

CHAPTER II-C-3

1.0. TARGETS FOR 1999-2000

1.1. FORESTRY AND WILDLIFE

1.1.1. FORESTRY EDUCATION AND TRAINING

1.1.2. INDIRA GANDHI NATIONAL FOREST ACADEMY

Advanced phase of training : IFS probationers of 1997-2000, 1996-1999, 1998-2001 courses in different phases.

5 compulsory courses.

2 Induction training courses to officers promoted to IFS.

The budget provision is Rs.1.75 Crores (plan) and Rs.2.73 Crores (non-plan).

1.1.3. STATE FOREST SERVICE COLLEGES AND RANGERS COLLEGES.

Training of SFS officers in 3 SFS colleges one each at Dehradun, Coimbatore and Burnihat.

Training of Forest Rangers in EFRC, Kurseong.

11 Refresher Course for in-service SFS officers with 35 participants each.

7 courses on "Computer Applications in Forestry" for in-service SFS officers with 35 participants each.

3 other courses of SFS officers and 1 course for Forest Rangers.

The budget estimate is Rs.1.30 Crores (plan) and Rs.1.86 Crores (non-plan)

1.1.4. INDIAN INSTITUTE OF FOREST MANAGEMENT, BHOPAL.

MDP/Courses and Seminars/Post Graduate Diploma Course on "Forestry Management/M.Phil. Ph.D. Research Studies.

National and International linkages to be strengthened.

On-going and new research projects to be continued.

Construction of hostel phase II, Director's bungalow, etc.

The budget estimate is Rs.2.70 Crores (plan) and Rs.1.05 Crores (Non-plan)

1.1.5. INDIAN PLYWOOD RESEARCH AND TRAINING INSTITUTE (IPIRITI), BANGALORE

New projects are to be initiated along with the on-going projects of 1998-99

Establishment of Particle Board and Finger and Lumber Jointed Unit.

The budget estimate is Rs.0.70 Crores (plan) and Rs 1.20 Crores (non plan).

1.1.6. INDIAN COUNCIL OF FORESTRY RESEARCH AND EDUCATION (ICFRE), DEHRADUN

Formulation of research plan of ICFRE Institutes and National Forestry Research Plan, Formulation and Implementation of HRD Plan. Publication of Annual Report of ICFRE 1997-98, IFLIN Newsletter, Publication of Forestry Statistics India 97, Forestry Statistics India 98, Quarterly Timber/Market Trade Bulletin. Purchase of 275 journals, books, Bar-coding of 7000 books. All civil works under FREEP Project will be completed and remaining equipment will be procured. The budget provision is Rs.67 crores (plan) and Rs. 11 crores under research and Rs. 2 crores under plan and Rs. 1.05 crores under education and training. The goals of ICFRE's important institutes are as under:-

1.1.6(1) . Forest Research Institute, Dehradun

Clonal propagation of *Dalbergia sissoo*, *Tectona grandis*, *Eucalyptus* hybrid and bamboo; morphological studies on fruits/seeds of *Dalbergia sissoo* and *Albizia* spp; medicinal plants, Seed studies, water stress studies, timber evaluation studies, development and evaluation of eco-friendly wood – preservative; efficiency of organic vis-à-vis chemical fertilizer in improving the productivity of sodic soil; studies on forest products, forest protection, forest nursery, bio-fertiliser etc. will be undertaken by the respective divisions of the Institute.

1.1.6(2). Institute of Forest Genetics & Tree Breeding, Coimbatore.

Evaluation of progeny trials of *Eucalyptus* and *casurina* species; reproductive biology studies, nutrient cycling studies, seed research, provenance trials and agro-forestry research will be continued at the Institute.

1.1.6(3). Institute of Wood Science & Technology, Bangalore.

Anatomical studies and development of software for computer assisted wood identification; environmental effects of wood preservatives; research on sandal, in-vitro probation, catamaran introduction, bio-fertiliser studies, progeny trials and standardisation of nursery practices , establishment and maintenance of SSO of teak, spectroscopic studies on red sanders wood and developing substitutes for Jigat used in agarbatti etc. will be continued.

1.1.6(4). Tropical Forest Research Institute, Jabalpur.

Maintenance and establishment of SSPA, CSO and vegetative multiplication garden of Teak, *casurina*, etc., agro-forestry trials and identification and selection of VAM fungi will be continued. Eco-restoration of mined areas and productivity enhancement studies for forest areas, bio-diversity studies in JFM areas of Orissa and Madhya Pradesh will be continued.

1.1.6(5). Arid Forest Research Institute, Jodhpur.

Evaluation of different tree species for high yields in forestry plantations and agro-forestry areas; experiments on soil water plant relationships, soil moisture management, Moisture stress tolerance in tree species will be continued. Studies for planting stock improvement, Neem provenance trial, observations, provenance studies in fodder species, development of tissue culture protocol for their propagation etc. will also be undertaken.

1.1.6(6). Institute of Rain & Moist Deciduous Forests Research, Jorhat.

Changes in morphological, physical and chemical properties of soil under shifting cultivation will be carried out. Studies on seeds, VAM, Bamboo's blight disease will be continued.

1.1.6(7). Himalayan Forest Research Institute, Shimla.

Establishment and maintenance of SPA, SSO and VMG, selection of species for desert and temperate afforestation will be continued. Agro-forestry and silvipastoral research would be undertaken. Studies forests and planting stock improvement would be undertaken. Hydrological studies in Eastern Himalayan region, nursery raising of NWFP and its extension etc. would also be undertaken.

1.1.6(8). Institute of Forest Productivity, Ranchi.

Seed production areas and seed orchard will be established and maintained. Maintenance of lac farms alongwith improvement trials will be continued. Plant growth and productivity studies and vegetative propagation studies will also be undertaken.

1.2. SURVEY AND UTILISATION OF FOREST RESOURCES

1.2.1. FOREST SURVEY OF INDIA

S.No.	Item or Work	Unit/Scale	Target
1.	Forest Inventory	Forest Area (in sq. kms.)	43,750
2.	Data Processing	Forest area (in sq. km)	43,750
3.	Thematic Mapping	Sheets of 1:50,000 scale	260 map sheets
4.	Vegetation Mapping	Sheets of 1:2,50,000 scale	181 map sheets
5.	Training	Persons to be trained	90
6.	Special studies	No. of areas	4

The budget provision is Rs.3 crores on the plan side and Rs.4.40 crores on the non-plan side.

1.3. FOREST CONSERVATION

Physical targets monitoring of cases under FCA, 1980 and EPA are given below:-

Forest (Conservation) Act	Environment (Protection) Act
950	400

The budget estimate is Rs. 4.00 crores under the scheme "Strengthening of Forest Divisions".

1.4. FOREST PROTECTION AND REGENERATION

It is proposed to extend assistance to all States/UTs under the scheme 'Modern Forest Fire Control Methods' for control of forest fire.

The budget estimate is Rs.3.10 crores on the plan side.

1.5. WILDLIFE

1.5.1. 300 Sanctuaries and National parks will be assisted under the National Parks & Sanctuaries scheme. Activities in 23 Tiger Reserves and 12 Project Elephant Range States will continue. The budget estimate is Rs.12 crores for development of National Parks & Sanctuaries, Rs.17 crores for Project Tiger and Rs.5.20 crores for Project Elephant.

1.5.2. ECO-DEVELOPMENT PROJECT

. The Project States will be implementing the project to achieve improved protected area management, village eco-development, environment education and awareness campaign, etc.

The on-going Govt. of India Eco-development Project activities will be continued. 80 National Parks and Sanctuaries and 18 Project Tiger areas will be assisted. The budget estimate is Rs.64 crores (including Rs.55.00 crores under externally aided India Eco-development Project).

1.5.3. STRENGTHENING OF WILDLIFE DIVISION AND CONSULTANCIES FOR SPECIAL TASKS

The on-going activities to fund establishment, office expenses and travel expenses of Central Wildlife Division and Regional Offices will continue. Funds will also be used to provide consultancies for special tasks as and when there is a proposal. The budget estimate is Rs.2 crores.

1.5.4. BENEFICIARY ORIENTED SCHEME FOR TRIBAL DEVELOPMENT

This will continue with a financial provision of Rs.4.5 crores.

1.5.5. WILDLIFE INSTITUTE OF INDIA

Sl.No.	Course	Target (No. of persons)
1.	M.Sc. course in Biology	11
2.	PG Diploma in Wildlife Management	30
3.	Certificate Course in Wildlife Management	30
4	Short Courses/Field Workshop	140

The budget estimate is Rs. 4 crore on the plan side and rs.1.45 crore on the non-plan side.

1.5.6 NATIONAL ZOOLOGICAL PARK

Construction work of new enclosures/modification in the existing enclosures will be taken up alongwith other captive breeding activities. The budget estimate is Rs.0.25 Crore on the plan side and Rs.2.97 Crores on the non-plan side.

1.5.7. CENTRAL ZOO AUTHORITY

All on-going activities including grant to various zoos in the country as per revised EFC Memo. For IX will continue. The budget estimate is Rs. 12 crores on the plan side.

1.6. NATIONAL AFFORESTATION & ECO-DEVELOPMENT BOARD

For the year 1999-2000 an allocation of Rs. 105.705 crores has been proposed for the NAEB at current prices. The scheme wise break up and the physical targets are given below:

(Rs.in Crores)

Name of the Scheme	BE	Physical target for 1999-2000
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Integrated Afforestation and Eco-Development Projects Scheme	41.00	49,261 ha.
Fuelwood/Fodder Projects Scheme	40.00	73,045 ha.
Non-Timber Forests Produce (including Medicinal Plants) Scheme	15.00	13,387 ha.
Seed Development Scheme	3.00	--
Grants-in-aid Scheme (for Voluntary Agencies)	2.00	50 projects

1.7. BOTANICAL SURVEY OF INDIA

Name of the Activity	Physical Target
Exploration Surveys	72 survey tours.
Collection of Specimens	Ca 15000 Specimens
Preservation of Specimens	Ca 12000 specimens.
Publications	12

The budget estimate is Rs.4.10 crore on the plan side and Rs.10 crore on the non-plan side.

1.8. ZOOLOGICAL SURVEY OF INDIA

Name of Activity	Physical Target
Exploration and Survey	56 surveys
Status Survey of Endangered Species	2 surveys
Taxonomic Studies:	
(a) Fauna of Manipur	Analysis of the data to be completed.
(b) Fauna of Ujni Wetlands	Volume to be published.
(c) Fauna of Mizoram	Volume to be published.
(d) Fauna of Nagaland	Volume to be published.
Publication:	
(a) Fauna of India	As and when received.
(b) Records of ZSI	Volume 97 and 98 under printing.

(c) Annual Report of ZSI	Volume 94 to be made press ready and Volume 95 to be made press ready.
(d) Bibliography of Indian Zoology	Numbers 29 & 30 to be sent for printing.
(e) Fauna of Tripura	To be made press ready.
Computerisation of Collected data	To be continued.
ENVIS on Biodiversity	Data available to be computerised. Half-yearly newsletter to be published.
Renovation of Zoological Galleries.	2 Regional Museums to be renovated.
Training and Extension Programme	1 Course during February, 99.
EIA Studies.	As and when assigned.

The budget estimate is Rs.3.25 crore on the plan side and Rs. 8.95 crore on the non-plan side.

1.9. ENVIRONMENT, EDUCATION AWARENESS & TRAINING

(Rs. in Crores)

Name of the Scheme	BE	Targets
Environment Education & Training	3.60(P) 0.05(NP)	The existing programmes will be continued
Seminars/Symposia/Workshops	0.30(P)	60

1.10. ENVIRONMENTAL POLICY & LAW

(Rs. in Crores)

Name of the scheme	BE	Physical Targets
1. Environmental Policy & Law Activities.		
a) Environment Policy & Legislation	} } } } }	- Preparation of rules. - Amendment of Cess Act. - Notification publication. -
b) Eco-mark scheme.	} } } }0.25 } }	- Publicity to Eco-mark. - Assistance to Comprehensive Testing proposals. - Development of Criteria & Publication of notification.
c) National Environment Policy.	} }	- Preparation of document on National Environment Policy.
d) Trade & Environment.	} } }	- Holding of Seminar. - Preparation of position paper.

2. National Environment Tribunal	1.50	Setting up of Benches of the Tribunal.
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1.11. WORLD BANK AIDED INDUSTRIAL POLLUTION CONTROL PROJECT

(Rs. in Crores)

Name of the Scheme	BE	Physical Targets
1. World Bank aided Industrial Pollution Control Project Industrial Pollution Prevention Project	15.00	<ul style="list-style-type: none"> - Calling tenders for eight packages for procurement of equipment. - Obtaining proposals from AP & Rajasthan Board for Lab facilities. - Making Schedule of training for personnel of SPCBs and organising training programmes. - Finalisation and award of Software contract on GIS by GCB. - Release of funds on Waste Water Recycle Project already in hand
2. World Bank aided hazardous substance Management Project		
a) Industrial Safety Disaster Prevention Project.	2.00	Award of ToRs 4 & 8. Release of total amount.
b) Hazardous Waste Management Project	0.10	(project is yet to be negotiated)

1.12. CIVIL CONSTRUCTION UNIT(CCU)

(Rs. in Crores)

Name of the Activity	BE	Physical Targets (No. of works)
Forestry & Wild Life	3.40	33
Ecology & Environment	8.60	53
Civil Wing	1.55	-
Grand Total	13.55	86

1.13. ENVIRONMENTAL INFORMATION SYSTEM(ENVIS)

(Rs. in Crores)

Name of the Scheme	BE		Physical Target
	Plan	Non Plan	
ENVIS	1.50	0.30	<ul style="list-style-type: none"> - A few ENVIS Centres in the emerging areas are proposed to be set up during the year. - Annual Report and the Enviro News newsletter will be continued to be published by ENVIS. - All ENVIS Centres will be strengthened to develop their Home pages. - Query-answer service will be provided by the ENVIS network and efforts will be made to provide substantive information as far as possible to the users. - The Sustainable Development Networking Programme (SDNP) will be continued and a Website will be developed for SDNP so that organised accessibility and exchange of information among all concerned users namely academic and research institutions, NGOs, Govt., bodies, business establishment etc.

1.14. CENTRES OF EXCELLENCE

(Rs. in Crores)

Name of the scheme	BE	Physical Target
Centres of Excellence	5.15(P) 1.50(NP)	As per programmes approved by Board of Governors/Governing Councils of each Centre.

1.15. NATIONAL NATURAL RESOURCE OF MANAGEMENT SYSTEM (NNRMS)

(Rs. in Crores)

Name of the scheme	BE	Physical Target
NNRMS	1.00	Efforts have been made to invite proposals under the scheme from various concerned organizations in the country. It is hoped that more research proposals will be supported under the scheme for the application of remote sensing technologies in the field of environmental sciences. Monitoring of already sanctioned projects will also be undertaken during the year.

1.15. PARYAVARAN VAHINI

(Rs. in Crores)

Name of the Scheme	BE	Physical Target
PARYAVARAN VAHINI	0.50	More districts will be covered to set up Paryavaran Vahinis during the year. Efforts will also be made to provide financial assistance to the existing vahinis after getting the requisite financial documents from the concerned State Governments.

1.16. GRANTS-INAID TO PROFESSIONAL SOCIETIES

(Rs. in Crores)

Name of the scheme	BE	Physical targets and achievements
Grants-in-aid To Professional Societies	0.10	Appropriate institutions and organizations will be supported under the scheme to develop the activities and the project in the field of environment and ecology.

1.18. NATIONAL RIVER CONSERVATION DIRECTORATE

(Rs. in Crores)

Name of the activity	BE	Physical Target
National River Conservation Directorate	6.00	The on-going projects will continue
Ganga Action Plan-I	2.00	
Ganga Action Plan-II	120.00	
National River Action Plan	70.00	
National Lake Conservation Plan	2.00	
Total	200.00	

1.19. ASSISTANCE FOR ABATEMENT OF POLLUTION

(Rs. in Crores)

Name of the scheme	BE	Physical Targets
Assistance for Abatement of Pollution	1.75	There is no physical target.

1.20. REIMBURSEMENT OF WATER CESS

(Rs. in Crores)

Name of the scheme	BE	Physical Targets
Reimbursement of Water Cess (Non-Plan)	50.00	This is a receipt related payment under the Water Cess Act., upto 80% of the collection is paid back to the SPCBs.

1.21. TAJ PROTECTION MISSION

(Rs. in Crores)

Name of the scheme	BE	Physical Targets
TAJ PROTECTION MISSION	50.00	Implementation of the following projects 1) Improvement in Electric Supply at Agra Part-II 2) Improvement in Electric Supply in and around the rural areas of Agra and Fatehpur Sikri. 3) Water Supply Agra 4) Water Supply Mathura-Vrindavan 5) Gokul Barrage 6) Solid Waste Management 7) Storm Water System Agra 8) Construction of one part of Agra Bye-pass 9) Widening of Agra Bye-pass 10) Improvement of Master Plan of roads of Agra city

1.22. CENTRAL POLLUTION CONTROL BOARD

(Rs. in Crores)

Name of the Scheme	BE		Physical Target
	Plan	Non Plan	
CENTRAL POLLUTION CONTROL BOARD	8.00	8.25	On-going activities will continue during the year.

1.23. ASSISTANCE TO BOTANIC GARDENS

Action plans for strengthening of 15 existing Botanic Gardens. The budget estimate is Rs.1.10 crore on the plan side.

1.24. ENVIRONMENTAL AUDIT , CLEAN TECHNOLOGY, ENVIRONMENTAL STATISTICS AND MAPPING

(Rs. in Crores)

Name of the Activity	BE	Physical Target
Environmental Audit	0.20	<ul style="list-style-type: none"> - Promotion through training and awareness programmes. - Preparation of guidelines for selected sectors for conducting environmental audit. - Analysis, evaluation and assessment of environmental audit statements. - Publication of reports on sectoral environmental performance of the industries and dissemination of the information to the concerned units
Environmental Statistics and Mapping	0.10	The physical targets of the scheme include bringing out environmental maps for metro and other major cities depicting environmental data as also bringing out reports on status and trends in environmental quality in the metro and other cities.
Adoption of Clean Technologies in Small Scale Industries	0.10	The physical target include demonstration of already proven cleaner technologies/techniques, preparation of sector-specific manuals on waste minimisation, award of studies on waste minimisation and demonstration in selected sectors and training and awareness programmes on pollution prevention and waste minimisation through DC:SSI.

1.25. ENVIRONMENTAL IMPACT ASSESSMENT (INCLUDING DEVELOPMENT AND PROMOTION OF CLEAN TECHNOLOGY)

(Rs. in Crores)

Name of the scheme	BE	Physical Target
Environmental Impact Assessment (including Development and Promotion of Clean Technology)	7.10(P) 0.09(NP)	The objective of Impact Assessment division is to assess the Impact of any development Projects from Environment angle which is referred to this Ministry. Therefore as such there is no physical target.

During the year 1999-2000 the following studies will continue:-

1) Sustainable Development Plan for environmental protection of Kutchah district Gujarat. National Council for cement and Building Materials Ballabharh, Haryana has been entrusted with this study in objective to establish baseline environmental and ecological studies of Kutchch region, which is one of the most backward but ecologically fragile and has become the focus of development in recent years. The total cost of the project is Rs.32.16 lakhs. The project likely to be completed by October, 1999.

2) Studies on the Evaluation and characterisation of Natural and Alternate Sand Resources in selected Zone of Andaman and Nicobar Islands for use in civil work. CBRI, Roorkee has been entrusted with this study with the objective to identify sand resources out side the CRZ in selected Andaman and Nicobar Islands for use in construction and to explore other alternate sources of sand which could be used as part or full replacement of natural sand in construction work. The total cost of the project is Rs.13.20 lakhs. The project is likely to be completed by end of 1999. During 1999-2000 all efforts will be made to take decision on 80 to 100 percentage of projects received, by simplifying the procedure and improving its format for environmental clearance certain deficiencies and procedural gaps were identified. In order to rectify the same the questionnaire is being updated with a view to computerising the same so that entrepreneurs will be able to submit their requisite information in a floppy and the experts assessing the project can examine it on the computer and receive the same.

1.26. RESEARCH AND ECOLOGICAL REGENERATION

(Rs. in Crores)

Name of the scheme	BE	Physical Targets
Research & Development	4.00	Twenty five new projects are expected to be developed.

1.27. GB PANT INSTITUTE OF HIMALAYAN ENVIRONMENT AND DEVELOPMENT

The Construction work of Institute's building at Sikkim will be completed and construction work at Itanagar will be initiated. The Institute will initiate new projects in addition to continuation of on-going projects. The budget estimate is Rs.5.40 crore (including Rs.40 lakhs for Integrated Action Oriented Research & Extension Projects).

1.28. HAZARDOUS SUBSTANCES MANAGEMENT

(Rs. in Crores)

Name of the Scheme	BE	Physical Targets
HAZARDOUS SUBSTANCES MANAGEMENT	6.05	*

* During 1999-2000, it is proposed to continue various programmes outlined below and monitor the implementation of this programme. In addition, intensive interactions with State Departments of Environment, State Pollution Control Boards are envisaged for effective implementation of rules on Management of Hazardous Substances and Chemical Crisis Management. Outline of the activities proposed is given below:

Proposed activities:

1. Strengthening of Hazardous Substances Management Structure in States.
2. Strengthening of crisis management structure in the country including setting up of Emergency Response Centres.
3. Accident prevention and emergency preparedness.
4. Augmentation of training facilities and conduct of training courses for training in accident prevention and emergency preparedness and hazardous waste management.
5. Prepare reports of status on compliance to international Conventions and stand on upcoming Conventions.

6. Formulation and implementation of Acts/Rules including amendments.
7. Developmental projects/studies and pilot plants.
8. Setting up/augmentation of Centres/Institutes for hazardous substances management.
9. Implementation of various provisions of Biomedical Waste Rules, 1998.
10. EIA studies for hazardous wastes disposal sites and setting up of two Treatment Storage and Disposal Facilities (TSDF) in the country.
11. Implementation of the Project on Remediation of the contaminated sites and identification of new sites for remediation.
12. Evolve policies and programmes for sound management of hazardous waste.
13. Evolve policies and programmes for sound management of solid waste.
14. Establishment of Databases and activities related to Agenda 21, UN Expert Committee on Transportation of Dangerous Goods.

1.29 BIO-DIVERSITY CONSERVATION

Finalisation and implementation of National Action Plan on Bio-diversity.
 Preparation of legislation on bio-diversity.
 Organisation of consultations on specific aspects relevant to bio-diversity .
 Implementation of the All India Co-ordinated Project on Taxonomy.
 Follow up work of the bio-safety protocol.
 Implementation of the decisions of the Conference of Parties.
 The budget estimate is Rs.1.25 crores on the plan side.

1.30. CONSERVATION AND MANAGEMENT OF MANGROVES

(Rs. in Crores)

Activities	BE
Management Action Plans in regard to 15 mangrove and 4 coral reef areas. 6 New & 6 ongoing research projects and net work of 4 Data Base Centres in each subject area.	1.50

1.31. BIOSPHERE RESERVES (BRs)

Physical Targets:

Preparation of Management Action Plans for 1999 -2000 and release of Central assistance to designated Biosphere Reserves.

Convening of National Committee Meeting on BRs.

Convening of Scientific Advisory Committee Meeting on BRs.

Evaluation of on-going research projects.

Monitoring of Management Action Plans.

The budget estimate is Rs.2.75 crores.

1.32. INTERNATIONAL COOPERATION

(Rs. in crores)

Name of the scheme	BE	Physical Targets
Environmental Management Capacity Building Technical Assistance Projects	32.00	*
UNDP-GOI CCF-I	8.00	*
Delhi, Surat Urban Environmental Project	2.00	*

ICEF	--	*
International Cooperation activities	1.18	*

*Physical Targets

1. Participation in the Seventh Session of the Commission on Sustainable Development to be held in New York in April, 1999.
2. Nomination of officials for training abroad in the field of environment and forestry.
3. Implementation of the World Bank assisted India: Environment Management Capacity Building Technical Assistance Project.
4. Implementation of the World Bank assisted under Environment Management Project for Delhi.
5. Building a strong pipeline of new GEF proposals, follow up and implementation of approved GEF projects, to monitor and evaluate their progress.
6. Follow up, implementation, monitoring and evaluation of the approved projects under the UNDP-CCF programme.
7. Assessment of the funding objectives of various lending a donor agencies (multilateral, bilateral and private) to facilitate access of more resources for projects.
8. Follow-up on MoUs signed with Germany, Russia, Turkmenistan, Tajikistan, Vietnam, China and Iran.
9. Follow-up on Indo-Brazil Common Agenda on Environment.
10. Follow-up on the action points related to SAARC Environment Ministers Meeting. Coordination Committee meetings to review various Externally aided projects in the field of Environment and Forests.