

CHAPTER II-C-3

TARGETS FOR 2003-2004

FORESTRY EDUCATION AND TRAINING

164. INDIRA GANDHI NATIONAL FOREST ACADEMY

1. Training of IFS probationers of 2000-2003, 2001-2004 and 2002-2005 course in different phases.
2. Two Professional Skills Upgradation courses for IFS officers promoted from SFS.
3. One compulsory course.
4. AFM Courses for IFS Officers of 10, 17 and 21 Years of Service.

BE for the year 2003-04 under Plan is Rs.5.00 Crores and Rs.2.81 Crores under Non-Plan.

165. STATE FOREST SERVICE COLLEGES AND RANGERS COLLEGES

Name of the activity	Physical Target
a) Two years Diploma Course in Forestry for SFS officers at State Forest Service College, Dehradun.	2 courses (Senior & Junior Batch)
b) Two Year Certificate Course for Forest Rangers in three colleges viz. State Forest Service College, Burnihat/Coimbatore & Eastern Forest Rangers College, Kurseong.	6 courses (Senior & Junior Batch)
c) Two week Refresher Course for In-service SFS officers with 35 participants each course.	7 courses
d) Three week course on Computer Application in Forestry for In-service Forest Officers with 25 participants in each course.	7 courses
e) Two-week Advance Course on Computer Application in Forestry for In-service Forest Officers with 25 participants in each course.	4 courses
f) Two week Theme Based Courses in Forestry for In-service SFS Officers.	7 courses
g) Two week "Refresher Course" for Rangers with 30 participants in each course.	2 courses
h) Two weeks "Trainers Training" courses with 20 participants in each course.	2 courses
i) Courses for sister & other organizations on request.	2 courses
k) Seminars, Workshops on different themes on Forestry	3 Nos
j) Six weeks "Promotion Linked Training" for A.C.Fs with 30 participants in each course (<i>subject to approval of ministry</i>).	3, subject to the approval by the Ministry

BE for the year 2003-04 under Plan is Rs.1.50 Crores & and under Non-Plan is Rs.2.22 crores.

166. INDIAN INSTITUTE OF FOREST MANAGEMENT, BHOPAL

Name of the activity	Physical Target
IIFM	
01. Building Construction	Construction of Boundary Wall, Road and Site development, development work, Staff & Faculty quarters.
02. Furniture Fixture & Machinery Equipment & computer upgradation	Purchase of computers, Upgradation of computer, purchase of generator purchase of furniture for class room and hostel and other purchases.
03. Library books and journals	Procurement of 600 books & 205 journals
04. Vehicle	Replacement of vehicle

05.Salary,Wages&T.A	Regular expenditure.
06.Office & other Misc.Exp.	Regular expenditure of postage, Telephone, Vehicle maintenance, Printing etc.
07.Electricity & Water charges & Security	Regular expenditure.
08.Bioaesthetic Expenses	Development and maintenance of garden,nursery,filling of soil, tree plantation at vanika
09Education & Training MDP/Course & Seminar/PGP/MRM	MDPs, Workshops, Seminars expenses and field trip, OT & placement expenditure of the students,
10.Research studies and consultancies	To carry out ongoing research project and to under take new projects, organise a national workshop.
11.New Initiates	Establishment of centre for education in natural resource management, National forest data centre, policy cell etc.
12.Maintenance of Building & Property Tax	Civil and electrical maintenance of building and campus,Carpeting of roads and payment of property tax etc.
13.Faculty Development	Academic exchange programme with national and international institutions etc.
14 Information Dissemination	Publication of research paper, discussion papers etc.
15 Provision for Advances to staff	HBA,Scooter,Computer & other advances to staff.

BE for the year 2003-04 under Plan and Non-Plan are Rs.4.00 crores and Rs.0.82 crores respectively.

167. INDIAN PLYWOOD RESEARCH AND TRAINING INSTITUTE (IPIRTI), BANGALORE

S. No.	Name of the activity	Physical Target
	IPIRTI	
1	Inputs to improve research capability in Labs. and experimental plant at IPIRTI	The research and development activities would be initiated during the year.
2	Research & Training Centre for Mechanical Wood Industries	-
3	Establishment of Particle Board and Finger Jointing and Laminating Plant	-
4	Establishment of National Information Centre on Wood (NICWOOD)	-
5	Development of Bamboo based panel products, Standardization, Technology Transfer, Establishment of demonstration structures, Training of Growers & Entrepreneurs, Evaluation of Standards and Code of Practices	-
6	Improvement of sawing techniques for the manufacture of sawn timber for efficient utilization of plantation woods	-
7	Information and consumer awareness programmes	-
8	Training Courses for IFS officers, Assistant Conservator of Forests and Range Forest Officers	-
9	Construction of residential quarters for staff members in Institute campus in phased manner	-

10	Stipend to PGD Course in Mechanical Wood Industries Technology and Fellowship for Ph.D Programme	-
11	Establishment of Centre for testing and evaluation of materials, products, components from wood, bamboo, non-wood materials, renewable fibres including agro-residues based on National Accreditation Board for testing and calibration Laboratories (NABL) requirements	-

BE for 2003-04 under Plan & Non-Plan are Rs.1.50 crores and 1.04 crores respectively.

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

Physical Targets for the year 2003-2004

Directorate of Research: - Prioritisation of new research projects based on the Xth plan goals and National Forestry Research Plan, (NFRP), review of on-going research projects and formulation of new research projects for seeking financial support from National and International donor agencies will be the main thrust of Directorate of Research. Compilation of achievements of Research Grant Fund projects and publication of findings and scrutinizing the new projects will be the major activities. Maintenance, monitoring and assessment of Planting Stock improvement Programme (PSIP) activities established under World Bank Project assets will be carried out. Also the Environmental Impact Assessment where development activities takes place will be carried out as and when requests are received from different agencies.³

Directorate of Education: - Training activities as per HRD plan, Grants-in-aid to Universities. Continuation of M.Sc. courses in Forestry, Wood science & Technology, PG Diploma Courses in Plantation Technology, Pulps & paper. Also nomination of Scientists and IFS officer for attending National and International Workshops/Conferences/Symposia.

Directorate of Extension:- Dissemination of ICFRE research findings through printing of publicity material, Preparation of films, Annual Reports, demonstration of technologies and Implementation of extension strategy of ICFRE. Setting up of well equipped Media Center at ICFRE, Publication of Annual Report 2002-2003 for dissemination of activities of the ICFRE. Printing of ICFRE quarterly Newsletter.

Directorate of Administration: - Over all Control of Budget, administrative activities and finalization of Balance Sheet etc.

Directorate of Statistics: - Publication of quarterly Timber/Bamboo Trade Bulletins, publication of Forestry Statistics India – 2002, maintenance and upgrading of NFDBMS to continue, bio-metrical support to research projects of ICFRE will continue.

FRI, Dehra Dun: -

Conservation of bio-diversity and enhancement of forest productivity and Genetic improvement of forest plant resources, Screening of clones of *Dalbergia sissoo* and *Eucalyptus teriticornis* for disease resistance in genetic materials raised in tree improvement programmes. Development of cultivation techniques of commercially important medicinal plants (i) *Desmodium gangeticum*, (ii) *Oroxylum indicum*, Evaluation of Australian seed sources and families of *Eucalyptus teriticornis* for productivity and genetic improvement. Integrated pest management of major insect pests of mandate species in nurseries and plantations, Biological control of *Lantana camara* and *Parthenium hysterophorus* by Fungal Pathogens, Green dimensioning aspects of Bamboo and Eucalyptus processing, Evaluation of physical and mechanical properties of plantation grown *Paulownia fortunei* and two bamboo species; viz. *Bambusa balcooa*, and *Bambusa nutans*, Chemical modification of cellulose and its industrial uses, Studies on isolation & characteri-zation of the polysaccha-rides, of abundantly available seeds, trees/ shrubs, leaves, bark & exudate gums, To develop propagation

technique i.e. Micro-propagation and Macro-propagation in economically important bamboos – *Arundinaria falcata* and *Dendrocalamus membranaceus*, Phytochemical examination for the utilization of leaves, barks, fruits and root of Indian forest trees, Assessment of the performance of different clones of *Dalbergia sissoo* and Eucalyptus sp. on the basis of wood quality planted under different agro forestry programmes.

Maintenance and Assessment of SPAs, CSOs, SSOs and VMGs established under World Bank FRREP, efficient utilization of Wood and Non-Wood Forest Products and development of eco-friendly products and processes.

IFGTB, Coimbatore: -

Variability studies in *Artocarpus* species and Teak using molecular markers, production of inter provenance and inter specific hybrids in Casuarina, Assessment of seed production in Seed Orchards of Eucalyptus, Casuarina, Acacia and Teak. Physiological and biochemical characterization of selected tree species for tree improvement, Antibiotic sensitivity studies in calli of Eucalyptus and Casuarina for genetic transformation. Characterisation of toxic proteins isolated against *Trichosporium vesiculosum* Butler, Hybrid production studies in Eucalyptus. Development of regeneration protocols for salt tolerant calli of *Casuarina equisetifolia*. Impact of silvicultural practices on Teak, Eucalyptus & Casuarina for quality seed production. Identification of suitable tree species for problem soils and flyash dumps, Optimize storability methods for tropical recalcitrant species, Study the seed deterioration during storage of short lived seeds. Nutrient Dynamics and Productivity studies in existing agroforestry systems, Standardisation of management to control forestry pests and diseases. Use of plant allelochemicals to control pest problems, Testing of promising plant derived chemicals against key pests, Identification of pest/disease resistant phenotypes of Teak, Casuarina and Eucalyptus, *Acacias* and *Albizia*, Biofertilizer studies to improve performance of seedlings in the nursery. Market dynamics studies relating to important Non-wood Forest produce, Update existing databases on medicinal plants and tree improvement activities, Testing growth models of eucalyptus.

IWST, Bangalore:-

Assessment of wood quality of eight to ten years old *Acacia auriculaeformis* and *Acacia mangium* hybrids, Development of seasoning schedules for plantation timbers using dehumidification based drying technology, Evaluation of wood quality parameters of plantation grown *Eucalyptus citriodora* for different end users, Influence of pretreatment techniques on the treatability of hardwood species grown in Karnataka, Studies on natural durability of treated and untreated lesser-known species of timbers, Performance of different agro-forestry systems in semi-arid tropics of Andhra Pradesh, Assessment of wood quality of *Simaruba glauca* for its timber value, Development of colouring reagents based on enzyme substrate reaction for differentiating oil yielders of sandal in field, Development of effective water resistant preservatives for different end uses, Effect of temperature, humidity and pH on CCB fixation in wood, Studies on the sucking pest complex of sandal and their management, Design of ligno cellulosic systematic polymer composite system, Biocomposites from engineered natural fibres, Bioremediation of heavy metal and organic pollution of Visakhapatnam by *Mytilopsis sallei*, Evaluation of the new chemical formulation for its efficacy against marine wood biodeteriorating organisms, Quality assessment of two prominent Jigat yielding species. I) *Cinnamomum inners* ii) *Percia macarantha*.

TFRI, Jabalpur:-

Mass multiplication of *Trichogramma* spp. and their efficacy against key pests of teak forests, Population dynamics and behaviour of sal heartwood borer and development of its control measures, Management of insect pests of forest nurseries and plantation of Central India, Collection of ethnobotanical data from various tribes of Central India, Biodiversity study in protected areas (a) Nauradehi Wildlife Sanctuary, M.P. (b) Debrigarh Wildlife Sanctuary, Orissa, Evaluation of NWFP species for saponin potential and their value addition, Establishment of Advance Centre of NWFPs, Studies on Gum and Resin characteristics in relation to their identification, purity and age, Development of Germplasm bank of biofertilizers, Investigation into the nature of inheritance and breeding of teak (*Tectona grandis*), Development of tissue culture protocols for important forest tree species, Studies on differential adventitious rooting response vis-à-vis clonal propagation of economically important forestry species, Germplasm conservation and investigation on inheritance pattern of *Gmelina arborea*,

Ecological and economic evaluation of teak monoculture and mixed plantation, Eco-restoration of degraded forests, Social and livelihood analysis of dependence of tribal people on forests, Development and standardization of management practices for most promising existing agroforestry systems in Central Narmada Valley and Satpura Plateau agroclimatic regions, Economic evaluation of NTFPs in tribal belt of Madhya Pradesh, Standardization of macropopagation protocol for mass multiplication of bamboo species, Standardisation of seed handling and storage techniques for important tree species of Central India, Studies on the feasibility of cultivation medicinal and aromatic plants as intercrop in natural forests and plantations and their phytochemical investigations, Standardization of nursery techniques and propagation methods of *B.lanzan*, Screening and identification of teak of M.P. for resistance against major insect pests, Studies on carbonic anhydrase and its relationship with photosynthesis and productivity in teak (*T.grandis*), Development of tree borne oil seeds of forest origin – jatropa, karanj and mahua.

AFRI, Jodhpur:

Conservation and improvement of *Acacia catechu*, Identification of mortality factors in *Prosopis cineraria* (L.) druce (Khejri) and development of their management strategies in North-western Rajasthan, Screening of different phenotypes of *Dalbergia sissoo* and *Acacia nilotica* for their tolerance for drought, salinity and sodicity, Productivity studies on *Acacia* spp. in arid region for their sustainable management, Survey and silviculture management practices for commercially exploitable medicinal plants of arid and semi-arid areas of Rajasthan, Micro propagation and genetic improvement of certain medicinal tree species of the arid zone of India, Plant tissue culture and genetic transformation research on forest tree species of economic importance.

Demonstration trails in hot arid zone, studies on interactive effect of ex-situ rain water harvesting and stand density, study of shelter belt and wind erosion, study of seed Borne micro-flora of selected tree species, disease spectrum of arid and semi-arid tree species, study of pest problems, study biocidal activities and proteins. The targets of 200 ha SPA, 26 ha CSO, 55 ha SSPA and 5 ha VMG shall also be fully achieved under Maintenance and Assessment of Planting Stock Improvement activities established under World Bank FREEP.

HFRI, Shimla:

Eco-stabilisation of cold deserts by afforestation/revegetation measures, Maintenance and Assessment of 50 ha Seed Production Areas, 8 ha CSO, 10 ha SSO and 2 ha of VMG, provenance testing of poplars, selection of suitable species for cold desert areas, regeneration of conifers and broad leaf forests, agro-forestry in lower Himalayan hills, conservation of indigenous species of western Himalayas and increasing productivity to man-made forests etc. Studies on Himalayan pines; identification, Screening, selection and collection of germplasm.

RFRI, Jorhat:

Studies on yield and quality traits of fragrant products from humid-tropical aromatic plants, Study on market mechanism of NTFPs for economic upliftment of jhumias, Capacity building of village level committee for efficient forest resource management through JFM, Genetic Improvement of Khasi pine (*Pinus kesiya*), Resources enhancement and processing of cane and bamboo species suitable for handicrafts, Germplasm evaluation of selected bamboo species for various end uses, Studies on distribution dynamics of bamboo and canes and their *ex-citu* conservation, Identification of genetically, Divergent genotypes *Gmelina arborea* using genetic markers for clonal forestry.

Ecological monitoring of Bio-diversity and strategy of conserving Kajiranga National Park, evaluation of tropical moist forest especially Dipterocarps, developing methods of restoring vegetation on degraded lands, disease management of forest tree species in nurseries and plantations, fertilizers response studies for tree species of north east, mycorrhiza screening, methodology to develop alternatives for shifting cultivation. Maintenance and Assessment of 50 ha SPA, 6 ha CSO, 5 ha SSO and 3 ha VMG.

IFP, Ranchi:

Planting Stock Improvement in relevance to Chotanagpur and South West Bengal, Standardization of Nursery Techniques in relation to Suitable Potting Media, Root Trainers, for improved Planting Stock Production in Jharkhand and southern West Bengal, Trials on composting for specific afforestation needs and development of cost-effective packages, Development of bio-fertilizers and standardization of their application in relation to productivity of forest tree species under degraded lateritic soil condition, Multilocational field trials of tissue culture raised plantations of *Dendrocalamus asper*, Genetic Improvement of *Eucalyptus* through Progeny Trial & Hybridization., Follow-up & Maintenance of PSIP Assets created under FREE Project, Soil Vegetation interaction with special reference to nutrient cycling in some selected plantations under different edaphic conditions, Studies on variability on bamboo species, their performance, conservation and economy with special reference to Bihar, Jharkhand & West Bengal, Cultivation and extension of Lac on new non-traditional hosts, Maintenance of Broodlac Farms for development and extension of Lac Cultivation.

Collection of germplasm bank for important medicinal Plants, use of bio-technology for bio-diversity conservation, phenology of important tree species, introduction of exotic species like *Paulownia*, eco-rejuvenation of coal mine areas, studies of mangrove ecosystem in West Bengal.

BE for 2003-04 under Plan & Non-Plan are Rs.34.00 crores and 11.46 crores respectively.

169. IN-SERVICE TRAINING FOR IFS OFFICERS

In 2003-2004 separate allocation of Rs.1.00 Crore has been provided for in-service training of IFS Officers.

SURVEY AND UTILISATION OF FOREST RESOURCES

170. FOREST SURVEY OF INDIA

(Rs. in Crores)

Name of the activity	BE	Physical Targets
1. Non-Forest Inventory (Forest Area in sq. kms.)	7.00(Plan)	3,23,000
2. Data Processing (Non- Forest Area in sq. kms.)		1,10,000
3. Vegetation Mapping (No. of Sheets- 1:250,000 scale)	5.45(NP)	182
4. Training (No. of Persons to be trained)		90
5. Special Study		L.S.

171. FOREST CONSERVATION

(Rs. in Crores)

Name of Activity	BE	Physical Target
FOREST CONSERVATION	7.00	
1. Monitoring of projects approved under FCA 1980 for compliance of stipulated conditions.		950
2. Monitoring of project approved, under FPA, 1980 for compliance of stipulated conditions.		400
3. Disposal of proposals for diversion of Forest land upto 5 ha. and Processing of proposals above 5 ha. to 20 ha land under FCA 1980.		All cases received from the user agencies through State Govt, for diversion of forest land within six weeks.
4. Site inspection of projects in all States/Uts		All cases referred by the Ministry within 30 days.
5. Participation in the other meeting at State/Uts.		All working plans referred by State Govt, to Regional Offices to be finalised with in 2 months as per the Ministry's Guidelines.
6. Assisting Paryavaran Vahine in the capacity of observer and technical advisors.		All work.

172. PROTECTION OF WILDLIFE OUTSIDE PROTECTED AREAS

(Rs. in Crores)

Name of the activity	BE	Physical Targets
Protection of wildlife outside protected areas	5.00	The Physical target will be as per annual plan of operation submitted by the States

173. FOREST PROTECTION AND REGENERATION

(Rs. in Crores)

Name of the Activity	BE	Physical Targets
Integrated Forest Protection Scheme	34.00	To assist all states for prevention & control of forest fires, Strengthening of infrastructure for forest protection & preparation of working plans / survey & demarcation.

174. CENTRAL ZOO AUTHORITY

The Physical Targets under the CZA Scheme in 2003-2004 are:

- 1.Grants to Zoo (including NZP)
2. Creation/maintenance of Rescue Centre
3. Feeding and Health care of rescued animals
4. Research Projects
5. Strengthening of Veterinary Institutes
6. Training, Workshops and Conferences& Education.
7. Grant for NE Region & Sikkim
8. Operational Cost of CZA
9. To enforce minimum required standard for housing, upkeep and health care of Zoo animals as envisaged in the Zoo Recognition Rules by regular monitoring and evaluate the Zoos, to provide technical and financial assistance to Zoos to achieve these standards, undertake research projects on various aspects of Zoo Management and Vet. Health Care, Capacity building of Zoo personnel by Organising training courses and workshops, construct at least two more Rescue Centre to house rescued animals, to upgrade the diagnostic facility for wildlife diseases in the selected Veterinary institutes, etc. Further, as per the directions of the Central Government, performance of the wild animals have been banned in Circuses. These animals are now being housed in the Rescue Centres and will remain there for their entire life. The Central Government has to meet the cost of feed and upkeep of these animals as a committed liability.

The Budget provision for 2003-2004 is Rs.10.50 Crores on Plan side.

175. PROJECT ELEPHANT

(Rs. in Crores)

Name of the activity	BE	Physical targets
Project Elephant	10.00	The physical targets will be as per Annual Plan of operations submitted by Elephant Range States.

176. PROJECT TIGER

(Rs. in Crores)

Name of the Activity	BE	Physical Target
Project Tiger*	26.00	It is proposed to continue the activities under the PT scheme with such modifications as approved are proposed to be carried out in proportion to the budget sanctioned.

* The other two Schemes namely Eco-Development Scheme and Beneficiary Scheme for Tribal Development has been merged with Project Tiger Scheme during Xth Plan.

176.1 INDIA ECO-DEVELOPMENT PROJECT (EXTERNAL COMPONENT)

(Rs. in Crores)

Name of the Activity	BE	Physical Target
India Eco-development Project (External Component)	28.00	
	The World Bank has agreed for extension of time by 2 years. i.e. completion date to 31-12-2003 and closing date to 30-06-04. The Government of India has been approached for its approval. If the extension is granted BE will be provided for the full projected cost meant for 2003-04. The residuary amount will be provided for expenditure up to June 2003 which is the closing date of the project	In case extension of the project, as agreed to by the World Bank, the targets laid down in the Cost Table of World Bank will be followed. The activities are enlisted under four major components viz., Improved PA Management, Village Eco development, Environmental Education and awareness Campaigns, Impact Monitoring and Research

WILDLIFE**177. NATIONAL PARKS AND SANCTUARIES**

(Rs. in Crores)

Name of the Activity	BE	Physical Targets
Development of National Parks & Sanctuaries	30.00	300 (National Parks & Sanctuaries to be covered for financial assistance)

178. ANIMAL WELFARE DIVISION

(Rs.in Crores)

Name of the Activity	BE	Physical Target
Ambulances	18.00 (P)	28
Shelters	0.53 (NP)	Shelter Houses – 40, Animal Houses – 10, Rescue Centre – 1, Activation of SPCAs – 60, Activation of SAWBs – 5 and Workshops – 10
Animal Birth Control		56,000 Dogs Sterilization and 600 Sanitization & Medication of Monkeys
Natural Calamity		As per requirement
AWBI		Assistance to 1,800 AWOs
Scholarships		As per requirement
CPCSEA		Conduction of Workshops and monitoring of Animal Houses
NIAW		Completion of the Building and other infrastructure.

179. STRENGTHENING OF WILDLIFE DIVISION AND CONSULTANCIES FOR SPECIAL TASKS

The on-going activities relating to the Central Wildlife Division and the Regional Wildlife offices will continue. Funds will be provided for undertaking Consultancies for special tasks.

The budgetary provision for 2003-2004 is Rs.2.00 crores on Plan side.

180. WILDLIFE INSTITUTE OF INDIA

(Rs. in Crores)

Name Of Activities	Physical Target
WII	
M.Sc.	15
PG Diploma Course in Wildlife Management	40
Certificate Course in Wildlife Management	40
Field Workshops/Short Courses	450

The budget provision for 2003-2004 is Rs.8.00 crores on Plan side and Rs.1.52 crores on Non-Plan side.

181. NATIONAL ZOOLOGICAL PARK

(Rs. in Crores)

Programme	B.E	Physical Target	Physical Achievement
Zoological Park	0.50 (Plan) 3.20 (Non-Plan)		
Development work at National Zoological Park		Conservation & Breeding of endangered animals ,Imparting of Education & awareness about wildlife , upkeep of animals ,Exchange of animals ,to maintain the health & hygienic condition	All target fixed shall be achieved in due course of time.

182. NATIONAL AFFORESTATION & ECO-DEVELOPMENT BOARD(NAEB)

(Rs. in Crores)

Name of the Activity	BE	Physical Target (in ha.)
National Afforestation Scheme	196.00	1,25,000
National Action Programme to combat Desertification	2.00	Approval of Planning Commission is awaited.
Grants-in-Aid Scheme for Greening India	8.14	100 projects
NAEB Secretariat	5.86	NA
Eco-Development Task Forces	8.00	Continuing Scheme

183. BOTANICAL SURVEY OF INDIA

(Rs. in crores)

Name of the activity	BE		Physical Target
	Plan	Non Plan	
BOTANICAL SURVEY OF INDIA	14.50	12.62	
1. Field Exploration Tour			80
2. Herbarium Consultation/Library Consultation/Study Tour			20
3. Documentation of Phytodiversity			1500
i. Vascular Plants			
National Flora (Flora of India)			
a. State Flora			
b. District Flora			
c) Biosphere Reserve			01
d) National Park			01
e) Wild Life Sanctuary			02
f) Fragile Ecosystem (including wetland)			02
ii. Lower Group Plants (Algae, Fungi, Lichen & Bryophytes)			100
iii. Collection of Specimens			-
iv. Preservation of specimens			-
v. Specimens identified			-
4. Ex-situ conservation of endangered, endemic, economic & ornamental plants.			120
5. Documentation of Traditional knowledge of plants			100
6. Publications			
a. Books			13
b. Journals			03
c. Research Papers/ Articles			60

184. ZOOLOGICAL SURVEY OF INDIA

(Rs. in crores)

Name of the Activity	B E	Physical Targets
Exploration & Survey of Faunal Resources	10.50 (Plan)	60 Surveys
Status Survey of Endangered Species	9.88(Non-Plan)	Status survey of 2 species (3 Surveys)
Taxonomic Studies of State Fauna		36 Surveys covering Arunachal Pradesh, Bihar, Andhra Pradesh, Tamilnadu, Madhya Pradesh, Karnataka, Uttar Pradesh, West Bengal, Gujarat, Maharashtra & Rajasthan Andaman & Nicobar Islands (Total : 45 districts)
Renovation of H Q's & Regional Museum		Regional museums at Solan, Itanagar, Chennai, Pune and Shillong will be strengthened.
Computerization of Data		National Zoological collections of Head Quarters & Regional Centres will be continued as it is ongoing programme.
Training & Extension Services		Two

Publication		Rec. ZSI Vol- 101, Occ. Papers – 10 books., Fauna of India – 2 books State Fauna – 3 books(4 parts) Memoirs Vol. 19 (part – 1-4) Bibliography – 1 book, Wetland series – 2 books Conservation area – 2 books Handbooks - two Annual Reports – 5 Nos. Special Publications – 2 Memoirs of ZSI – 4 Nos.
Sale of Publication		4.8 Lakhs

185. ENVIRONMENT, EDUCATION AWARENESS & TRAINING

(Rs. in Crores)

Name of the Activity	Budget Estimate	Physical Target
Environment Education Awareness & Training.	17.00 (P) 0.02(NP)	The existing programmes will be continued
i) National Environment Awareness Campaign (NEAC)@		
ii) Eco-clubs@		
iii) Seminars/Symposia/Workshops @		
Grants-in-aid to Professional Societies		New proposals will be considered. Projects funded earlier will be monitored & remaining grant released & closed

@ No separate allocation has been made for these programmes.

186. ENVIRONMENTAL POLICY & LAW

(Rs. in crores)

No.	Name of the Activity	BE*	Physical Targets
1.	Environment Policy & Law Activities : a) Environment Policy & Legislation b) Eco-mark Scheme d) Trade & Environment		- Amendment of the Environment (Protection) Act, 1986 - Amendment of Cess Act - Publicity to Eco-mark - Assistance to Comp. Test. programme - Holding of seminars - Preparation of a Position Paper

*Budget provision of this Scheme included in the provision of Assistance for Abatement of Pollution Scheme.

187. ESTABLISHMENT OF ENVIRONMENT AUTHORITIES, COMMISSIONS AND TRIBUNALS.

(Rs. in Crores)

Name of Activity	B.E.	Physical Targets
NEAA Loss of Ecology (Pre. & Payment of Compensation) Authority for Tamil Nadu Envn. Pollution (P&C) Authority for NCR Other Authorities	5.00	To complete work as mentioned in their terms of reference.

188. WORLD BANK AIDED INDUSTRIAL POLLUTION CONTROL PROJECT

The Project has ended on 30.11.2002.

189. NATIONAL MUSEUM OF NATURAL HISTORY (NMNH)

(Rs. in Crores)

Name of the activity	BE	Physical target
National Museum of Natural History, New Delhi Including Regional offices. 1) Acquisition of land and construction of building for NMNH 2) Creation of infrastructure and updating the exhibits. 3) Educational & extension services	7.00 (Plan) 0.69 (Non-Plan)	Efforts will be made to get suitable piece of land allotted for the Museum building through the Ministry of Urban Development All out efforts will be made to create necessary infrastructure and updating the existing exhibits As done in previous years, educational programmes and extension services will be undertaken throughout the year.
Regional Museum of Natural History, Mysore 1. Completion of 2 nd gallery works 2. Planning and designing of conservation gallery. 3. Renovation of discovery centre including digital library.		Educational programmes, outdoor activities, field visits, collection, research works, publication of hand outs and take home materials, establishing Eco-clubs along with NGOs.
Regional Museum of Natural History, Bhubaneswar 1. Acquisition of specimens/exhibit material		Specific collection of exhibit materials and reproduction of realistic display artifacts for Diorama and show case.

<p>2. Gallery development</p> <p>3. Discovery learning area</p> <p>4. Establishment of Administrative Block</p> <p>5. Establishment of technical block, reserve collection room-cum-laboratory</p> <p>6. Establishment of library</p> <p>7. Establishment of conference room and auditorium</p> <p>8. Establishment of digital photo lab.</p>		<p>Development of permanent exhibit gallery comprising dioramas, showcases and participatory exhibits on specific themes depicting eastern Indian biodiversity with reference to Orissa.</p> <p>Establishment of discovery and multimedia centre. Acquisition of digital imaging system with stereomicroscope.</p> <p>Acquiring of furniture and creation of infrastructure</p> <p>Acquiring of furniture, equipment, chemicals and preservation materials.</p> <p>Furnishing and computerization of library</p> <p>Initiation of planning and procurement of advance audio-visual systems.</p> <p>Initiation of action to establish a digital photo documentation centre for the eastern Indian Biodiversity.</p>
<p>Regional Museum of Natural History, Bhopal</p> <p>1. Discovery Centre</p> <p>2. Renovation of Ist Phase Gallery</p> <p>3. Setting up of Computer Room</p> <p>4. Development of Central court-yard</p> <p>5. Educational & Extension programmes</p> <p>6. Planning for IInd Gallery</p>		<p>To under-take the renovation and re-organisation Discovery Centre after completion of Air-Conditioning works.</p> <p>To undertake the renovation & re-organisation of existing exhibits in the I st Phase Gallery especially the exhibits of Rivers of Central India.</p> <p>To undertake the works pertaining to re-setting up of Computer Room in new area with modern facilities.</p> <p>Work will be initiated as per the approved models.</p> <p>Various Educational programmes for school children will be conducted</p> <p>Planning & initiation of works pertaining to development of IInd Phase Gallery.</p>

190. CIVIL CONSTRUCTION UNIT (CCU)

(Rs. in Crores)

S. No.	Name of the activity	B.E.	Physical Target (No. of works)
a	Forestry & Wildlife	5.00	5
b	Forestry & Wildlife (EAP)	2.26	2
c	Ecology & Environment	15.25	13
d	Civil Engineering Wings	1.94	-
	Grand Total	24.45	20

191. ENVIRONMENTAL INFORMATION SYSTEM(ENVIS)

(Rs. in Crores)

Name of the Scheme	BE		Physical Target
	Plan	Non-Plan	
ENVIS	2.50	0.21	Recurring grants to 25 ENVIS Centres established will be released. Paryavaran Abstract Vol. 20, No.-3 will be published ENVIS –News issue 1-4 will be published. A compendium on ENVIS Centres & nodes will be published. A new ENVIS Homepage will be launched & all ENVIS Nodes will be linked Sdnp.delhi.nic.in. will be updated. All the 96 ENVIS Nodes will be monitored. 3 Training courses & 2 workshops will be held for the ENVIS Nodes.

192. CENTRES OF EXCELLENCE

(Rs. in Crores)

Name of the scheme	BE	Physical Target
Centres of Excellence	8.00 (Plan) 1.35 (Non-Plan)	There are ten Centres of Excellence under the Scheme, in different thrust areas of environment. All the Centers continued their ongoing activities in respective fields, as approved by respective Governing Councils/Board of Governors.

193. NATIONAL NATURAL RESOURCE OF MANAGEMENT SYSTEM (NNRMS)

(Rs. in Crores)

Name of the Scheme	BE	Physical Target
NNRMS	1.50	It is envisaged that 25 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.

194. NATIONAL RIVER CONSERVATION DIRECTORATE**194.1 NATIONAL LAKE CONSERVATION PLAN**

(Rs. in Crores)

Name of the Activity	BE	Physical Target
NLCP	45.00	To complete the ongoing schemes sanctioned till now and consider new proposals.

194.2 NATIONAL RIVER CONSERVATION PLAN

(Rs. in Crores)

Name of activity	BE	Physical Target
1. NRCD(Estt.)	6.00	Balance schemes (if any) to be completed.
2. NRCP	234.00	

195. ASSISTANCE FOR ABATEMENT OF POLLUTION

(Rs. in Crores)

Name of the Activity	B.E.	Physical Target
Assistance for Abatement of Pollution	4.00	Financial assistance to states for purchase of equipment, studies, projects, salary support for UT PCCs etc. to meet the objectives of the Policy Statement for Abatement of Pollution.

196. COMMON EFFLUENT TREATMENT PLANTS (CETPs)

(Rs. in Crores)

Name of the Activity	B.E.	Physical Target
Common Effluent Treatment Plants	5.00	Construction of CETPs in the Small Scale Industrial clusters.

197. REIMBURSEMENT OF WATER CESS

(Rs. in Crores)

Name of the Activity	B.E.	Physical Targets
Reimbursement of Water Cess	44.10 (NON-PLAN)	There are no physical targets

198. TAJ PROTECTION MISSION

(Rs. in Crores)

Name of the Activity	BE	Physical Targets
Taj Protection Mission	33.00	Completion of on-going projects And approval of seven new projects

199. CENTRAL POLLUTION CONTROL BOARD

(Rs. in Crores)

Name of the Activity	B.E.	Physical target
CPCB	22.00 (Plan) 6.47 (Non-Plan)	*

* Physical Targets

I. Pollution Assessment Survey & monitoring:

Continuation of National Water Quality Monitoring Network of 784 stations covering river lakes & ground water through concerned SPCBs. Survey of polluted river, stretches, assessment of non point pollution sources, bio-monitoring of national aquatic species & assessment of pollution from point sources. Continuation of National Ambient Air Monitoring network at 295 locations covering 98 cities/towns.

II. Laboratory Management:

Continuation of strengthening of laboratory facility at Head office for analysis critical pollutants. The analysis of pollutants related to bio-medical waste, hazardous waste, municipal solid waste etc. Proposal for R&D schemes relating to various aspects of prevention and control of pollution. Continuation of A.Q.C. programmes & training to the staff of Pollution Control Boards.

III. Development of Standard, Guidelines and Ecomark:

Revision / Review of Standards in respect of major polluting categories of industries due to change/ upgradation of technologies.

IV. Training:

To undertake training programmes for benefit of SPCBs/ PCCs, regional level training programmes would be conducted through expert institutions & Zonal Offices. The important areas include biomedical waste, municipal solid waste, cleaner production technologies, vehicular & noise Pollution Control, plastic waste & recycling etc.

V. Information (Data Base) management and Library:

Upgradation of Local Area Network /Wide Area Network through NIC. Updation/ purchase/ procurement of new text books, journals, newsletter etc.

VI. Pollution Control Enforcement:

Ensure compliance of effluent/emission standards in 17 categories of polluting industries discharging waste water into rivers & lakes. Implementation of action points for restoration of environmental quality in critically polluted areas through SPCBs/ PCCs. Surprise inspection visits to polluting industries under Environment Surveillance Squad (ESS). Compliance of Hon'ble Court's directives issued time to time. The other on going programmes include preparation of zoning atlas, optimization of chlorine use, environmental audits, noise pollution control, monitoring of compliance for biomedical waste, municipal solid waste etc.

VII. Pollution Control Technology:

Studies on existing treatment technologies & performance of technologies for cleaner production. The important on going programmes includes performance evaluation of STPs, risk assessment in chemical industries, control of noise level from gensets, treatment technology for distillery effluent, application of root zone treatment system, in small cities/towns.

VIII. Mass Awareness and NGOs:

This is an ongoing programme which include publication of reports/document on various aspect of prevention & control of pollution, distribution of water testing kits etc..

IX. Hazardous Waste Management:

Continuation of sector specific Inventorization of hazardous waste, development of standards for leachate from hazardous waste dump sites, assessment of hazardous waste disposal facilities, organizing training & workshop & follow up of various Committees constituted for management of hazardous waste/ chemicals

200. ASSISTANCE TO BOTANIC GARDENS

(Rs. in Crores)

Name of the Activity	BE	Physical Targets
Assistance to Botanical Gardens	2.00	20 Botanical Gardens to be supported

201. INDUSTRIAL POLLUTION ABATEMENT THROUGH PREVENTIVE STRATEGIES

(Rs. in Crores)

Name of the Activity	BE	Physical Target
Industrial Pollution Abatement through Preventive Strategies	1.00	There are no physical targets

202. CLEAN TECHNOLOGY

(Rs. in Crores)

Name of the Activity	BE	Physical Target
Development and promotion of clean technology	3.50	To take follow-up action on the out come of various studies undertaken under this programme. To initiate LCA studies in cement sector and to promote demonstration projects relating to cleaner technologies.

203. ENVIRONMENTAL IMPACT ASSESSMENT

During the year 2003-2004, following studies under Coastal Regulation Zone are proposed to be initiated in the Impact Assessment Division for evolving a strategy for Integrated Coastal Zone Management.

- * Digitization of Coastal Zone Management Plans for Coastal Stretches.
- * Mapping and digitization of Ecological Stretches along the coasts of Andaman, Nicobar and Lakshadweep Islands.
- * To study the effects of mining of sand and rocks from coastal stretches of Andaman and Nicobar.
- * To quantify the availability of alternative sources of building materials in main land of Andaman and Nicobar.
- * To identify, map, digitise and prepare integrated coastal zone management plans for coastal stretches demarcated as Special Tourism Areas.
- * To identify, map, digitise and prepare integrated coastal zone management plans for coastal stretches demarcated as Special Economic Zone.
- * Preparation of Integrated Coastal Zone Management Plans for the coastal states.

(Rs. in Crores)

Name of the Activity	BE	Physical Target
Environment Impact Assessment	2.80	The objective of Impact Assessment division is to assess the environmental impacts of development projects which are referred to this Ministry. As such no physical target is fixed

204. RESEARCH AND ECOLOGICAL REGENERATION

(Rs. in Crores)

Name of the Scheme	BE	Physical Targets
Research & Development	4.50	Initiation of new projects: 35 Servicing of ongoing projects: 124 Review & Monitoring of ongoing projects: 124 Preparation of Executive Summaries of completed research projects: 15

205. G.B. PANT INSTITUTE OF HIMALAYAN ENVIRONMENT AND DEVELOPMENT

(Rs. in Crores)

Name of the Activity	BE	Physical Targets
GB PANT INSTITUTE OF HIMALAYAN ENVIRONMENT AND DEVELOPMENT <ul style="list-style-type: none">R&D and other expenditureConstruction of Building	6.00	Continuation and strengthening of ongoing R&D activities and completion of construction activity for the strengthening of the existing campuses as given in II A&B

206. INTEGRATED ACTION ORIENTED ECO-DEVELOPMENT RESEARCH PROGRAMME (IERP) FOR HIMALAYAN REGION.

(Rs. in Crores)

Name of the Activity	BE	Physical Targets
INTEGRATED ACTION ORIENTED ECO-DEVELOPMENT RESEARCH PROGRAMME (IERP) FOR HIMALAYAN REGION.	0.65	Continuation of ongoing projects, sanction of new projects and organization of IERP workshop(s)/PEC meeting(s).

207. HAZARDOUS SUBSTANCES MANAGEMENT

(Rs. in Crores)

Name of the Activity	BE	Physical Targets
Hazardous Substance Management	9.00	*

* Physical Target

- Finalization of the Comprehensive National Chemical Profile.
- Continuation of Hazard Analysis and Preparation of Off-site Plans
- Setting up of Emergency Response Centres as per modifications.
- Providing support to Poison Control Centres.
- Support the setting up/operating of Common TSDFs .
- Continuation of the Registration Scheme for re-cyclers/reprocessors of identified hazardous wastes.
- Setting up of Demonstration Plans for management of municipal solid waste including plastic wastes.
- Continue existing projects on flyash utilization and initiate new ones.
- Continue strengthening of SPCBs/PCCs.
- Continuation of on-going projects and studies on identified thrust areas.
- Organization of training programmes and workshops on important issues such as management of hazardous wastes including bio-medical wastes and municipal solid wastes including flyash and plastic wastes.
- Setting up of Basel Convention Regional Centre at New Delhi.
- Initiation of a project on capacity building in the area of dioxins and furans – sampling, analytical techniques and training under the Stockholm Convention on POPs.
- Notification of New Rules/Amendments to existing Rules as and when necessary.
- Continuation of work relating to preparation of guidelines/guidance documents on identified areas.

208. BIO-DIVERSITY CONSERVATION

(Rs. in Crores)

Name of the activity	BE	Physical target
Biodiversity Conservation	3.50	As given below

- Enactment and implementation of the biodiversity Act, including preparation of People's Biodiversity Registers.
- Preparation of microlevel action plans on biodiversity under the NBSAP project.
- Implementation of action plans on biodiversity and internalisation of biodiversity concerns in sectoral and cross sectoral programmes.
- Taxonomic capacity building.
- Development and implementation of a biosafety regulatory framework in the country, including matters relating to GEAC
- Conservation of medicinal plants
- Conservation and management of sacred groves.
- Conservation of coastal and marine biodiversity and inland water biological diversity.

209. CONSERVATION AND MANAGEMENT OF WETLANDS, MANGROVES AND CORAL REEFS

(Rs in Crores)

Name of the activity	BE	Physical Target
MAPs on Wetlands	10.00	25 MAPs on Wetlands
MAPs on Mangroves and Coral Reefs		30 MAPs on Mangroves and 4 MAPs on Coral Reefs

210. BIOSPHERE RESERVES (BRs)

(Rs. in Crores)

Name of the activity	BE	Physical Targets
MAPs and Research on BRs	6.00	15 MAPs on BRs and 10 new Schemes

211. INTERNATIONAL COOPERATION

(Rs. in Crores)

Name of the Activity	BE	Physical Targets
UNDP—Government of India- CCF	1.00	Sub-programmes will be implemented as per project objectives.
India Canada Environment Facility.	0.01	The project will be implemented with the available funds in ICEF.
IC Division activities.	1.50	Existing activities will continue.
Grants-in-aid to State Governments.	1.50	Funds will be transferred to State Governments as soon as the corresponding external assistance is received.
State of Environment Scheme.	1.50	Approved activities would be continued.
Indo-German Technical Cooperation (ASEM) project.	0.50	Specific project concepts to be formulated.
Canada Assisted Centre of Excellence on Environmental Science, Policy & Technology.	0.10	New Scheme.

212. TAXONOMY CAPACITY BUILDING PROJECT

(Rs.in crores)

Name of the Activity	BE	Physical target
Taxonomy Capacity Building Project	1.50	Continuation of the existing units and to start Chairs in two areas.

213. ENVIRONMENTAL MANAGEMENT CAPACITY BUILDING TECHNICAL ASSISTANCE PROJECT (WORLD BANK AIDED)

(Rs in crores)

Name of the Activity	BE	Physical Targets
ENVIRONMENTAL MANAGEMENT CAPACITY BUILDING TECHNICAL ASSISTANCE PROJECT	16.74	The original planned activities under the various sub-components included for implementation in the project on Environmental Management Capacity Building have been completed to a great extent and the objectives will be fully achieved during one year extended period of the project upto 30-6-2004, by which time some of the continuing activities will be fully completed such as infusion of environmental concepts in school curriculum widened, environmental impact assessment up scaled at national level, institutions in mining areas strengthened; training facility on zoning atlas will be set up market based economic instruments will be introduced & media trained on environmental issues.

214. ADAPTATION AND CAPACITY BUILDING PROJECT ON CLIMATE CHANGE

(Rs. in Crores)

Name of the activity	BE	Physical Target
Adaptation and Capacity Building Activities	1.00	Launching of Climate Change Studies Setting up of National CDM Authority Updating of Climate Change Web Site Awareness building activities: workshops, seminars, etc.