27. Periyar (2.4.02)	Kerala	3742	1058	1268
		28. Srivilliputtur ER (19.9.03)	Tamil Nadu	1249	568	223
	Total			4991	1626	1491
XI	Northern India (Uttaranchal – U.P.)	29. Shivalik ER (28.10.02)	Uttaranchal	5405	1340	1391
		30. Ganga-Jamuna ER^	U.P.	744	-	40
	Total			6149	1340	1431
	Total			58,900+	16,400+	20,150+

National Zoological Park (NZN)

On the recommendation of the Indian Board for Wildlife in 1952, the Government of India set-up a Zoological Park in the capital in the year 1959 for the conservation and captive breeding of rare fauna and to educate and provide recreation to the people.

Progress/Achievements made during the year

- ◆ The NZN has been evaluated by the Central Zoo Authority (CZA) as per the provisions of the Recognition of Zoo Rules, 1992. The recommendations of the CZA are being implemented to achieve the objectives of the Zoo.
- ◆ The Wildlife Week was celebrated by involving over 1000 students from various schools of the NCT of Delhi.
- ◆ Teachers Orientation Course was conducted during the year.
- ◆ Guided Tours for the Forestry personnel, Wild lifers and students of the school was organized.

Environmental Impact Assessment

This Plan Scheme has been under implementation since the end of the Sixth Five Year Plan and is looked after by Impact Assessment Division in the Ministry. It originated initially as scheme for establishing a Division of Environmental Assessment and over the years the scheme has helped in creating an infrastructure in the Ministry for environmental impact assessment of various developmental projects and the enforcement of the related regulatory framework.

Progress/achievements made during the year

- ◆ During the year, a total of 963 project proposals were appraised for the grant of prior environmental clearance. Out of these proposals, 746 projects were accorded environmental clearances.
- ◆ The comprehensive review of the existing environmental clearance process under the EIA Notification 1994 was completed and a revised process notified on 15th September, 2005 inviting public responses as required under the statute.
- ◆ A draft notification declaring Pachmari (M.P.) as eco sensitive zone inviting suggestions and objection is being notified.

Abatement of Pollution

Control of Pollution

The concern for environmental quality has been an issue of concern in the backdrop of increasing urbanization, industrial and vehicular pollution as well as pollution of water courses due to discharge of effluents without conforming to the environmental norms and standards. Realizing the trend of pollution in various environmental media like air and water, soil etc., Ministry adopted policy for abatement of pollution, which provides multi-pronged strategies in the form of regulations, legislations, agreements, fiscal incentives and other measures to prevent and abate pollution. To give effect to various measures and policies for pollution control, various steps have been initiated which include stringent regulations, development of environmental standards, control of vehicular pollution, spatial environmental planning etc. Activities under various programmes are coordinated by Control of Pollution and Clean Technology Division in the Ministry.

Progress/achievements made during the year

- ◆ The task forces comprising of experts and members from institutions and industry associations for implementation of the Charter on Corporate Responsibility for Environmental Protection continued to meet regularly to monitor and to provide necessary guidance to the industries for adopting requisite pollution abatement measures during the year.

- ◆ Various authorities, namely, Environment Pollution (Prevention and Control) Authority for the National Capital Region, National Environment Appellate Authority and Loss of Ecology (Prevention and Payments of Compensation) Authority for the State of Tamil Nadu continued to function during the year as per their mandates.
- ◆ The noise limits for Diesel Generator (DG) set up to 1000 KVA were notified in May, 2002. After review of the preparedness by the manufacturers to comply with the standards, the time for implementation was extended up to 1st January, 2005. While the emission norms for DG sets above 19 KW and up to 800 KW have been made operational since November, 2004, these norms for DG sets up to 19 KW have come into effect from 1st July, 2005.
- ◆ For continuous air quality monitoring, Automatic Air Quality Monitoring Stations have been set up in four cities namely; Jodhpur, Patna, Pune and Sholapur.
- ◆ Keeping in view the monitored data available on air quality, the Hon'ble Supreme Court in its various judgements have identified sixteen cities namely; Hyderabad, Patna, Ahmedabad, Faridabad, Jharia, Bangalore, Pune, Mumbai, Sholapur, Jodhpur, Chennai, Agra, Kanpur, Lucknow, Varanasi and Kolkata as equal to or more polluted than Delhi for which Action Plans for improvement of air quality have been drawn.
- ◆ As per the Auto Fuel Policy, Bharat Stage-II norms for new vehicles have been introduced through out the country from 1st April, 2005. However, EURO-III equivalent emission norms for all new vehicles, except 2-3 wheelers, have been introduced in 11 major cities from 1.4.2005. To meet Bharat Stage-II, EURO-III and EURO-IV emission norms, matching quality of petrol and diesel is being made available.
- ◆ During the year, financial assistance under the said scheme was extended to various State Pollution Control Boards/Pollution Control Committees. The Programme will continue for the whole of the Tenth Five Year Plan period.
- ◆ During this year, an allocation of Rs.4.38 crores has been provided for providing financial assistance to the on-going CETP Plant project and for new projects. Financial assistance was provided for the on going projects namely- Roha, Mahad, Thane-Belapur-Maharashtra and Sanand-Gujrat. One new Project for setting up of CETP at Tarapur has been provided financial assistance during the year.
- ◆ Under environmental audit, various studies relating to preparation of sector specific performa have been initiated. Project has been sponsored to the Central Pollution Control Board (CPCB) in this regard for development of environmental statements in the sectors of sugar, pesticide, thermal power, cement, textile, iron & steel, tanneries, petrochemicals, oil refineries, pulp & paper and bulk drug industries.
- ◆ Final Technical Report of the study titled "Life Cycle Assessment for Pulp and Paper sector Industries" submitted by Indian Agro and Recycled Paper Mills Association (IARPMA) has also been accepted by the Ministry.
- ◆ Consequent to the directions of Hon'ble Supreme Court of India, the Central Pollution Control Board has finalized guidelines on the Common Hazardous Waste Incinerators, and published during the year.
- ◆ The CPCB studied performance of 78 CETPs operating throughout the country. It is observed that out of the total 78 CETPs studied, only 20 complied

with the prescribed limits for general parameters pH, BOD, COD but 15 of these were not able to comply with prescribed limit for TDS. Thus, only five (i.e. 6.4%) CETPs were complying all general parameter including TDS. In general, the performance of CETPs has been found very unsatisfactory, largely because of poor operation and maintenance.

- ◆ The CPCB has prepared “Guidelines and Biomedical Treatment Facilities” and circulated to all SPCBs / PCCs for taking necessary actions in this regard.
- ◆ The Central Pollution Control board (CPCB) is executing a nation wide programme of ambient air quality monitoring, namely, “National Air Quality Monitoring Programme which consists of 326 monitoring stations covering 116 cities/towns in 28 States/UTs of the country.
- ◆ The CPCB had identified a list of 72 polluted cities in which the prescribed National Ambient Air Quality Standards (NAAQS) were violated. Action plans are being formulated and implemented to control in non-attainment cities by respective States.
- ◆ As per Hon’ble Supreme Court’s directives, the Ministry and CPCB has decided to set up 16 continuous Air Quality Monitoring Stations in the 16 identified cities where air pollution is high, to see the impact of implementation of action plan on air quality.
- ◆ The CPCB in collaboration with SPCBs/PCCs has established a wide network of water quality monitoring comprising of 870 Stations in 26 States and five UTs spread over the country.

Management of Hazardous Substances

The Hazardous Substances Management Division (HSMD) in the Ministry is responsible for planning, overseeing and implementation of the policies and programmes on the management of hazardous substances and chemical emergencies. The mandate of this Division is to promote safety in the management and use of hazardous substances including hazardous chemicals and hazardous wastes with an objective to prevent and mitigate damage to health and environment due to hazardous chemicals and wastes. The activities of the division can be grouped under three main thrust areas, viz., Chemical Safety; Hazardous Wastages Management and Solid Waste Management.

Progress/Achievements made during the year

- ◆ Out of 180 identified hazard prone industrial pockets, Hazard Analysis studies have been undertaken for 78 pockets. Out of these 78 studies, 77 studies have been completed.
- ◆ Financial assistance was provided during the year to National Safety Council, Disaster Management Institute (DMI), Bhopal, Federation of Indian Chambers of Commerce and Industry,



Fig 6. Common Hazardous Waste Treatment Storage Disposal Facility (TSDF) at Talaja, Maharashtra, - Incinerator

Associated Chambers of Commerce and Industry and other State run institutions for conducting training programmes on Emergency Preparedness, Accident Prevention and Hazardous Waste Management.

- ◆ The pilot study entitled “GIS based Emergency Planning and Response System with respect to chemical accidents in Major Accident Hazard (MAH) installations” in major industrial clusters in four identified industrial States namely-Gujarat, Maharashtra, Tamil Nadu and Andhra Pradesh initiated earlier has been completed.
- ◆ The Ministry has so far supported five common Treatment, Storage and Disposal Facilities (TSDF) one in Maharashtra (TTC-Belapur), two in Gujarat (Anklesher and Surat), one in Andhra Pradesh (Ranga Reddy District) and one in West Bengal. The other states viz. Karnataka, Tamil Nadu, Orissa, Goa, Delhi and Haryana are in the process of setting up such facilities.
- ◆ The Batteries (Management and Handling) Rules, 2001 were notified in May, 2001 to regulate the collection, channelization and recycling of used lead acid batteries. These rules *inter-alia* make it mandatory for consumers to return used batteries.
- ◆ An Indian delegation participated in the open ended Working Group meeting Basel Convention on the control of trans-boundary movement of hazardous waste and their disposal, held at Geneva during 4-8 July, 2005.
- ◆ The Ministry also participated in the Eleventh session of the Inter-Governmental Negotiating Committee Meeting as well as the first Conference of Parties under Rotterdam Convention held in September 2004.

Conservation of Water Bodies

National River Conservation Directorate (NRCDD)

The NRCDD in the Ministry is engaged in implementing the River and Lake Action Plans under the National River Conservation Plan (NRCP) and National Lake Conservation Plan (NLCP) by providing assistance to the State Governments.

Progress/Achievements made during the year:



Fig 7. Sewage treatment plant at Panaji, Goa – raw sewage treatment process

- ◆ A total 34 rivers have been covered under the National River Conservation Plan to improve the water quality, i.e., upto bathing class of the rivers, which are the major fresh water resources in the country through the implementation of pollution abatement scheme.

- ◆ Additional works under Ganga Action Plan (GAP) are being taken up in 60 towns along the main stem of river Ganga at

an approved cost of Rs. 82.11 crores.

- ◆ Pollution abatement works have also been taken up in 64 towns along 29 rivers in 14 States of the country. Out of 340 projects of pollution abatement sanctioned so far under River Conservation Plan, 181 projects have been completed.
- ◆ Under Lake Conservation Plan, works on 37 lakes including Dal Lake, and Velli Akkuluam Lake in Kerala were taken up so far.

Wet Land Conservation

Taking into consideration deterioration of water bodies, a programme on Conservation of Wetlands was initiated in 1987 with the basic objective of assessment of wetland resources, identification of wetlands of national importance, promotion of R&D activities and formulation and implementation of management action plans of the identified wetlands. The activities of the wetland conservation are coordinated by the Conservation and Survey Division in the Ministry.

Progress/Achievements made during the year

- ◆ Out of 30 new proposals received, five wetlands have been recommended by the Research sub-Committee and National Wetland Committee for inclusion in the National list. The remaining sites are being inspected by teams with multidisciplinary expertise.
- ◆ Three Regional workshops on Wetlands were organized at Agra, Srinagar and Lakshwadeep during the year.
- ◆ Ministry participated in COP 9 of Ramsar Convention held in Uganda during November 2005.
- ◆ Revision of Guidelines for Wetland Conservation and Management Scheme along with sustainable regulatory regime is being finalized.
- ◆ India chaired the session in the meeting of Wetlands international held in Manesar, Gurgaon, India.
- ◆ Assistance released for ongoing and new Management Action Plans of identified Wetlands to various States during the year.

Regeneration and Development:

National Afforestation and Ecodevelopment Board (NAEB)

The NAEB was set up by the Ministry, in August 1992 for promoting afforestation, tree planting, ecological restoration and eco-development activities in the country. Special attention is being given to the regeneration of degraded forest areas and lands adjoining forest areas, national parks, sanctuaries and other protected areas as well as the ecologically fragile areas like the Western Himalayas, Aravallis, Western Ghats etc.

Progress/Achievements made during the year

- ◆ The 11th Meeting of the National Afforestation and Eco-Development Board (NAEB) was held on 19th January, 2006, under the chairmanship of Minister of Environment and Forests.
- ◆ Six hundred and eighty FDAs have been operationalised so far at a cost of Rs. 1,489.42 crores to treat a total area of 9.05 lakh ha. Bamboo plantation, medicinal plants and Jatropha have been given adequate focus under National Afforestation Programme (NAP) during the current plan period.
- ◆ During the year, 60 new FDA projects have also been sanctioned to cover an area of 36,688 hectare through 1,502 Joint Forest Management Committees (JFMCs). These

include six new FDA projects in the North East to cover a total project area of 3440 ha. through 106 JFMCs.

- ◆ Financial assistance was provided for setting-up 13 Central nurseries, and awareness generation about quality planting material in seven States under Grants in aid in Greening India Programme. In addition, proposals for assistance of Rs.3.86 crores to different organizations for 79 tree-planting projects through various agencies, including voluntary organizations, have been approved.
- ◆ All States have adopted JFM with involvement of 13.8 million families. 99,868 JFMCs are managing around 21.4 million ha. forest land.
- ◆ Joint Forest Management (JFM) has been made centre of Ministry's flagship afforestation programme "National Afforestation Programme" (NAP) to ensure involvement of village communities on care and share basis.
- ◆ An additional component entitled "Strengthening of Joint Forest Management" has been included in National Afforestation Programme scheme w.e.f. August, 2004. Forest Development Agency (FDA) implementing NAP will facilitate constitution of new JFMCs in forest fringe villages within its territorial jurisdiction.
- ◆ Four Eco-Task Force (ETF) battalions are being supported under the Eco Development Forces (EDF) Scheme of the NAEB. These battalions are located at Pithoragarh, Samba, Bikaner and Dehradun.
- ◆ The Committee to Review the Implementation of Convention (CRIC)-3 meeting of UNCCD was held on 2nd -10th May, 2005 at Bonn, Germany. The Indian delegation led by Special Secretary of Ministry participated in the meeting. The CRIC-3 meeting reviewed the implementation of UNCCD processes in African countries and ways to strengthen Regional and Sub Regional Action Plan to implement UNCCD.
- ◆ The World Day to Combat Desertification and Draught was celebrated on 17th June, 2005 to raise awareness among people, policy planners and stakeholders of the country.
- ◆ The COP-7 meeting of UNCCD was held on 17th-28th October, 2005 at Nairobi, Kenya. The Indian delegation led by Minister of State for Environment & Forests participated in the meeting. The COP-7 reviewed the implementation of UNCCD processes in India and need to strengthen the same. It also reviewed the working of Committee on Science & Technology, mobilization of resources for implementation of National Action Plan to Combat Desertification. A National Level Workshop synergy on RIO Convention was organized in collaboration with Centre for Public Policy, Indian Institute of Management, Bangalore on 15th-16th December, 2005 at Bangalore.

Research

Environmental Research

The Environmental Research is a Central Plan Scheme for promotion of research in multidisciplinary aspects of environmental protection, conservation and management. The objective of the scheme is to generate information required to develop strategies, technologies and methodologies for better environment management. It also aims at attempting solutions to practical problems of resource management, conservation of natural resources and eco regeneration of degraded areas. Further, the scheme also seeks to strengthen infrastructure facilities and scientific manpower to shoulder the responsibility of environmental management in the country. Research grant is provided in the identified thrust areas of environment to various institutions/universities and non-governmental

Ministry of Environment & Forests

organizations all over the country, after necessary examination, peer review and recommendation of the Expert Committees. A Research Advisory Committee (RAC) constituted in the Ministry scrutinizes and recommends the research proposals to the concerned Expert Committees for consideration of funding. The activities are coordinated by the Research Division in the Ministry.

Progress/Achievements made during the year:

- ◆ More than 300 new proposals were considered by RAC during the year, which were sent to the various expert committees along with the comments of the referees.
- ◆ Eighteen expert committee meetings were organized during the year in which 150 new proposals were considered and 142 projects were reviewed. 25 new projects recommended by the Committees were processed for financial support during the year.
- ◆ Research Projects which help in taking policy decisions/provide data for discussions at International fora/court cases etc. are also supported by the Ministry under the programme. Twenty seven policy research proposals received in the identified areas of policy research were placed before the Evaluation Committee, constituted under the Chairmanship of Secretary [E&F] after peer review. The committee has recommended eight projects for funding.
- ◆ Under Environmental Research Programme, seven new projects were taken up and progress of 53 ongoing projects were reviewed during the year. Twelve projects sanctioned earlier were also completed.
- ◆ Under Ecosystem Research Programme, five new projects were taken up and progress of 49 projects were reviewed and monitored. Eleven ongoing projects were completed under the programme during the year.
- ◆ Under Eastern and Western Ghats Research Programme 13 new projects were taken up while progress of 40 projects was reviewed and monitored. Nineteen projects sanctioned earlier were completed during the year under the programme.

G.B. Pant Institute of Himalayan Environment & Development (GBPIHED)

The GBPIHED, established by the Ministry in 1988 as an autonomous research and development institute of the Ministry has emerged as a leading institution for fostering scientific knowledge, formulation of policy guidelines, and development of efficient strategies for conservation and management of natural resources in the Indian Himalayan Region (IHR).

Progress/Achievements made during the year

- ◆ During the year, geo-hydrological studies were undertaken at Thelu (Gangotri glacier system), Dokriani, Gangotri and Milam glaciers to understand the glacier recession processes. Realizing the importance of springs of consumptive water use investigations on spring discharge and geology were undertaken in the western Himalayan region. Erosion studies (cold deserts, Jhum cultivation, settled agriculture) were carried out for conservation implications.
- ◆ Extensive surveys were conducted in the representative blocks/village clusters of the region relating to poverty and resource-use pattern to chalk-out strategies for natural resource management.
- ◆ The indigenous knowledge relating to natural resource management and healthcare was documented and digital database was further strengthened based on primary survey and secondary information.
- ◆ Institute's Integrated Eco-development Research programme (IERP) has been meaningfully complimenting to the R&D needs of the IHR. Based on the

recommendation of project evaluation committee, a total of 34 projects (13 to Universities, nine to NGOs and 12 to Government Institutions) were funded for execution in different parts of IHR.

Research on Wetlands, Mangroves and Coral Reefs

Research activities under Wetlands, Mangroves and Coral Reef Programmes are overseen by specific Advisory Committee and Sub-committees under Wetlands, Mangroves and Coral Reefs. The activities are coordinated by the Conservation and Survey Division in the Ministry.

Progress/Achievements made during the year:

- ◆ Six projects were approved under Wetland Research to carry out research activities on various identified wetlands.
- ◆ In Coral Reef Programme, The National Coral Reef Research Centre at Port Blair was provided financial assistance for strengthening infrastructure of the centre. The centre is continuing its activities to bio-physical monitoring related to health of coral reefs.

National Natural Resource Management System (NNRMS)

The main objective of National Natural Resource Management System (NNRMS) is utilization of remote sensing technology with conventional methods of monitoring of natural resources such as land, water, forests, minerals, oceans etc. for attaining sustainable development by addressing the following aspects:

- ◆ Optimal utilization of the country's natural resources by a proper and systematic inventory of the resource availability.
- ◆ Reducing regional imbalances by effective planning and in tune with the developmental efforts.
- ◆ Maintain the ecological balance with a view to evolve and implement the environmental guidelines.

The Standing Committee on Bio-resources and Environment (SC-B) constituted by the Planning Commission advises on the methods of using the remote sensing technology for optimal use and management of natural resources in the country. The activities of this programme are coordinated by Environmental Research Division in the Ministry.

Progress/Achievements made during the year

- ◆ The Standing Committee Meeting of National Natural Resource Management System on Bio-Resource and Environment was held on 28th April, 2005. The Committee considered 10 proposals and recommended nine projects under NNRMS Programme. The Committee had also reviewed the recently completed projects and accepted the Final Technical Reports of five recently completed project.
- ◆ The Committee (SC-B) met 20 times so far and sponsored about 89 remote sensing application projects addressing key environmental and ecological issues such as management of forests, grassland, faunal resources, wetland, coastal areas, mangroves and coral resources, land degradation, impact of mining and industrialization, river pollution etc. Fifty five projects have so far been completed.

Forestry Research

The Indian Council of Forestry Research and Education (ICFRE) is the apex body in the national forestry research system to develop a holistic forestry research through planning, promoting, conducting and coordinating research, education and extension on all aspects of forestry for ensuring scientific management of forests, tree

improvement, forestry productivity through scientific and biotechnological researches, bioremediation of degraded land, efficient utilization of forest produce, value addition of forest products, conservation of biodiversity and climate change, effective agro forestry models for various agro ecological zones, policy research, environmental impact assessment and integrated pests and disease management. Besides, research activities in this area are also conducted by Indian Institute of Forest Management (IIFM), Bhopal and Indian Plywood Industries Research & Training Institute (IPIRTI), Bangalore, The research activities are coordinated by Forestry Research & Training Division in the Ministry.

Progress/Achievements made during the year

- ◆ In order to promote medicinal plants as agro-forestry cash crop, Centre for Social Forestry & Eco-Rehabilitation (CSFER), Allahabad planted twenty species of medicinal plants.
- ◆ FRI, Dehradun conducted a study on drying of natural dye solution using vacuum drying and spray drying through Central Food Technological Research Institute (CFTRI), Mysore. The vacuum drying was found to be superior than spray drying.
- ◆ Arid Forest Research Institute (AFRI), Jodhpur have developed cultivation practices of *sena*, *guggal*, *Aloe vera*, *Asparagus racemosus*, *Withania somnifera*, *Catharanthus roseus* and *Ocimum sanctum* for Jodhpur conditions.
- ◆ Himalayan Forest Research Institute (HFRI), Shimla is standardizing agro-technologies for mass propagation of some important medicinal plant species of temperate region, nursery techniques of the indigenous species of cold deserts such as *Capparis spinosa* and is developing efficient methods of preparation of compost from different locally available raw material.
- ◆ Implementation of National Project Operational strategy for sustainable forestry development with community participation in India has been undertaken by the IIFM, Bhopal.
- ◆ During the year, the IPIRTI undertook 43 projects of which 35 projects were funded through its own resources and eight projects sponsored by various organizations. The projects cover product development from plantation wood, bamboo, agro and forest residue, process development and development of new resins. Emphasis was given to meet R&D need of the industry, develop wood alternatives from bamboo and other lignocellulosic materials. Binding materials based on synthetic polymer, where phenolic compound has been replaced by material of natural origin like cardanol, lignin and tannin, were also developed. Of the 35 institute funded projects, nine were completed and out of eight sponsored projects, seven were completed.
- ◆ The other areas of research undertaken by the IPIRTI are: (i) development of machine for efficient veneer finger jointing; (ii) development of products from new generation eco-friendly materials; and (iii) effluent treatment of chemicals discharged from plywood industries.

Wildlife Research

Wildlife research is coordinated by Wildlife Institute of India (WII), Dehradun. It covers ecological, biological, socio-economic and managerial aspects of wildlife conservation in various parts of the country. The wildlife research activities are coordinated by Wildlife Division in the Ministry.

Progress/Achievements made during the year

- ◆ A total number of 50 research projects on diverse aspects of wildlife and coordinated by WII is at various stages of implementation. These projects are either grants-in-aid projects of WII or sponsored as collaborative projects.

Education and Awareness

Environmental Education, Awareness and Training

The 'Environment Education, Awareness and Training' is an important scheme of the Ministry for enhancing the understanding of people at all levels about the relationship between human beings and the environment and to develop capabilities/skills to improve and protect the environment. This scheme was launched in 1983-84 with the following basic objectives:

- ◆ To develop educational/teaching materials and aids in the formal education sector;
- ◆ To encourage non-governmental organizations, mass media and other concerned organizations for promoting environmental awareness among the people at all level;
- ◆ To promote environment education through existing educational/scientific /research institutions;
- ◆ To ensure training and man-power development in environment education; and
- ◆ To mobilize people's awareness for preservation and conservation of environment.

The activities of environmental education, awareness and training are coordinated by the Environmental Education Division in the Ministry.

Progress/Achievements made during the year

- ◆ More than 72,000 eco clubs have been established across the country under the National Green Corps (NGC) Programme. One of the major changes effected in the programme during the year was to increase the quantum of financial assistance from Rs.1,000/- to Rs.2,500/- per eco-club per annum. Also the ceiling of eco-clubs entitled to get financial assistance from the Ministry will be raised from 150 to 250 per district from next year. The progress in supporting Eco-Clubs under the scheme is shown in Fig. 9.
- ◆ The National Environment Awareness Campaign (NEAC) 2005-06 were conducted throughout the country with the major theme on "Solid Waste Management" to inculcate environmental awareness among the various sections of the country's population. A total number of 9566 organizations belonging to NGOs, schools, colleges, universities, research institutions, women and youth organizations, army units, government departments, etc., were associated for conducting several awareness raising activities in this campaign throughout the country and were provided suitable financial as-

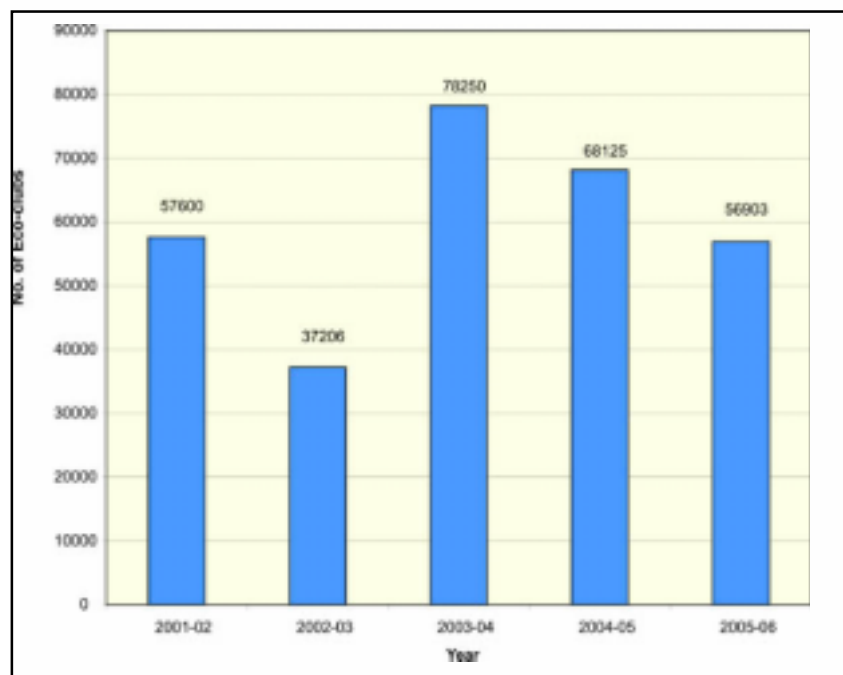


Fig 8. Number of eco clubs supported

sistance by the Ministry. 29 Regional Resource Agencies (RRAs) selected by the Ministry helped in conducting, supervising and monitoring the NEAC programme throughout the country.

◆ About 70 organizations were financially supported under seminars/symposia/workshop scheme for conducting various seminars/symposia/workshops etc., in different fields of environment.

- ◆ A media action plan covering various activities like sponsoring weekly environmental television magazine, launching of radio programmes, supporting of Vatavaran film festival, sponsoring of documentary films on environmental issues, etc. has been formulated by the Ministry to spread awareness about environmental issues and projecting government's environmental policies and regulations among the people.
- ◆ Under the programme on grants-in-aid to professional societies, various organizations were supported to augment their capabilities in the identified areas of environmental education, ecology and wildlife and publications.
- ◆ An international written Environment Quiz programme known as Green Olympiad followed by a televised Quiz programme TERRA-QUIZ conducted by TERI. This was conducted in both Hindi and English this year. More than 60,000 school students from India, Russia and UAE participated in this competition.
- ◆ In order to provide interested persons an opportunity to learn in detail about specific environmental issues, the Ministry has already got a course module developed from Indira Gandhi National Open University (IGNOU) for Environmental Appreciation Courses. Delivery of these courses through distance education mode has been started during the current year by IGNOU.
- ◆ A Curriculum Development Workshop was conducted to develop new curriculum and also to develop a resource base for teaching material. An inventory of the courses offered in India and abroad has also been prepared along with an inventory of resource material.

National Museum of Natural History (NMNH)

The National Museum of Natural History (NMNH) an attached organization of the Ministry has been set up with its main objective to promote non-formal environmental education and nature conservation awareness among people. The NMNH and its Regional Museums of Natural History (RMNH) at Mysore, Bhopal and Bhubaneswar carried out a number of programmes and activities, keeping in mind all the sections of society to enhance public awareness on Environment and Conservation and to develop scientific temperament in the society. The activities of NMNH are coordinated by Conservation and Survey Division in the Ministry.

Progress/Achievements made during the year

- ◆ Various exhibitions were conducted on several topics by NMNH and other RMNHs during the year.



Fig 9. Hon'ble President with the participating students of National Green Corps

- ◆ A complete Rhino exhibit was opened to the public during the inauguration of Zero Carbon City Exhibition showcasing for the first time a complete skeleton of African Black Rhino *Diceros bicornis*. It also features all the five different living Rhinos of the world in their natural habitats in a dioramic presentation.
- ◆ Teachers training workshop on Environmental Education was organised at RMNH, Bhopal from 2nd-6th May, 2005 in collaboration with Science & Maths Teachers Training Centre, Bhopal in which 30 teachers from all over Madhya Pradesh participated.
- ◆ A workshop on Solid Waste Management titled “Waste wise” was organised from 30th-31st December, 2005 at RMNH, Mysore in which 30 members from Resident Welfare Associations of Govt. of India participated.
- ◆ A workshop for Science Teachers of Secondary Schools and Science Supervisors of the State was organized by RMNH, Bhubaneswar to give basic knowledge on model making with paper and resin.
- ◆ NMNH along with its Regional Museums of Natural History organised a number of in-house and outreach programmes for the benefit of school children, college students, teachers, challenged children and general public.
- ◆ Various national and international days of scientific relevance like the World Wetland Day, World Day for Water, World Forestry Day, International Ozone Day, Conservation Day, Earth Day, World Environment Day, World Day to Combat Desertification, World Population Day, Braille Day, World Heritage Day, International Bio-diversity Day, World No Tobacco Day, Wildlife Week, World Habitat Day and National Environmental Awareness Campaign were observed and different programmes for school children and challenged children were also organised.
- ◆ The Museum organised different educational activities and competitions like Quiz, Declamation, On-the-spot Painting, Poster making, Essay writing, Model making, Bird Watching, Tree spotting for the participating students on these occasions.
- ◆ NMNH and its Regional Centres organised Nature Camps during Summer and Winter Vacations for students, teachers, rural school drop outs and winner children of various competitions. The students were taken to Orissa, Sikkim, World Heritage Site, Bhimbetka, Chail Wildlife Sanctuary, H.P., Yamuna Bio-diversity Park, New Delhi, Bhitarkanika National Park, Orissa.
- ◆ A special project was sanctioned by the National Biodiversity Board of the Department of Biotechnology, for the establishment of a Touch, Feel and Learn Plant Bio-resource Centre in a form of a garden meant specifically for the visually impaired. It is in the final stage of establishment.

Forestry Education, Training and Extension

The activities related to forestry education, training and extension are performed by the different institutes of the Ministry like Indira Gandhi National Forest Academy (IGNFA), Directorate of Forest Education (DFE), Indian Council of Forestry Research and Education (ICFRE), Indian Institute of Forest Management (IIFM) and Indian Plywood Industries Research and Training Institute (IPIRTI). The activities in this area are coordinated by Forestry Research & Training Division in the Ministry.

Progress/Achievements made during the year

- ◆ Several training courses, skill upgradation courses, advanced forest management courses, workshops for foresters, refresher training programmes, etc., were conducted by Indira Gandhi National Forest Academy (IGNFA), Dehra Dun

for IFS Probationers, State Forest Officers, IFS Officers, senior foresters and other related officers in the forestry cadre from various State Government Departments during the year.

- ◆ Directorate of Forest Education and State Forest Service Colleges conducted several training courses for State Forest Service (SFS) Officers, In-Service SFS personnel, Range Officers and front line staff of several forest departments during the year.
- ◆ The ICFRE and its various research institutes under its control conducted a number of training and demonstration programmes on different aspects of forestry related issues during the year.
- ◆ The IPIRTI provided training on forest product utilization for plywood industry and trade, and allied industries, imparting technical education training at under graduate, postgraduate and/or any other level in technology of forest products, adhesive and paper laminates, and/or synthetic finishing development equipments.
- ◆ The IIFM, Bhopal imparted education in forest management with specific objectives to provide training in management and related subjects to persons from Forest Services, Forest Departments, Forest Development Corporations and forest related institutes. The institute conducted 29 training programmes in which 473 participants participated during the year.
- ◆ The IIFM also conducted 12 workshops in which 527 persons participated and continued its Post Graduate Diploma in Forestry Management (PGDFM) and Post Masters course on Natural Resourced Management (NRM) during the year.
- ◆ The Ministry sponsored 41 one-week courses in the premier training/management institutions in the country on a wide range of disciplines including human resource development financial management, environmental impact assessment and auditing, intellectual property rights issues in forestry, policy and legal issues, good governance, non-timber forest product management, forest certification, ecotourism-wildlife and habitat management, impact of global warming and climate change on forests and biodiversity.
- ◆ During the year, the Ministry also sponsored 14 training workshops for the IFS officers on emerging topics/themes of regional, national and international importance like Forest Certification-Implications on forestry in India, Wildlife Crime: Strategies to prevent organized Poaching, Climate Change Mitigation: Role of Forestry and Sinks Projects within the CDM Framework, Training Needs Assessment at various levels of Forestry Services, Effect of Weeds on Productivity of Forest Plantations and Natural Forests and different Cost Effective Methods for their Control, Strengthening GIS Implementation in Indian Forestry.
- ◆ The Ministry has revised the Syllabus /Course contents for the IFS probationers at the IGNFA, Dehra dun and made applicable to the probationers of 2005 batch onwards.
- ◆ The Ministry also decided to organize six-week duration induction courses for the promoted SFS officers of the states. The state Governments have been requested to modify their concerned recruitment rules to make these courses compulsory.

Wildlife Education & Training

Wildlife education and training is primarily looked after by the Wildlife Institute of India, an autonomous institute of the Ministry for imparting training to government and non-government personnel to carry out research and training activities and advice on matters of conservation and management of wildlife resources. Wildlife education and training activities are looked after by the Wildlife Division in the Ministry.

Progress/Achievements made during the year

- ◆ The IX M.Sc. course in Wildlife Science, which commenced from July 2003 has completed successfully.
- ◆ XXVII Post Graduate Diploma Course in Wildlife Management has been

commenced from September 1, 2005 at WII. In all nineteen officer trainees joined the course of which fourteen candidates were from different states of the country.

- ◆ The XXI Certificate Course in Wildlife Management (three months) has been commenced from November 1, 2005. Twenty-one officer trainees have joined the course, of which five officer trainees were from abroad.
- ◆ Training of Wildlife Staff of Himachal Pradesh State Forest Department in “Abundance Estimation and Monitoring of Pheasants” was conducted from April 28-May 4, 2005. Over 700 forest and wildlife staff and over 20 officers (ACF and above) of H.P. Forest Department were trained in abundance estimation and monitoring of pheasants.
- ◆ The training of Wildlife Staff of Uttaranchal State Forest Department in ‘Wildlife Abundance Estimation and Monitoring in Gopeshwar, was organized on May 16, 2005. The institute conducted the training for over 130 forest and wildlife staff of Kedarnath Wildlife Division and other Forest Divisions of Garhwal Circle.
- ◆ A one-week Compulsory Training Course for IFS officers on ‘Wildlife Management: Issues, Concerns and Practices was held in Dehradun, from June 20-26, 2005. Seventeen participants attended in the course from 14 States/UT of the country.
- ◆ A Sensitizing Workshop for All India Tiger, Large Canivores, Ungulate and Habitat Status Evaluation and Monitoring was held at the India Habitat Centre, New Delhi. The Principle Chief Conservator of Forests, Chief Wildlife Wardens and Field Directors/Deputy Directors of Tiger Reserves participated in the workshop.
- ◆ Regional Workshops on All India Tiger Co-predators, Prey and Habitat Monitoring was conducted at regional level at four places viz. Corbett Tiger Reserve (Uttaranchal), Kanha National Park (M.P.), Bandipur Tiger Reserve (Karnataka) and Kaziranga National Park (Assam) for training the spearhead teams and team of trainers from States across the country.

Centres of Excellence

The Centres of Excellence Scheme was started by the Ministry in 1983 to strengthen awareness, research and training in priority areas of environmental science and management.

Nine Centres of Excellence have been set up so far by the Ministry under the scheme. These are:

- ◆ Centre for Environmental Education (CEE), Ahmedabad (linked with Nehru Foundation for Development, Ahmedabad)
- ◆ CPR Environmental Education Centre (CPREEC), Chennai (linked with Sir C.P. Ramaswamy Aiyer Foundation, Chennai)
- ◆ Centre for Ecological Sciences (CES), Bangalore (linked with Indian Institute of Sciences, Bangalore)
- ◆ Centre of Mining Environment (CME), Dhanbad (linked with Indian School of Mines, Dhanbad)
- ◆ Salim Ali Centre for Ornithology and Natural History (SACON), Coimbatore (linked with the Bombay Natural History Society, Mumbai)
- ◆ Centre for Environment Management of Degraded Ecosystem (CEMDE), Delhi (linked with the Department of Environmental Biology, South Delhi Campus, Delhi University)
- ◆ The Tropical Botanic Garden and Research Institute (TBGRI), Thiruvananthapuram (linked with the State Government of Kerala)

- ◆ Madras School of Economics (linked with Madras University, Chennai)
- ◆ Foundation for Revitalization of Local Health Traditions (FRLTH), Bangalore.

The activities of these Centres of Excellence are coordinated by the subject-related Divisions like Environmental Education Division, (CEE, CPREEC) Conservation and Survey Division (CES, SACON, TBGRI, FRLHT), Environmental Impact Assessment Division (CME), Environmental Economics Division (MSC) and National Afforestation and Eco-development Board (CEMDE) in the Ministry.

Progress/Achievements made during the year

- ◆ CEE and CPREEC continued their activities in the field of environmental education during the year. CEE conducted several programmes for strengthening environmental education in the school system, school and community based conservation activities for eco-clubs in Delhi, environmental education programme through interpretation and other related activities in this field during the year. The CPREEC conducted several teachers' training programmes, biodiversity conservation education, conservation and restoration of sacred groves, role of women in eco-development, Biodiversity Conservation Programme, National Environmental Awareness Campaign programme and other related activities during the year.
- ◆ The CES in Bangalore carried out several research activities in Western Ghats Ecology and undertook research studies in this area on diverse topics.
- ◆ The SACON and TBGRI also conducted multi-purpose research programmes on wetland conservation and ex-situ conservation on tropical plants respectively during the year. Both the Centres published research articles, research papers and conducted several training and extension programmes in their areas.
- ◆ The CME imparted several trainings and conducted regular academic programmes in environmental science and engineering during the year.
- ◆ The CEMDE undertook ecological rehabilitation activities and carried out field ecological surveys in various areas for environmental management of the degraded ecosystems. The Institute also developed restoration technology on several environmentally degraded areas.
- ◆ The Madras School of Economics conducted research study on eco-taxes on polluting inputs and outputs, studies to develop policy environment from trade, economic analysis of environmental impact on development projects, natural resource accounting, etc., during the year.
- ◆ The FRLHT developed a bio-cultural repository of medicinal plants and documentation of educational material on the traditional knowledge of the medicinal plants of India, during the year. Pharmacognostic studies on prioritized medicinal plants and demonstration for establishing an Ethno-Medicinal Garden as well as development of distribution maps of the medicinal plants for conservation using GIS, were also undertaken by the Centre during the year.

Fellowships and Awards

The Ministry instituted various fellowships and awards in the field of protection of environment, afforestation, biodiversity, wildlife conservation and development of hindi writing in the field of environment and forests. These are :

- ◆ The Indira Gandhi Paryavaran Puraskar (IGPP)
- ◆ Pitambar Pant National Environment Fellowship Award
- ◆ B.P. Pal National Environment Fellowship Award
- ◆ Indira Priyadarshini Vriksha Mitra Award (IPVM)
- ◆ Amritadevi Bishnoi Wildlife Protection Award

- ◆ Dr. Salim Ali National Wildlife Fellowship Award
- ◆ Shri Kailash Sankhla National Wildlife Fellowship Award
- ◆ Rajiv Gandhi Wildlife Conservation Award
- ◆ Vishisht Vaigyanik Puraskar; and
- ◆ Medini Puraskar Yozana

These awards are coordinated by several Divisions, namely, Environmental Information Division, (IGPP), Environmental Research Division (Pitambar Pant and B.P. Pal National Wildlife Fellowship Awards), NAEB (IPVM), Project Tiger Division (Amritadevi Bishnoi Wildlife Protection Award, Dr. Salim Ali and Shri Kailash Sankhla National Wildlife Fellowship Awards and Rajiv Gandhi Wildlife Conservation Award), Hindi Division (Medini Puraskar Yozana) in the Ministry.

Progress/Achievements made during the year

- ◆ The regulation governing the IGPP has been revised from the year 2005 and accordingly one prize of Rs. 5.00 lakhs along with silver lotus trophy under the organization category and two prizes of Rs. 3.00 lakhs and Rs. 2.00 lakhs each to individuals in the individual category along with silver lotus trophy will be given annually. Award in both the categories upto 2002 has been given and short-listed nominations for the year 2003 and 2004 have been processed for scrutiny and verification. Nominations for 2005 are being invited by the Ministry.
- ◆ The Pitambar Pant Fellowship for 2004 has been awarded and the nominations for 2005 are being invited.
- ◆ Procedure for inviting nominations for the Pitambar Pant National Environment Fellowship Award and B.P. Pal National Environment Fellowship Awards have been revised during the year. It has been decided that the nominations should be invited through press advertisement in at least two national news papers and through notice on Ministry's website. Each nomination should be supported by at least two Fellows of National Academy of Science/Engineering/Agriculture. The age of the nominee should not exceed 55 years.
- ◆ The IPVM has been awarded for the year 2002 and 2003 and were conferred on 12 individuals and nine organizations respectively under different categories. Nominations for the awards for the year 2004 and 2005 have been invited by the Ministry in the prescribed proforma. Two new categories namely, "Forest Development Agency" and "Joint Forest Management Committee" have been included in the regulations of the IPVM award. The award money has also been increased from Rs.1.00 lakh to Rs. 1.25 lakh in case of first prize and Rs.1.00 lakh in case of second prize from the year 2004 onwards.
- ◆ The nominations for Amritadevi Bishnoi Wildlife Protection Award, 2006 are being invited from all the State Governments / Union Territories. The last date for receipt of nominations is 30th May, 2006.
- ◆ Nominations for both Dr. Salim Ali National Wildlife Fellowship Award 2005 and Shri Kailash Sankhla National Wildlife Fellowship Award 2006 have been invited by the Ministry. Last date for receipt of nominations is 30th June 2006.
- ◆ Nominations for Rajiv Gandhi Wildlife Conservation Award for the year 2005 have been invited by the Ministry and the last date for receipt of the same is 15th April, 2006.
- ◆ Medini Awards for the years 2003 and 2004 have been awarded on 16.9.2005 by the Hon'ble Minister of State for Environment & Forests.

Environmental Information

Environmental Information System (ENVIS)

Realizing the need of environmental information, the Ministry set up an Environmental Information System (ENVIS) as a plan programme and as a comprehensive network in environmental information collection, collation, storage, retrieval and dissemination to varying users, which include decision-makers, researchers, academicians, policy planners, research scientists, etc. ENVIS has been conceived as a distributed information network with the subject-specific centres to carryout the mandates and to provide the relevant and timely information to all concerned. Association of the various State Governments/UTs was also felt necessary in promoting the ENVIS network to cover a wide range of disciplines of subjects and the cooperation of the various State/UT Governments. Keeping this in view, the network was expanded gradually with the involvement of thematic subject-areas and State Government departments to make it more comprehensive. ENVIS network at present, consists of a chain of 78 subject-specific and State related Centres, called ENVIS Centres and are located in the notable organizations/institutions throughout the country. The Focal Point of ENVIS is located in the Ministry and coordinates the activities of all the ENVIS network partners to make ENVIS a web-enabled comprehensive information system. The activities of the ENVIS Programme are coordinated by Environmental Information Division in the Ministry.

Progress/Achievements made during the year

◆ The ENVIS focal point and all its partners responded to more than 15000 queries during the year and provided substantive information as far as possible. Wherever information was not readily available, the network provided 'Referral Services' to the concerned users. The major subject-areas on which the queries were responded to pertain to environmental laws, waste management, notifications, environmental education and awareness, air and water pollution, genset standards, conservation, etc.

◆ The website recorded approximately 15 lakh hits per month which reflects the usage of website by various national and international users. A view of the website of the Ministry, developed and maintained by ENVIS, is given in Figure 10.

◆ The functioning of ENVIS Centres was monitored by ENVIS Focal Point through Regional Evaluation Workshops conducted by the ENVIS Focal Point during the year at various places covering all the 78 network partners of ENVIS. The recommendations of the Evaluation Committee are being implemented in phases by ENVIS.



Fig 10. Ministry's website

- ◆ ENVIS, with the assistance of Indo-Canada Environment Fund, has started implementing strengthening of Sustainable Development Networking Programme (SDNP) on the identified areas. A network of ENVIS Centres of 20 thematic areas has been selected for strengthening of SDNP network under ENVIS.
- ◆ The ENVIS Focal Point, in association with NIC, developed a database, namely, India State Level Basic Environmental Information Database (ISBEID) with 23 modules and GIS interface, to assist the State Government ENVIS Centres to collect, collate and disseminate environmental information concerning their States. The database has been implemented in selected module form on pilot basis for the State of Madhya Pradesh and Orissa. Remaining States are being taken in a phased manner.
- ◆ ENVIS Focal Point continued to publish 'Paryavaran Abstracts', reporting information on environmental research in Indian context during the year.
- ◆ Four issues of ENVIRONEWS, a quarterly newsletter, were published by the focal point with the objective of disseminating information on important policies, programmes, legislations, amendments to the existing Acts, new sanctioned projects and other important decisions taken by the Ministry from time to time to a wide cross-section of the society including administrators, policy makers, planners, scientists, environmentalists, students, NGOs, voluntary bodies and the general public.
- ◆ Like every year, the ENVIS Focal Point coordinated and published the Annual Report (2004-05) of the Ministry and got it distributed to all organizations and individuals.
- ◆ ENVIS also continued to function as a National Focal Point of the Global Information Network, INFOTERRA of UNEP, and provided the necessary inputs from the Ministry as and when required. It also functioned as a Regional Service Centre (RSC) of INFOTERRA for South Asia Sub-Region Countries of INFOTERRA network and provided the information package as requested by them.
- ◆ The ENVIS Focal Point coordinated the reorientation of the Information & Facilitation Counter (IFC) in order to provide information to all concerned and especially to various voluntary agencies, non-governmental organizations and such other bodies who are in need of special descriptive information of the Ministry from time to time. It has been outsourced now to Centre for Environment Education, Delhi Desk.
- ◆ Apart from 25,000 books, technical reports, journals, proceedings, etc., the library also procured a wide range of general books both in English and Hindi during the year. Research scholars from various organizations, institutions and other professional bodies visited library for various information required by them from time to time. In order to provide online access to the users, the library records were computerized after following the regular classification system.

Legislation and Institutional Support

Legislation and Institutional Support is looked after by Policy and Law (PL) Division in the Ministry through the following schemes.

- ◆ Environment Policy and Law under part of Plan Scheme "Assistance for Abatement of Pollution".
- ◆ Establishment of Environment Commission and Tribunal.

Progress/Achievements made during the year

- ◆ A Draft National Environment Policy (NEP) was prepared and posted on the website of the Ministry in August 2004 for seeking comments till 31st Dec.

2004. Formal consultations were also held with various stakeholders. After considering more than 500 communications from all segments of society, the draft NEP has been modified. It was placed before the Committee of Secretaries and is in the process of submission to the Union Cabinet after incorporating the required modifications.

- ◆ Considering the need for review of the ECOMARK scheme to make it more effective, a workshop was organized by the Central Pollution Control Board on “Future of Eco-labeling” in November, 2005 in which representatives of concerned Ministries, Industry Associations, Consumer Groups, Manufacturers and other stakeholders actively participated. The scheme is being reviewed with a view to introduce necessary changes required for its promotion as also to bring it in the line with the procedures in other countries.
- ◆ An International Conference on “Enforcement of Environmental Laws” organized by the Asia Pacific Jurist Association, New Delhi was also co-sponsored by the Ministry.
- ◆ The Inter Ministerial Consultative Group on ‘Trade & Environment’ under the Chairmanship of Secretary(E&F) and Secretary(Commerce) was reconstituted during the year to deliberate upon finalize India’s position on Trade & Environmental issues in the International Fora. Four meetings of the Inter Ministerial Consultative Group on ‘Trade & Environment’ were held during the year. As per the decision taken by this Group, Expert Groups on four generic issues have been set up – two each by this Ministry and by the Ministry of Commerce and Industry to undertake relevant studies on these issues.

International Co-operation and Sustainable Development

International Co-operation & Sustainable Development Division is the nodal point within the Ministry to co-ordinate all international environmental cooperation and sustainable development issues. It is the nodal Division for United Nations Environment Programme (UNEP), Commission for Sustainable Development (CSD), Global Environment Facility (GEF) and regional bodies like Economic & Social Commission for Asia & Pacific (ESCAP), South Asian Association for Regional Cooperation (SAARC), South Asia Co-operative Environment Programme (SACEP) - and European Union (EU). The Division also handles bilateral cooperation in the areas of environment protection and sustainable development.

Progress/Achievements made during the year

- ◆ Ministry of External Affairs is the nodal ministry for CSD matters and the Ministry plays the role of providing technical support and for implementation of Agenda 21. The 13th Session of the Commission on Sustainable Development was held from 12th -22nd April, 2005. The Sessions focused mainly on water, sanitation and human settlement. This Ministry as well as Ministry of External Affairs participated in the above session. The Chairman’s Summary on the outcome of the CSD XIII is available at <http://www.un.org/esa/sustdev/csd/csd13/csd13.htm>.
- ◆ The 14th Session of the CSD is scheduled to take place in New York from 1-12 May, 2006 and will take up issues of Energy for Sustainable Development; Industrial Development; Air pollution/ Atmosphere; and Climate Change. India has already submitted its National Report to the Commission on the above mentioned thematic areas.
- ◆ The 9th Special Session of UNEP Governing Council/GMEF has been held at Dubai, UAE from 7-9 February, 2006. The Hon’ble Minister of State for Environment and Forests led the Indian Delegation to participate in the 9th Special Session of the Governing Council. This Session of the Governing Council focused on the policy issue of ‘Energy and Environment’, ‘Chemical’ and ‘Tourism and Environment’.
- ◆ During the year, the empowered committee constituted under Global Environment

Facility (GEF) considered and approved eight project proposals under biodiversity, climate change and land degradation for further development and for further submission to the GEF.

- ◆ 25th, 26th, and 27th Sessions of the GEF Council were held in Washington DC respectively on 3-8 June, 2005, 31 August – 1 September, 2005 and 8-10 November, 2005. The Ministry was represented in the above meetings where a new Resource Allocation Framework was negotiated.
- ◆ The period of preparation of the State of Environment (SoE) Reports in each State/ UT stretches from 2002 to 2007 in the 10th Five Year Plan with a total outlay of Rs 6.0 crores. So far an amount of Rs 5.10 crores has been spend. Total 32 States/UTs were to publish their SOE Reports. So far 20 States/UTs have published these Reports and the remaining State/UTs are in the process of publishing the same.
- ◆ TERI organized the Delhi Sustainable Development Summit (DSDS), 2006 with the support of this Ministry from 2-4 February 2006 which focused on 'Linking across MDGs: towards innovative partnerships and governance.
- ◆ The 9th Governing Council of SACEP was held on 26th August, 2005 in Bhutan. The meeting deliberated on matters relating to "Vision For the Future and Way Forward for SACEP", institutional matter, project status and finalization of work programme.
- ◆ Ministry's Representative participated in the Senior Officers' Meeting of 5th Ministerial Conference on Environment and Development in Asia and the Pacific from 24th -26th March, 2005 and Hon'ble Minister of States attended the Ministerial Segment from 28th -29th March, 2005.
- ◆ A new initiative was launched during the year with the signing of Joint Statement on India-UK High Level Dialogue on Sustainable Development by Hon'ble Minister of Environment & Forests and the UK Minister of State. The areas to be covered under the Statement are the use of research and analysis in both countries; Environmental integration including environmental impact assessment and strategic environmental assessment.
- ◆ The 3rd meeting of India-Finland Joint Working Group on Environment was held on 31st January 2006 at New Delhi, which discussed areas of cooperation between the two countries and future course of action.

Ozone Layer Protection

The Ministry has set up the Ozone Cell as a national unit to look after and to render necessary services to implement Montreal Protocol and its Ozone Depleting Substances (ODS) phase-out programme in India.

Progress/Achievements made during the year

- ◆ Ministry has established an Empowered Steering Committee chaired by the Secretary (E & F) which is supported by three Standing Committees. These Committees are responsible for the implementation of the Montreal Protocol provisions, review of various policy and implementation options, project approvals and project monitoring.
- ◆ The Ozone Cell of the Ministry and the United Nations Environment Programme (UNEP) jointly launched a new global initiative to raise awareness on the Ozone Layer protection and "Remembering Our Future:: Commemorating Closure of ODS Production Sites" under the Montreal Protocol on 8th March, 2005.

◆ A one day conference on “Meeting Challenges in phase-out of CFCs from India’s RAC Servicing Sector” was organised by the Ministry in collaboration with Government of Switzerland, Government of Germany and IIT, Delhi on 9th March 2005. The main focus of this conference was to share the initiatives taken to minimize consumption of CFCs in this sector in India and solicit the active cooperation and support of all the stakeholders.



Fig 11. A pledge ceremony presided by Hon’ble Minister of State (E&F) during International Ozone Day, 2005

◆ As a part of non-investment activity under the Foam and Commercial Refrigeration Programme, three technical workshops were organised in Bangalore in February, 2005, Mumbai in June, 2005 and in Ahmedabad in June, 2005 respectively.

◆ The Eleventh International Day for the Preservation of the Ozone Layer was celebrated in Delhi on 16th September, 2005. The theme of this year’s International Ozone Day was “Act Ozone friendly and stay sun safe”, Hon’ble Minister of State for Environment and Forests, presided over the function and Shri.K.Madhava Sharma, Former Executive Secretary, Ozone Secretariat delivered the Keynote address.

◆ The combined Seventh Meeting of the Conference of Parties (COP) to the Vienna Convention for Protection of the Ozone Layer and Seventeenth Meeting of the Parties (MOP) to the Montreal Protocol on Substances that Deplete the Ozone Layer was held Dakar, Senegal from 12 to 16 December, 2005. India has been selected as a Member of the Executive Committee of the Montreal Protocol for the year 2006. The 17th MOP decided to host the 18th MOP in Delhi during November, 2006.

◆ India has so far met the following compliance dates as per the control schedule of the Montreal Protocol:-

✧ Freeze of CFC production and consumption in July, 1999 at 22588 ODP tons and 6681 ODP tons respectively.

✧ Freeze of Halon Production on 1st January, 2002.

Externally Aided Project in Forestry Sector

◆ 33 projects covering over 4.5 million ha. area and in 16 States of the Country have been completed with the help of external assistance under externally aided forestry projects. Eight projects are also now being implemented in different States of the country.

◆ Externally aided projects are contributing in a significant way to bridge the financial and technological gap in forestry sector.

Climate Change

India is a Party to the United Nations Framework Convention on Climate Change (UNFCCC), which was adopted in May 1992 and came into force on 21st March 1994. The objective of the Convention is to achieve stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Parties to the Convention in 1997 adopted the Kyoto Protocol in recognition of necessity for strengthening developed country commitments under the Convention in furtherance to the objective of the Convention. The Kyoto Protocol commits the developed countries, including economies in transition to reduce emissions of greenhouse gases by an average of 5.2% below 1990 levels during 2008-2012. The Kyoto Protocol came into force on 16 February, 2005. India is a party to the Kyoto Protocol. The activities in this area are coordinated by the Climate Change in the Ministry.

Progress/Achievements made during the year

- ◆ Meetings of National Clean Development Mechanism (CDM) Authority were held periodically to consider the CDM Projects for grant of Host Country approval. Till 10th March 2006, the National CDM Authority has approved 252 projects in various fields including biomass based Cogeneration, Energy efficiency, Municipal Solid Waste; Renewables such as Wind, Small Hydro projects, etc.
- ◆ An Inter-Ministerial delegation from India participated in the 11th Conference of Parties (COP-II) of the UNFCCC and the first Meeting of Parties (MOP-I) to the Kyoto Protocol held in Montreal, Canada from 28 November-9 December, 2005. This Conference was a landmark event as it formally adopted various decisions popularly known as “Marrakech Accords”.
- ◆ An Indo-EU Workshop on Clean Development Mechanism (CDM) was organized in New Delhi on 11-12 November, 2005.
- ◆ A full scale project for obtainment of the funds from the Global Environment Facility (GEF) has been submitted through the United Nations Development Programme, New Delhi to GEF on November 28, 2005.
- ◆ The proposed project is in line with India's commitments to the United Nations Framework Convention on Climate Change (UNFCCC) and envisages specifically to undertake activities leading to the preparation of the Second National Communication accordingly to the guidelines provided by the Conference of Parties (COP) for developing countries.
- ◆ A joint collaborative research programme between the Government of United Kingdom, Department of Environment, Food and Rural Affairs and the Government of India, Ministry of Environment & Forests was completed in September, 2005. The project aimed at the assessment of the sectoral impact of climate change, resolution of uncertainties in current climate prediction models and to enhance the understanding in the area of climate change.
- ◆ Union Minister of Environment & Forests and U.K. Minister of States for Trade released the key result of the Indo-UK Programme on Impacts of Climate Change in India.
- ◆ The research programme included development of Indian climate Scenarios for Impact Assessment; Socio-economic scenarios for India: Impacts of climate change on sea-level variability along the coast of India, Impacts of climate change on water resources; Impacts of climate change on agriculture; Impacts of climate changes on forests; Impacts of climate change on industries, energy and Transport and Impact of climate change on human health.

Administration

Personal Administration

Personal administration is looked after by P-I, P-II and P-III Divisions in the Ministry.

Progress/Achievements made

- ◆ The Ministry is presently having a total strength of 1069 personnel in various groups including Regional Office (HQ) / IFS / CCU / NAEB and NRCD.
- ◆ Under the Flexible Complementing Scheme (FCS), involving a two-tier system of evaluation for review/assessment of the Scientists for their promotion, a total of 18 Scientists of the Ministry including its Subordinate Officers were screened during the year. Seven of them found fit for promotion to the next higher Grades and were promoted accordingly. Interviews of 32 Scientists in various Grades, who were screened in during the last year, were also held. Out of these, 27 Scientists were found fit for promotion to the next higher Grades and were accordingly Promoted.
- ◆ Two posts of scientist 'C' in the National River Conservation Directorate (NRCD); Six posts of Scientist 'D' and two posts each of Scientist 'E' and Scientist 'F' belonging to this Ministry, have been filled on deputation basis, during the current year.
- ◆ During the current year, the cases of promotion under FCS in respect of Scientists, under the administrative control of this Ministry, belonging to different Grades, who were screened-in, are still under finalization due to the recent modifications concerning FCS, made by Department of Personnel & Training.

Indian Forest Service (IFS) Cadre Management

IFS Cadre management is coordinated by the IFS Section in the Ministry.

Progress/Achievements made during the year

- ◆ During the year, 31 Direct Recruit officers have been selected for the Indian Forest Service and 47 State Forest Service officers were inducted into Indian Forest Service by Promotion. About 15 IFS officers joined at various levels under the Central Staffing Scheme of the Ministry and about ten IFS officers joined under the Central Staffing Scheme of DoPT. The Cadre Review Committee meeting was held for the States of Andhra Pradesh, Haryana and Chhattisgarh and preliminary meeting for cadre review for the States of Jammu & Kashmir, Karnataka and Bihar were also held. The IFS Civil List for 2005 was published. For the first time, e-mail IDs for all 2763 officers have been created and made operational.
- ◆ New guidelines for promotion of IFS officers to different grades with a view to removing stagnation have been issued.

Vigilance

The Vigilance Division is responsible for examination and processing of Disciplinary Cases, Appeals, Reviews and Memorials of Indian Forest Service Officers of all States/Union Territories, Investigation of complaints, Obtaining & Maintenance of Annual Immovable Property Returns etc. Cases filed in various Benches of Central Administrative Tribunal and Courts in India in connection with the disciplinary matter are also handled in vigilance Division.

Progress/Achievements made during the year

- ◆ During the year 29 Disciplinary Proceedings cases, 8 Appeal cases, 4 Prosecution Sanction cases were processed in the Vigilance Division. Of these 7 Disciplinary Proceedings cases and 3 Appeal cases were finally disposed of. Besides, 10 CAT/Court cases were also processed and reply filed; wherever necessary in the concerned Bench of the CAT. Out of the 15 Complaints received through CVC 4 complaints were finally disposed of after obtaining and considering the investigation reports. Other complaints are at various stages of investigation/examination.

- ◆ It was decided to undertake inspection and surprise checks of Regulatory Divisions and such other Desks as involved dealing with members of public on a considerable scale. To begin with it has been decided to investigate two oldest cases, selected on random basis from out of the 15 oldest cases pending in each Regulatory Division. The objective was to eliminate avoidable delays in processing & deciding the cases and to find out the reasons for their long pendency.
- ◆ A need has been emphasized for availability of the post of Finance Officer/ Administrative Officer / Accounts Officer in each subordinate organization under the Ministry to ensure strict compliance of the laid down rules and procedures. Steps have been taken to fill up such posts, wherever these are lying vacant. For such posts which have come under deemed abolition, a proposal for revival of such posts has been referred to the Ministry of Finance, Department of Expenditure.
- ◆ Vigilance Awareness Week was observed in the Ministry during the period from 7th November, 2005 to 11th November 2005 and a pledge was administered by Secretary (E&F) to the officers and staff to bring about integrity and transparency in all spheres of activities and to work unstintingly for eradication of corruption in all spheres of life. Posters were displayed in the Ministry's premises during the Vigilance Awareness Week to create greater awareness amongst the employees of the Ministry as well as amongst the visiting public.

Parliament

The activities of the parliament works and parliamentary matters are coordinated by the Parliament Unit of the Ministry.

Progress/Achievements made during the year

- ◆ During the year, total 887 Parliament Questions pertaining to various aspects were dealt with by Ministry (528 questions in the Lok Sabha, 44 Starred and 484 Unstarred and 359 questions in the Rajya Sabha, 34 Starred and 325 Unstarred were answered). The questions covered a wide range of issues with which the Ministry is concerned, prominent among them being Conservation of Wildlife, Pollution related issues, Preservation and extension of Forest cover, Environmental Clearance of Development and Industrial Projects, Bio-diversity, Genetically modified crops, Animal Welfare etc.

Internal Work Study Unit

Activities relating to internal work study are coordinated by IWS Unit of the Ministry. To ensure timely action by various sections on proper record management and strict compliance of various other provisions of the manual of office procedure.

Progress/Achievements made during the year

- ◆ During the year from January to December 2005, 1856 files were recorded/ closed and 3580 files were reviewed out of which, 2891 files were weeded out by various Sections/Divisions of the Ministry.
- ◆ Five hundred and thirty five files of 'A' category kept in the Departmental Record Room of this Ministry were got appraised by the representatives of National Archives of India (NAI) in Oct, 2004 and 253 files recommended for permanent retention, which are being transferred to NAI.
- ◆ In order to have a quick retrieval system and an accurate and permanent data base, the computerization of all the files in the Departmental Record Room (DRR) has been completed. For this purpose, a software was developed. This is very helpful in monitoring the Records Management in the Ministry. Till now, computerization of more than 15,000 files lying in the DRR has been completed.

Use of Hindi

Hindi Division in the Ministry coordinates all the activities to improve the use of Hindi, and other translation works required by the Ministry from time to time.

Progress/Achievements made during the year

- ◆ The over all progress in the use of Hindi was continued to be reviewed by holding the meetings of the Official Language Implementation Committee (OLIC) on regular basis under the chairmanship of the Joint Secretary in-charge of Hindi Division. The over all performance regarding use of Hindi in the Ministry in respect of regions A,B and C remained 57%, 52% and 40 % respectively.
- ◆ The Hindi Salahkar Samiti of the Ministry was reconstituted on 20th April, 2005 under the Chairmanship of Hon'ble Minister of Environment and Forests. The committee met for the first time in New Delhi on 3rd August, 2005. The member gave a number of valuable suggestions for further improvement in the use of Hindi in the Ministry which were duly followed.
- ◆ During the year Hindi workshops were organized for officers and staff of the Ministry on regular basis. The Hindi Noting and Drafting award scheme of Govt. of India, Ministry of Home Affairs, Department. of Official Language, is being implemented in the Ministry.
- ◆ A Hindi Fortnight from 14th -18th September, 2005 was organized in the Ministry. A number of Hindi competitions were held during this period. Out of nine competitions five were relating to use of computer in Hindi.
- ◆ Quarterly Hindi pataka "PARYAVARAN" continued to be published to create awareness among people about environment.

Plan Coordination and Budget

The Plan Coordination Division is responsible for the coordination of all plan schemes and programmes of the Ministry in close association with the Planning Commission. This involves preparation, monitoring and review of Five Year Plans, Annual Plans and the Annual Action Plans of the Ministry. The Division also looks after the monitoring of progress reports and reports under the 20-Point Programme (Points 16 & 17).

Progress/Achievements made during the year

- ◆ Total Plan expenditure during the Ninth Five Year Plan (1997-2002) amounted to Rs.2945.48 crores. An amount of Rs.5945.00 crores was allocated to the Ministry for the Tenth Five Year Plan (2002-2007). The Annual Plan 2002-03, 2003-04, 2004-05 and 2005-06 of the Ministry provided outlays (RE) of Rs.950.49 crores, Rs.950.00 crores, Rs.1050.00 crores and Rs.1100.00 crores respectively. Sector-wise details of Outlays/expenditure is given in Table-5.

- ◆ The progress of plan schemes are reviewed regularly in the Ministry and necessary corrective action is taken to ensure proper and meaningful deployment of resources with a view to building up the capacities of the State Governments in Forestry and Environment Sector, for the programmatic aspects and variengated Centrally Sponsored and Central Sector Scheme.

- ◆ An outlay of Rs.1338.93 corres has been allocated for the Annual Plan 2006-07. Sector-wise break-up of approved outlays is given in Table-6.

Table-6. Sector-wise breakup of Approved Outlays, 2006-07

(Outlay in Rs. Crores)

Sl. No.	Sector	Planned Outlay
1	Environment	212.54
2	National River Conservation Directorate (NRCD)	435.00
3	Forest & Wildlife	316.39
4	National Afforestation and Eco Development Board (NAEB)	356.00
5	Animal Welfare (AW)	19.00
Total		1338.93

Civil Construction

The Civil Construction Unit was created in this Ministry during 1987. This unit is catering to construction work for all the main and attached offices under the Ministry such as Botanical Survey of India, Zoological Survey of India, Forest Survey of India, National Museum of Natural History, Indira Gandhi National Forest Academy, Animal Welfare Division and Autonomous bodies funded by the Ministry like, Indian Council of Forestry Research and Education, G.B. Pant Institute of Himalayan Environment and Development, Indian Institute of Forest Management, Indian Plywood Research and Training Institute, Central Pollution Control Board and Central Zoo Authority.

Table-5. Ninth Plan Expenditure, Tenth Plan and Annual Plan Outlays of the Ministry

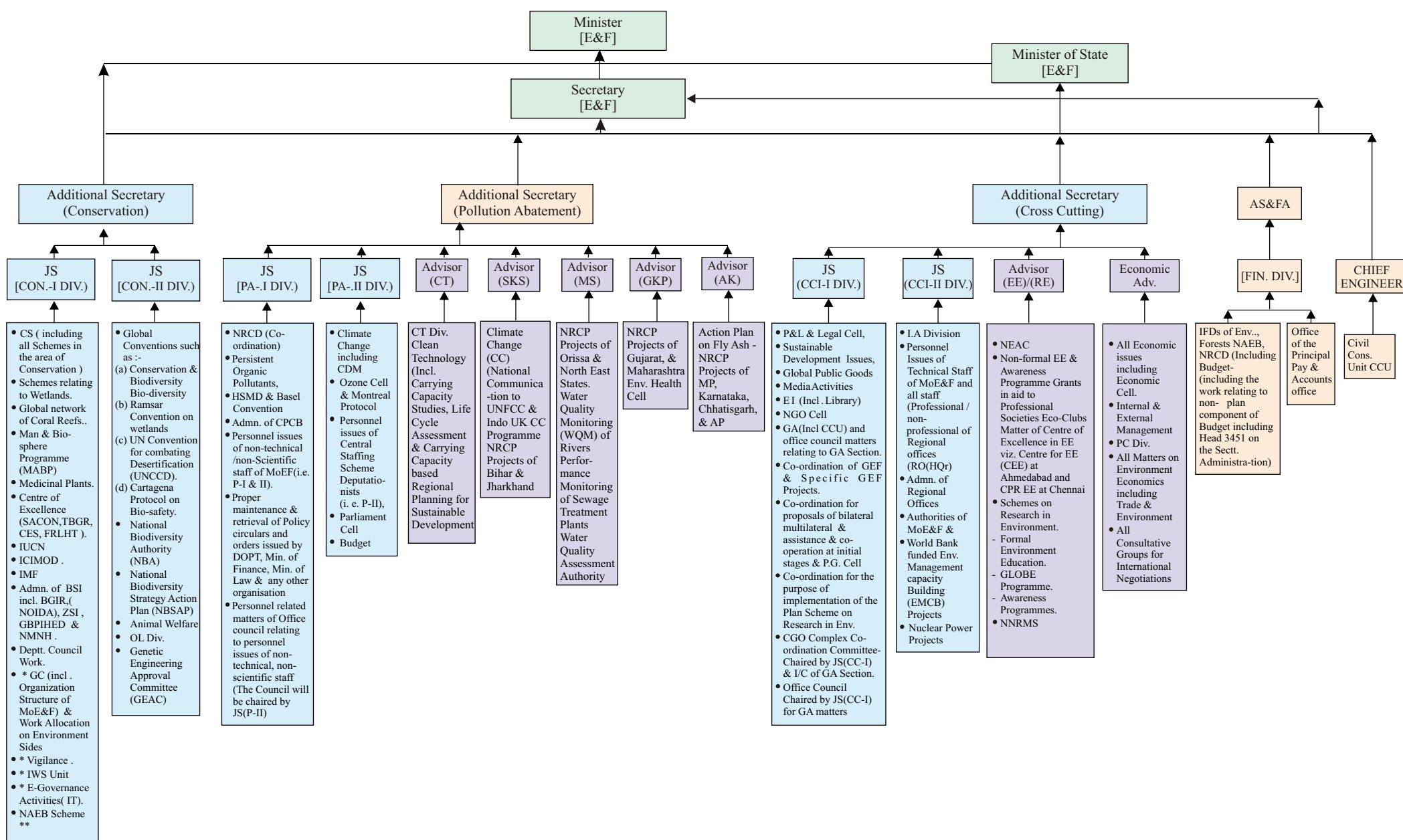
S. No.	Sector Outlay	IX Plan Exp.	X Plan Outlay	2002-03		2003-04		2004-05		2005-06	
				Outlay (RE)	Exp.	Outlay (RE)	Exp.	Outlay (RE)	Exp.	Outlay	Anticipated Exp.
1	Environment	677.59	1199.70	208.11	206.32	174.45	153.32	171.41	179.49	177.71	177.71
2	National River Conservation Directorate	783.46	1670.00	296.45	295.59	289.75	244.49	324.96	317.88	365.42	365.42
3	Forest & Wildlife	924.29	1600.00	244.21	244.29	221.53	192.54	271.98	270.98	264.53	264.53
4	Animal Welfare	4.01	175.00	15.00	14.56	14.77	11.90	14.00	14.00	16.16	16.16
5	National Afforestation and Eco Development Board	496.13	1300.30	186.72	187.27	249.50	195.26	267.65	267.65	276.36	276.36
	Lump Sum North East	60.00	--	--	--	--	92.96	--	--	110.00	110.00
	Total	2945.48	5945.00	950.49	948.03	950.00	890.47	1050.00	1050.00	1100.18	1100.18

Progress/Achievements made during the year

- ◆ A number of office buildings, laboratories, museums and residential quarters have been completed at Almora, Dehradun, Jodhpur, Jabalpur, Bhopal, Delhi, Mysore, Bangalore, Coimbatore, Yercaud, Hyderabad, Shimla, Allahabad, Chhindwara, etc.
- ◆ Thirty one construction works above Rs. 25.0 lakhs were completed by CCU during the year. Another 16 construction activities of Rs. 25.0 lakhs or above are under various stages of construction.

ORGANIZATIONAL STRUCTURE OF MINISTRY OF ENVIRONMENT AND FORESTS

(As on 06-02-2006)



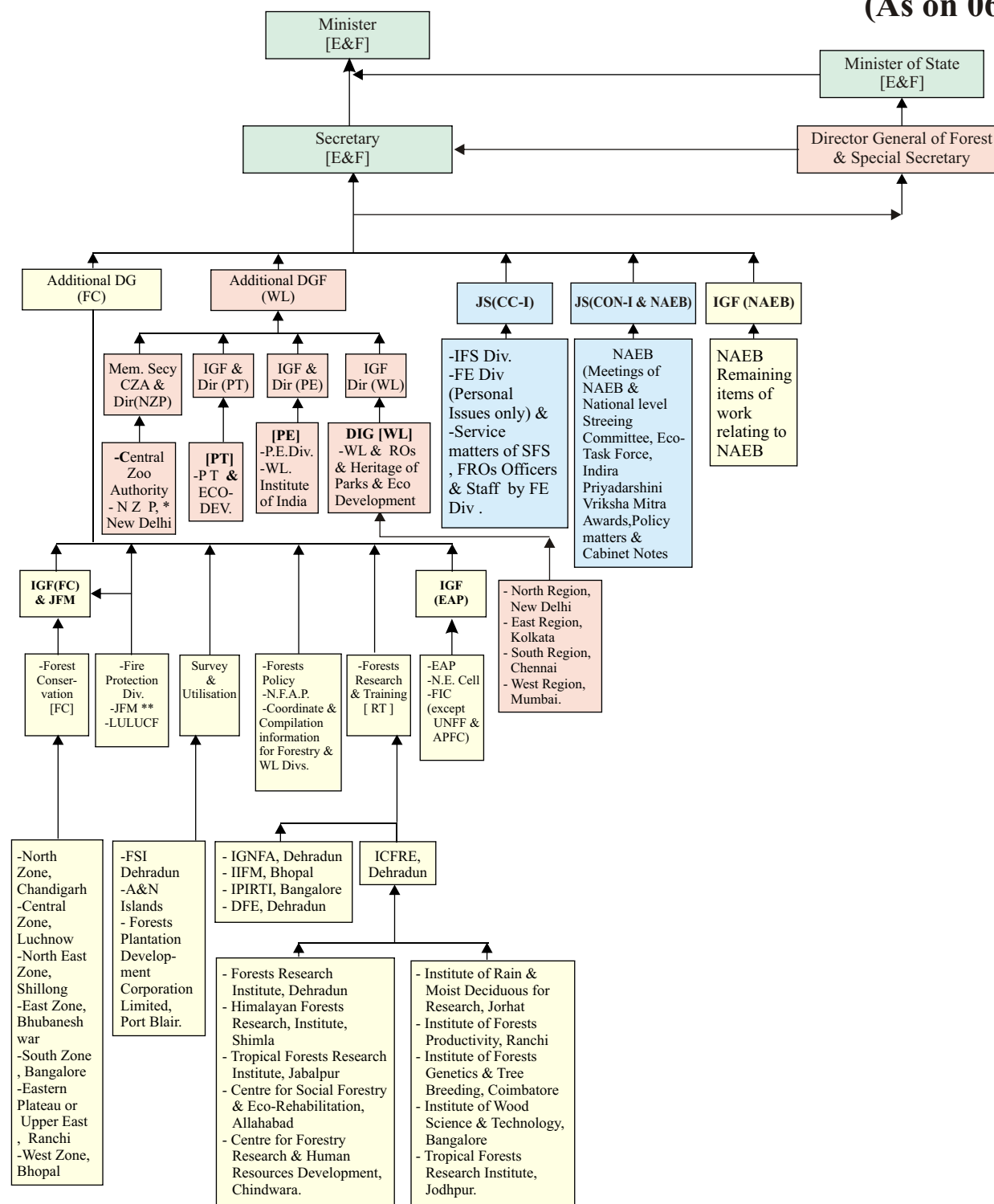
** JS(CON-I) will submit the work of NAEB directly to DGF&SS.

\$ This post is laying vacant
 CS Conservation & Survey
 SACON Salim Ali Centre for Orihthology & Natural History
 TBGRI Tropical Botanical Garden & Research Institute.
 CES Centre of Eco-logical Science
 FRLHT Foundation of Revitalization of Local Health Traditions.
 ICIMOD Integrated Centre of Mountaineering Development
 IMF Indian Mountaineering Foundation
 IWS Unit Internal Work Study Unit
 BSI Botanical Survey of India
 BGIR Botanical Garden of Indian Republic
 ZSI Zoological Survey of India
 GBPIHED G. B. Pant Institute of Himalayan Environment & Development
 NAEB National Afforestation & Eco Development Board

NMNH National Museum of Natural History
 OL Div. Official Language Div.
 FE Forests Establishment
 HSM& Hazardous Substance Management
 GA General Administration
 GEF Global Environment Fund
 PC Plan Co-ordination
 CPCSCA Committee for the Purpose of Control & Supervision of Experiments on Animals.
 P&L Div Policy & Law Div.
 NRCD National River Conservation Directorate
 P.G. Cell Public Grievances Cell
 IA Div Impact Assessment Div.
 IFDs Integrated Finance Divisions.
 NNRMS National Natural Resources Management System

ORGANIZATIONAL STRUCTURE OF MINISTRY OF ENVIRONMENT AND FORESTS

(As on 06-02-2006)



** JS(CON-I) will submit the work of NAEB directly to DGF&SS.

\$	This post is laying vacant	NMNH	National Museum of Natural History
CS	Conservation & Survey	OL Div.	Official Language Div.
SACON	Salim Ali Centre for Orihthology & Natural History	FE	Forests Establishment
TBGRI	Tropical Botanical Garden & Research Institute.	HSMD	Hazardous Substance Management
CES	Centre of Eco-logical Science	GA	General Administration
FRLHT	Foundation of Revitalization of Local Health Traditions.	GEF	Global Environment Fund
ICIMOD	Integrated Centre of Mountaineering Development	PC	Plan Co-ordination
IMF	Indian Mountaineering Foundation	CPCSCA	Committee for the Purpose of Control & Supervision of Experiments on Animals.
IWS Unit	Internal Work Study Unit	P&L Div	Policy & Law Div.
BSI	Botanical Survey of India	NRC	National River Conservation Directorate
BGIR	Botanical Garden of Indian Republic	P.G. Cell	Public Grievances Cell
ZSI	Zoological Survey of India	IA Div	Impact Assessment Div.
GBPIHED	G. B. Pant Institute of Himalayan Environment & Development	IFDs	Integrated Finance Divisions.
NAEB	National Afforestation & Eco Development Board	NNRMS	National Natural Resources Management System