

CHAPTER 6

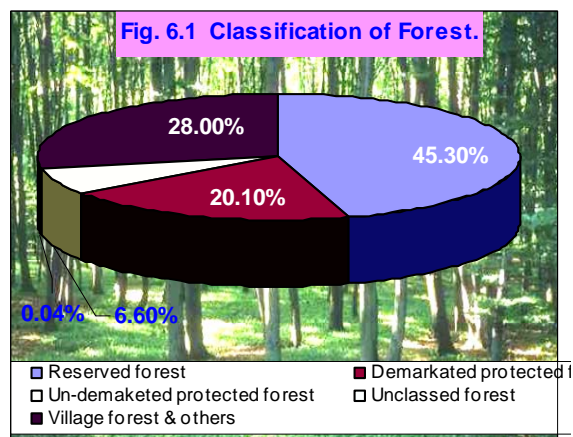
FORESTS AND ENVIRONMENT

FOREST

6.01 Forest plays a vital role in maintaining ecological balance and contributing significantly to the State economy, particularly in the rural sector. Forestry activities contribute a lot to the food security and livelihood for people living around forests. The pressure of human population and livestock on forests for firewood, small timber and grazing is much more and beyond the carrying capacity of existing forests and these forests are under continuous threat of deforestation and degradation. The rapid deforestation and degradation of forests has created serious problems for the overall ecosystem and livelihood of forest dependant population. Therefore, deforestation needs to be arrested and suitable measures devised for rapid reforestation and restoration of degraded forests.

6.02 The State has a recorded forest area measuring 58,136.23 sq. km., i.e.. 37.34% of the total geographical area. This includes 26,329.12 sq km. (45.29%) of reserved forests, 11,686.44 sq km. (20.10%) of demarcated and protected forests, 3,838.78 sq km. (6.60%) of un-demarcated protected forests, 20.55 sq km. (0.04%) of un-classified

forests and 16,261.34 sq km (27.97%) of other forests (village forests, Khesra forests etc.).



Source: P.C.C.F., Orissa.

6.03 As per the "State of Forest Report, 2003' published by the Forest Survey of India, the State has only 48,366 sq kms of forest cover including 207 sq. km of mangrove forest. Of this, 28,170 sq km is dense forest (with crown density greater than 40%) and 20,196 sq km is open forest (with crown density between 10% to 40%) and scrub area 4,574 sq. km. In addition to the above, there is additional 6,381 sq km of area under tree cover. Thus, while the recorded forest area constitutes about 37.34% of the total geographical area of the State, actual forest cover exists over only 31.06%. Out of this, 12.97% is open forest. In regard to forest

cover, there has been wide disparity between districts. While valuable forests are located in the districts situated in Eastern ghat, Central table land and Northern Plateau, the coastal districts are deprived of the potential. National Forest Policy stipulates that 33% of the geographical area should be under forest cover. The State Government has however taken up of afforestation programmes including development of village forests, and introduction of social and farm forestry in the coastal belt.

6.04 The forest sector objective in the Annual Plan, 2006-07 and Tenth Plan period has been to promote sustainable forest management in the State with a larger goal of supporting rural livelihoods. Recognizing the crucial linkages between rural livelihood and conservation of forest resources, particularly in the Orissa context, the plan specifically focuses on conservation and development of forests and optimal use of forest resources in a sustainable manner. The immediate goal of forestry in the State is to protect the existing dense forests with their rich bio-diversity and wildlife from degradation and to restore through appropriate treatment of their vigor for natural regeneration. The forest policy, rules and regulations in force will also be fine-tuned and modified wherever required during the Eleventh Plan period to make the policy and institutional environment conducive for Joint Forest Management of degraded forests.

6.05 The Annual Plan, 2006-07 adopted an approach combining elements of asset creation, institutional development and social development to promote sustainable forest management practices. The Plan will support development of forest resources in the State with focus on:

- i) *Conserving, protecting and developing 27,882 sq. km of dense forests.*
- ii) *Regenerating and developing 20,196 sq. km of open forests.*
- iii) *Afforesting and reforesting 5,782 sq. km of scrub forests.*
- iv) *Promoting Eco-tourism and Eco-development in the protected area and*
- v) *Building capacity of the Forest Department and Village level institutions to take up protection and management of the assigned forests.*

FOREST PLANTATIONS

6.06 According to the Forest Survey of India, present forest cover in the State is 31.06% as against 33% of the total geographical area mandated by the National Forest Policy, 1988. Thus there is an imperative need to accelerate efforts for afforestation and regeneration of the degraded forests for achieving the mandated 33% forest cover and also to reforest the degraded forests with less than 10% crown density in the entire recorded forest area measuring 4,574 sq. km.

6.07 During 2005-06, afforestation programme has been implemented in the State under State Plan and Central Plan over a total area of 19,090 ha. Out of this 10,366

ha has been covered under Revised Long Term Action Plan (RLTAP), 2,315 ha under National Afforestation Programme (NAP) and 6,409 ha under Economic Plantation. Bulk of the afforestation programmes is being implemented in KBK districts under RLTAP for the last six years. During 2005-06, 5265 ha have been covered under Block Plantation, 5,000 ha under rehabilitation of degraded forests and 101 ha under medicinal plantation. Fruit bearing and Non Timber Forest Products (NTFP) species as well as fuel wood, economic species and bamboo have been planted under the scheme. At all plantation sites Vana Sanrakshana Samities (VSS) have been formed and people's participation ensured.

6.08 The Forest and Wildlife Wings have also taken up 81 ha of plantation under Jagannath Vana Prakalpa and 343 ha mixed plantations with DRDA funding. Further 3,642 ha plantation under compensatory afforestation has also been taken up during the current year with funds deposited by User Agencies for the purpose. 7,400 Frangipani seedlings have been planted at Lalitgiri Heritage site.

ECONOMIC PLANTATIONS

6.09 The value of the growing stock of our forests is substantially lower in comparison with the other States. This situation can be improved by raising plantations of economically important species like Teak,

Sissoo, Rose Wood and Red Sanders etc. on suitable sites on a sustained basis. This will ensure substantially higher production of valuable timber in future. An out lay of Rs.3.00 crore has been provided in the Annual Plan 2006-07 for maintenance of valuable species plantations under-taken in previous years. Block Plantations over 1,000 hectares, RDF works over 2,700 hectares and preparatory works for plantation of 1,000 hectares during 2007-08.

MEDICINAL PLANTS

6.10 State Medicinal Plants Board is functioning since Aug'02 for promoting cultivation of medicinal plants in the State. During 2004-05, 43 commercial and 31 promotional projects including 11 from Govt. agencies have been recommended to State Medicinal Plants Board (SMPB) out of which National Medicinal Plants Board (NMPB) has sanctioned five promotional projects at an estimated cost of Rs.0.64 crore and assisting 41 commercial projects of farmers for cultivation and marketing of medicinal plants with Rs.0.53 crore over a period of 3 years. Projects sanctioned in 2004-05 were under implementation during 2005-06 also. A scheme on Vanaspati Van Samittee with a financial outlay of Rs.5 crore is under implementation in Gandharmardan Hill Range of Bolangir district and Baragarh Forest Division.

AREA ORIENTED FUELWOOD & FODDER PROJECT SCHEME

6.11 The Area Oriented Fuel and Fodder Plantation Scheme (AOFFP) is a Centrally Sponsored Plan scheme with a funding pattern of 50:50 between the Centre and the State. The main objective of the scheme is to augment production of fuel wood and fodder species through regeneration of degraded forests and adjoining lands by associating the local people in planning, implementation and management under Joint Forest Management (JFM).

KENDU LEAF

6.12 Kendu Leaf (KL) trade is not only the major source of revenue receipt from forest produce, but also offers large employment opportunities in rural Orissa at a point of time when other employment avenues are non-existent. The selling and marketing of Kendu Leaf is the responsibility of Orissa Forest Development Corporation Ltd. During 2005-06, 7,324 collection centres (Phadis) were opened in 23 non-coastal districts for purchase of Kendu leaf collected by the villagers and 993 KL Central Go-downs have been constructed for storage of the processed and phal kendu leaf bags.

6.13 During 2005-06 (2005 Crop Year) the Kendu leaf production in the State was 3.46 lakh qtls. of processed form and 0.29 lakh qtls of Phal. About 9 lakh pluckers were engaged in leaf collection and the employment

generated were 130 lakh mandays through ancillary work of Kendu leaf operation like bush cutting, phadi repair, processing and binding of Kendu leaf etc. During 2005-06, about 339 MT of food commodities under World Food Programme were provided as an incentive to the labourers. For enhanced transparency in the operations at all stages, Phadi Committees have been organized and activated at each collection centre. Procurement price offered to primary collectors has been revised from 21 paisa to 21.5 paisa per Kerry comprising 20 leaves. During 2005-06, as per decision of the State Government a pair of chappals has also been supplied to each Kendu leaf plucker.

6.14 During 2005-06, an amount of Rs. 144.28 lakh has been received from Kendu leaf trading. A sum of Rs.87.39 lakh has been paid as working fund advance to meet the operations of Kendu leaf and a sum of Rs. 42.14 lakh has been paid to State Government towards royalty.

DIVERSION OF FOREST LAND AND COMPENSATORY AFFORESTATION

6.15 For every diversion of forest land for non-forest uses, it is mandatory to obtain prior permission from Government of India under Sec-2 of Forest Conservation Act, 1980. Since implementation of the Act, Govt. of India have accorded permission to 305 projects diverting 32,196 ha of forest land. While giving permission, Govt. of India have

stipulated for under-taking compensatory afforestation in lieu of forest areas diverted for non-forestry purposes. Accordingly, an amount of Rs.63.06 crore has been deposited by various agencies and by the end of December, 2005 Compensatory Afforestation have been undertaken over an area of 27,004 ha including forest and non forest land. During 2005-06, Govt. of India has cleared 26 projects (6 Irrigation projects, 13 mining projects, 1 Railway project and 2 projects each for industry, road and energy) involving diversion of 2,153.685 ha of forest land.

6.16 Pursuant to commitment of the State Government to regularize Pre-1980 encroachment / forest villages in favour of the encroachers, proposals in respect of 17 districts involving the cases of 3,754 families, 3,328.42 ha of forest land to be settled in their favour have been submitted to Govt. of India. The State Govt. moved Hon'ble Supreme Court in November, 2004 for giving direction to Govt. of India for regularization of Pre-1980 eligible encroachments in the State. Orders of the Apex court have since been received. The matter is being further processed.

FOREST PROTECTION

6.17 With growing population, there has been tremendous pressure on forests i.e. not only for forest produce but also in forest land. Illegal removal of forest produces is prevalent almost in all districts. However, the basin of River Mahanadi spread over Sambalpur,

Cuttack, Nayagarh and Boudh districts, Similipal Forests in Mayurbhanj district, the forests of Rayagada, Koraput, Malkangiri and regions adjoining Orissa-Andhra Pradesh border and the forest corridors on the Inter-State Orissa- Jharkhanda and Orissa-Chhatisgarh border attract increasing illegal removals of forest produces.

6.18 The Forest Department has been keeping a close vigil over forest offences and taking action for booking the offenders. During 2005-06, about 16,200 cum of timber valued at Rs.8 crore was seized as against 5319 cum of timber valued at Rs.2.97 crore seized in 2004-05 during the same period. Similarly, 45,180 forest offence cases were registered involving 7,390 offenders during 2005-06 as against 38,753 cases were registered involving 29,543 offender during 2004-05. Nineteen units of APR Forces have been posted in different Territorial Forest Divisions in vulnerable areas and Central Range Police Force (CRPF) has been deployed in the Dhuanali and Barbara Reserve Forest of Khurda Forest Division which is a patch of rich and unique forest with Teak plantation from the pre-independence time. Besides, 265 Forest Check gates have been established in the State to regulate the transit of forest produce and 739 VHF sets have been installed in different territorial ranges and vulnerable areas. Draft Rules for

use of fire arms by Forest Officers are under consideration of State Government.

JOINT FOREST MANAGEMENT

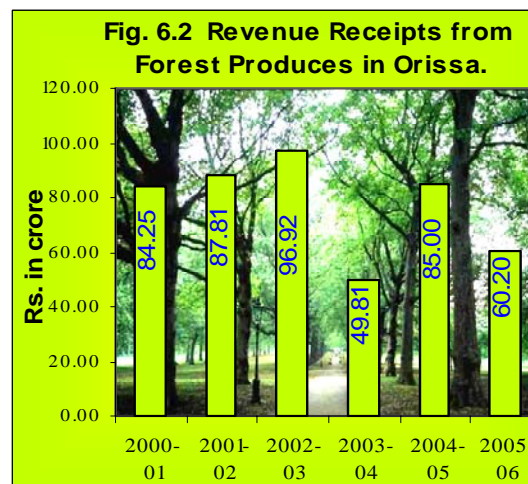
6.19 One of the salient features of the National Forest Policy, 1988 is to actively associate the people in protection, conservation and management of forests. The State Govt. brought out a resolution in 1988 to introduce a scheme of protection of peripheral reserved forests with participation of the people of adjoining villages. The process has been further fine-tuned from time to time.

6.20 In accordance with the 1993 JFM Resolution of the Government, 9,977 numbers of **Vana Sarankshana Samities (VSS)** have been formed by the end of 2005-06 and 8,80,187 hectares forest area is covered under protection of these VSS. A total of 11.99 lakh families including 2.05 lakh S.C. and 4.28 lakh ST of 8,198 villages are members of these Vana Sarankshana Samities.

FOREST REVENUE

6.21 Forests are the important source of non-tax revenue for the State Government. Figure 6.2 and Table 6.1 shows the revenue receipts from forest produces in Orissa since 2000-01. It is observed that the revenue receipts from forest produce shows a fluctuating trend. During 2004-05, the revenue receipt was Rs.85.00 crore which declined to Rs.60.20 crore during 2005-06. Further it is

also revealed that the revenue receipt from the Kendu Leaf trade is being the highest among other forest produces. During 2005-06, out of total Rs.60.20 crore revenue receipts, about 70% was earned from Kendu leaf trade.



Source: P.C.C.F., Orissa.

Table – 6.1
Revenue Receipts from
Forest Produces in Orissa.

(Rs. in Crore)						
Item	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Timber and firewood	14.23	9.36	9.15	3.70	8.94	6.65
Bamboo	5.11	2.03	0.07	1.45	1.58	4.21
Kendu leaf	55.00	69.00	75.00	31.00	24.25	42.15
Others	9.91	7.42	12.7	13.66	50.23	7.19
Total	84.25	87.81	96.92	49.81	85.00	60.20

Source: P.C.C.F., Orissa.

ORISSA FOREST DEVELOPMENT CORPORATION (OFDC)

6.22 Orissa Forest Development Corporation was formed on 01.10.1990 by taking over the assets and liabilities of erstwhile Similipal Forest Development Corporation (formed in December 1979), Orissa Plantation Development Corporation (formed in August 1985) and Orissa Forest Corporation (formed in 1962). At present the Corporation has 20 commercial units under 4 zones along with it's Head Office at Bhubaneswar. The main activities of the Corporation includes sale of timber, fire wood, bamboo, sal seeds, kendu leaf, honey, pickles and other products.

6.23 The Corporation has taken up the responsibility of supply of firewood, bamboo and house building materials to the public mostly obtained from salvage of dead and wind fallen timber and U.D. case materials through its 172 Retail Sale Depots all over Orissa. The Corporation finances the entire operational cost of production of Kendu leaf

and carries out marketing of Kendu leaf as an agent of the State Government.

6.24 The Corporation has sold 16,741 cum of round timber, 15,023 MT of firewood to the public during 2005-06 and earned revenue of Rs.17.21 crore approximately. Besides, 4.88 lakh qtls. of Kendu leaf valued at Rs.147.39 crore and 3,889 MT of sal seeds valued at Rs. 0.72 crore have also been sold during 2005-06.

6.25 Bamboo in the State was nationalized with effect from 1988. M/s J. K. Paper Ltd., Rayagada and M/s BILT (Sewa), Jeyopore have been entrusted with the harvesting of bamboo as raw materials procurer from 2004-05 with a purpose to increase the employment opportunities in the rural areas of the State for sustainable management of forest and supply of raw materials to paper industries in the State. During 2005-06, about 1.40 lakh units of industrial bamboo and 1.36 lakh units of commercial bamboo were produced and 13.11 lakh mandays of employment were generated.

Table 6.2

Production and Revenue Collection from Forest Produce by OFDC.

Sl.No.	Item	Units	2004-05			2005-06 (P)		
			Produce	Quantity sold	Revenue collected (Rs. in crore)	Produce	Quantity sold	Revenue collected (Rs. in crore)
1	Timber round	Cum	17143	14624	18.58	20398	16741	15.30
2	Fire wood	MT	14982	16023	1.94	14849	15023	1.91
3	Bamboo	SU	35024	25944	2.25	151911	-	22.79
4	Kendu leaf	Qtls	454000	269570	105.12	369904	488037	147.39
5	Sal Seeds	MT	1820	1798	0.62	3412	3389	0.72

P: Provisional

Source: Orissa Forest Development Corporation, Bhubaneswar.

WILD LIFE

6.26 Orissa with its diversified topography and climate has been the abode of a variety of wildlife species. But due to increasing biotic interference and dwindling forest cover, there has been a rapid decline in the wildlife population in the State. In order to protect and preserve wild life, 18 Wildlife Sanctuaries and 2 National Parks have been established. Besides, three elephant reserves namely, (i) Mayurbhanj, (ii) Sambalpur (Badarama-Khalasuni) and (iii) Mahanadi have also been constituted. The Committee set up by the Government of India for 'rationalization of boundaries' of National Parks and Sanctuaries has submitted its report regarding the steps to be taken in respect of villages situated within the boundaries of the Sanctuaries declared under Section-18 of the Wildlife (Protection) Act, 1972. The total area of Sanctuaries / National Parks (excluding the Gahirmatha marine sanctuary in the sea) is 4.1% of the total geographical area of the State and 10.73% of the recorded forest area. The Rationalization Committee recommends that in order to check any diminishing coverage of area under Protected Area (PA), where villages are required to be excluded as per recommendation of the Collector, new areas have to be added to the existing sanctuary.

6.27 Eighty four species of reptiles, 446 species of birds and 65 species of mammals have been identified in the protected areas. The wild life status survey and census is periodically carried out by forest personnel with active participation of various non-official enumerators. Table 6.3 gives names of some important species and their number as per status survey and census reports for different years, besides the captive stock at Nandankanan Zoological Park.

6.28 Three Elephant Reserves (ERs) namely Mayurbhanj ER, Mahanadi ER and Sambalpur ER were notified in the State in the years 2001 and 2002. These Reserves are meant to define the prime elephant habitats and to launch various management interventions for conservation of elephants. The extent of notified and proposed forest blocks in these three reserves is 4,129 sq km. and the geographical area covered by these three reserves is 8,509 sq. km. Constitution of two more elephant reserves, i.e., Brahmani-Baitarani ER and South Orissa ER as well as expansion of the Mahanadi and Sambalpur elephant reserves for providing better habitat condition to the elephants and for reducing the problems of elephant depredation are being contemplated.

Table 6.3
Wildlife Population in the State.

Sl. No.	Name of species	Number	Census Year	Remarks
1	2	3	4	5
1.	Tiger	192	2004-05	In the wild (entire State)
2.	Leopard	487	-do-	-do-
3.	Elephant	1511	2005-06	-do-
4.	Salt Water Crocodile	1462	2005-06	In Bhitarkanika Wild Life Sanctuary
5.	Birds (Migratory & Resident)	6.70 lakh 1.15 lakh	2005-06	Chilka lake ,Bagagahan Bhitarkanika Sanctuary
6.	Olive Ridley Sea Turtles	4.65 lakh	2005-06	Rushikulya river mouth, Gahira Matha, Gahirmatha Marine Sanctuary
7.	Dolphin in Chilka	130	2005-06	Chilka lake
8.	Black Buck	786	2004-05	Balipadar – Bhetnoi
9.	Mugger	156	2005-06	Satakosia & Similipal Tiger Reserve

Source: Chief Warden, Wildlife, Orissa, Bhubaneswar.

6.29 The State Govt. have also proposed to Govt. of India for declaration of Tiger Reserve in the State comprising of Sunabeda sanctuary and adjoining forest area to its south in Nuapada district. Similipal Sanctuary, which covers 2,200 sq km. and is covered in the Project Tiger areas, that extends over 2,750 sq km. as been strengthened with the addition of other Reserved Forests and a transitional zone, and has been designated as a Biosphere Reserve by Government of India. The Biosphere Reserve covers an area of 5,569 sq km. with a core area of 845.70 sq km., a buffer of 2,129 sq km. and a transitional zone of 2,595 sq km.

6.30 As per Tiger Census conducted in 5th – 10th January, 2004, there were 192 tigers and 487 leopards in the State as against 173 tigers and 457 leopards counted in 2002 census. Out of 192 tigers and 487 leopards,

101 tigers and 127 leopards were found in Similipal area.

6.31 As per elephant survey conducted in April, 2004, a total 1,511 elephants were counted in Elephants Reserves (ER) as against 1,841 elephants counted in May, 2002 census. Out of 1,511 elephants, 465 were in Mayurbhanj ER, 464 in Mahanadi ER, 336 in Sambalpur ER, 108 in Baitarani ER and 138 in South Orissa Elephant Reserves. The Elephant Reserves hold about 82% of total elephant population in Orissa.

6.32 The Bhitarkanika Wild Life Sanctuary and the Bhitarkanika National Park are spread over an area of 672 sq. km and 145 sq. km respectively. The Gahirmatha Marine Sanctuary covering an area of 1,435 sq. km is the largest nesting ground for Olive Ridley sea turtles in the world. During 2005-06, 4.65 lakh Olive Ridley sea turtles came to Gahirmatha

beach and Rushikulya river mouth for nesting and laying eggs. The number of salt water crocodiles which was 672 during the year 1998 in Bhitarkanika river mouth has increased to 1462 during the census year 2005-06.

6.33 The Chilka (Nalabana) Wild Life Sanctuary was started in December, 1987 over an area of 15.58 sq. km. which is not only an ideal habitat for migratory birds but also for the endangered Irrawady Dolphin. It attracts migratory birds from far off countries during Winter Season every year. As per Bird Census held in January '2006 about 6.70 lakh birds including 102 species of migratory and local-migratory birds visited Chilika Lake. Besides 1.15 lakh birds including 101 species of migratory and local migratory birds visited Bhitarkanika during 2005-06.

Nandankanan Zoological Park

6.34 Amidst lush green forests along the backs of Kanjia lake lays Nandankanan, a beautiful zoological park that got its name from "Nandan Van" meaning the "Garden of Gods". The zoological park is set in a beautiful natural setting and is one of the finest parks in the country. Unlike conventional zoos, this zoo has got a very good natural habitat and the park is unique of its kind. The zoological park together with the lake and Botanical Garden has been declared as Nandankanan wild life sanctuary. The Nandankanan zoological park was

established in December, 1960 while it was declared as wildlife sanctuary in August'1979. The geographical area of Nandankanan zoological park is 3.62 sq km including 0.66 sq. km of Kanjia Lake and the area of Nandankanan wild life sanctuary is 4.37 sq km. The park has a captive managerial area including 1,200 animals and birds representing 128 species (94 reptiles of 23 species, 657 birds of 63 species and 449 mammals of 42 species). Besides, Tiger safari, Lions safari, an Aquarium, Toy train, Boating and Aerial ropeway are some of the attraction of the zoo.

6.35 During 2005-06 about 13.06 lakh visitors visited the park and revenue to the tune of Rs.1.46 crore was collected as against 12.41 lakh visitors and Rs.1.12 crore revenue collected in 2004-05. Number of visitors as well as revenue collection from the park shows an increasing trend over the years.

Table - 6.4

Number of visitors & revenue collected by Nandankanan, Orissa.

Year	No. of visitors (in lakh nos.)	Revenue collection (Rs.in Cr.)
2000-01	10.01	0.65
2001-02	11.99	0.81
2002-03	12.99	0.90
2003-04	13.37	0.89
2004-05	12.41	1.12
2005-06	13.06	1.46

Source: Directorate of Nandankanan.

WORLD FOOD PROGRAMME PROJECT

6.36 Under this programme food rations are being provided to the labourers engaged in different forestry activities for improving their nutritional status. In order to avail the benefit under the programme, a labourer is required to voluntarily contribute Rs. 9/- from his daily wage for getting a food packet of 2.5 kg of rice and 200 grams of pulses. The generated funds are utilized towards meeting the needs of local communities by implementation of

micro plan projects and creating public infrastructure such as provision of drinking water, storage go-down, concrete road etc. inside the village, renovation of ponds and promotion of pisciculture, renovation of old tank etc. During 2005-06, about 11,253 MT of rice and 876 MT of pulses were utilized under this project and welfare funds to the tune of Rs.49.46 lakh have been utilized for execution of micro projects as approved by S.L.C.C.

ECOLOGY AND ENVIRONMENT

6.37 The Environment Wing of the Forest and Environment Department has the following objectives:

- i *To act as the nodal agency for environmental management and conservation.*
- ii *To implement Pollution Control Acts and Rules.*
- iii *To assess environmental impacts of development projects and industries.*
- iv *To protect ecologically fragile sites, natural living resources and endangered ecosystems including wastelands and grass land and mangroves.*
- v *To restore, develop, protect and maintain ecologically sensitive sites and selected nature reserves / locations.*
- vi *To promote environmental awareness and environmental education.*
- vii *To promote research, education and training on environmental conservation and protection.*
- viii *To co-ordinate activities for conservation and management of Chilka and Ansupa lakes, and mangroove areas of the State.*

6.38 The following important activities were undertaken by the Environment wing of the State Government.

6.39 State Government has constituted three members Appellate Authorities under Water Act, Air Act and Bio medical Waste Rules to hear appeals preferred against any order made by State Pollution Control Board. These Authorities have started functioning.

ENVIRONMENTAL EDUCATION & AWARENESS DEVELOPMENT

6.40 State Government have constantly endeavoured to promote awareness on environment conservation and protection through District Environment Societies and 4,500 Eco-clubs over the entire State. State Government have conferred 23 “Prakruti Mitra” and 22 “Prakruti Bandhu” awards to selected voluntary organizations / individuals / villages institutions for their meritorious work

in environmental conservation on World Environment Day, 2005. So far 408 “Prakruti Mitra” and 265 “Prakruti Bandhu” awards have been conferred.

CONSERVATION AND MANAGEMENT OF THE COASTAL AREA

6.41 The Orissa State Coastal Management Authority constituted by Govt. of India to enforce the Coastal Zone Management Plan and the Coastal Regulation Zone (CRZ) has recommended 9 projects to Govt. of India for construction of jetties and waiting halls for convenience of passengers as proposed by Directorate of Inland Water Transport of Commerce and Transport Department.

NATIONAL GREEN CROP PROGRAMME

6.42 The National Green Crop Programme has been introduced by the Ministry of Environment & Forests, Govt. of India. 4,500 Eco-clubs have been constituted in schools @150 Eco-clubs in each district. These Eco-clubs are pioneer teams creating environmental awareness among the local inhabitants.

NATIONAL ENVIRONMENT AWARENESS CAMPAIGN (NEAC)

6.43 NEAC is an important environmental awareness programme, taken up by the Environment Department through the Centre for Environmental Studies which has been declared as the Regional Resource Agencies under the NEAC Programme by the Ministry

of Environment & Forest, Govt. of India. Small NGOs are funded for environmental awareness activities.

STATE POLLUTION CONTROL BOARD (SPCB)

6.44 State Pollution Control Board (SPCB) was constituted in 1983 and is functioning under Forest and Environment Department, Govt. of Orissa. The Board is entrusted with the responsibility to execute and ensure proper implementation of Environmental Act, particularly the Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986 as amended from time to time, and various rules framed there under. The Board is also expected to execute and ensure proper implementation of environmental Policy of the Union and the State Government.

6.45 During 2005-06, the Board has received 648 applications for consent to establish and 264 cases carried forward from 2004-05. Out of these 912 applications, consent have been given in favour of 499 industries which includes 218 Large & Medium Industries, 281 Small Scale Industries.

6.46 After declaration of entire State of Orissa as Air Pollution Control Area in 2002, all the brick kilns have to obtain consent to establish within 90 days of notification.

During 2005-06, 75 applications including 49 carried forwarded from 2004-05 have been received and permission was granted in favour of 23 cases.

6.47 Similarly, 112 applications were received during 2005-06 to establish stone crushers, out of which permission to 54 units have been accorded during 2005-06.

6.48 During 2005-06, there were 79 cases including 15 spilled over cases from 2004-05 for public hearing. Out of this, 27 public hearing have been conducted for major industries / mining / development projects.

6.49 As per the provision of Hazardous Waste (Management & Handling) Rules, 1989 and Amendment made in 2003, the Board ensures proper management of hazardous waste through authorized administration. During 2005-06, about 82 authorization applications have been received of which authorization was granted in favour of 30 units and show cause notice have been issued to 34 Hazardous Waste generating units.

6.50 Bio-medical Wastes generated in different health care establishments need to be disposed off safely without any adverse impact to the human health and environment. The OSPCB being declared as the prescribed authority for the State for enforcement of the rules and regulations for the waste management through authorized

administration. During 2005-06, out of 630 health care establishments, the Board has brought 583 establishments under authorized administration. Balance 47 units have been exempted either due to closure or for providing treatment to less than 1,000 patients per month. Out of these 583 establishments, 87 establishments have their own treatment facilities, 122 establishments are utilizing Common Bio Medical Waste Treatment and Disposal Facilities (CBWTDF) and the balance 374 establishment have no adequate facilities.

6.51 Under Municipal Solid Waste (Management & Handling) Rules, 2000, the Board has so far granted authorization in favour of 17 local bodies out of which 11 ULBs have valid authorizations.

6.52 In order to plan a comprehensive programme for prevention and control of pollution, the Board has undertaken the following activities during 2005-06.

- *Monitoring of water quality at 62 stations of six major rivers of the State.*
- *Monitoring of noise pollution level on occasions like Dushera, Dipabali, Rath Yatra and Bali Yatra.*
- *Monitoring of ambient air quality of eight important towns and industrial areas like Cuttack, Bhubaneswar, Balasore, Berhampur, Sambalpur, Rayagada, Rourkela and Angul. Air quality is being monitored in 15 stations in the above eight towns.*
- *Creating awareness on restriction on sale and use of plastic carry bags and its ill effects.*

- *Acting as a facilitator for the implementation of the Ecocity programme for Puri town.*

6.53 Besides, the following Awareness Programmes are also undertaken by Orissa State Pollution Control Board.

- ❖ *Organised three seminars/ workshops for public awareness regarding environmental protection.*
- ❖ *Undertakes periodical orientation programmes like imparting training to police personnel in respect of monitoring and control of vehicular and noise pollution.*
- ❖ *Published three issues of news letter "Paribesh Samachar" and published a popular book titled "Noise Pollution".*
- ❖ *Celebrated World Environment Day, Ozone Day and the National Pollution Prevention Day on 5th June, 16th September and 2nd December, 2005 respectively for creating public awareness.*
- ❖ *Promotes eco-club activities in various schools in the State. Nuapada and Ganjam districts have been chosen for implementation of the programme in the first phase.*

CHILKA DEVELOPMENT AUTHORITY (CDA)

6.54 The Chilka Development Authority (CDA), established in November, 1992 as an autonomous body, is attending to various problems of the lake including its conservation and all-round development. The lake is facing a number of problems, viz, siltation, shifting of Chilka mouth, loss of salinity, extensive weed growth and depletion of fishery resources.

6.55 During 2004-05, CDA has taken initiatives for 10 Micro Watersheds in Banapur Block of Khurda district under "Integrated

Waste Land Development Programme" (IWDP). It covers 38 villages with total population 7,759 in catchments of Chilika. The total geographical area of these micro sheds is 8,426 ha, out of which treatable area is 5,000 ha. The project period of this programme is 5 years from 20.10.2004 with a proposed outlay of Rs. 3.00 crore.

6.56 Participatory watershed development project is being implemented in the catchments of Chilika through NGOs. During 2004-05, cultivation of horticultural species like grafted mango, papaya, banana, lemon etc. in backyard (7,004 nos.) areas and bulk plantation over 393.196 acres was initiated with active involvement of stake holders.

6.57 CDA has initiated measures for catchments amelioration under "Integrated Sustainable Management of Chilika lagoon" programme with financial support from Govt. of India. During 2004-05, 5.50 acres under block plantation, 101 acres under bamboo plantation, installation of vegetative hedges with ditches in 500 hectares, stabilization of ravines in 100 hectares etc. have been accomplished.

6.58 The project "Wise Use of the Natural Resources of Chilka Lagoon through Stake Holders Participation and Documentation of Emerging Lessons" is being implemented with financial support from India Canada Environment Facility (ICEF). This project aims

at optimization of productivity and value addition through appropriate technology to facilitate improved livelihoods of the local communities. The project period of this project is two years from 1st April 2005.

6.59 “Participatory Integrated Watershed Development for Chilika Lagoon” is under implementation with financial support from Royal Danish Embassy. The focus of this project is capacity development at community and institution level in participatory watershed management. The project started on 16.8.2004 and ended on 31.12.2005.

REGIONAL PLANT RESOURCE CENTRE

6.60 Regional Plant Resources Centre (RPRC) has well defined focus areas of Research and Development, i.e. Taxonomy and Conservation, Bio-Technology, Forestry and Horticulture.

6.61 During 2005-06, a midterm and a long term module of seed banks have been set up for 250 species of economic plants. A Bambusetum of 34 species is also being maintained in the centre. A medicinal germ plasma garden housing 250 species of medicinal plants collected from all over India has been developed by the centre for sensitization of public in general and researchers in particular.

6.62 At present 360 varieties of Rose are available at the centre and also 110 different

orchards were introduced by the centre. Besides, molecular taxonomic works on phylogenic significance of Calliandra, Typhonium, Cassia etc. were under taken in this year.

6.63 Bio-technological application of ornamental plants and medicinal plants mutation breeding work in rose plants is carried out for variety improvement.

CENTRE FOR ENVIRONMENTAL STUDIES

6.64 Center for Environmental Studies (CES), a registered society, came in to existence in 2000 with an objective to promote environmental awareness in the State. CES is the Regional Resource Agency for the National Environment Awareness Campaign (NEAC) and nodal agency for the National Green Crops.

6.65 Under NEAC programme, CES releases grants to NGOs in the area of environmental conservation. During 2004-05, 526 organisations were supported under the programme.

6.66 Under National Green Crops programme, CES provides resource material for dissemination of environmental knowledge and facilitates activities among members of eco-clubs established in 4,500 schools.

6.67 CES has been selected by the MOEF to prepare Indian State Level Basic Environmental Information Database (ISBEID)

in association with National Informatics Centre, New Delhi.

***NATIONAL FOOD FOR WORK
PROGRAMME (NFFWP)***

6.68 National Food For Work Programme (NFFWP) has been launched in the State. Through this programme, works like construction of water harvesting structures,

plantation and rehabilitation of degraded forest, distribution of seedlings etc. are being taken up by utilizing food grain received from Central Government. About 461.64 lakh mandays employment have been generated by utilizing 1.76 lakh MT of food grain and an amount of Rs.291.88 crore of cash by the end of February, 2006.

