

**CHAPTER-II B**  
**REVIEW OF OVERALL PERFORMANCE DURING 1995-96**

**FORESTRY AND WILDLIFE**

**Indira Gandhi National Forest Academy:**

- During the year 82 IFS officers of 1994-97 batch and 39 IFS officers of 1995-98 batch underwent training.
- To meet the needs of training, the library, computer and other infrastructural facilities were strengthened.

**STATE FOREST SERVICE AND RANGERS COLLEGES**

- 33 State Forest Service Officers have completed 2 years Dipoloma Course during 1994-96.
- 14 Rangers passed out from Eastern Forest Rangers College, Kurseong after completing their course during 1993-95.
- 139 refresher courses of 2 weeks duration were completed. 65 short term computer courses were completed.
- One short term course on Rural Development was conducted at SFS College ,Dehradun.

**INDIAN INSTITUTE OF FOREST MANAGEMENT, BHOPAL.**

- 27 students were admitted to the 1995-97 batch of Post-Graduate Diploma in Forestry Management during this year. Out of this, 21 students are currently undergoing the programme
- 10 students were admitted to M.Phil. Level Course on Resource Management. During the year, 18 Management Development Programmes and 5 National Workshops/Seminars were conducted.
- 20 research projects were taken up.

**INDIAN COUNCIL OF FORESTRY RESEARCH AND EDUCATION DEHRADUN.**

The performance of activities of ICFRE HQs. during 1995-96 are as under:

- Supervision and evaluatior of ICFRE World Bank Project (Procurement/disbursement, foreign training of ICFRE Scientists, utilisation of International consultants etc).
- Deemed FRI University/PG Diploma Courses/Research Fellowships and Associateships.
- New bulletins on seed and timber were published
- 15 films highlighting research achievement in forestry sector are under preparation.
- Extension material on different species and different aspects of forestry were published.
- "Forestry Statistic 1995" covering different aspects of forestry in India is under preparation. This is going to be an annual feature.
- Various diploma courses like Plantation Technology, Pulp and Paper Technology were conducted. Course curriculum for M.Sc. (Forestry) is under finalization. B.Sc (Forestry)

for Laos students have been completed at FRI Deemed University. Scholars have been enrolled for award of Ph.D Degree. Some of them have been awarded degree on completion of the research work.

- Scientist Hostel of 32 rooms has been set up at Dehra Dun.
- Lab equipment, office equipment and teaching aids for the Deemed University were procured.
- The various Research Institute of the Council continued their research work.

## **INDIAN PLYWOOD INDUSTRIES RESEARCH AND TRAINING INSTITUTE (IPIRTI), BANGALORE.**

### **PARTICULARS OF COURSES CONDUCTED DURING 95-96**

SUBJECT AREA	NO.OF COURSES CONDUCTED	NO. OF PERSONS TRAINED
Plywood Manufacturing Log centering, peeling, slicing drying and knife grinding-Resin manufacture, pressing and hot pressing operations.	1	6
Testing of wood based panels	2	11
Saw-doctoring	1	1
Saw-milling and Timber Grading	1	2
Mechanical Wood Industries Technology	1	20
Total	6	40

## **SURVEY AND UTILIZATION OF FOREST RESOURCES.**

### **FOREST SURVEY OF INDIA**

Forest Survey of India (FSI) carries out a comprehensive forest survey at regular intervals and brings information in form for planning at National state and local levels including evaluation through inventory to facilitate scientific forestry planning. During the year 1995-96 Digital Interpretation for the assessment of forest cover for the State of Madhya Pradesh has been done. The FSI has acquired a Digital Cartography system to strengthen its capabilities.

The achievement of FSI are as under:

Items	Units	Target	Achievements
1. Forest Inventory	Area in Sq. Km	25,000	38,399
2. Thematic mapping	1:50, 000 scale (map sheet Nos)	260	142
3. Vegetation mapping	1:2, 50, 000 scale (map sheet Nos)	182	183
4. Training	No. of persons trained	90	219
5. Wood consumption	No. of areas	4	4
6. Data processing	Area in Sq. Km	25,000	27,504

## FOREST CONSERVATION

Region-wise physical targets for 1995-96 and achievements up are given below:

REGIONAL OFFICE	FOREST (CONS.) ACT		ENVIRONMENTAL (PROTECTION) ACT	
	TARGETS	ACHIEVEMENTS	TARGETS	ACHIEVEMENTS
Bangalore	100	103	100	149
Bhopal	175	197	80	69
Bhubaneshwar	150	164	100	112
Lucknow	175	175	80	90
Shillong	140	140	45	45
Chandigarh	80	95	35	35
<b>Total</b>	<b>820</b>	<b>874</b>	<b>440</b>	<b>500</b>

## FOREST PROTECTION AND REGENERATION

Under the scheme "Association of Scheduled Tribes and Rural Poor in Regeneration of Degraded Forests on Usufruct sharing Basis" the afforestation projects sanctioned in the States Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh, Maharashtra, Orissa, Rajasthan and West Bengal during earlier years were continued. During the year two new projects, one in Karnataka and the other in Raipur district of Madhya Pradesh were sanctioned. A sum of Rs. 218.45 lakhs was released to State Governments.

## FOREST POLICY

The forest policy division deals with all the references pertaining to forest policy, forest acts and tribals. With the announcement of the National Forest Policy, 1988, all the Forestry programmes have already been reoriented to meet the objectives set by it. The Indian forests Act, 1927 is the main act which regulates the management of forest by the states. In some states, the act is applicable as it is, while some of the States have enacted their own acts which in essence, are the adopted version of the Indian Forest Act, 1927. Since its adoption, forestry has undergone many conceptual changes leading to the new National Forest Policy of 1988. Consequently, need has been felt for a revised and more comprehensive legislation which would take into account the new National Forest Policy and emerging imperatives of conservation of forests. The proposed amendments had been circulated to all the states/ Uts for their comments. The comments and suggestions of NGOs and other organisations have also been received through Indian social Institute, New Delhi. These comments and suggestions are under process. The final draft will be prepared taking into account the comments of all concerned. The final draft will be circulated to all the Ministries before it is placed to the Cabinets.

The National Forest Policy, 1988 provides for involvement of people in managing forests to attain the desired objectives of Forest Conservation and development. To have the total participation of communities and a better link between the panchayats and implementing agencies, guideline for the nomination and role of Van Mukhia have been issued to all the states/UTs on 7.12.95. The guidelines of consultative mechanism to assess the responsiveness of all concerned in tree planting programmes and conservation have also been issued.

## **NATIONAL FORESTRY ACTION PLAN**

With the announcement of the National Forest Policy, 1988, it became necessary to orient all on-going forestry programmes to meet the objective set by it. Consequently, an integrated perspective programme for long, medium and short term development of the forestry sector at national and state level is being prepared, taking all aspects of forestry and people. This is being done under the project National Forestry Action Programme (NFAP) with the assistance of UNDP and FAO. The project document was signed during June, 1993 and became operational since July, 1993. Zonal sector Review Reports under the NFAP were prepared. Organizations/Institutions/individuals for consultancy in specific subject areas were identified and preparation of consultancy was under progress. International consultants in the fields of resource Economics, Forest Industries Planning, Institutional development and Forest Sector Review were appointed.

## **WILDLIFE**

### **BENEFICIARY ORIENTED SCHEME FOR TRIBAL VILLAGES OF PROJECT TIGER AREAS, NATIONAL PARKS AND WILDLIFE SANCTUARIES.**

The recommendations of the committee constituted to examine the revision in the rates and norms for the scheme were examined and were enhanced to Rs.1.00 lakhs per family from the existing Rs.0.49 lakh per family. Accordingly, the State Governments have been requested to send the proposals under the revised norms/ rates.

An amount of Rs. 16.39 lakhs was released to various State Governments under the Scheme.

### **ECO-DEVELOPMENT IN AND AROUND PROTECTED AREAS.**

The schemes Eco-development in and around protected areas started in the year 1991-92 and continued during VIII Plan.

The Expenditure Finance Committee (EFC) for the scheme approved the enhancement in the total allocation of the scheme during the VIII plan period, from existing Rs.10.20 crores to Rs.29.96 crores, which include an amount of Rs.6.16 crores as externally aided component. Central assistance of Rs. 466 lakhs has been provided under general component and Rs. 190 lakhs under externally aided component for development/welfare activities for the villages in and around protected area.

A project document on eco-development around seven sites Ranthambhore (Rajasthan), Pench (Madhya Pradesh), Periyar (Kerala), Palamau (Bihar) and Buxa (West Bengal), was prepared with the financial assistance from the United Nations Development Programme (UNDP) and posed to the World Bank for consideration for being funded under the Global Environmental Facility (GEF). Further an amount of US \$ 2 million has been sanctioned as project for seven sites.

## **PROJECT TIGER**

The development and management of all the twenty three tiger reserves are being continued. The annual census of tigers has been conducted and the results are being analyzed/compiled.

The Expenditure Finance committee (EFC) for the Project Tiger Scheme has conveyed their concurrence to the proposed enhancement in the total allocation of the Scheme during the VIII Five Year Plan period, from Rs.26.00 crores to Rs.40.00 crores. During 1995-96, an amount of Rs. 840.50 lakhs was released to State Governments for development and management of Tiger Reserves.

## **PROJECT ELEPHANT**

Through this project, State with free ranging population of wild elephants are assisted to ensure long term survival of identified viable population of elephants in their natural habitats.

Assistance of Rs. 301.84 lakhs was provided to eight States

## **NATIONAL PARKS AND SANCTUARIES**

Assistance of Rs. 1012 lakhs was given to State Governments for development of 37 national parks and 183 sanctuaries.

## **NATIONAL ZOOLOGICAL PARK**

A number of construction works were completed including purchase and installation of Electric Incinerator with burning capacity of about 100 kg/hr.

## **B. WILDLIFE INSTITUTE OF INDIA**

The achievements of the Wildlife Institute of India during 1995-96 are as under:

Course		No. of persons trained
1	M.Sc. Course in Biology	7
2	PG Diploma in Wildlife Management	16
3	Certificate course in wildlife management	12
4	Short courses/workshops	11 Nos.

Four new projects under Indo-US collaboration have been cleared by the Ministry of Finance and the work has been started. The institute has undertaken the assignment to train Sri Lankan Forest Officers in Wildlife Management.

## **CENTRAL ZOO AUTHORITY**

The main activity of the Central Zoo Authority has been to provide financial assistance to zoos for achieving the desired standards of management. The assistance has mainly been provided for construction of boundary walls, improvement of food storage and veterinary care facilities, improvement of water supply, sewerage disposal systems and upgradation of animals housing facilities.

The authority continued the evaluation work of zoos 15 large zoos, 16 medium zoos, 28 small zoos, 58 mini zoos and 14 mobile zoos were evaluated. A contract for Rs.9.00 lakh has been materialized with M/s Multi Media to prepare a film of zoos in India.

### **ANIMAL WELFARE BOARD**

The budgetary provisions made by AWBI to support various Animal welfare Schemes is as under;

(Rs. in Lakhs)

1	Propagation of Humane education	20.00
2	Rescue Home for Animals	20.00
3	Anti-Rabies and neutering programme (Animal Birth Control)	45.00
4	Veterinary hospitals, Rescue operations	20.00
5	Revitalization of old Animal Welfare Organizations and assistance to new organizations Board's	15.00
6	H.Q.(land & building construction)	3.00
		143.00

- 15 NGOs in all have set a target of 21,000 operations on stray dogs as part of As per programme in the six Metros. As per monthly reports submitted by NGOs, over 13,500 operations on stray Dogs have been completed.
- 130 training courses have been completed.

### **NATIONAL AFFORESTATION AND ECO-DEVELOPMENT BOARD (NAEB)**

(Rs. in Crores)

Sl. No	Scheme	Physical target for 1995-96	Physical achievement 1995-96 (upto oct. 95)	Financial Target (upto march 96)	Financial Achievement (upto march 96)
1.	Integrated Afforestation and Eco-development Scheme	60,000 ha	50,000*	50.00	41.02
2.	Fuelwood / Fodder Project		70,000*	34.00	34.00

3.	Non- Timber forests	68,000 ha	Under Completion	12.25	12.24
4.	Seed Development Schemes	19,000 ha	17 States assisted	2.00	1.50
5.	Aerial Seeding Schemes			0.50	0.00
6.	Grants- in- Aid Scheme		45 Projects sanctioned	1.50	1.50
		1.50 cr.			

(for Voluntary Agencies)

\* Tentative

## ECOLOGY AND ENVIRONMENT

### BOTANICAL SURVEY OF INDIA

The achievement upto 31.30.96 are as follows:

S.No.	Particulars of achievement	Target	Achievement
1	Survey & Exploration	42 tours	42 tours
2	National Flora	Vol. XII & XIII	in press
3	Fascicle	No. 22 (65 spp)	65 spp.
4	National Data Base	20spp (Manual)	20spp
5	Ethno-botanical Studies	2 tours	2tours
6	Cryptogams	Hymnochetaceae	Completed
7	Publication	5	5

### ZOOLOGICAL SURVEY OF INDIA

#### Exploration and survey of faunal resources

**Himalayan Ecosystem:** A Total of 4 surveys, 3 in Arunchal Pradesh and one in Ladakh (J&K) have been carried out.

**Tropical Rain-forests Ecosystem:** 18 surveys, 4 in nagaland, 8 in Mizoram, 2 in Manipur and 4 in weatern Ghat (Kerala) have been unsdertaken.

**Estuarine Ecosystem:** 3 surveys have been carried outin Sunderbans.

**Freshwater Ecosystem:** A Total of 32 surveys - 24 in Doon valley wetlands and 2 each in Sambhar Lake and Pichola Lake, both in Rajasthan, harike Wetland, Punjab and Adra Lake, Bihar were undertaken.

**Marine Ecosystem:** 26 surveys, 2 in Andaman Islands and 24 in Digha coast, west Bengal have been completed.

**Conservation Areas:** 14 surveys in 7 conservation areas viz., Govind Pashu, UP (1) ; Desert National Parks, Rajasthan (2) ; Gulf of Mannar Biosphere Reserve, Tamil Nadu (2) ; Tadoba Tiger Reserve, Maharashtra (2) ; Pench Tiger Reserve, Maharashtra (2) ; Sanjay Gandhi National Park, Maharashtra (4) ; Indira Gandhi (Perambikulam) wildlife Sanctuary, Tamil Nadu-Kerala (91).

**State Survey:** A total of 25 surveys to 5 states, viz., Andhra Pradesh, Bihar, Delhi, Madhya Pradesh and Tamil Nadu have been undertaken.

**Status Survey of Endangered Species:** 2 surveys have been completed.

**Taxonomic Studies:** Fauna of Sikkim: Partly completed; 10 manuscripts have been received, rest under preparation. Fauna of Manipur: Identification of fauna collected so far from the state is in progress. Fauna of Nanda Devi Biosphere Reserve, UP: The final manuscript submitted for publication. The coordinators were asked to revise the MSS. Fauna of Ujni Wetlands, Maharashtra : Manuscript has been received and the same is being corrected.

## Publication

Records of ZSI	Vol 94 Published
Fauna of India	Two Vol sent in press
Annual Report of ZSI	one volume (1993-94) in press
Bibliography : Indian Zoology	Volume 29 in press
State Fauna of Meghalaya	Part I- IV in the final stage of Printing
Fauna of Hugli- Matla Estuary	Volume released
Fauna of Rajaji National Parks	Published
Fauna of Western Himalayas, UP	Published
Computerization of Faunal Data	Computerization of data pertaining to the National Zoological collection (NZC) is being continued.

## ENVIRONMENT EDUCATION, AWARENESS AND TRAINING

The ministry accorded priority to promote Environmental education and create Environmental Awareness among various age groups through diverse activities and mass media campaigns. The National Environment Awareness Campaign (NEAC) was organized with the main theme of 'Women and Environment'. The campaign also addressed the whole gamut of environmental issues such as people's participation in forest management, soil conservation, wildlife protection, Montreal Protocol, Natural Resources Conservation etc.

Advertisement in newspaper, poster and magazani have been completed. So far 1400 Eco-clubs have been set up. The quarterly magazine Paryavaran in Hindi is being published regularly and 2000 copies are distributed.

Production of films: 3 films on topics related to environment were produced during the year.

**Paryavaran Vahini:** An amount of Rs. 22, 20, 300 was related for expenditure of Paryavaran Vahinis in the States of Kerala, Madhya Pradesh, Himachal Pradesh and Manipur.

**Grant-in-aid to professional Societies:** Financial support has been provided to 13 organizations including NGOs for developing exhibitions galleries and education programmes relevant to ecology, wildlife and environment and to develop activities to the field of environment.

#### **Training & Extension Programme:**

- World Environment Day celebrated.
- Workshop on faunal Biodiversity for SACEP held in June '95.
- Wildlife Week was celebrated on October 6, 1995.
- Extension service to NGO's, school/college students be given.
- Training Course on Leadership in Environmental Awareness & Wildlife Preservation was organized.
- Refresher Course on Collection & Preservation Techniques was conducted.
- Training Course in Field Ornithology held.

#### **NATIONAL MUSEUM OF NATURAL HISTORY**

- (a) Inauguration of the RMNH, Mysore, with its galleries, educational facilities, Bio-science Computer Room etc.
- (b) Completion of the building of 1st Phase, galleries of RMNH, Bhopal slated for inauguration in early part of 1996.
- (c) Setting up a Project Office for the RMNH, Bhubaneswar and initiation of its building construction works.
- (d) Collection of specimens, preservation, fabrication and production of exhibits needed for the RMNH.
- (e) Regular educational and outreach activities of the NMNH, throughout the year including Mobile Museum Service, School Loan Service, Summer Programmes, Teacher Orientation Workshops, Environment Awareness Campaign, Popular Publications, Organization of temporary exhibitions etc.
- (f) Collaboration with the Delhi University and the National Museum Institute, New Delhi in conducting co Environmental Biology and Museology.
- (g) Strengthening the educational infrastructure and potential of the NMNH through enriching the Library, Audio—visual and Film collection, Photographic Documentation

of the flor~ fauna and ecosystems of India etc. Maintenance, upkeep and updating of Exhibit Galleries and collections of NMNH.

## **CIVIL CONSTRUCTION UNIT (CCU)**

### **MAJOR WORKS COMPLETED DURING 1995-96**

- i) Scientists Hostel for FRI, Dehra Dun.
- ii) 46 staff quarters for G.B. Pant Institute of Himalayan Environment & Development, Almora.
- iii) 41 staff quarters (Phase-II), IFGTB, Coimbatore.
- iv) Annexe Building, ZSI, Calcutta.
- v) Regional Museum of Natural History (Phase I), Bhopal

## **NATIONAL RIVER CONSERVATION DIRECTORATE**

### **GANGA ACTION PLAN PHASE I**

The following table shows the number of projects sanctioned, projects completed and project under implementation.

Category	UP	BIHAR	WEST BENGAL	TOTAL
Schemes Sanctioned	106	45	110	261
Schemes completed	102	41	100	243
Schemes under progress/implementation	4	4	10	18

Following table shows category-wise number of schemes Completed till in various States: \*

Category	UP	BIHAR	WEST BENGAL	TOTAL
Interception and diversion	40	17	26	83
Sewage Treatment Plants (STPs)	9	3	12	24
Low Cost Sanitation	14	7	22	43
Electric Crematoria	3	8	15	26
River Front Facilities	8	3	24	35
Other Schemes for river's biological regeneration	28	3	1	32
<b>TOTAL</b>	<b>102</b>	<b>41</b>	<b>100</b>	<b>243</b>

A capacity to intercept/divert 654.45 mld of municipal sewage and to treat 484.50 mld waste water, has been created. The completion of all the low cost sanitation schemes and most of electric crematoria has helped in reducing river water pollution. The water quality has improved discernibly in towns where pollution abatement schemes have been commissioned wholly or in part. The following table gives a comparison in water quality between 1986 and 1995 in selected stations.

### **SUMMER AVERAGE FOR VALUES FOR WATER QUALITY ON MAIN STEM OF RIVER GANGA**

Station Name	Dissolved (mg/1) 1986	Oxygen Demand (BOD) 1995	Biochemical (mg/1) 1986	Oxygen 1995
Rishikesh	8.1	9	1.67	1.3
Kanpur U/S	7.2	8.1	7.17	2
Kanpur D/S	6.7	6.8	8.57	5.5
Allahabad U/S	6.4	8.2	11.4	4.5
Allahabad D/S	6.6	8.2	15.5	3.2
Varanasi U/S	5.6	8.5	10.13	2.6
Varanasi D/S	5.9	8	10.6	1.4
Patna U/S	8.4	6.8	1.95	1.5
Patna D/S	8.1	6.8	2.2	1.3

DO SHOULD BE 5 mg/1 OR MORE; BGD ,SHOULD ESS THAN 3 mg/1

NOTE : U/S stands for up-stream and D/S stands for down-stream.

The evaluation of the Ganga Action Plan (GAP) Phase I the Roorkee University, Aligarh Muslim University, IIT Kanpur, and All-India Institute of Hygiene and Public Health, Calcutta has been completed. The evaluation has concluded that the reduction of discharge of organic matter, a necessary first step in restoring the water quality, has been achieved to a fair level and the GAP as conceived and implemented is an appropriate programme for replication in other river basins as well. It further recommends appropriate intervention to reduce the microbial pollution of the river, rigorous qualitative and quantitative characterization of the sewage for adopting the most appropriate technology of treatment. The findings have been appropriately incorporated in the proposals of Ganga Action Plan (GAP) Phase II and National River Conservation Plan. The findings of the evaluation of the rehabilitation of the turtles for biological control of pollution are being analyzed and compiled by Wild Life Institute of India.

Under the R&D activities, the emphasis is on finding economically viable and technically feasible solution for controlling the microbial pollution. use of Gamma Radiation technology, though found to be most effective cannot be utilized being unviable due to high costs of resource material and operation and maintenance costs. Experiments are also underway using other technologies like UV Radiation, biological control and chlorination. The results of all these activities shall be available in the year 1997-98. The most appropriate technology shall be adopted for microbial pollution control in the NRCP. Field surveys on bio-monitoring and bio-conservation to know the ecological status of the river after the implementation of the GAP works was completed by the end of the financial year and the results are being evaluated for formulating the appropriate strategies for the bio-conservation of the rivers.

For framing the pollution abatement schemes in the non-perennial rivers in the coastal areas, the Central Pollution Control Board in collaboration with the Coastal State Pollution Control Boards is preparing a proposal for detailed surveys and studies to assess the actual pollution load following the methodologies earlier decided in a workshop held for the purpose.

To optimize the bio-gas production for conservation into electric energy from the activated sludge technology based sewage treatment plant (STP), studies have been initiated in collaboration with the Ministry of Non-Conventional Energy Sources.

The water quality monitoring mechanism has been revamped to include drain monitoring, sediment monitoring, performance monitoring of STPs. All the laboratories involved in this exercise have been subjected to Analytical Quality Control (AQC) for sampling, preservation, transport and analysis in order to avoid any discrepancy in the results.

Identification of appropriate agencies for taking up the water quality monitoring in the rivers under NRCP is being carried out. A workshop with the participating States has already been held. Water quality bulletins containing information on basic parameters are being published every month. This bulletin contains the information on the performance of the STPs constructed and commissioned under the action plan.

## **GANGA ACTION PLAN PHASE II & NATIONAL RIVER CONSERVATION PLAN RIVER CONSERVATION PLAN**

The Central Government on 3rd July 1995 approved the programme for pollution abatement of river Ganga under GAP II (UP & Bihar) and other river stretches under National River Conservation Plan (NRCP) as a centrally sponsored scheme on the basis of equal sharing of capital cost of works between the Central and the concerned States. The operation and maintenance cost would, however, be fully borne by the States.

- The GAP Phase II (UP & Bihar) approved by the Government includes pollution abatement works in 10 towns of UP and 11 towns of Bihar located on main stem of river Ganga at approved cost of about Rs.235 crores.
- Under NRCP the Government approved works in 46 towns located on polluted stretches of 18 rivers in 10 States. The approved cost of works is about Rs.772 crores.
- The PFRs received from States under both GAP II (UP & Bihar) and NRCP have been approved. The States are preparing DPRs.

## **YAMUNA ACTION PLAN**

72 Detailed Project Reports (DPRs) in respect of schemes of various categories except the Sewage Treatment Plants based on UASB process received till the end of October 1995 have been approved. The remaining DPRs are likely to be received and approved during the current year. Implementation works on sanctioned schemes have begun and these works are at various stages of completion.

## **GOMTI ACTION PLAN**

8 Detailed Project Reports (DPRs) in respect of schemes in Jaunpur and Sultanpur received till the end of October 1995 have been approved and, accordingly, implementation commenced.

In respect of works in Lucknow under Gomti Action Plan, the consultants appointed by ODA are collecting data to prepare document (Master Plan) containing details of investment proposals. As soon as the Master Plan is prepared, works would be finalized. One DPR for Gaughat drain diversion (I&D) at Lucknow as emergency work has been approved.

### **DAMODAR ACTION PLAN & GANGA ACTION PLAN PHASE II (WEST BENGAL)**

The State Governments are conducting survey to collect data to prepare PFRs under above schemes.

### **NATIONAL LAKE CONSERVATION PLAN (NLCP)**

The lakes which are important component of the ecosystem have over the years been subjected to abuse due to rapid urbanization and industrialization. Most of these lakes are also the source of drinking water supply. In order to restore the status of these lakes by taking appropriate remedial steps for pollution abatement and catchment area development a Centrally Sponsored Scheme on equal cost sharing basis between the Central Govt. and the State Govts. is under formulation. The National Lake Conservation Plan (NLCP) shall initially cover 11 out of the 21 lakes identified by the National Committee on Wetlands, Mangroves and Coral Reefs. Workshops at the National and the State levels have been held for carrying out systematic surveys and studies for preparing the management plans for the conservation of these lakes.

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

- i) Inventory of Industrial Estates has been completed and reports are being prepared.
- ii) Pollution status report for Delhi is completed and data is being collected for Surat, Jabalpur, Palcutta and Guwahati.
- iii) Assessment of pollution from various sources viz. stationary and mobile sources was continued.
- iv) Assessment of water quality of rivers-coastal and ground water was continued in all major/medium rivers. Patalganga river in Maharashtra has been identified as polluted river stretch.
- v) Monitoring of ambient air quality with special emphasis on respirable dust and lead was continued in all big cities/towns through State Pollution Control Boards.
- vi) Research and development on special areas relating to prevention & control of pollution was undertaken.
- vii) Bio-monitoring of Damodar river has been completed.
- viii) Development and review of standards for liquid effluent and gaseous emissions for various categories of industries was continued.
- ix) Development of criteria for eco-labelling consumer products viz. Electrical/Electronic, cosmetics, textiles and drugs has been finalized & draft Gazetted notification was prepared.
- x) Under World Bank Training programme, calendar for 46 training programmes has been prepared to be organized by CPCB and several other organizations.
- xi) The water and air quality data have been received and status reports have been prepared.

- xii) Development and review of technologies relating to prevention & control of pollution was continued.
- xiii) A report on implementation status of pollution control programme in major polluting industries has been published.
- xiv) Organized mass awareness programmes through Zonal offices, State Boards and also through NGOs.
- xv) Draft document on environmental conditions in international trade has been examined.
- xvi) Water Testing Kits have been developed by CPCB for distribution to NGOs.
- xvii) Inventorization of hazardous waste generating industries in Northern and Southern States completed and document published.
- xviii) Preparation of Zoning Atlas in States for identification of sites for industrial siting was continued.

## **WETLAND**

- Meeting of National Committee on Wetlands, Mangroves and Coral Reefs was held.
- The State Governments have been requested to notify important wetlands within various States for conservation purposes.
- Management action plans for Kanjli, Harike, Wular, Deepar Beel, Loktak, Pougdam and Nalsarovar have been sanctioned.
- Meeting of Research Sub-committee on Wetlands, Mangroves and Coral Reefs was held and two research projects have been recommended for financial assistance.
- An amount of Rs.165 lakhs has been released against a provision of Rs.150 lakhs for the scheme during 1995-96.
- The Sixth meeting of the conference of contracting parties of Ramsar Convention was held at Brisbane, Australia was attended by India. A regional report of the activities carried out under Ramsar Convention was presented by India on behalf of the Asian Region as India was a member of the Standing Committee during 1993-96 triennium.

## **ASSISTANCE TO BOTANIC GARDENS**

A meeting of the expert group was held in which the proposals received from various Universities/ Research Institutes/State Governments were examined and evaluated. The experts have recommended seven proposals for granting of financial assistance amounting to approximately Rs.50 lakhs, which is also the financial target for the year 1995-96. Additional information has been sought from some of the proponents. The recommended proposals were processed for financial assistance and Rs. 48.025 lakhs have been released out of Rs. 50 lakhs allocated for this scheme.

## **RESEARCH AND DEVELOPMENT**

201 research projects remained operational under sub-scheme of Man and Biosphere Programme, Environment Research Programme and Action Oriented Research programme for Eastern and Western Ghats. Twenty-eight projects were sanctioned up to 31st March 1996. 8 projects have been completed. Progress of 168 ongoing projects was reviewed through Experts Committees. Meeting of all three committees i.e. (i) Expert Advisory Committee on Action

Oriented Research Programme for Eastern and Western Ghats; (ii) Man and Biosphere Committee, and (iii) Environment Research Committee, were held to consider project proposals for funding. An expenditure of Rs. 355 lakhs has been incurred out of a total allocation of Rs. 385 lakhs.

The first B.P. Pal National Fellowship Award for Biodiversity was awarded to Prof. Raghavendra Gadagar, Chairman, Centre for Ecological Sciences, Indian Instt. of Science, Bangalore for pursuing both basic and applied' research in the area of insect biodiversity with special emphasis on honey bees and other social Hymenoptera.

The Pitamber Pant Award for 1995 was awarded to Dr. K.C. Jayaram of the Madras Science Foundation. During the tenure of the present Fellowship Award, Dr. Jayaram will work on "State of Art on the endangered Mahaseer fishes of South India". An expenditure of Rs. 2.12 lakhs has been incurred out of the total outlay of Rs. 5 lacs.

## **HAZARDOUS SUBSTANCES MANAGEMENT**

- i) The Red Book for Crisis Management has been revised and is in press for printing.
- ii) Consultants are being appointed for 13 industrial pocket-wise hazard analysis.
- iii) Review of the hazard analysis reports of Udagamandal, Hoogly, Rishra, Ahmedabad, Udaipur, Manali, Bilaspur, Bangalore, Ankleshwar, Lote, Delhi, Kovvyur and Ahmedabad have been done.
- iv) Mock-drills for the Off-site Emergency Plan for Moradabad and Durgapur have been completed. New off-site plan for Alwar, Ankleshwar and Vapi have been proposed.
- v) Draft rules on Emergency, Planning, Preparedness and Response for hazardous chemicals have been finalized.
- vi) Draft rules on Bio-Medical waste have invited comments.
- vii) A guideline on safe road transport of hazardous chemicals has been published.
- viii) Report on H-Acid and other dye intermediates has been prepared and circulated to various expert organizations. Comments have been received which are being compiled for revision.
- ix) Four zonal workshops on implementation of PLI Act were organized at Bhopal, Lucknow, Gandhinagar and Madras.
- x) Various Research and Developmental studies on preparation of software, information on chemicals and studies on pesticides are in progress.
- xi) Proposals on training and accident prevention and emergency preparedness and hazardous rules at NSC, Bombay and Ghaziabad, HRD Foundation, New Delhi have been funded.
- xii) Survey reports on municipal solid waste for selected cities have been received from the Municipalities and are being examined. Pilot project for utilization of municipal solid waste has been sanctioned to Hyderabad Municipal College. Pilot project for fly-ash utilization for back-filling of mines has been sanctioned to Mining Research Instt, Dhanbad.
- xiii) A meeting on National Waste Management Council was held.
- xiv) Cases of hazardous waste imports are being examined by expert committee set up for this purpose. Inventorization of hazardous waste is being carried out by CPCB.

xv) Cabinet approval for contribution to BASEL Convention has been obtained.

## **MANGROVES AND CORAL REEFS**

A meeting of National Committee on Wetlands, Mangroves and Coral Reefs was held. Management Action Plans for Pichavaram, Goa, Muthupet, Sunderbans, Coondapur, Gulf of Kutch mangroves and coral reefs of Gulf of Mannar have been sanctioned. A sum of Rs.12r lakhs has been released against the provision of Rs. 150 lakhs for the scheme.

## **BIOSPHERE RESERVES**

Meeting of National Committee on BRs was held on 2nd June, 1995. An amount of Rs.1.11 lakhs was released to the Government of Orissa for preparing a project document on Similipal Biosphere Reserve. Management Action Plan for Nanda Devi in UP, Manas in Assam, Great Nicobar in Andaman and Nicobar Islands, Nokrek in Meghalaya, and Nilgiri (Kerala, Karnataka) portion have been sanctioned. An amount of Rs.255 lakhs has been released for Management Action Plan and Research Projects.

## **BIODIVERSITY CONSERVATION**

The draft of the National Action Plan on Biodiversity is under preparation. An analysis of the existing Central Acts relevant to biodiversity has revealed that there are significant gaps in the existing legal/regulatory measures. Keeping in view the provisions of the Convention, the main elements for inclusion in a comprehensive act on biodiversity are being identified following deliberations with the all concerned agencies.

In the light of the provisions of the Convention, deep public concern has been expressed over the free movement of genetic material from our country, which continues unhindered in the absence of a comprehensive legal framework to regulate it. Action has therefore been initiated to regulate the transfer of indigenous genetic material from the country. The guidelines for this purpose are being prepared in consultation with the Ministry of Agriculture and other concerned agencies. A comprehensive Status Report covering the various facets of biodiversity conservation in the country is under preparation.

India's annual contribution to the Trust Fund of the Convention, amounting to approximately Rs.7.5 lakhs, has been sanctioned for payment to UNEP.

Pursuant to the decisions taken in the first meeting of the Conference of Parties (COP) to the Convention, a meeting of the 15-Member panel of experts on bio-safety was held in Cairo in May 1995, in which India was one of the three countries to represent the Asian region. This was followed by a meeting of the open-ended ad-hoc group of experts on bio-safety held in Madrid in July, 95. In this meeting, India played an active role in mobilizing the support of other countries for a legally binding framework on bio-safety. The first meeting of the Subsidiary Body for Scientific, Technical and Technological Advice to the Convention was held in Paris in Sept' 95, in which a nominee of the Government of India participated.

An Indian delegation participated in the second meeting of the Conference of Parties held in Jakarta from November 6-17 1995. The Minister for Environment and Forests participated and addressed the Ministerial Segment of this Conference in Jakarta.

Follow up of the decisions taken in the second meeting of the COP has been initiated. Deliberations are being held with various sectoral Central Ministries, experts and NGOs on issues pertaining to biosafety; access to IPRs; indigenous knowledge and benefit sharing; bioprospecting; and coastal and marine biodiversity.

The total expenditure incurred under the scheme was Rs 17.20 lakhs.

### **ENVIRONMENTAL AUDIT.**

Submission of an environmental statement by polluting unit to the concerned State Pollution Control Boards has been made mandatory through gazette notification issued under the Environment (Protection) Act, 1986. Sector-wise training programme on environmental audit in different identified sectors have been conducted. An advertisement campaign in newspaper through DAVP has been launched inviting the attention of industries to meet the 30th September deadline for submission of environmental statement to the concerned SPCBs. The concerned SPCBs have been asked to analyze the information contained in the statements submitted to them and also to draw an inter-firm comparison in different sectors.

A software package "Paryavaran" for analysis of information submitted in environmental statement has been prepared and has been distributed to all the SPCBs along with a user manual for "Paryavaran Software for Environmental Statements". A report on performance of environmental statements in selected SPCBs has been prepared by the CPCB. Preparation of sector specific environmental audit manuals in respect of sugar, tannery and lubricating oil refining industries has been initiated.

### **ENVIRONMENTAL STATISTICS AND MAPPING**

A project "Environmental Statistics and Mapping using Geographic Information System and Remote Sensing with specific reference to abatement of pollution" has been sponsored to National Institute for Science, Technology and Development Studies (NISTADS) New Delhi. Under this project activities relating to collection, collation and analysis of environmental data pertaining to air, water and noise pollution and solid waste disposal and their depiction in an atlas are being carried out. Activities relating to the production of computerized maps and preparation of zoning atlas for siting industries in selected districts of different States using GIS has been taken up.

A Project entitled "Preparation of Environmental Quality Mapping based on the GIS in the industrial location Kakinada and Visakhapatnam in Andhra Pradesh has been sponsored to EPTRI, Hyderabad to provide information on industrial pollution in these two major industrial towns based on the GIS systems.

## **ADOPTION OF CLEAN TECHNOLOGIES IN IN SSIs**

A scheme for promoting the development and adoption of clean technology including waste reuse and recycling has been formulated for small-scale industries for research and development with diffusion and adoption of prevention of pollution.

Under this scheme, during the year the following activities have been carried out:

- Training and awareness programmes for personnel in Small Industry Development Organization (SIDO) through Small Industry Service Institute and for entrepreneurs by DC: SST.
- Sector Specific-Manuals on Waste Minimisation in respect of pulp and paper, pesticides formulations and textiles dyeing and printing have been prepared.
- A report on waste minimisation and demonstration studies in electroplating units located in Tamil Nadu has been prepared by NPC under the project sponsored by the Ministry.
- Waste minimisation and demonstration studies of edible oil and dye intermediate industries have been sponsored.

## **WASTE MINIMISATION CIRCLES**

Waste minimisation has proven to be the most sustainable approach for simultaneous promotion of profit enhancement and environmental pollution reduction particularly in small scale industry.

In order to give waste minimisation a form of movement, the concept of Waste Minimisation Circles has been introduced. These circles would be an assembly of representatives of industries of small type in a cluster who would work collectively to promote waste minimisation in their respective units as part of their overall business strategies. A project to establish and run waste minimisation circles has been sponsored to NPC. The prime objective is to promote group efforts in increasing the productivity and imposing the environmental conditions in small and medium scale industries through adoption of waste minimisation techniques. The approach adopted in the project-included identification of clusters, conduction of awareness and training programme and formation of circles. So far 11 such circles have been established which are running on their own.

They are:

- i. Hosiery sector, Kanpur
- ii. Pulp and Paper, Muzaffarnagar
- iii. Electroplating, Industrial Estate Ludhiana
- iv. Cotton dyeing industries, Ludhiana
- v. Electroplating industry, Focal Point, Ludhiana
- vi. Textile Hosiery Processing Unit, Tirupur
- vii. Textile Weaver Processing Unit, Erode
- viii. Metal Finishing Unit, Perungudi, Madras
- ix. Tannery units with CETP, Nammal, Madras
- x. Manmade Textile, Surat

xi. Metal finishing, Mumbai

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

- ENVIS Network with its 20 ENVIS centres continued its activities in information collection, collation strategy, retrieval and dissemination to all concerned.
- The network responded to 8857 national and international queries pertaining generally to the subject areas in pollution control, bio-degradation of wastes, Western Ghat ecology, wildlife, environmental legislation and management etc.
- The ENVIS Focal Point also continued to publish the quarterly journal namely 'Paryavaran Abstract' reporting information on environmental research in Indian context. Over 500 national and international environmental related journals are referred to in compilation of the various abstracts for inclusion in this publication. Relevant abstracts are also arranged under major categories like air pollution, water pollution, noise pollution, ecology, environmental management, forestry, wildlife etc.
- The Focal Point of ENVIS also continued its efforts for networking the ENVIS Centres through ERNET network programme of the Department of Electronics. The ENVIS centres were provided the modems and other hardware so as to make the network functional. Various centres also installed E-mail facilities for fast and quick dissemination.
- The ENVIS Focal Point organized a 3-day workshop on "networking" at the National Centre for Software Technology (NCST), Bombay during the year and was attended by representatives of several ENVIS Centres.
- All the ENVIS centres continued their activities for development of databases in their respective assigned fields during the year. The "newsletter", service reporting activities of the centre as well as various publications available in the centres in their respective subject areas were published by all ENVIS centres. Modems and other hardware were supplied to various centres so that networking is made functioning through ERNET programme of the Department of Electronics.
- ENVIS centre on Western Ghat Ecology located at IISc, Bangalore installed its accession with INTERNET for on-line accession with various national and international database in its specified subject area. Various documents were also published by several centres during the year.

### **Library**

During the year, the Library in the Ministry enriched its documentary base in environment and its related areas by procuring an additional 350 books, documents etc. so that it could act as an environment repository for ENVIS in the Ministry.

More than 250 national and international scientific journals were received in the library. In order to expedite the retrieval and dissemination of information, automation of the library has been initiated. The necessary hardware for this purpose has been installed and software packages procured during the year.

### **Indira Gandhi Paryavaran Puraskar:**

Nominations have been invited for consideration of the award during the year. Steps have also been taken to finalize the awards during the year.

### **Centres of Excellence:**

#### **Centre for Mining Environment, Dhanbad:**

- Centre continued three semester M. Tech. programme in Environmental Sciences and Engineering and so far 19 candidates were awarded the M. Tech. degree by the Centre.
- One week executive development programme for 20 participants on environmental impact assessment was organized by the Centre.
- 13 weeks executive development programme for Coal India Ltd. executives on environmental management for mining areas were conducted by the Centre for 25 participants.
- One week off-campus executive development programme at Ranchi for CMPDI executives on environmental management for mining areas were also organized by the Centre.
- A comprehensive list of references on land subsidence and a book on 'man-made land subsidence in the Indian context' have been compiled by the faculty members of the Centre. During the year, 14 research projects on environment impact assessment in mineral industry, air quality assessment due to vehicular movement around Dhanbad town and other related areas of mining have been completed.
- Research and Development programmes on 31 projects related to various aspects on mining and other associated areas are in progress in the Centre during the year.
- The 10<sup>th</sup> meeting of the Monitoring Committee of the Centre was held during the year to monitor various activities of the Centre and to suggest the corrective measures and the areas to be undertaken for research by the Centre

#### **Centre for Ecological Sciences, Bangalore:**

During the year, the Centre continued 52 research projects in various areas on major themes related to Western Ghat ecology. The theme under which the projects continued are: -

- Monitoring ecological changes at the scale of individual communities/landscapes.
- Monitoring ecological change on a sub-regional scale.
- Monitoring ecological change on a national scale.
- Solid access to biological resources.
- Multi-purpose indigenous plant resources.
- Ecologically sustainable development
- Community based resource management systems.
- Bio-diversity
- Networking

Besides, 4 additional new projects on 'bio-diversity' on Garhwal Himalaya and genetic-diversity, domestic livestock were also undertaken by the Centre during the year.

Apart from R&D projects, the Centre also continued to organize workshops/training programmes on the following:

- Interaction ecology
- Behave and socio biology
- Population theory
- Human ecology
- Conservation biology
- General biology

The Centre also continued short course meeting and workshops on various issue of biodiversity and quality during the year.

## **INTERNATIONAL COOPERATION**

### **(i) Indo-US Common Agenda for Environment:**

During the visit of Mr. Tim Wirth, US Under Secretary of State to New Delhi a Joint Statement of Intent was signed between Government of India and Government of USA on April, the 18th, 1995 for pursuing a Common Agenda for the environment.

As a follow-up of this Common Agenda, the following three Working Groups have been set up:

1. Global Environmental Issues.
2. Environment, Trade and Investment.
3. Science and Teghnology.

The first meeting of the Working Group on Environment, trade and Investment was held on September 25, 1995 in New Delhi. The Indian side was led by Mr. N.R. Krishnan , Secretary (Environment & Forests) and the US side by Mr. Frank G. Wisner, US Ambassador to India. The representatives from Ministries of Power, Economic Affairs, Non-Conventional Energy Sources, Commerce, Confederation of Indian Industry, Associated Chambers of Commerce and Industry of India, Federation of Indian Chambers of Commerce and Industry, USAID, US Embassy participated in the discussions.

The first Working Group Meeting of the Global Environmental issues was held in October, 1995. The Indian side was led by Shri N.R. Krishnant Secretary (Environment & Forests). The US side was led by Ms. Eileen Claussen, Senior Director for Global Affairs, USA. Representatives from the Ministry of External Affaira participated irl the discussions. Various global environmental issues like Ozone Depletion, Transboundary movement of Hazardous Wastes, Biological Diversity, Climate Changes global Environment Facility, etc were discussed.

### **(ii) Follow-up of UNCED:**

The principle enshrined in the Rio Declaration and Agenda 21 provide a framework for future action on environmental issues in a global perspective. India is actively participating in the global debate on the implementation of Agenda 21. The Third Session of the Commission on Sustainable Development (CSD) over 11-28 April, 1995, deliberated on the various sectoral and cross-sectoral issues relating to the Chapters 10-16 of Agenda 21. These relate to land management, forests deserts, mountains/ sustainable agriculture, bio-diversity and biotechnology. One of the major achievements in the 3rd Session of the CSD so far as India is concerned is the culmination forestry matter in the decision to set Governmental Panel on Forests to promote and sustainable development of all types

### **(iii) 18th Governing Council Meeting of UNEP**

The 18th Governing Council meeting UNEP held bi-annually was held at Nairobi over 15-26 May, 1995, in which India participated. Various matter like funding, programmes, governing etc. of the UNEP were discussed in the 18<sup>th</sup> meeting of Governing Council including possibilities of increasing the effectiveness of UNEP in discharging its mandate in the post- Rio phase.

### **(iv) First meeting of the Open ended Ad-hoc Inter Governmental Panel on Forests:**

The Economic and Social Council by its decision 1995/226, endorsed the recommendation of the UN Commission on Sustainable Development at its third session to establish an open-ended Inter-Governmental Panel on Forests to pursue consensus and formulate coordinated proposals for action towards the management, conservation and sustainable development of all types of forests. The first ever meeting of the Panel was held in New York over 11-15 September 1995. India participated in this meeting, which considered the organizational matters and programme of work of the Panel. The panel will be submitting its report to the CSD in early 1997. The term of the panel is for 2 years and the most satisfying from Indian point of view is that India, along with U.K has been elected Co-Chairmen of the Panel.

### **(v) Global Environment Facility:**

After completion of the restructuring of the Global Environment Facility (GEF) and its replenishment, it has passed through its pilot phase, and has become a regular facility. The four focal areas of GEF, which have a bearing on global environment are climate change, Biological Diversity/ International Waters and Ozone layer Depletion. The agreement on restructured GEF envisages funding for activities concerning land degradation, primarily desertification, and deforestation as they relate to the four focal areas. During the year, this Ministry have been regularly participating in the meetings of the GEF Council. So far, five Indian projects have got approval for funding under the GEF. All of them relate to the mitigation Of global warming.

### **(vi) Capacity 21 and Institutional Development Fund of World Bank:**

A large number of projects were posed for funding for institutional capacity building (Capacity 21) in the field of environment and forests. But only one project has so far been approved under Capacity 21. Since all the other projects have very little likelihood of getting

approval under Capacity 21, some of them with modifications as per operational directives of the Institutional Development Fund of World Bank have been posed for IDF funding. Four of them got the approval, on principle, from the World Bank IDF.

**(vii) SOE, 95:**

India's country-report for the State of Environment (SOE), 95 for the Asia and Pacific, being prepared by ESCAP has been completed and presented to the ESCAP High level meeting on environment and sustainable Development held at Bangkok over 1-4 August, 1995.

**(viii) International Centre for Integrated Mountain Development (ICIMOD):**

India has regularly participated in the activities of the International Centre for Integrated Mountain Development (ICIMOD) during the year in which the Second Quinquennial Review of the organization was completed and presented to the Board of Governors of ICIMOD. An Indian Mission consisting of farmers, scientists and officials connected with the Seabuck Thorn project visited China to gain valuable experience from them under the aegis of ICIMOD. Also, newer areas of possible cooperation between ICIMOD and the States of H.P and Sikkim were explored.

(ix) In addition, India is to participate in 2 workshops of the SAARC Technical Committee on Environment on the subjects of vehicular pollution and marine pollution, and many other inter-sessional activities of CSD.

The Joint Project Steering Committee of ICEF has approved the following projects:

1. Indian Farmers Fertilizer Cooperative Ltd. (IFFCo) - Project for Rs.31.5 crores (in 1994-'99) to build the capacity in IFFCo to improve the productivity of degraded lands for the benefit of rural poor especially women by the application of Participatory Farm Forestry System, research, training and extension through village level farm forestry cooperative societies in national/state federations.
2. Government of Nagaland - Proposal on developing and demonstrating an approach based on test measures which would improve the practice of shifting cultivation and transform it into agro-forestry for Rs.12.6 crores (1994-'99).

In the year 1993-'94 an amount of Rs.19.18 crores has been released to ICEF society. An amount of Rs.55.24 crores were released to ICEF society in the year 1994-'95. In the year 1995-'96 an amount of Rs.13.75 crores will be released to ICEF Society.

(x) A Memorandum of Understanding was signed on 18th April, 1995 with Iran in the field of Environment and Forests during the visit of Mr. Rafsanjani, President of Iran. The MoU was signed by the former Minister (Environment & Forests) and Mro Ali Akbar Velayah, Iran Minister for Foreign Affairs.

**(xi) Training:**

Candidates from State Governments, State pollution Control Boards, Central Pollution Control Board, Central Ministries/Departmentst, Non-Governmental Organizations, Institutions were sent for training abroad under Colombo Plan/UNEP programmes on environmental and forestry matters.

**(xii) WORLD BANK AIDED INDUSTRIAL POLLUTION CONTROL AND PREVENTION PROJECTS (PHASE I & II)**

Efforts are in progress to entrust the activity for procurement of equipment to another procuring agency.

Progress under the components of CETP is picking momentum. Similarly progress under waste minimisation, clean technology, GIS based tracking demonstration project are also showing a satisfactory progress.

In the fiscal year of 1995-96 an amount of Rs.13.5 crores has been earmarked for strengthening of Pollution Control Boards of Uttar Pradesh, Gujarat, Tamil Nadu and Maharashtra. The strengthening of these Boards includes civil construction of laboratory, procurement of equipment, training of personnel of the Central and State Boards. An amount of Rs.76.22 lakhs was spent. The entire amount could not be utilized for the reasons mentioned below:

The Ministry of Environment & Forests had engaged DGS&D as the procuring agent for equipment to be purchased under the World Bank Aided Industrial Pollution Control Project. DGS&D could only procure very few equipment, which has led the Ministry an embarrassing point to surrender a huge sum of un-utilize funds. The inefficiency in procurement of equipment by DGS&D was realized and consultations with RITES was initiated for a change-over of procurement agencies. However, keeping in view the-specialized scientific equipments being procured, it was felt that the Central Pollution Control Board who is the field organization of the Ministry having specialized persons, could very well be entrusted this challenging job and therefore, this has been entrusted to the Central Pollution Control Board recently. It is hoped that all the equipment under the project will be procured without any further delay.

An amount of Rs. 3 crores has been earmarked for having Common Effluent Treatment Plant in the clusters of small scale industrial units. An amount of Rs. 1.5 crores has been achieved.

This indicates that the CETP concept is gradually gaining confidence among the small scale entrepreneurs. The reasons for non-full utilization of funds under this component is as follows:

- i. The CETP is a new concept
- ii. Prosecution of the industries takes a long time and even after prosecution starts, the small scale industries continue to pollute.

- iii. CETPs has to be put up by a cluster of small scale industries of the compatible effluent quality.
- iv. Formation of a cooperative society of the small scale industries is the crucial bottleneck.
- v. Formation of the CETP Company by the cooperative society takes time;
- vi. Availability of land on subsidized price ;
- vii. Sanction of the State subsidy by the State Government;

Steps have been initiated to monitor the CETPS physically on field and also to interact with the State Government for establishing new CETPs in the clusters of small-scale industries where no such facilities are existing.

The extent of capacity utilization and cost benefit analysis of the entire project is under study.