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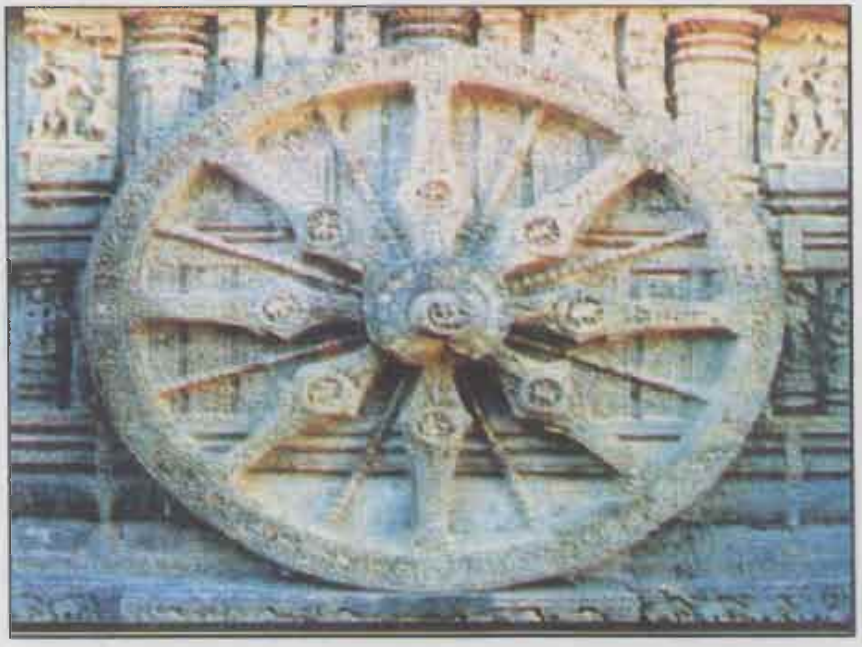
REPORT ON

FOREST RESOURCES OF



PURI AND CUTTACK DISTRICTS OF ORISSA

FOREST SURVEY OF INDIA
EASTERN ZONE
CALCUTTA
2001

Contents

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Preface

Forest Survey of India, Eastern Zone, Calcutta has brought out its report on forest resources of undivided Puri and Cuttack district of Orissa state comprising findings on the various aspect of crop composition and status of land use. There is a view on different parameters e.g. topography, status of degradation of forest, injuries to crop, regeneration status, fire incidence, grazing incidence etc. Tree density and growing stock estimation have also found space in the report. The fieldwork of this forest inventory was carried out during the year 1998-99.

The Puri district extends over 10182 km^2 area of which the recorded forest area is 2837 km^2 .where as in Cuttack district the recorded forest area is 1894 km^2 when geographical area is 11142 km^2 accounting 27.86% and 17.00% of the geographical area. However, the forest area has been calculated by dot grid methods on the green wash area of the topo-sheets which works out to be 2430.97 km^2 and 1339.81 km^2 for Puri and Cuttack district as the field work was confined to the green wash areas of the respective district.

The total growing stock of forests for Puri and Cuttack district have been estimated at 9.401 million cu.m and 1.646 million cu.m respectively. The number of stems has been estimated as 41.657 million and 9.250 million respectively.

This report was prepared after the devastating cyclone of 1999. Much life and property was lost or damaged and the entire quantification of the damage will be a gargantuan task. It is hoped that this report might help to serve a baseline data on the existing forest resource prior to the arrival of the cyclone.

Officers and staff members of Eastern Zone who were entrusted with the hard work of the forest inventory and bring out the report in the present form deserve appreciation. The co-operation and help extended by the Orissa state Forest Department for conducting field work and making the records available for collection of data is also thankfully acknowledged.

It is hoped that the report will provide a comprehensive source of data to the state government and will help in planning further development activity.

(DR. J. K. RAWAT)
DIRECTOR.

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GOVERNMENT OF INDIA

MINISTRY OF ENVIRONMENT AND FORESTS
FOREST SURVEY OF INDIA
(EASTERN ZONE)
KOLKATA

ACKNOWLEDGEMENT

This organisation expresses its gratitude and sincere thanks to the officers and staff of Orissa Forest Department for their valuable cooperation extended to our field parties during the survey work, without which it would not have been possible to complete the survey work in the stipulated time.

I express my sincere thanks to all the officers and staff members of Eastern Zone of the Forest Survey of India who were entrusted with carrying out the forest inventory and bringing out the report in the present form.

(Madhawa Trivedy)
Regional Director

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PART - I

(MAIN REPORT WITH MAPS, CHARTS & DIAGRAMS)

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CHAPTER-1

BACKGROUND INFORMATION

1.1 INTRODUCTION

Forest resources of this earth purify the environment and thus protect human life. Unfortunately, the same human being is the destroyer of this vital natural resource, thereby threatening the very existence of mankind. In order to maintain a balanced ecology, people should step forward to take proper care of this vital endowment, since forests offer a pollution-free, viable environment for the sake of human life itself.

Keeping in view all the benevolence of forest resources, we, the people, are legally and ethically bound to reciprocate this gesture. A complete and detailed assessment of these forest resources is thus, a necessity for further developmental activities. For this purpose, Forest Survey of India (Eastern Zone) endeavoured to estimate the forest resources of the district of Puri and Cuttack (undivided) in the State of Orissa in the year 1998-99.

This report was prepared in the aftermath of the devastating super-cyclone of 1999 that hit coastal Orissa. As widely publicised, the damage and suffering caused by the cyclone is immense and perhaps a quantification of the same will never be possible. Yet what has been made clear is that the indiscriminate unsustainable exploitation of tree cover, especially with reference to coastal shelter-belts allowed the cyclone to unleash its full fury on highly populated and arable stretches of land. The loss of tree cover before and due to the cyclone has raised the specter of severe ecological disaster and climate changes in near future. Inundation of arable land by saline water and the projected intense summer heat are but the tips of an iceberg.

1.2 AREA AND LOCATION

The present inventory area comprises of the undivided Puri and Cuttack districts of Orissa. Both Puri and Cuttack are located in the coastal tract of the State. The two districts owe a rich tradition from early centuries till to-date and the district Puri is especially famous for its antiquities and religious sanctuaries. Orissa has a history that goes back to the pre-vedic periods. History has granted ' kalinga' its place as an example of how the greatest of tragedies in the form of war converted the mighty Chandashoka into the greater Dharamashoka. The Temple City of Puri is among the greatest pilgrimages for Hindus world over the indeed the entire socio-economy of the State revolves round the grandeur of Lord

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Jaggannath. Known for its architecture, the many temples of Orissa are this nation's pride. The Lingaraj temple, the Rajarani temple, and Sakhshi Gopal temple are a few that need to be mentioned. It would sacrilege not make a mention of the one and only 'Black Pagoda" i.e. the Sun temple at Konark. What is left of it after the ravage of time is breathtaking- a poetry in stone where the erotic figurines, the danseuses and the animals come alive in the courtly splendour of rulers of the past. Orissa as a State is known for its variety in arts and culture being the home of the famous Odissi style of classical dance, the Chau and other tribal rituals, its handloom, handicrafts and natural mineral resources. Blessed with good forests and Wildlife, in eastern India, Orissa stands out as an example of development- specially if one goes by the standard of roads, infrastructure, investment opportunities and quality of education -compared to those in its neighbouring East Indian States. Orissa has also taken remarkable steps in women's empowerment. On the other hand, the contemporary media does like to paint a dismal picture of this state- specially the Tribal areas of Kalahandi and Phulbani regions. While as a state of a poor developing country Orissa does have its problems, yet to brand it as 'backward' will be a cardinal mistake.

One interesting example of the intimate relation of forests and religious sentiments is the "Phassi' tree. 'Phassi', (*Anogeissus acuminata*) a handsome deciduous, tall tree is endemic to the river banks of Mahanadi region in Orissa. A member of the family Combretaceae, it has a 1.25 cm thick bark, dark grey, rough, granulated when old. The wood id grey, sometimes yellowish grey with a greenish tinge, shining, in structure moderately hard, resembling that of *Anogeissus latifolia*, but the pores are considerably larger, and the zigzag concentric arrangements of the patches are more marked. It reproduces well from seed. The wood as such compares unfavourably with that of Anogeissus latifolia, because of larger pore. *Anogeissus latifolia* and also *Anogeissus pendula* is known as 'Axle Wood' – as the hard straight and smooth wood is ideal for cart axles and so has been used in various parts of India for centuries. Phassi has a similar yet unique use. It is used for making the axle of the Car (Ratha) of Lord Jaggannath during the annual Car festival (Ratha Yatra). Previously, the Rajah of Nayagarh supplied it. Today the Divisional Forest Officer, Nayagarh, supplies it. Examples of indigenous knowledge such as this are proof on one hand that with the proper co-operation of the locals, forests and wildlife do have a chance of survival and on the other that there is a vast untapped ethno-forestry know-how which if channelled, could go a long way in ameliorating a number of problems this country faces.

Administratively, the old district of Cuttack was split into four separate districts viz. Cuttack, Jajpur, Jagatsingpur and Kendrapara. Similarly, the district of Puri has also been divided into three separate districts viz. Puri, Khurda and Nayagarh. The location of these seven districts is shown in the map attached. The geographical area of the seven districts is as follows:

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Table 1 GEOGRAPHICAL AREA OF DISTRICTS.

S. No.	DISTRICT	GEOGRAPHICAL AREA (IN SQ.KM.)
1	CUTTACK	3733
2	JATSINGHPUR	1973
3	JAJPUR	2,888
4	KENDRAPARA	2,548
5	PURI	3,051
6	KHURDA	2,889
7	NAYAGARH	4242

The vegetation cover as well as the forest composition of Puri, Khurda and Nayagarh districts are almost of similar pattern and that of Cuttack, Jajpur, Jagatsingpur and Kendrapara is of the same pattern. Therefore, the findings of the inventory are worked out separately on undivided Puri and Cuttack districts.

1.3 PHYSICAL FEATURES

Orissa is a maritime State situated on the east coast of India and both Puri and Cuttack are coastal districts. The district of Cuttack consists of a deltaic plain stretching inland for about 65 Kilometres, traversed by many rivers, with a multi-directional network. .It is a fertile land, though afflicted by frequent floods. These floods submerge the standing crop and sand-cast the arable land. The rock formations of the district are of alluvium, laterite, Ihgarh sandstone, dolerite etc. The soil of a large portion of the district is covered with alluvium. Much of this is a recent deltaic deposit of the Mahanadi and Brahmani rivers and occupies a flat tract of country extending some 48 kilometres from the sea with the exception of a belt of low sandstone hills along the coast. The district of Puri also contains plain alluvial tract. It has seacoast with a littoral tract of a few kilometres having a row of sand hills. Beyond this tract, to the north, is a large alluvial country just a few feet above the sea level. This area is mostly subjected to inundation and contains many marshy swamps. Further north are vast stretches of flat fertile rice lands, beyond which the country assumes a varying level interspersed with small patches of forest which mark the beginning of the hilly tracts. The important peaks are Mundula Parbat, Balimunda Parbat and Goaldei. The highest peak is Khundabole (949 metres, msl). The district has a variety of soils, namely saline soil in the littoral tract, a vast area of alluvial soil behind the saline strip, laterite soil in the western part and a small patch of black cotton soil in the South Eastern part of the district.

1.4 CLIMATIC CONDITION

The climate of coastal Orissa, in general, is equable i.e. it is neither very hot in summer nor very cold in winter. The climate of Puri district can be typically characterised as a mixture of tropical and Mediterranean. The period from June to September is the monsoon season while October and November constitute the post-monsoon transition period. The cold season starts from December and continues till the end of February followed by the hot season from March to May. Relative humidity is generally high throughout the year in the

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coastal areas. Puri and Bhubaneswar, on account of their pleasant weather, are good summer holiday resorts. The maximum temperature recorded in Puri is 32°C in May and June and the minimum temperature is 16°C recorded in January. The annual rainfall in Puri is approximated at 1438 mm. while for Bhubaneswar it is approximated at 1613 mm. The climate of Cuttack district is hot in summer with a maximum temperature of 46.7°C in the month of June and cold in winter with a minimum temperature 9.9°C in the month of December. The normal annual rainfall is 1501.3 mm, with high humidity during the rainy season. Usually cyclones and floods affect this district during the monsoon months.

1.5 RIVER SYSTEM

Many a small and big river flows through Orissa into the Bay of Bengal. In fact, the rivers are the lifeline of the State. Because of their alluvial deposits, fertile plains have been created in the river valleys. Yet many of the rivers are in high flood during the rainy season bringing devastation to the coastal and eastern districts. The Cuttack district has two main rivers, Mahanadi flowing in the south and Brahmani in central part. Both rivers throw out many tributaries- sometimes re-uniting and sometimes bifurcating as they pass across the plains. During the rainy season they cause flooding in the countryside. However, following the construction of the Hirakud multipurpose project, there has been some respite from the repeated inundation. The Taladanda canal passes through this district. Baitarani is the main river of Jajpur district. Kharcuan, is another river, which passes through Jajpur road. Kendrapara is situated on the Kendrapara canal. In Puri district river Mahanadi flows in the eastern boundary and many small rivers also traverse in this part. The Chilika Lake lies in the South-western part of the district. Originally a part of the Bay of Bengal, Chilika Lake is separated from the Bay by a sand bar. It is 64 kilometres long and its width varies from 16 to 20 Kms. There are two islands in Chilika, Parikud and Malud. Chilika Lake is a known centre for brackish water fisheries, tiger prawn hatcheries and the countless varieties of resident and migratory waterfowl that frequent the lake. Nalabon Bird sanctuary is located in Chilika for the purpose of conservation of Avifauna. Two more lakes need to be mentioned in this context. Ansupa lake in Cuttack- around 5Kms long and 1.5 Kms broad and Sara lake in Puri District (around 5 Kms long and 3 Kms wide).

1.6 FLORA AND FAUNA

1.61 FLORA

Forests of various types cover a little more than forty per cent of the total area of the State. The forests are not dense everywhere. In most places, they are mere shrub. However, there are areas where the forest is thick and is home to a considerable quantum of Biological Diversity. Forests, of the following types cover the study area (As per Champion and Seth, revised Forest Types of India).

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1. **Northern Tropical Semi Evergreen type (Orissa semi evergreen Forest 2B/C3).**

This type typically is found on the hilly regions of Banigocha and Chariapally of Puri District. The upper storey is deciduous for a short period and the sub-storey is evergreen. Characteristic species include *Artocarpus lakoocha, Michelia champaca, Celtis tetranda, Bridelia* species, *Dillenia pentagyna, Saraca indica,* various *Ficus* species, *Mangifera indica.* The other common species include *Messua ferrea, Litsea nitida* etc. However due to high biotic interference, undisturbed climaxes no longer exist and a rapid invasion by Sal and other moist deciduous elements has occurred. Even this converted eco-tone is also subject to severe biological interference.

2. **Peninsular (Coastal) Sal Forests (3C/C1d).**

Found in Puri District, this type has Sal (Shorea robusta) upto 50%. The common associates are *Dillenia pentagyna, Terminalia tomentosa, Bridelia retusa, Adina cordifolia, Syzygium cuminii, Cycas circinalis.* Bamboo includes *Bambusa arundinacea, Dendrocalamus strictus,* and *Oxytenanthera* spp. Shrubs include *Macaranga peltata, Ardisia solanacea,* various Rubiaceae, *Leea* spp., *Strobilanthes* spp. etc. Grasses include *Panicum* spp., *Thysanolaena* spp, and *Imperata* spp. Climbers, Lianes and others include *Bauhinia vahlii, Combretum decandrum, Zizyphus* and *Butea.*

3. **Moist Peninsular low level Sal Forests (3C/C2e(ii)).**

This type occurs in Puri and Cuttack districts (in Athgaragh). This Sal is of sub optimum site quality but has natural regeneration. Weed growth is low. Associates include *Pterocarpus marsupium,* Terminalia tomentosa, *Embelica officinalis, Themeda quadrivalvis. Mallotus* is typically absent.

4. **Riparian Fringing Forests (4E/RS1).**

Found all over the project area, this type as the name suggests is restricted to riverbanks. Tall trees interspersed with scrub and coarse grass is typical of the type. *Terminalia arjuna, Lagerstroemia speciosa, Syzygium cuminii* and *Bombax malabaricum* are typical elements of this type.

5. **Mixed moist deciduous Forests (3C/2S1).**

Found both in Puri (Dhuanali) and Cuttack Districts, in the higher rainfall areas this type often invades the Orissa semi-evergreen forest type. The forest of the area having been

worked heavily the original vegetation has been replaced. Floristic elements include *Alstonia scholaris, Mangifera indica, Anthocephalus cadamba, Dillenia, Shleichera oleosa, Terminalia tomentosa, Bridelia retusa, Protium serratum, Melia, Saccopetalum tomentosum, Careya arborea, Zizyphus, Polyalthia, Mallotus phillipensis, Bambusa arundinacea, Glycosmis pentaphylla, Stobilanthes scaber, Bauhinia vahlii, Combretum decandrum.* Teak plantations have been successfully been introduced and the famous Berbera teak is an example of quality teak as well as quality protection.

6. Northern Dry mixed deciduous forests (5B/C2)

This type occurs in both Puri and Cuttack districts. The floristic elements include associations of *Anogeissus latifolia, Boswellia serrata*, and *Cleistanthus collinus*. Found in the drier parts and on rocky hill slopes and in and about habitations this type is restricted to patches. Other elements of this type include Sal, *Lannea coromandelica, Mitragyna parviflora, Bombax malabaricum, Dalbergia paniculata, Pterocarpus marsupium, Terminalia bellerica, Stereospermum suaveolens, Albizzia* spp, and *Dalbergia latifolia*. Quality rosewood trees and seized timber was seen in Nayagarh.

7. Tidal Swamp Forests(4B)

This type is found in Rajnagar in the Bhitarkanika National Park at the delta/ estuary of Brahmani and Baitarani (Chandbali range). Elements of mangrove Scrub (4B/TS1), Mangrove Forests (4B/TS2), Saltwater mixed forests (4B/TS3) and palm swamp (4B/E1) are present. Floristic elements include, *Phoenix paludosa* in pure patches in the northern parts of the national park along the Bansgarh river, *Avicennia officinalis, Avicennia alba, Pongamia pinnata, Heritiera minor, Excoecaria agallocha, Rhizophora mucronata, Sonneratia apetala, Ceriops roxburghiana, Carapa obovata, Xylocarpus molusensis.* These forests are dense to moderately dense and have height upto 8 metres. Maximum diameter was of Avicennia species (50 cm.).

The forest of the area is known for important forest products like timber, firewood, bamboo and non wood forest produce like Cane, Kendu leaf, Broom grass, Salai grass and Sunari bark etc. The district of Cuttack also produces Bamboo, Kendu leaves, firewood, various timber species and some other forest products. . Timber of different varieties, bamboo, firewood, Kendu leaves and other Non timber forest produce yield good revenue to the State Exchequer. They have also developed a botanical garden in the Kandha forests in the district of Cuttack known as Nandankanan.

A special mention of the mangroves of Cuttack district is imperative. The mangroves are spread over the Mahanadi estuary with the Devi river in the south and the Dhamra river in the north. The core area of mangroves cover some 120 Km^2. These were once Zamindari forests. Following abolition of zamindari system, these forest were taken up by the

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government for management. Paradip port is situated in the centre of this area. As a result of infrastructure development, population growth and industrial activities have risen. Biotic pressure on the mangroves thus has been magnified. Substantial mangrove areas have been cleared for harbour and related activities. Paddy cultivation has started in mangrove areas. The flow of fresh water has been interfered with because of irrigation and other human needs. The resultant increasing salinity of the area has also caused damage to the mangroves. The mangroves of Mahanadi delta have been divided into two zones - the outer and the inner zone. The outer zone is characterised by exposure to sea, high salinity and wave action. The species of trees in this zone are *Avicennia, Sonneratia*, and *Aegialitis*. The inner zone is comparatively sheltered. The saline water is fairly mixed with fresh water and the tidal flow is moderate. The main species in this zone are *Rhizophora* and *Heritiera*. At the Mahanadi confluence, *Avicennia merina* is abundant. All the mangrove species have their uses. The mature trees meet timber needs. Leaves are used for thatching. Poles are used for fencing purposes. Charcoal is made from a number of species. The mangrove forests also supply fodder and fuel. A number of plants are used for various medicinal purposes.

Like the flora, the faunal composition of the mangroves is highly varied yet delicate. The root structure and high availability of organic detritus serve as ideal habitat for the young of a number of molluscs, fishes and arthropods. Prawns, Shrimp and lobsters are the most important of these. A very special feature of the Bhitarkanika mangroves is that in its coastal areas, countless sea turtles come for laying eggs. The Olive Ridley Turtle (*Lepidochelys olivacea*) is the most famous of these. Indiscriminate nest robbing for eggs, killing of Turtles for food, and mechanised trawling cause Turtle mortality. Bhitarkanika is also known for its salt water Crocodiles (*Crocodilus porosus*) and perhaps is the only place in India where Albinism in salt water Crocodiles has been reported. However, despite limited resources, the Forest Department of Orissa along with the help of N.G.O.s is doing commendable work with regard to conservation and protection of the Mangroves.

1.62 FAUNA.

Growth of forest accounts for interesting specimens of wild animals. As per Rodgers and Panwars' Biogeographic Zones of India, the following zones lies in the project area:

1.	**Biogeographic Zone**	**6.**	**DECCAN PENINSULA**
	Biotic Province	6B	Chotta Nagpur
		6C	Eastern Highlands
2.	**Biogeographic Zone**	**7.**	**GANGETIC PLAIN**
	Biotic Province	7B	Lower Gangetic Plain.
3.	**Biogeographic Zone**	**8.**	**COASTS**

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Biotic Province 8B East Coast.

As evident from the above Bio-geographic classification, the overall biological diversity of the area is substantially high. The variety is due to the multiplicity of habitats available. The forests of Orissa abound in Wildlife and though outside the project area, Simlipal National Park must be mentioned both as one of the pioneers of Tiger Conservation in India. The Forests in the interior of Puri and Cuttack Districts abound in animals. Reptiles like Monitors (*Varanus* spp.), Snakes including Indian Monocled Cobra (*Naja naja kaouthia*),Indian Spectacled Cobra (*Naja naja naja*) King Cobra (*Ophiophagus hannah*), Russels' viper (Vipera russellii), Banded Krait (*Bungarus fasciatus*), Python, (*Python molurus*), Striped Keelback (*Amphiesma stolata*), rat Snake (*Ptyas mucosus*) a variety of birds including raptors like Short Toed eagle, Shikra, Crested Serpent Eagle; Hornbills, Green pigeons, Orioles, Parakeets, Woodpeckers, Kingfishers, Doves, Cormorants, etc. Mammals include, Tiger (*Panthera tigris tigris*), Leopard (*Panthera pardus*), Fishing Cat (*Felis viverrina*), Jungle cat (*Felis chaus*); Small Indian Civet (*Viverricula indica*), Palm Civet (*Paradoxurus hermaphroditus*), Common mongoose (*Herpestes edwardsi*), Small *Indian* Mongoose (*Herpestes auropunctatus*); Striped Hyaena (*Hyaena hyaena*), Wolf (*Canis* lupus), Jackal (*Canis aureus*); Sloth bear (*Melursus ursinus*); Flying Fox (*Pteropus giganteus*), Bandicoot (*Bandicota bengalensis*), Large Brown Flying Squirrel (Petaurista petaurista philippensis), Indian Giant Squirrel (*Ratufa indica*); Indian Elephant (*Elephas maximus*), Black buck (*Antelope cervicapra*); Chowsingha (*Tetracerus quadricornis*), Sambhar (*Cervus unicolor*), Chital (*Axis axis*), Barking Deer (*Muntiacus muntjak*), Wild Boar, (*Sus scrofa*), Pangolin (*Manis crassicaudata*).

The Chilika area is noted for its Avifauna specially migratory birds , Like waterfowl.

The Government of Orissa have started a Biological Park at Nandankanan in Cuttack district. Nandankanan is a unique Zoo and arboretum. It has a tremendously varied collection of fauna, exhibited imaginatively. The Lion and White tiger safaris are extremely well managed. Also it would be pertinent to mention the Chandaka Elephant sanctuary – a erstwhile bamboo and Teak area converted into a protected area and now supporting a healthy and viable pachyderm population, just on the outskirts of Bhubaneshwar city. Fish of varied kinds including Hilsa (*Hilsa ilisha*), prawns and oysters that are used as food, are caught in different areas and these are exported from the Chilka in Puri district on a large scale. There is Orissa Fisheries Corporation to look into the development of fisheries.

1.7 MINERAL RESOURCES

Orissa has a huge wealth of minerals buried under the surface of the earth. As many as twenty different types of minerals in Orissa and twelve of them are commercially exploited.

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Orissa produces 5.2 per cent of the total minerals produced in India. It is a large producer of high-grade iron ore. These iron-ore is not only being supplied to the Rourkella Steel Plant and the Tata Iron and Steel Company but it is also being exported in large quantities to Japan and other countries through the Paradeep Port. Large deposits of hematite associated with shale and ash beds of the iron ore series are found in the Daitari Tomka ranges in Sukinda Tahasil of Cuttack district. Sizeable reserves of float ore are also found in this district. Some deposits are also found in and around Daitari peak in Jajpur. Orissa accounts for twenty per cent of the total output of manganese in India. Deposits of chromite occur in Cuttack district. Besides, low-grade lateritic nickel ore is also found in this district. The other economic minerals of lesser importance are magnetite, fire-clay, Ochre, sandstone and soap stone. Orissa is a large producer of salt as well, but this is not mineral salt but salt manufactured by open field system and open pan system from the saline waters of the sea and the rivers. The Puri district produces salt in large quantities.

1.8 DEMOGRAPHIC DEPICTION

The demographic information of the inventoried area is depicted through the data provided by 1991 census. Total population along with rural-urban bifurcation for undivided Puri and Cuttack district is shown here.

Table 2 RURAL AND URBAN POPULATION

DISTRICT	TOTAL	RURAL	URBAN
CUTTACK	55,22,659	48,44,040	6,78,619
PURI	35,90,026	28,84,022	7,06,004

Thus the total population of the inventoried area is 91,12,685. Of these, 46,66,388 persons are males and 44,46,297 persons are females. Total rural population of the inventory area is 77,28,062 comprising 39,03,297 males and 38,24,765 females. On the contrary, total urban population of the concerned area is 13,84,623, which comprises 7,63,091 males and 6,21,532 females. The distribution of scheduled castes and scheduled tribes population is encased.

Table 3 POPULATION OF SCHEDULED CASTES AND TRIBES

DISTRICT	SCHEDULED CASTES POPULATION	SCHEDULED TRIBES POPULATION
CUTTACK	1124160	182188
PURI	554689	127347

The Decennial growth rate of population of these two districts in relation to the State, as a whole, between the period 1981 and 1991 is as below.

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Table 4 DECENNIAL POPULATION GROWTH

STATE/DISTRICT	DECENNIAL GROWTH RATE OF POPULATION (1981-91)		
	TOTAL	RURAL	URBAN
ORISSA	19.50	17.28	36.08
CUTTACK	18.89	16.20	42.36
PURI	22.22	15.09	63.30

Literacy rate of ages 7 years and above for Puri and Cuttack district is almost the same, 63.82 and 63.28 respectively. The main languages spoken in these areas are Oriya, Hindi, Bengali, Telegu and Urdu. The religion practised by the people are mainly: Hinduism, Muslim, Christian, Budhism, Sikh, Jainsim, etc. Of these, the proportion of Hindu population in the inventory area is highest (96.20%). The Muslims (3.42%) and Christians (0.19%) comprise comparatively less proportion of population in these areas.

1.9 ECONOMIC PURVIEW

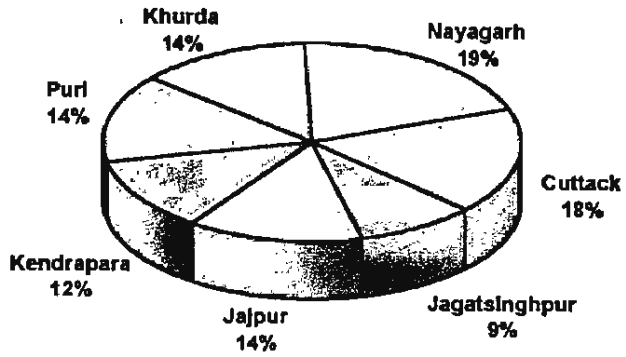
The economic purview of an area is reflected by the factors like distribution of working class, development of agriculture and industry, trade opportunities in the surrounding areas, etc. The working class distribution shows the involvement of people in different types of works. The following table depicts the working class distribution in the districts of Puri and Cuttack.

Table 5 DISTRIBUTION OF WORK FORCE

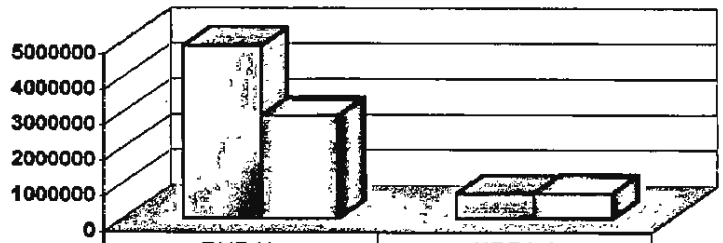
DISTRICT	MAIN WORKERS	MARGINAL WORKERS	NON-WORKERS
PURI	10,40,655	44,932	25,04,439
CUTTACK	14,65,486	54,016	40,03,157

Among the main workers, in either of the districts, maximum number of people is engaged in agricultural activities. Orissa is predominantly an agricultural State. The percentage of people dependent upon agriculture in the State is as high as eighty percent. Puri is primarily an agricultural district, where, majority of the people depends on agriculture for their livelihood. The important crops are paddy, wheat, ragi, maize, kulthi, green gram, Black gram, red gram, sugarcane, and sesame. Among cereal crops, paddy occupies the highest position. The percentage of area under paddy cultivation in the district is also higher than the State average. A large area is given to cultivation of Kulthi. The percentage of area under cultivation of black gram in the district is also greater than the State average. Similarly, the economy of Cuttack is also agriculture-based. The main crops of the district are paddy, wheat, ragi, green gram, gram, groundnut, kulthi, etc. Most of the agricultural farms of the district are paddy seed multiplication farms, but in some horticulture is taken up. These are 69 different types of industries in the district when the industries are grouped according to I.S.I. Classification Scheme. Some of the major industries of the district are manufacture of materials from cork, bamboo, cane and leaves, cotton weaving in handlooms, manufacture of wooden industrial goods, manufacture of earthenware and earthen pottery, manufacture of jewellery and silverware, cotton spinning,

GEOGRAPHICAL AREA

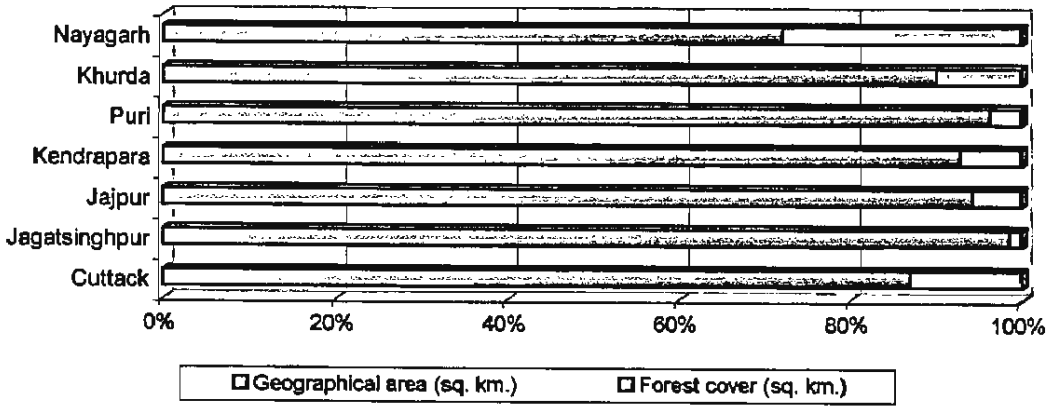


RURAL AND URBAN POPULATION



	RURAL	URBAN
CUTTACK	4844040	678619
PURI	2884022	706004

GEOGRAPHICAL AREA AND FOREST COVER



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etc. On the other hand, the district of Cuttack has got 103 different kinds of industries as per the classification made under the I.S.I. Scheme. A few major industries of this district are iron and steel processing industries, wood & engineering industries, chemical and pharmaceutical industries, textile industries, electro-chemical industries, non-ferrous industries, printing and allied industries etc. Cuttack is known for its exquisite handicrafts. Some of them are silver filigree, horn work, patta-chitras, metal ware, appliqué work and silk and cotton handlooms. In the district of Cuttack, commodities like, handloom textiles, filigree works, tobacco, horn works, vegetables, jute and pulses etc. are exported. Orissa has been the tourists' paradise throughout history. Both the districts of Puri and Cuttack, especially Puri lying on the shore of Bay of Bengal, have been attracting millions of tourists from India and abroad. For this, tourism has now become an important industry in these districts.

1.10 TRANSPORT AND COMMUNICATION

In spite of rapid growth in agricultural and industrial production, Orissa remains far behind in respect of communications. One of the reasons is the existence of a number of rivers, which have to be bridged. However, Orissa has made some considerable progress during the last few years in the matter of providing all weather road communication to different parts of the State. Qualitatively, the roads in Orissa are among the best in eastern India. The National Highway connecting Calcutta and Madras passes through the districts of Puri and Cuttack. An all weather communication is now maintained in this district after the construction of the bridges on Mahanadi and Birupa in 1964. The State Transport Organisation and Orissa Road Transport Company ply passenger service buses on all the important roads in these two districts. A few private buses are also seen on some routes of these districts.

There are 2,322 Kms, of railways in Orissa. The railway line of South-eastern Railway which links Howrah with Madras passes through the coastal districts with junction lines from Cuttack to Paradeep and from Khurda to Puri.

It seems from the network of rivers in Cuttack district that it has a good water communication facilities, but it is not so. The aniculs and dams across the rivers have prevented direct communication between the lower and upper reaches. Besides, high flow of water during rains and insufficient flow during summer also make communications impossible. The little communication available on the rivers Mahanadi, Brahmani and Baitarani are mostly for goods.

There is a modern airport at Bhubaneswar. There are regular flights from here to Delhi. Plane services also link Bhubaneswar with Calcutta, Mumbai, Chennai, Hyderabad and Nagpur.

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CHAPTER – II

DESIGN AND METHODOLOGY

2.0 The forest inventory entails a wide range of information on total growing stock and details of area estimates. For this, data is collected on different parameters, which, in turn will form the basis of sustainable forest management. To carry such an inventory, the usual forests inventory design provided by the Forest Survey of India, Dehradun has been followed.

2.1 SURVEY OBJECTIVE

The objective of the inventory is to assess the existing forest resources and changes therein, thereby highlighting the critical aspects needing immediate attention for further planning purpose. In short, the survey objectives are shortlisted as follows:

i) Distribution of total stems and stems/hectare according to different strata and diameter classes.

ii) Estimation of total growing stock and its distribution by stratum and different diameter classes.

iii) Distribution of forest area according to different land use classes and other parameters such as topography, rockiness, aspect, legal status, grazing, fire incidence, regeneration status etc.

2.2 AREA SELECTION

The areas in which the inventory was carried out are enlisted as follows:

- Area shown in green wash on the Survey of India topo-sheets.
- All such areas in which words such as thick jungle, open forests, bamboo, etc. are pointed.
- All those areas indicated by dotted line, spotted line or a pillar line as forest areas.
- Any other areas reported to be forest areas by local forest department.

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2.3 MAPS USED

The Survey of India topo-sheets on 1:50,000 scale have been used for the present inventory. The topo sheets used for the survey in the district of Puri and Cuttack are encased as follows:

Table 6. TOPOSHEETS.

DISTRICT	TOPOSHEET NUMBER	SCALE
PURI	73 D/10, 11, 12, 14, 15, 16	1:50,000
	73 H/3, 4, 7, 8, 11, 12, 15	"
	74 A/13	"
	74 E/1, 2, 5, 6, 9, 10, 13	"
CUTTACK	73 d/14, 15	
	73 H/2, 3, 6, 7, 10, 11, 13, 14, 15	"
	73 K/4	"
	73 G/16	"
	73 L/1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	"

2.4 SURVEY DESIGN

The field survey was essentially a systematic sampling under which the Survey of India topo sheets of 1:50,000 scale is divided into 36 grids of 2.5′ x 2.5′ of latitude and longitude. In each of such grids, two points were selected on the topo sheets. The selection of the first point is random and the second point is the mirror image of the first, . . Therefore, the second point is linked to the first one in the opposite direction at an equal distance from the grid center. The inventory data were collected from a square plot of 0.1 hectare laid out at each of these sample points on the ground. Mention may be made that only the plots falling within the forest areas were surveyed. One sample plot of 0.1 hectare represents about 10 sq.km. on the ground and the intensity of sampling is 0.01%. The length of each side of the square plot is 31.62 meters on the ground and 0.6324 mm. (say, 0.6 mm.) on the topo sheets of scale 1:50,000.

2.5 PRECISION AND ACCURACY

Precision level for the study has been maintained to check the error limit and thus to enhance the reliability of the data. The result of the present survey would be at the precision level of 95% probability with error limit of ±10%. This accuracy is, however, obtained for the entire state *and not by individual districts.*

2.6 PLOT LAYOUT

The method of marking of the plot centres of the two sample plots on the map in each grid of 2.5′ x 2.5′ is depicted in Diagram-2. The length and width of each grid are measured to the smallest convenient scale. The length of the side of a plot on the map corresponding to 0.1 hectare square plot on the ground is calculated. Let **X** and **Y** be the length and width of

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the grid and **S** the side of the plot. Subtract side **S** from both sides, i.e. find (**X-s**) and (**y-S**). Let these numbers be **X'** and **Y'**. Two random numbers, one in the range of **O** to **X'** and the other in the range of **O** to **Y'** are selected. These numbers are called x and y respectively. Half of the side of the plot (**S/2**) is added to **x** and **y** to get **x +S/2** and **y+S/2**, which will be the co-ordinates of the centre of first plot in the grid [considering the left hand bottom corner (south-west corner) of the grid as origin of the axis]. The centre of second plot is located by joining the centre of first plot with the grid centre and extending this line in the opposite direction. A point at an equal distance from the grid centre in the opposite direction is marked which is the centre of second plot. After fixing the plot centre with the help of topo-sheet and reference point, the four corners of the plot are obtained by measuring 22.36 meter from the plot centre in each of the directions viz. Northwest, Southeast, Northeast and Southwest.

2.7 DATA COLLECTION

An inventory crew (team) headed by a crew leader collects the forest inventory data in the field. To demarcate a plot, a prominent reference point is selected in the vicinity of the plot centre. The field reference point met be clearly visible on the map as well as on the ground, e.g. junction of roads or rivers, prominent topographical features in hilly area such as spurs and knots, village tri-junction points, old bridges and culverts, springs, milestones etc. The data is collected and recorded in a legible manner in the codified field forms such as Plot Approach Form, Plot Description Form, Plot Enumeration Form etc. Since bamboo does not occur widely in the concern district of Bihar, the details of this kind of data have not been tabulated. However, the details of all these forms are discussed here.

a) **Plot approach form:** It gives an account of the details regarding the approach to the plot. All the conspicuous features observed during the journey from campsite to the plot centre are recorded. Prominent reference point along with bearings is recorded which serves as an aid to reach the plot at a future date.

b) **Plot description form:** The description of several parameters such as topography, soil, land use class, forest type, regeneration, crop data etc. are collected and recorded in this form for an area of 2 hectare around the centre of the plot.

c) **Plot enumeration form:** This form is filled up for each plot. The details recorded are the name of the species and its diameter. Trees less than 10 cm. d.b.h. over-bark and utility less than 70% are not recorded usually. Border trees are counted 'IN' when they touch NW-NE and NW-SW boundaries and considered 'OUT' when they touch NE-SE and SW-SE boundary lines.

d) **Sample tree form:** Data for trees with diameter 10 cm. and above at breast height over bark are collected from ¼ area of the total plot is 0.025 hectares area at

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Northwest quadrant of the plot . On each sample tree, sample tree card will be nailed. In this form, data on tree height, bark thickness, length of clear bole, shape of the tree etc. are recorded .

e) **Bamboo enumeration form:** This form is designed for enumeration of bamboo culms per clump. Age and soundness of culms by clump size are the parameters considered. Separate forms are used for clump forming and non-clump forming bamboo.

f) **Bamboo weight form:** This form is maintained to determine the green weight and dry weight of bamboo. Mature bamboos are selected from each diameter class and for each species. Three 30 cm. long pieces , obtained on each from the top, middle and bottom portions of the utilisable culms from each class, are cut out and their green weights are recorded. These pieces are properly documented and kept in the base camp and weighed every 30 days till a constant weight is obtained. Since bamboo did not occur widely, hence the use of form (e) & (f) were very limited.

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CHAPTER – III

DATA PROCESSING AND COMPILATION

The information on different parameters collected in the field for an ideal forest management serves as the basic input. To serve the grave purpose of forest administrative planners, proper classification of the multispectral data is an essential requisite. The processing of these data and its compilation is carried out in two phases viz., **Manual Processing and Processing on Computer.**

3.1 MANUAL PROCESSING

It involves overall checking of the field forms and necessary marking of the codes manually. The necessity of such approach is to enhance the accuracy and to maintain the relative consistency of the data. collected in the field for an ideal segregation of the entire information. It involved the following steps:

- Proper documentation of the field information received.
- Codification of the information in the field forms which have not already been incorporated.
- Manual checking for validity of codes used in various columns of the information filled in the forms.
- Reconciliation of the discrepancies, if any, in consultation with the crew leaders and the field officers.

3.2 PROCESSING ON COMPUTER

After the manual checking is done, the information incorporated in the field forms, are fed into the computer for onward processing and final compilation of data. The following three types of inventory data are stored in the disk/floppy for this purpose.

- PLOT DESCRIPTION DATA
- PLOT ENUMERATION DATA
- SAMPLE TREE DATA

The information encoded in these forms is the ideal requisite to estimate the existing forest stock. Therefore, assessment on several aspects of these forms is essential. The various stages followed under processing on computer are presented here.

- Loading of the inventory data on computer. Verification and correction of data for the creation of clean file and then transference of the same to hard/floppy disk.

- Consistency checking of the data on computers and correction of data to reserve discrepancies noticed during consistency checking.
- Tabulation of Plot Description Data and thus to find out the area under different land-use classes.
- Tabulation of stem distribution plot wise and for the district, as a whole.
- Tabulation of volume distribution plot wise and for the district, as a whole.
- Calculation of standard error.

3.3 CONSISTENCY CHECKING

The consistency checking of inventory data is highly necessary for generating reliable statements about the characteristics and resource potentiality of the forest stock. Suitable computer programs were developed for this purpose to check the range of variables. The discrepancies discovered were resolved in consultation with the field officers. Afterwards, listing of the data from hard/floppy disk was taken to verify if the corrections have been incorporated or not.

3.4 CONSTRUCTION OF VOLUME EQUATION/TABLES

No trees were felled during the survey for the district. The general volume and local volume equations developed in earlier surveys were used to calculate the volume of different species.

3.4.1 GENERAL VOLUME EQUATIONS

General volume equations were used for the following important species in the present survey.

Table 7 VOLUME EQUATIONS.

SPECIES	EQUATIONS
Terminalia crenulata	$V/D^2H = 0.339402 + 0.000342/D^2H$
Pterocarpus marsupium	$V/D^2H = 0.382499 - 0.007399/D^2H$
Lannea coromandelica	$V = 0.017028 - 0.243413D + 0.415072\ D^2H$
Diospyros melanoxylon	$V/D^2H = 0.400004 - 0.007336/D^2H$
Bridelia retusa	$V/D^2H = 0.383012 - 0.003872/D^2H$
Anogeissus latifolia	$V = -0.009211 + 0.500013D^2H - 0.022211(D^2H)^2$
Lagerstroemia parviflora	$V = -0.010442 + 0.385687\ D^2H$
Boswellia serrata	$V = -0.020177 + 0.377885D^2H$
Garuga pinnata	$V = -0.014212 + 0.390288D^2H$
Adina cordifolia	$V/D^2H = 0.319951 - 0.002392/D^2H$
Bombax ceiba	$V/D^2H = 0.310272 - 0.003990/D^2H$
Cleistanthus collinus	$V = 0.005405 + 0.336072D^2H$
Shorea robusta	$V/D^2H = 0.338574 - 0.001775/D^2H$
Rest of the species	$V = -0.001119 + 0.346750D^2H$

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Where:

V = Total under bark volume of tree including branches (in m^3).

D = Over Bark D.B.H. (O.B.) in meter.

H = Height (m)

3.4.2 LOCAL VOLUME EQUATION

The following local volume equations have been used in the present inventory:

Table 8 LOCAL VOLUME EQUATIONS.

SPECIES	EQUATIONS
Terminalia crenulata	$V/D = 1.684599 + 10.107586D + 0.103171/D$
Pterocarpus marsupium	$V = 0.058424 - 1.233468D + 9.433633D^2$
Lannea coromandelica	$V = 0.057424 - 1.153088D + 8.542648D^2$
Diospyros melanoxylon	$V/D = -0.494103 + 7.610416D - 0.009124/D$
Bridelia retusa	$V/D = -0.839708 + 8.157614D + 0.035142/D$
Anogeissus latifolia	$V/D^2 = 9.656667 - 1.020606/D + 0.045731/D^2$
Lagerstroemia parviflora.	$\sqrt{V} = -0.153687 + 2.975938D$
Boswellia serrata	$\sqrt{V} = -0.188655 + 3.021335D$
Garuga pinnata	$V/D = -1.481043 + 9.797028D + 0.077965/D$
Adina cordifolia	$\sqrt{V} = -0.153360 + 2.802965D$
Bombax ceiba	$V/D^2 = 10.15660 - 2.076740/D + 0.136196/D^2$
Cleistanthus collinus	$V = 0.030925 - 0.567037D + 5.709471D^2$
Shorea robusta	$V/D = -1.804754 + 10.297714D + 0.109884/D$
Rest of the species	$V/D = -1.449236 + 8.760534D + 0.088074/D$

Where,

V= Under bark volume (m^3)

D= Over-bark diameter (m) at the breast height.

3.5 TREE VOLUME

Volume of each enumerated tree was estimated with the help of volume equations and was used for generation of stock tables by species and diameter classes.

3.6 PLOT VOLUME

Volumes of each enumerated tree in a plot when added up provided the plot volume. These plot volumes are the basis for estimation of growing stock estimation.

3.7 ANALYSIS OF GROWING STOCK

Growing stock estimation is carried out from the plot volume data and per hectare figures are generated from these data for each stratum and for the district. Similar calculations i.e. volume per hectare and total volume distribution over different diameter classes are also estimated. Following are the important tables generated for each stratum.

1. Stems/ ha. for individual species and its distribution into diameter classes as 10-19 cm., 20-29 cm., 30-39 cm. etc.

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2. Total stems by species and diameter classes.

3. Corresponding volume/ha. by species and diameter classes.

4. Total volume by species and diameter classes.

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CHAPTER: IV

RESULTS OF INVENTORY

4.1 GENERAL :

Inventory data of undivided Puri and Cuttack districts of Orissa State have been analysed separately for the district level as well as stratum wise also. The present findings relate with the various parameters like land use classes, topography, grazing incidence, fire incidence, regeneration etc.

4.2 FOREST COVER AS PER STATE OF FOREST REPORT 1997 :

The inventory relates to the forest resources of Puri, (presently Puri, Nayagarh and Khurda) and Cuttack (presently Jagatsinghpur, Cuttack, Jajpur and Kendrapara districts) district of Orissa State. The geographical area and the extent of forest cover of the above districts are given below:

Table 9 DISTRICTWISE FOREST COVER.

District	Geographical area (sq.km.)	Forest Cover (sq.km.)			
		Dense	Open	Mangrove	Total
PURI	3051	58	58	0	116
NAYAGARH	4242	1031	609	0	1640
KHURDA	2889	137	180	0	317
UNDIVIDED PURI	10182	1226	847	0	2073
JAJPUR	2888	110	64	0	174
CUTTACK	3733	372	183	0	555
JAGATSINGHPUR	1973	0	18	10	28
KENDRAPARA	2548	0	14	181	195
UNDIVIDED CUTTACK	11142	482	279	191	952

SOURCE: STATE OF FOREST REPORT, 1997, F.S.I.

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4.2.1 RECORDED FOREST AREA:

Recorded forest area as obtained from State Forest Department is furnished below:

Table 10 DISTRICTWISE RECORDED FOREST AREA.

DISTRICT	FOREST AREA IN SQUARE KILOMETRES					
	RESERVE FOREST	PROTECTED FOREST	UNDEMARCATED PROTECED FOREST	UNCLASSED FOREST	OTHER FOREST	TOTAL
PURI	15.66	85.88	0	0.51	35.05	137.10
NAYAGARH	1301.99	188.03	135.58	0.25	455.12	2080.97
KHURDA	298.81	209.87	0	0.68	109.31	618.67
UNDIVIDED PURI	1616.46	483.78	135.58	1.44	599.48	2836.74
JAJPUR	6.35	299.32	0	0.01	419.59	725.27
CUTTACK	522.39	101.41	0	0.45	163.65	787.90
JAGATSINGHPUR	1.23	4.77	83.06	0.02	43.84	132.92
KENDRAPARA	14.49	127.57	62.32	4.50	39.17	248.05
UNDIVIDED CUTTACK	544.46	533.07	145.38	4.98	666.25	1894.14

4.2.2 INVENTORIED AREA:

Area shown in green wash on the Survey of India toposheets is treated as forest area. The total forest area of the two districts was calculated using 'dot grid' method which comes to 2430.97 and 1339.81 sq.km. Henceforth, the inventoried forest area as calculated by 'dot grid' method would be taken as the total forest area of the respective district.

4.3 STRATIFICATION:

Stratification is based on proportional distribution of the forested plots as per forest composition and land use classes. Four major forest Strata have been identified according to forest crop composition found in two ha. area around the plot centre in the undivided Puri district. The distribution of plots in different strata is as follows:

Table 11 STRATA WISE DISTRIBUTION OF PLOTS IN PURI DISTRICT

	Stratum	No. of plots
Puri	Sal	82
	Misc.	117
	Bamboo	12
	Teak	13
	Forestry Plot but non Forestry use	4
	Total:	228

Thus, 228 plots have been distributed over 2430.97 Km^2 of forest area of the undivided Puri district. One plot represents 10.6622 Km^2 (1066.22 Hectares) of forest area. Forest area of 4 plots have been excluded while calculating growing stock estimation because of non forestry use.

The net forest area for growing stock estimation and its distribution among various stratum is given below.

Contents

Table 12 FOREST AREA IN DIFFERENT STRATA

S.NO.	STRATUM	FOREST AREA (Km²) for growing stock estimation
1.	Sal	874.30
2.	Miscellaneous	1247.47
3.	Bamboo	127.94
4.	Mangrove	138.61
	Total	2388.32

Area excluded for growing stock estimation is 42.65km².

Similarly, four distinct strata have been identified in Cuttack district. The distribution of plots in different strata is:

Table 13 STRATA WISE DISTRIBUTION OF PLOTS IN CUTTACK DISTRICT.

S.NO.	STRATUM	NO. OF PLOTS
1.	Sal	22
2.	Miscellaneous	61
3.	Bamboo	8
4.	Mangrove	7
5.	Habitations, Barren land, Blanks etc.	6
	Total	104

104 plots have been distributed over 1339.81 Km² forest area. Forest area covered by 6 plots have been excluded while calculating the net forest area for growing stock estimation, as these plots represented habitations, barren land, agricultural land i.e., forestry plots but in non forestry use. The abstract of the net forest area for growing stock estimation and its distribution among the above mentioned strata are as follows.

Table 14 NET FOREST AREA FOR GROWING STOCK ESTIMATION

S.NO.	STRATUM	FOREST AREA (Km²) for growing stock estimation
1.	Sal	283.42
2.	Miscellaneous	785.85
3.	Bamboo	103.06
4.	Mangrove	90.18
	Total	1262.51

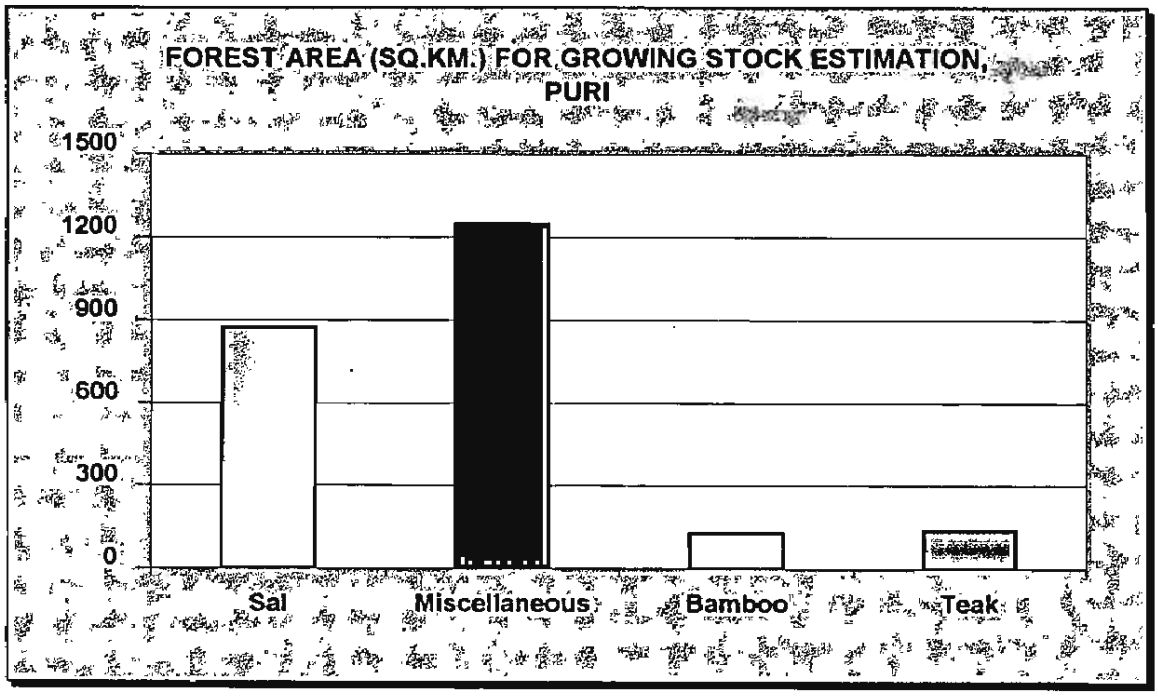
77.03 Km² area was excluded from growing stock estimation.

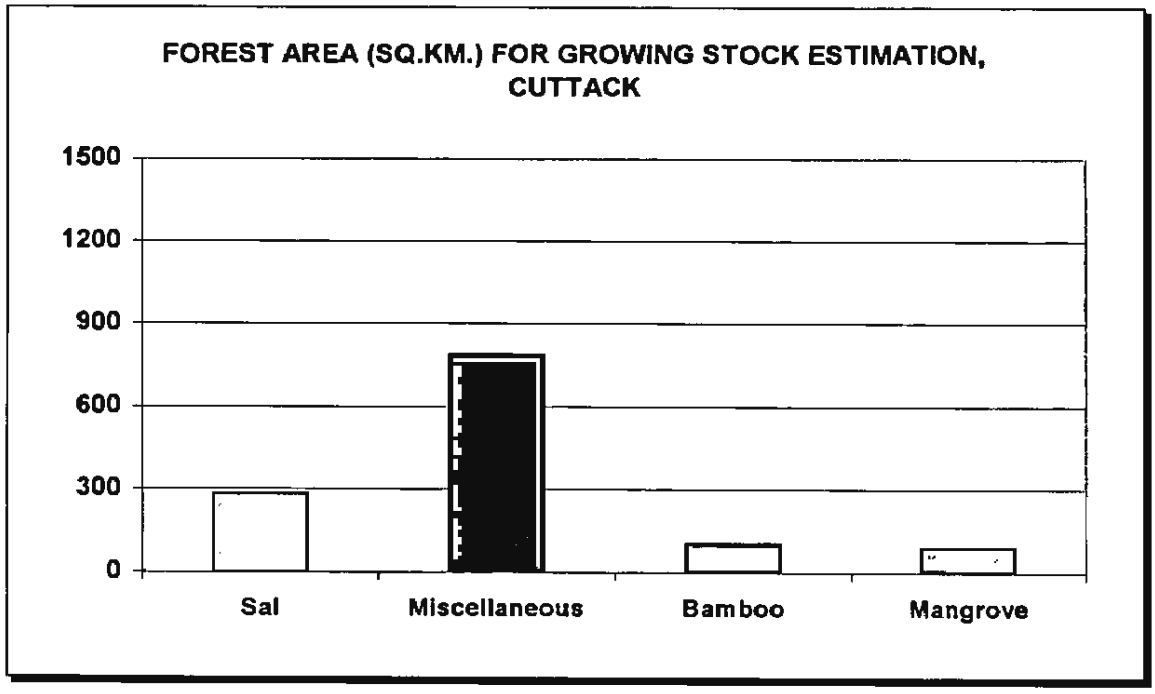
The number and weight of Bamboo in the Bamboo stratum has not been analysed. Only the tree species have been enumerated and analysed.

4.4 ANALYSIS OF PLOT DESCRIPTION DATA, PURI DISTRICT

Plot data collected during the field inventory in respect of terrain, degradation status, intensity of grazing, fire incidence, regeneration status have been analysed. The final analysis is given in the following paragraphs.

Contents


FOREST AREA (SQ.KM.) FOR GROWING STOCK ESTIMATION, PURI
1500
1200
900
600
300
0
Sal
Miscellaneous
Bamboo
Teak


FOREST AREA (SQ.KM.) FOR GROWING STOCK ESTIMATION, CUTTACK
1500
1200
900
600
300
0
Sal
Miscellaneous
Bamboo
Mangrove

Contents

4.4.1 DISTRIBUTION OF FOREST AREA BY LAND USE CLASS

Table 15 DISTRIBUTION OF FOREST AREA BY LAND USE CLASSES

Code No.	Land Use	Description	No. of Plots	Forest area (Ha.)	Percentage
1	Dense tree forest	Forest with canopy density 70% & above	10	10662	4.39
2	Moderately dense tree forest	Forest with canopy density 30 to 69%	119	126880	52.19
3	Open tree forest	Forest with canopy density 5 to 29%	32	34119	14.03
4	Scrub forest	Forest with canopy density less than 5%	30	31987	13.16
5	Bamboo brakes	Areas completely covered with bamboo	7	7463	3.07
6	Shifting cultivation	Areas under current as well as previous years shifting cultivation.	0	0	0
7	Young plantation of forestry species	-	25	26656	10.96
8 to 10	Trees in line	-	0	0	0
11	Barren land	-	1	1066	0.44
12	Agricultural land without trees.	-	1	1066	0.44
13	Agricultural land with trees.	-	1	1066	0.44
14	Non-forest plantation	-	0	0	0
15	Habitation	-	0	0	0
16	Water bodies	-	1	1066	0.44
18	Young crop of natural/artificial regeneration.	-	1	1066	0.44
		TOTAL	228	243097	100.00

It is observed from the above table that 52.19% of the forest area is under moderately dense tree forest followed by 14.03% in open tree forest. Dense tree forest cover 4.39% of the forest area.

4.4.2 THE DISTRIBUTION OF FOREST AREA BY TOPOGRAPHY

The percentage of forest area by topography is given below:

Table 16 THE DISTRIBUTION OF FOREST AREA BY TOPOGRAPHY

Code No.	Topography	No. of Plots	Forest Area (Ha.)	Percentage
1	Flat	46	49046	20.17
2	Gently rolling	56	59708	24.56
3	Hilly	124	132211	54.39
4	Very hilly	0	0	0
	Unrecorded	2	2132	0.88
	Total	228	243097	100.00

Most of the forest area is hilly to gently rolling and covers 78.95% of the forest area. Flat area amounts to 20.17%, whereas very hilly is practically insignificant.

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4.4.3 DISTRIBUTION OF FOREST AREA BY ASPECT:

The distribution of forest area by various aspect classes is given below:

Table 17 DISTRIBUTION OF FOREST AREA BY ASPECT

Code No.	Aspect	No. of Plots	Forest Area (Ha.)	Percentage
1	Northern	22	23457	9.65
2	North-Eastern	36	38384	15.79
3	Eastern	19	20258	8.33
4	South-Eastern	24	25589	10.53
5	Southern	28	29854	12.28
6	South-Western	20	21324	8.77
7	Western	17	18126	7.46
8	North-Western	14	14927	6.14
9	No aspect	46	49046	20.17
	Unrecorded	2	2132	0.88
	TOTAL	228	243097	100.00

The forest area of the district is almost distributed in all the aspect classes. However, North-eastern and southern aspect occupy 15.79% and 12.28% of the total forest area. It is also revealed that 20.17% of the area has no aspect.

4.4.4 DISTRIBUTION OF FOREST AREA BY ROCKINESS:

The distribution of forest area by rockiness classes is as under:

Table 18 DISTRIBUTION OF FOREST AREA BY ROCKINESS

Code No.	Rockiness	No. of Plots	Forest Area (Ha.)	Percentage
1	High	0	0	0
2	Medium	5	5331	2.19
3	Low	50	53311	21.93
4	No rock	172	183389	75.44
	Unrecorded	1	1066	0.44
	TOTAL	228	243097	100.00

While in 75.44% of the forest area rockiness is absent, 24.12% is medium to low in rockiness.

4.4.5 DISTRIBUTION OF FOREST AREA BY SOIL CONSISTENCY:

The soil of the district is found to be under following categories:

Table 19 DISTRIBUTION OF FOREST AREA BY SOIL CONSISTENCY

Code No.	Soil Consistency	No. of Plots	Forest Area (Ha.)	Percentage
1	Friable	24	25589	10.53
2	Slightly compact	197	210045	86.40
3	Compact	5	5331	2.19
4	Cemented	0	0	0
5	No soil	0	0	0
	Unrecorded	2	2132	0.88
	TOTAL	228	243097	100.00

86.4% of the forest area has slightly compacted soil. Friable soil occurs in 10.53% of the area while, 2.19% of the area has compact soil.

4.4.6 DISTRIBUTION OF FOREST AREA BY SOIL TEXTURE:

The distribution of district forest by soil texture is given below:

Table 20 DISTRIBUTION OF FOREST AREA BY SOIL TEXTURE

CODE	SOIL TEXTURE	NO. OF PLOTS	FOREST AREA (HA.)	PERCENTAGE
1	Clayey	1	1066	0.44
2	Clayey loam	31	33053	13.6
3	Loam	127	135409	55.70
4	Sandy loam	51	54377	22.36
5	Sandy	16	17060	7.02
6	No soil	0	0	0
	Unrecorded	2	2132	0.88
	TOTAL	228	243097	100.00

55.7% of the forest area is on loamy soil. 13.6% of the forest area has clayey loam while 22.36% has sandy loam soil.

4.4.7 DISTRIBUTION OF FOREST AREA BY SOIL EROSION:

The extent of soil erosion in the district is given below:

Table 21 DISTRIBUTION OF FOREST AREA BY SOIL EROSION

Code No.	Soil Erosion	No. of Plots	Forest Area (Ha.)	Percentage
1	Heavy	1	1066	0.44
2	Moderate	10	10662	4.38
3	Mild	172	183389	75.44
4	No erosion	42	44781	18.42
	Unrecorded	3	3199	1.32
	TOTAL	228	243097	100.00

It is clear from the above table that 75.44% of the forest area is subject to mild erosion. 4.38% of the forest area lies in a moderately eroded zone and 0.44% of the forest area lies in heavily eroded area.

4.4.8 DISTRIBUTION OF FOREST AREA BY INJURIES TO CROP:

Injuries to crop as observed during inventory is as under:

Contents

Table 22 DISTRIBUTION OF FOREST AREA BY INJURIES TO CROP

CODE NO.	CROP INJURY	NO. OF PLOTS	FOREST AREA HA.)	PERCENTAGE
1	Borer attack, leaf defoliator attack or damage by other rest epidemic.	1	1066	0.44
2	Top drying	0	0	0
3	Girdling and illicit felling	193	205780	84.65
4	Scaring of trees	0	0	0
5	Lopping for fodder	1	1066	0.44
6	Wind damage or flood damage	0	0	0
7	Other injuries	17	18126	7.46
8	No injuries	13	13861	5.70
	Unrecorded	3	3198	1.31
	TOTAL	228	243097	100.00

The above table reveals that illicit felling is still the major cause of injury to crop.

4.4.9 DISTRIBUTION OF FOREST AREA BY FIRE INCIDENCE:

Forest area affected by fire in the district is as under.

Table 23 DISTRIBUTION OF FOREST AREA BY FIRE INCIDENCE

Code No.	Fire Incidence	No. of Plots	Forest Area (Ha.)	Percentage
1	Heavy	0	0	0
2	Moderate	3	3198	1.32
3	Light	72	76768	31.58
4	No fire	150	159933	65.78
5	Unrecorded	3	3198	1.32
	TOTAL	228	243097	100.00

Light fire incidence is noticed in the forest area to the extent of 31.58%. However, no heavy fire incidence is noted in the area. 65.78% of the area has no fire incidence. Thus, fire incidence does not seem to be a major problem in the forests of Puri district.

4.4.10 DISTRIBUTION OF FOREST AREA BY GRAZING INCIDENCE:

Intensity of grazing in the district is as follows:

Table 24 DISTRIBUTION OF FOREST AREA BY GRAZING INCIDENCE

Code No.	Grazing incidence	No. of Plots	Forest Area (Ha.)	Percentage
1	Heavy	23	24523	10.09
2	Moderate	57	60775	25.00
3	Light	130	138609	57.02
4	No grazing	15	15993	6.58
	Unrecorded	3	3198	1.31
	TOTAL	228	243097	100.00

Heavy grazing occurs in 10.09% forest area. Moderate to light grazing is common in the area. Area free from grazing is only 6.58%.

4.4.11 DISTRIBUTION OF FOREST AREA BY PLANTATION POTENTIALITY:

The following table shows Plantation potentiality of the inventoried area.

Table 25 DISTRIBUTION OF FOREST AREA BY PLANTATION POTENTIALITY

Code No.	Plantation potentiality	No. of Plots	Forest Area (Ha.)	Percentage
1	Plantable	59	62907	25.88
2	Unplantable	1	1066	0.44
3	Not Applicable	165	175926	72.37
	Unrecorded	3	3198	1.31
	TOTAL	228	243097	100.00

Plantable area is 25.88% of the forest area.

4.4.12 DISTRIBUTION OF FOREST AREA BY INTENSITY OF REGENERATION

Table 26 DISTRIBUTION OF FOREST AREA BY INTENSITY OF REGENERATION.

Code No.	Description (No. of seedlings in 4 m. x 4 m. square plot)	No. of Plots	Forest Area (Ha.)	Percentage
1	Adequate(8 or more seedlings)	27	28788	11.84
2	Inadequate (less than 8 seedlings)	137	146072	60.09
3	Absent (No Seedlings)	60	63973	26.32
	Unrecorded	4	4264	1.75
	TOTAL	228	243097	100.00

Adequate regeneration appears only in 11.84% of the forest area. Inadequate regeneration occurs in 60.09% of the forest area whereas regeneration is absent in 26.32% of the forest area. Overall regeneration status is thus unsatisfactory.

4.4.13 DISTRIBUTION OF FOREST AREA BY DEGRADATION:

Degradation status of forest is observed in the following tables.

Table 27 DISTRIBUTION OF FOREST AREA BY DEGRADATION

Code No.	Degradation status	No. of Plots	Forest Area (Ha.)	Percentage
A. Grazing, Fire. Pollarding, illicit cutting and lopping.				
11	Heavily degraded	67	71437	29.39
12	Moderately degraded	67	71437	29.39
13	Mildly degraded	76	81032	33.33
14	Not degraded	17	18125	7.45
B. Other natural calamities such as land slide, glacier, flood, rain etc.				
21	Heavily degraded	0	0	0
22	Moderately degraded	0	0	0
23	Mildly degraded	0	0	0
24	Not degraded	0	0	0
	Unrecorded	1	1066	0.44
	TOTAL	228	243097	100.00

Degradation on account of biotic interference is easily discernible from the above table. Heavy to moderate degradation has been noticed in the forest areas to the extent of 58.78%. Mild degradation is noticed in 33.33% of the forest area. Only 7.45% of the forest area is free from degradation.

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4.5 ANALYSIS OF PLOT DESCRIPTION DATA: CUTTACK DISTRICT.

Plot data collected during the field inventory in respect of terrain, degradation status, intensity of grazing, fire incidence, regeneration status were analysed. The final analyses are given in the following paragraphs.

4.5.1 DISTRIBUTION OF FOREST AREA BY LAND USE CLASS.

Table 28 DISTRIBUTION OF FOREST AREA BY LAND USE CLASSES

Code No.	Land Use	Description	No. of Plots	Forest area (Ha.)	Percentage
1	Dense tree forest	Forest with canopy density 70% & above	1	1288	0.96
2	Moderately dense tree forest	Forest with canopy density 30 to 69%	25	32207	24.04
3	Open tree forest	Forest with canopy density 5 to 29%	19	24477	18.28
4	Scrub forest	Forest with canopy density less than 5%	28	36072	26.92
5	Bamboo brakes	Areas completely covered with bamboo	4	5153	3.85
6	Shifting cultivation	Areas under current as well as previous years shifting cultivation.	0	0	0
7	Young plantation of forestry species	-	21	27054	20.19
8 to 10	Trees in line	-	0	0	0
11	Barren land	-	1	1288	0.96
12	Agricultural land without trees.	-	2	2577	1.92
13	Agricultural land with trees.	-	0	0	0
14	Non-forest plantation	-	0	0	0
15	Habitation	-	2	2577	1.92
16	Water bodies	-	0	0	0
18	Young crop of natural/artificial regeneration.	-	1	1288	0.96
		TOTAL	104	133981	100.00

Bulk of the forests are moderately dense; open tree forest and scrub forest to the extent of 24.04%, 18.28% and 26.92% respectively. There is a preponderance of young plantations of forestry species that accounts to 20.19% of the forest area

4.5.2 THE DISTRIBUTION OF FOREST AREA BY TOPOGRAPHY

The percentage of forest area by topography is given below

Table 29 THE DISTRIBUTION OF FOREST AREA BY TOPOGRAPHY

Code No.	Topography	No. of Plots	Forest Area (Ha.)	Percentage
1	Flat	25	32207	24.04
2	Gently rolling	16	20612	15.38
3	Hilly	63	81162	60.58
4	Very hilly	0	0	0
	Unrecorded	0	0	0
	Total	104	133981	100.00

Most of the forest area is hilly (60.58%).

4.5.3 DISTRIBUTION OF FOREST AREA BY ASPECT:

The distribution of forest area by various aspect classes is given below:

Table 30 DISTRIBUTION OF FOREST AREA BY ASPECT

Code No.	Aspect	No. of Plots	Forest Area (Ha.)	Percentage
1	Northern	12	15459	11.54
2	North-Eastern	9	11594	8.65
3	Eastern	9	11594	8.65
4	South-Eastern	10	12883	9.62
5	Southern	16	20612	15.38
6	South-Western	15	19324	14.42
7	Western	2	2577	1.92
8	North-Western	7	9019	6.74
9	No aspect	24	30919	23.08
	Unrecorded	0	0	0
	TOTAL	104	133981	100.00

Forest area is mostly in the southern aspect i.e. 15.38% followed by area having south-western aspect at 14.42%. 23.08% of the area has no aspect.

4.5.4 DISTRIBUTION OF FOREST AREA BY ROCKINESS:

The distribution of forest area by rockiness classes is as under:

Table 31 DISTRIBUTION OF FOREST AREA BY ROCKINESS

Code No.	Rockiness	No. of Plots	Forest Area (Ha.)	Percentage
1	High	0	0	0
2	Medium	4	5153	3.85
3	Low	32	41225	30.77
4	No rock	68	87603	65.38
	Unrecorded	0	0	0
	TOTAL	104	133981	100.00

Medium to low rockiness in the district is 34.62%, while 65.38% of the forest area has no rockiness.

4.5.5 DISTRIBUTION OF FOREST AREA BY SOIL CONSISTENCY:

The soil of the district is found to be under following categories:

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Table 32 DISTRIBUTION OF FOREST AREA BY SOIL CONSISTENCY

Code No.	Soil Consistency	No. of Plots	Forest Area (Ha.)	Percentage
1	Friable	4	5153	3.85
2	Slightly compact	87	112080	83.65
3	Compact	13	16748	12.50
4	Cemented	0	0	0
5	No soil	0	0	0
	Unrecorded	0	0	0
	TOTAL	104	133981	100.00

In the district, 96.15% of the area has compact to slightly compact soil. Friable soils occur in 3.85% of the area only.

4.5.6 DISTRIBUTION OF FOREST AREA BY SOIL TEXTURE:

The distribution of district forest by soil texture is given below:

Table 33 DISTRIBUTION OF FOREST AREA BY SOIL TEXTURE

CODE	SOIL TEXTURE	NO. OF PLOTS	FOREST AREA (HA.)	PERCENTAGE
1	Clayey	5	6441	4.81
2	Clayey loam	26	33495	25.00
3	Loam	53	68279	50.96
4	Sandy loam	20	25766	19.23
5	Sandy	0	0	0
6	No soil	0	0	0
	Unrecorded	0	0	0
	TOTAL	104	133981	100.00

50.96% of the forest area is on loamy soil. 25% of the forest area has clayey loam while 19.23% has sandy loam soil.

4.5.7 DISTRIBUTION OF FOREST AREA BY SOIL EROSION:

The extent of soil erosion in the district is given below:

Table 34 DISTRIBUTION OF FOREST AREA BY SOIL EROSION

Code No.	Soil Erosion	No. of Plots	Forest Area (Ha.)	Percentage
1	Heavy	0	0	0
2	Moderate	29	37360	27.88
3	Mild	44	56684	42.31
4	No erosion	31	39937	29.81
	Unrecorded	0	0	0
	TOTAL	104	133981	100.00

It is clear from the above table that 42.31% of the forest lie on a mildly eroded belt whereas, moderately eroded area is at 27.88%. Heavy erosion is insignificant in the area.

4.5.8 DISTRIBUTION OF FOREST AREA BY INJURIES TO CROP:

Injuries to crop as observed during inventory is as under:

Contents

Table 35 DISTRIBUTION OF FOREST AREA BY INJURIES TO CROP

Code No.	Crop Injury	No. of Plots	Forest Area (Ha.)	Percentage
1	Borer attack, leaf defoliator attack or damage by other rest epidemic.	1	1288	0.96
2	Top drying	0	0	0
3	Girdling and illicit felling	91	117233	87.50
4	Scaring of trees	0	0	0
5	Lopping for fodder	0	0	0
6	Wind damage or flood damage	2	2577	1.92
7	Other injuries	4	5153	3.85
8	No injuries	2	2577	1.92
	Unrecorded	4	5153	3.85
	TOTAL	104	133981	100.00

The above table reveals that at 87.5%, illicit felling is still the major cause of injury to crop.

4.5.9 DISTRIBUTION OF FOREST AREA BY FIRE INCIDENCE:

Forest area affected by fire in the district is as under.

Table 36 DISTRIBUTION OF FOREST AREA BY FIRE INCIDENCE

Code No.	Fire Incidence	No. of Plots	Forest Area (Ha.)	Percentage
1	Heavy	9	11594	8.65
2	Moderate	17	21901	16.35
3	Light	24	30919	23.08
4	No fire	50	64414	48.07
	Unrecorded	4	5153	3.85
	TOTAL	104	133981	100.00

Light fire incidence is noticed in the forest area to the extent of 23.08%. Heavy to moderate fire incidence is noted in 25% of the area.

4.5.10 DISTRIBUTION OF FOREST AREA BY GRAZING INCIDENCE:

Intensity of grazing in the district is as follows:

Table 37 DISTRIBUTION OF FOREST AREA BY GRAZING INCIDENCE

Code No.	Grazing incidence	No. of Plots	Forest Area (Ha.)	Percentage
1	Heavy	23	29630	22.11
2	Moderate	20	25766	19.23
3	Light	52	66991	50.00
4	No grazing	5	6441	4.81
	Unrecorded	4	5153	3.85
	TOTAL	104	133981	100.00

Heavy grazing occurs in 22.11% forest area. Moderate to light grazing is common in the 69.23% of the area. Area free from grazing is only 4.81%.

4.5.11 DISTRIBUTION OF FOREST AREA BY PLANTATION POTENTIALITY:

The following table shows Plantation potentiality of the inventoried area.

Contents

Table 38 DISTRIBUTION OF FOREST AREA BY PLANTATION POTENTIALITY

Code No.	Plantation potentiality	No. of Plots	Forest Area (Ha.)	Percentage
1	Plantable	49	63126	47.11
2	Unplantable	7	9018	6.74
3	Not Applicable	46	59261	44.23
	Unrecorded	2	2576	1.92
	TOTAL	104	133981	100.00

Plantable area is 47.11% of the forest area.

4.5.12 DISTRIBUTION OF FOREST AREA BY INTENSITY OF REGENERATION

Table 39 DISTRIBUTION OF FOREST AREA BY INTENSITY OF REGENERATION.

Code No.	Description (No. of seedlings in 4 m. x 4 m. square plot)	No. of Plots	Forest Area (Ha.)	Percentage
1	Adequate(8 or more seedlings)	13	16748	12.50
2	Inadequate (less than 8 seedlings)	54	69567	51.92
3	Absent (No Seedlings)	30	38648	28.85
	Unrecorded	7	9018	6.73
	TOTAL	104	133981	100.00

Overall status of regeneration is unsatisfactory.

4.5.13 DISTRIBUTION OF FOREST AREA BY DEGRADATION:

Degradation status of forest is observed in the following tables.

Table 40 DISTRIBUTION OF FOREST AREA BY DEGRADATION

Code No.	Degradation status	No. of Plots	Forest Area (Ha.)	Percentage
A. Grazing, Fire, Pollarding, illicit cutting and lopping.				
11	Heavily degraded	53	68279	50.96
12	Moderately degraded	29	37360	27.88
13	Mildly degraded	18	23189	17.31
14	Not degraded	4	5153	3.85
B. Other natural calamities such as land slide, glacier, flood, rain etc.				
21	Heavily degraded	0	0	0
22	Moderately degraded	0	0	0
23	Mildly degraded	0	0	0
24	Not degraded	0	0	0
	Unrecorded	0	0	0
	TOTAL	104	133981	100.00

Heavy and moderate degradation has been noticed in the forest areas to the extent of 50.96% and 27.88% respectively. Mild degradation is noticed in 17.31% of the forest area. Only 3.85% of the forest area is free from degradation.

4.6 TREE DENSITY STUDY.

The distribution of stems per hectare by species and the diameter classes in different strata in the two districts are given in following tables of Part II of this report.

Puri District: Table 1.1.1 to 1.1.4

Cuttack District: Table 2.1.1 to 2.1.4.

Contents

The summary of number of stems /per hectare in each stratum in each district is as follows.

Table 41 STEMS /HA IN PURI DISTRICT.

STRATUM	No. OF STEMS/HA.
Miscellaneous	154.530
Sal	230.242
Bamboo	15.000
Teak	148.461
FOR THE DISTRICT	174.419

Table 42 STEMS /HA IN Cuttack DISTRICT.

STRATUM	No. OF STEMS/HA.
Miscellaneous	53.115
Sal	156.363
Bamboo	21.250
Mangrove	47.143
FOR THE DISTRICT	73.265

The Sal stratum in Puri is better stocked than that of Cuttack. So is the Miscellaneous Stratum. Puri has teak while Cuttack has Mangroves. The overall number of stems per hectare in Puri is higher than that of Cuttack.

4.6.1 TREE DENSITY – PURI DISTRICT.

A. Miscellaneous Stratum.

The following observations regarding this stratum have been found to be pertinent.

i. The number of stems per hectare in this stratum is 154.30.

ii. The concentration of tree in the lower diameter class i.e. 10-19 cm is maximum which accounts for 70.02% of the total trees of this stratum followed by 18.92% and 6.86% in 20-29 cm and 30-39 cm diameter class respectively.

iii. Stems of all diameter classes are found to be present.

iv. Some of the important species with their percentage distribution in this stratum are given below:-

Table 43 PERCENTAGE AND NUMBER OF STEMS PER HA. OF IMPORTANT SPECIES, MISCELLANEOUS STRATUM, PURI DISTRICT.

SPECIES	STEMS/HA.	PERCENTAGE
Cleistanthus collinus	23.077	14.94
Anacardium occidentale	10.684	6.91
Casuarina equisetifolia	8.205	5.31
Lannea coromandelica	5.043	3.26
Grewia tiliaefolia	4.786	3.10

Contents

Anacardium and *Casuarina* are typical coastal plantation species and the latter is raised for shelter-belt purposes.

For details, please refer Table 1.1.1, Part II, of this report.

B. Sal Stratum.

The salient features of this stratum are:

i. Number of stems per hectare is 230.242.

ii. Stems are most concentrated (66.42%) in the lowest diameter class, i.e. in the 10 –19 cm class. In 20 - 29 cm and 30 – 39 cm diameter classes , 19.43% and 9.43% stems are found respectively.

iii. Stems are found to be present in all diameter classes.

iv. The number of stems per hectare, of the important species along with their percentage is as follows:

TABLE 44 PERCENTAGE AND NUMBER OF STEMS PER HA. OF IMPORTANT SPECIES, SAL STRATUM, PURI DISTRICT.

SPECIES	STEMS/HA	PERCENTAGE
Shorea robusta	108.657	47.19
Buchanania lanzan	12.805	5.56
Cleisthasus collinus	12.683	5.51
Terminalia crenulata	9.756	4.24
Madhuca latifolia	8.293	3.60

C. Bamboo Stratum.

The pertinent observations are :

i. Only the data regarding the tree species have been analysed.

ii. The number of stems per hectare is 15.00.

iii. Stems are only present in the 10-19 cm diameter class (72.22%) and the 20–29 cm diameter class (27.78%)

The dominant tree species of this stratum are:

TABLE 45 PERCENTAGE AND NUMBER OF STEMS PER HA. OF IMPORTANT SPECIES, BAMBOO STRATUM, PURI DISTRICT

SPECIES (Tree Species)	STEMS/HA.	PERCENTAGE
Odina wodier	4.167	27.78
Acacia species	1.667	11.11
Bridelia retusa	1.667	11.11
Lagerstroemia parviflora	1.667	11.11

D. Teak Stratum.

Contents

Teak in Puri is a plantation species. However the quality in certain areas like Dhuanali and Berbera is exceptional. The pertinent observations are:

i. The number of stems per hectare is 148.461. 58.55% of the stems of this stratum is occupied by Teak.

ii. Stems are mostly concentrated in 10-19 cm class followed by 20-29 cm class and 30-39 cm class.

iii. The number of stems per hectare and the percentages of the major species of this stratum are:

TABLE 46 PERCENTAGE AND NUMBER OF STEMS PER HA. OF IMPORTANT SPECIES, TEAK STRATUM, PURI DISTRICT.

SPECIES	STEMS/HA.	PERCENTAGE
Tectona grandis	86.923	58.55
Bridelia retusa	10.000	6.74
Mallotus phillipensis	8.462	5.70
Lagerstroemia parviflora	3.077	2.07
Grewia tiliaefolia	2.308	1.55

4.6.2 TREE DENSITY – CUTTACK DISTRICT.

A. Miscellaneous Stratum.

The following observations were made in this stratum:

i. The number of stems per hectare in this stratum is 53.115.

ii. The concentration of tree in the lower diameter class i.e. 10-19 cm is maximum which accounts for 73.15% of the total trees of this stratum followed by 17.59% and 4.94% in 20-29 cm and 30-39 cm diameter class respectively.

iii. Some of the important species with their percentage distribution in this stratum are given below:

TABLE 47 PERCENTAGE AND NUMBER OF STEMS PER HA. OF IMPORTANT SPECIES, MISCELLANEOUS STRATUM, CUTTACK DISTRICT.

SPECIES	STEMS/HA.	PERCENTAGE
Cleistanthus collinus	4.262	8.02
Hollarhaena antidysentrica	3.607	6.79
Xylia xylocarpa	3.607	6.79
Anacardium occidentale	3.443	6.48
Cassia siamea	2.131	4.01
Tectona grandis	2.131	4.01

Anacardium and *Casuarina* are typical coastal plantation species and the latter is raised for shelter-belt purposes.

Contents

For details, please refer Table 2.1.1, Part II of this report.

B. Sal Stratum

The salient features of this stratum are:

i. Number of stems per hectare is 156.363.

ii. Stems are mostly concentrated, i.e. 84.88%, in the lowest diameter class, i.e. in 10–19 cm diameter class. The 20–29 cm diameter class has 6.10% of the stems, while the 30-39 diameter class has 5.24% of the stems.

iii. Stem distribution is regular upto the 60 cm diameter class.

iv. The number of stems per hectare with the percentage contribution of the dominant species is as follows:

TABLE 48 PERCENTAGE AND NUMBER OF STEMS PER HA. OF IMPORTANT SPECIES, SAL STRATUM, CUTTACK DISTRICT.

SPECIES	STEMS/HA.	PERCENTAGE
Shorea robusta	85.454	54.65
Terminalia cremulata	10.000	6.39
Cleistanthus collinus	6.818	4.36
Buchanania lanzan	3.182	2.04
Casearina tomentosa	3.182	2.04
Terminalia bellerica	3.182	2.04

C. Bamboo Stratum

The pertinent observations are:

i. Only the tree species have been analysed.

ii. The number of stems per hectare is 21.250.

iii. Most of the stems are present in the 10-19 cm diameter class.

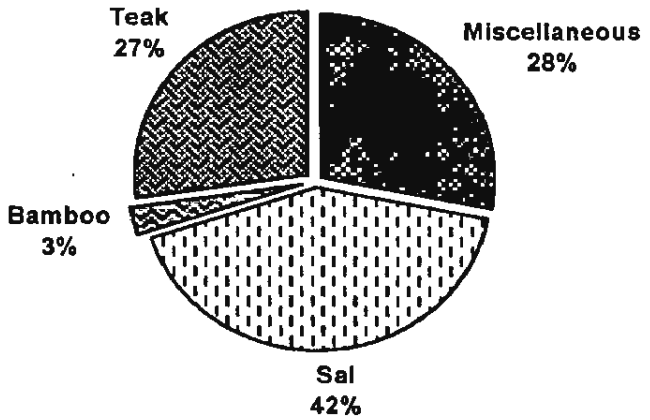
iv. The dominant tree species in this stratum are.

TABLE 49 PERCENTAGE AND NUMBER OF STEMS PER HA. OF IMPORTANT SPECIES, BAMBOO STRATUM, CUTTACK DISTRICT.

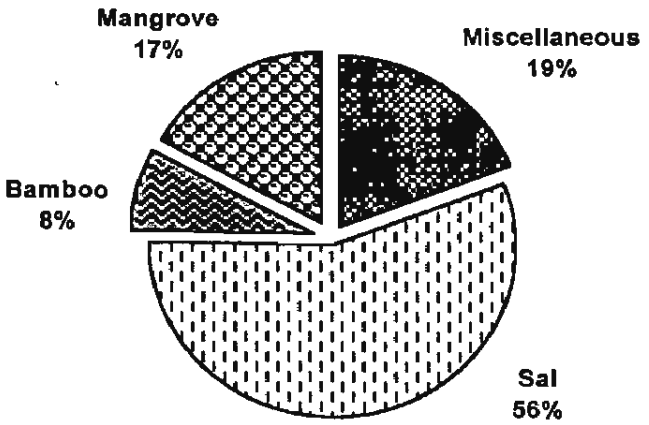
SPECIES(TREE)	STEMS/HA.	PERCENTAGE
Anacardium occidentale	5.000	23.53
Legerstroemia parviflora	5.000	23.53
Tectona grandis	2.500	11.76

Contents

STRATA-WISE STEMS/HA., PURI



STRATA-WISE STEMS/HA., CUTTACK



Contents

D. Mangrove Stratum.

The pertinent observations are:

i. The number of stems per hectare is 47.143.

ii. All stems are mostly concentrated in 10-19 cm diameter class.

The number of stems per hectare and the percentages of the major species of this stratum are:

TABLE 50 PERCENTAGE AND NUMBER OF STEMS PER HA. OF IMPORTANT SPECIES, MANGROVE STRATUM, CUTTACK DISTRICT.

SPECIES	STEMS/HA.	PERCENTAGE
Avicennia officinalis	24.286	51.51
Heritiera littoralis	7.143	15.15
Rhizophora spp.	4.286	9.09

4.6.3 TOTAL STEMS.

The total number of stems in the two districts by species in different strata as per diameter class is analysed in detail in tables 1.2.1 to 1.2.4 & 2.2.1 to 2.2.4 in Part II of this report. The results may be summarised as:

A. PURI DISTRICT.

TABLE 51 TOTAL STEMS, STRATUM WISE, PURI DISTRICT.

STRATUM	TOTAL STEMS ('000 NOS.)
Miscellaneous	19277
Sal	20130
Bamboo	192
Teak	2058
Total	41657

Thus, Puri district has 41.657 million stems.

B. CUTTACK DISTRICT.

TABLE 52 TOTAL STEMS, STRATUM WISE, CUTTACK DISTRICT.

STRATUM	TOTAL STEMS ('000 NOS)
Miscellaneous	4174
Sal	4432
Bamboo	219
Mangrove	425
Total	9250

Thus, Cuttack district has 9.250 million stems.

Contents

4.7 VOLUME STUDIES.

The distribution of volume per ha. by species and diameter class in different strata in each district has been calculated and given in tables No. 1.3.1 to 1.3.4 & 2.3.1 to 2.3.4 of Part II of this report. The summary of the same is as follows:

TABLE 53 STRATUMWISE VOLUME/HECATRE, PURI DISTRICT.

STRATUM	VOLUME (M^3 PER HA.)
Miscellaneous	32.873
Sal	54.574
Bamboo	1.360
Teak	36.924
For the District	**39.364**

TABLE 54 STRATUMWISE VOLUME/HECATRE, CUTTACK DISTRICT.

STRATUM	VOLUME (M^3 PER HA.)
Miscellaneous	10.683
Sal	25.85
Bamboo	5.578
Mangrove	1.766
For the District	**13.033**

4.7.1 VOLUME STUDIES, PURI DISTRICT.

a. Stratum Miscellaneous.

i. Volume per hectare in this stratum is 32.873 m^3 only.

ii. Volume is distributed in all diameter classes.

iii. Distribution of volume is 19.79% in 10-19 cm diameter class, 20.77% in 20-29 cm diameter class and 20.39% in 30-39 cm diameter class.

iv. Major volume contributing species in this stratum are:

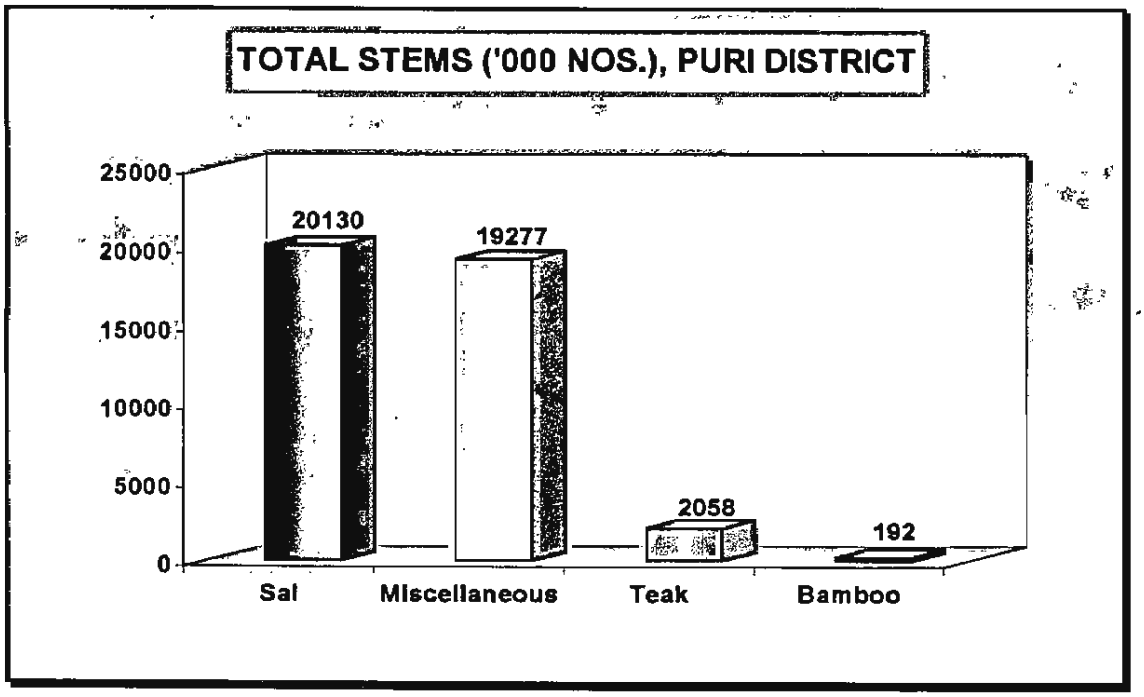
TABLE 55 MAJOR VOLUME CONRTIBUTING SPECIES, MISCELLANEOUS STRATUM, PURI DISTRICT.

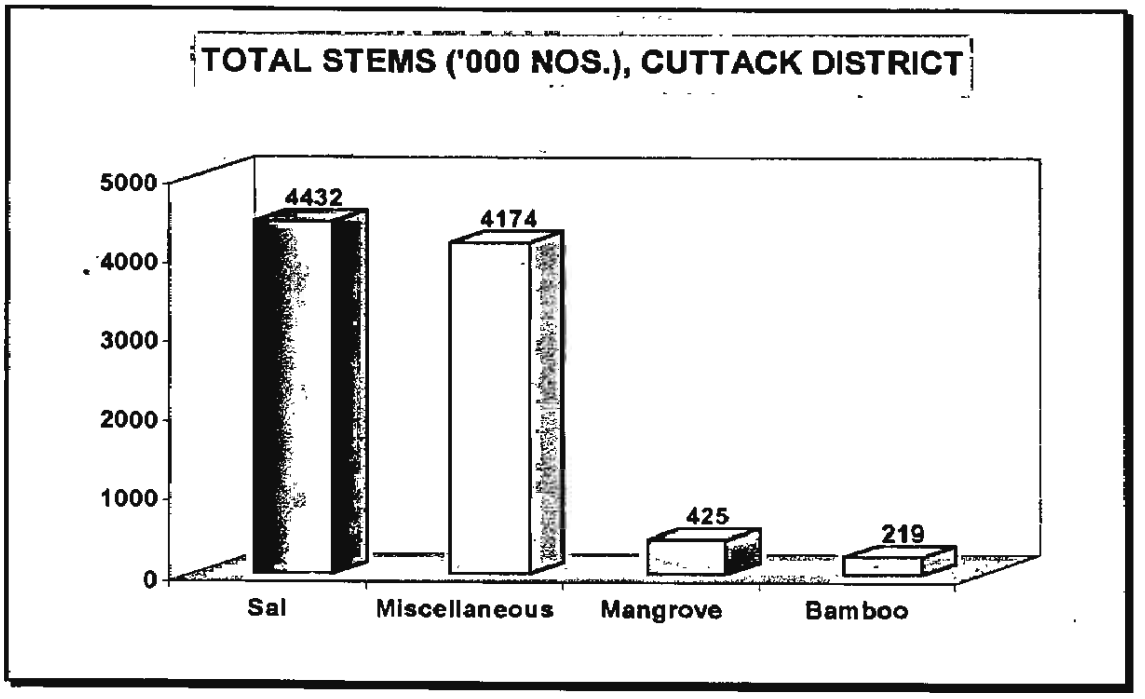
SPECIES	VOLUME (M^3/ HA.)	PERCENTAGE.
Schleichera trijuga	2.677	8.14
Cleistanthus collinus	2.290	6.97
Anogeissus latifolia	2.210	6.72
Dalbergia paniculata	1.637	4.98
Terminalia crenulata	1.684	5.12

b. Stratum Sal, Puri District.

Following observations were made in this stratum:

Contents


TOTAL STEMS ('000 NOS.), PURI DISTRICT
25000
20000
15000
10000
5000
0
20130
19277
2058
192
Sal
Miscellaneous
Teak
Bamboo


TOTAL STEMS ('000 NOS.), CUTTACK DISTRICT
5000
4000
3000
2000
1000
0
4432
4174
425
219
Sal
Miscellaneous
Mangrove
Bamboo

Contents

i. Volume per hectare is 54.574m^3.

ii. Distribution of volume is in all diameter classes.

iii. Contribution of volume in 10-19 cm class is 16.64%, in 20-29 cm class is 21.57% and in 30-39 cm class is 27.25% respectively.

iv. The Volume in m^3 per hectare and percentage of the major volume contributing species are:

TABLE 56 MAJOR VOLUME CONRTIBUTING SPECIES, SAL STRATUM, PURI DISTRICT.

SPECIES	VOLUME (M^3/ HA.)	PERCENTAGE
Shorea robusta	28.203	51.68
Schleichera trijuga	2.308	4.23
Madhuca latifolia	2.236	4.10
Diospyros melanoxylon	1.988	3.64
Terminalia crenulata	1.822	3.34

c. Stratum Bamboo, Puri District.

i. Volume per hectare is 1.36m^3 only.

ii. Distribution of volume in diameter class 10-19 cm is 33.82% and in 20-29 cm class is 66.18%.

iii. Volume per ha. with percentage of major volume contributing species is:

TABLE 57 MAJOR VOLUME CONRTIBUTING SPECIES, BAMBOO STRATUM, PURI DISTRICT.

SPECIES (TREE)	VOLUME (M^3/ HA.)	PERCENTAGE
Odina wodier	0.676	49.70
Acacia species	0.175	12.87

d. Stratum Teak, Puri District.

Salient features of this stratum are given below:

i. Volume/ha. is 36.924m^3

ii. Distribution of volume is observed up to 90-99cm diameter classes also.

ii. Volume is mostly concentrated in 10-19 cm, 20-29 cm, 30-39cm and 40-49 cm diameter classes which accounts 15.98%, 9.84%, 18.78% and 19.90% respectively.

Contents

iv. Volume/ha. and important volume contributing species are given here under:-

TABLE 58 MAJOR VOLUME CONRTIBUTING SPECIES, TEAK STRATUM, PURI DISTRICT.

SPECIES	VOLUME (M^3)/HA.	PERCENTAGE
Tectona grandis	30.480	82.54
Bridelia retusa	1.453	3.94
Mallotus philippensis	1.214	3.29
Odina wodier	0.434	1.17
Adina cordifolia	0.230	0.62

4.7.2 VOLUME STUDIES, DISTRICT: CUTTACK

a. Miscellaneous Stratum, Cuttack District.

Following observation could be drawn for this stratum.

i. Volume/ha is 10.683 m^3 only.

ii. Volume distribution is observed upto 70-79 cm diameter classes.

iii. Contribution of volume in 10-19 cm, 20-29cm and 30-39 cm diameter classes is 20.68%, 21.48% and 17.38% respectively.

iv. Volume/ha with percentage for some of the volume contributing species are summarised below:

TABLE 58 MAJOR VOLUME CONRTIBUTING SPECIES, MISCELLANEOUS STRATUM, CUTTACK DISTRICT.

SPECIES	VOLUME (M^3)/HA.	PERCENTAGE
Mangifera indica	1.055	9.88
Xylia Xylocarpa	0.834	7.81
Dalbergia paniculata	0.711	6.65
Shorea robusta	0.698	6.53
Ficus species	0.565	5.29

b. Sal Stratum, Cuttack District.

Following observation could be drawn for this stratum

i. Volume/ha. in this stratum is 25.850 m^3 only.

ii. Volume distribution is regular upto 50-59 cm diameter classes.

iii. Contribution of volume is 26.07%, 8.06% and 23.72% in 10-19 cm, 20-29 cm and 30-39 cm diameter classes respectively.

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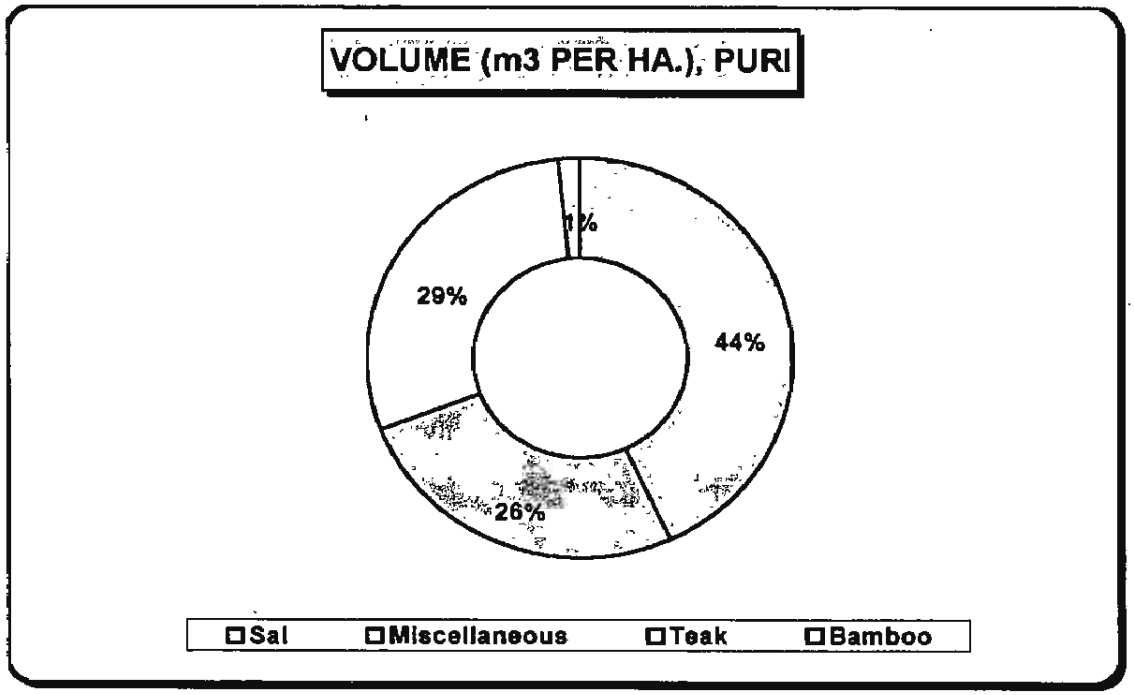
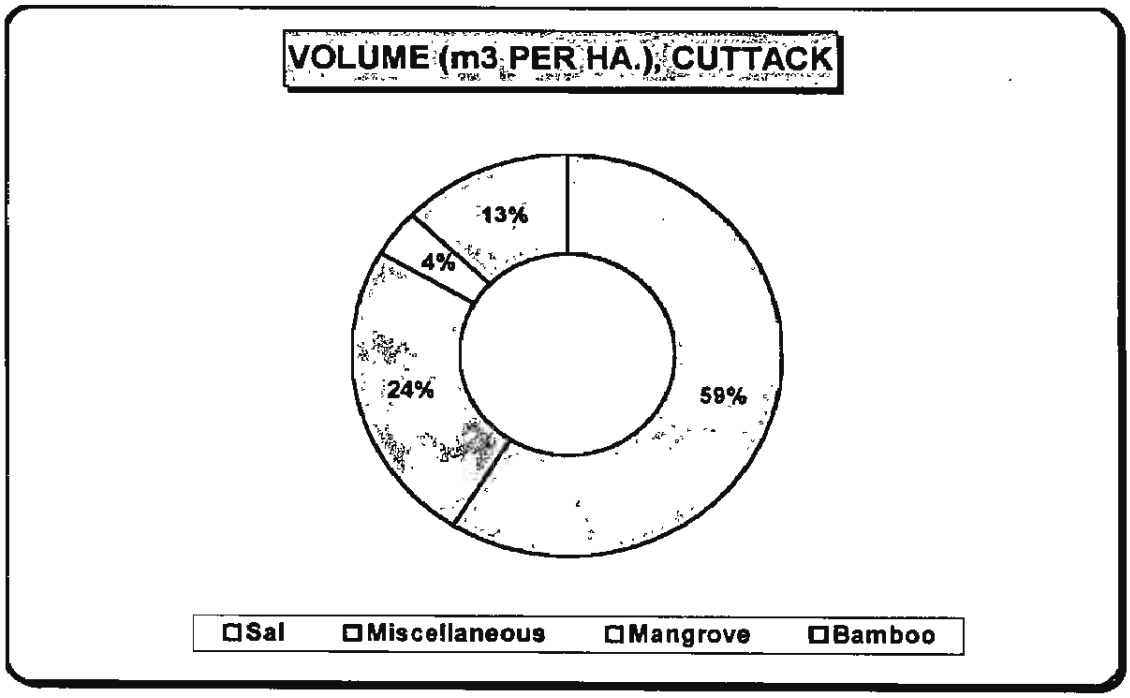

VOLUME (m3 PER HA.), PURI
1%
29%
44%
26%
Sal
Miscellaneous
Teak
Bamboo


VOLUME (m3 PER HA.), CUTTACK
13%
4%
24%
59%
Sal
Miscellaneous
Mangrove
Bamboo

Contents

iv. Volume/ha. with percentage for important volume contributing species are given below:-

TABLE 59 MAJOR VOLUME CONRTIBUTING SPECIES, SAL STRATUM, CUTTACK DISTRICT.

SPECIES	VOLUME (M^3)/HA.	PERCENTAGE
Shorea robusta	12.617	48.81
Terminalia crenulata	2.584	10.00
Terminalia species	2.008	7.77
Diospyros melanoxylon	1.961	7.59
Xylia xylocarpa	1.090	4.22

c. Bamboo Stratum, Cuttack District.

Salient features of this stratum are enumerated below:

i. Volume/ha. in this stratum is 5.578 m^3 only.

ii. Distribution of volume in different diameter class is very irregular.

iii. Volume/ha. with percentage for some of the important volume contributing species are given below:-

TABLE 60 MAJOR VOLUME CONRTIBUTING SPECIES, BAMBOO STRATUM, CUTTACK DISTRICT.

SPECIES (TREE)	VOLUME (M^3)/HA.	PERCENTAGE
Mangifera indica	4.344	77.88
Anacardium occidentale	0.271	4.86
Erythrina variegata	0.379	6.79

d. Mangrove Stratum, Cuttack District.

The following observation can be made for this stratum.

i. Volume/ha. is 1.766 m^3 only.

ii. Volume contribution is 100% in 10-19 cm diameter classes.

iii. Volume/ha. with percentage for some of the volume contributing species are given below:

TABLE 61 MAJOR VOLUME CONRTIBUTING SPECIES, MANGROVE STRATUM, CUTTACK DISTRICT.

SPECIES	VOLUME (M^3)/HA.	PERCENTAGE
Avicennia officinalis	0.965	54.64
Heritiera littoralis	0.225	12.74
Rhizophora species	0.137	7.76

Contents

4.7.3 TOTAL VOLUME:

Total volume in different strata by species and diameter class is given in Table No.1.4.1 to 1.4.4. and 2.4.1 to 2.4.4. (Part II of this report). Those are summarised below:

a. District Puri:

TABLE 62 TOTAL VOLUME IN DISTRICT PURI.

STRATUM	TOTAL VOLUME ('000M³)
Miscellaneous	4101
Sal	4771
Bamboo	17
Teak	512
TOTAL	9401

Thus, the total volume in undivided Puri district is 9.401 million m^3.

b. District:- Cuttack

TABLE 63 TOTAL VOLUME DISTRICT CUTTACK.

STRATUM	TOTAL VOLUME ('000M³)
Miscellaneous	840
Sal	733
Bamboo	57
Mangrove	16
Total	1646

Thus, the total volume in undivided Cuttack district is 1.646 million m^3.

4.8 STANDARD ERROR:

The standard error percentage (i.e. S.E%) has been calculated by ratio method of estimation for the growing stock by stratum and district for Puri and Cuttack district which are given below:

TABLE 64 STANDARD ERROR % FOR BOTH DISTRICTS.

DISTRICT	STRATUM	S.E.%
Puri	Miscellaneous	9.42
	Sal	11.85
	Bamboo	26.25
	Teak	24.95
	District	7.00
Cuttack	Miscellaneous	13.40
	Sal	20.59
	Bamboo	-
	Teak	33.14
	District	10.53

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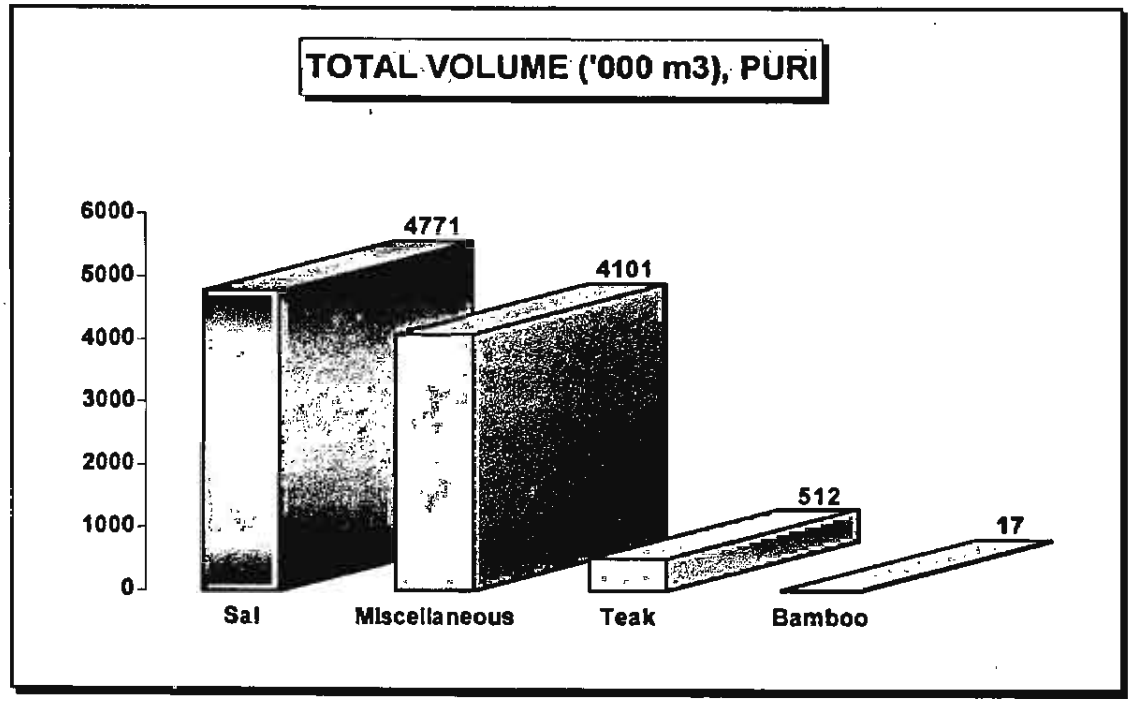
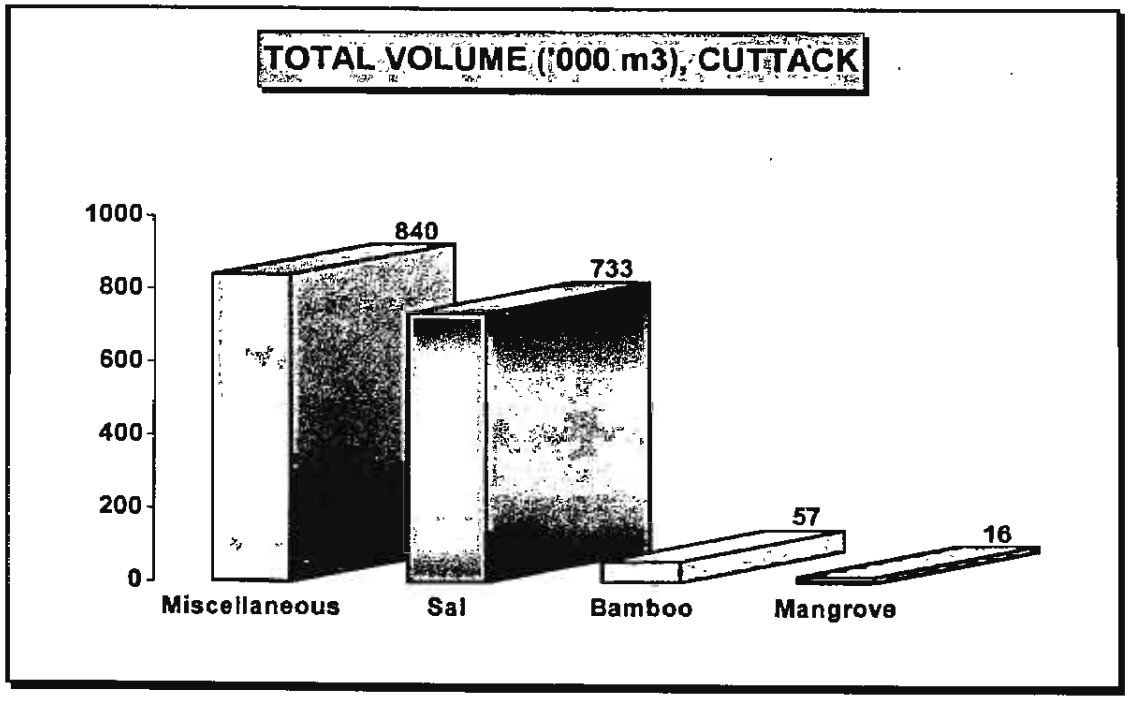

TOTAL VOLUME ('000 m3), PURI
6000
5000
4000
3000
2000
1000
0
4771
4101
512
17
Sal
Miscellaneous
Teak
Bamboo


TOTAL VOLUME ('000 m3), CUTTACK
1000
800
600
400
200
0
840
733
57
16
Miscellaneous
Sal
Bamboo
Mangrove

Contents

CHAPTER V

5.1. SUMMARY

1. The recorded forest area of undivided Puri district is 2836.74 Km². The inventoried area as calculated by the dot grid method on the green wash of Toposheet is 2430.97 Km². This is 23.87% of the geographical area of the district, which is 10182 Km ².

2. The recorded forest area in undivided Cuttack district is 1894.14 Km². Whereas the greenwash area on the toposheet is 1339.81Km². . This is 12.02% of the geographical area of the district, which is 11142Km².

3. In Puri district, the forest area has been categorised into 4 strata e.g. Miscellaneous, Sal, Bamboo and Teak. In Cuttack district the forest area has been categorised into Miscellaneous, Sal, Bamboo and Mangrove strata.

4. In both Puri and Cuttack districts, enumeration data from the areas in the Bamboo stratum have been analysed only for the tree species.

5. The value of the estimated Stems and Volume per hectare, in the various strata of the two districts has been computed to be as follows:

TABLE 64 PER HA. STEMS AND VOLUME

DISTRICT	STRATUM	NO. OF STEMS	VOLUME (m³/ha.)
Puri	Miscellaneous	154.530	32.873
	Sal	230.242	54.574
	Bamboo	15.000	1.360
	Teak	148.461	36.924
	For the district	174.419	39.364
Cuttack	Miscellaneous	53.115	10.683
	Sal	156.363	25.850
	Bamboo	21.250	5.578
	Mangrove	47.143	1.766
	For the district	73.265	13.033

6. The total number of stems in Puri and Cuttack districts is 41.657 and 9.250 million respectively.

7. The total growing stock in Puri and Cuttack districts is 9.401 million m³ and 1.646 million m³ respectively.

8. Regarding the land use classification in Puri district, results indicate that 4.39% forest area is covered under dense forests. 52.19% of the forest area can be categorised as moderately dense forests, while 14.03% of the forest area is open tree forest. In Cuttack district, dense forests exists in 0.96% of the forest area, moderately dense forest in 24.04% and open tree forest in 18.29% of the forest area.

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9. In Puri district, out of the total forest area, 75.44% area faces mild erosion, while 4.38% area faces moderate erosion. In Cuttack district, mildly erosion can be seen in 42.31% of the forest area, while moderate erosion can be seen in 27.88% forest area.

10. Injuries to the crop is mainly by illicit felling by human agencies, to the extent of 84.65% forest area in Puri district and 87.50% of forest area in Cuttack district.

11. Moderate and light incidence of fire occurs to the extent of 1.32% and 31.58% of forest area in Puri district, and of 16.35 and 23.08% of forest area in Cuttack district.

12. 82.02% of the forest area in Puri district and 69.23% of the forest area in Cuttack district is affected by moderate to light grazing.

13. The regeneration status of the main species is unsatisfactory in the forests of both the districts.

5.2. COMPARISON WITH PAST SURVEY RESULTS

Comparison with past survey results in terms of the number of stems/ha. and volume/ha. is not possible, as no survey of this nature was carried out in these two districts in the past.

5.3. CONCLUSION

1. Both the districts, especially Puri district, falls in the mild erosion affected belts. This problem needs to be tackled now to prevent aggravation. Soil conservation measures should be adopted both by structural means as well as adopting vegetative techniques, especially on slopes and in and around waterways.

2. The forests in both Puri and Cuttack districts are subjected to maximum biotic interference especially in the form of illicit felling. This problem requires serious and urgent attention.

3. Grazing, which is detrimental to forest regeneration and deteriorates the soil condition of the forest area affecting the crop growth and composition, is prevalent in both the districts and should be controlled.

4. The percentage area of dense tree forests is low in both the districts. In Cuttack district even the area under moderate and open tree forest is comparatively low. Thus the forest density class distribution is not very satisfactory.

5. Fire is not a major problem affecting the forests of the two districts.

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6. Regeneration is absent or unsatisfactory over a greater part of the area in both Puri and Cuttack districts. It is suggested that special measures are adopted for inducing and protecting regeneration in severely affected areas both by minimising biotic interference and introducing site specific artificial regeneration.

7. Tectona grandis, the most important and valuable species is found to planted and present in almost all diameter classes in Puri district.

8. These forests which probably had good quality forests in the past, have deteriorated progressively over time. The increase in the human and livestock population in the region has led to a manifold increase in the biotic pressure on the forests of the region. The lack of employment opportunities and the reduction in the real income of the people, has led to an increase in the pressure on the forest resources. The Orissa Forest department has in the recent years, begun promoting the concept of peoples participation in forest management and protection. This along with the traditional forest protection and conservation practices that have been followed for centuries by the communities in the vicinity of the forests should yield appreciable results in improving the health of the forests. There have been demands from various quarters, for amending the Orissa Forest Act to make it more stringent. This and legislation regarding wildlife protection, environmental protection and coastal zone management have to be strictly implemented to give species under pressure like the mangroves their best chance.

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14. The Forest within Bihar and Orissa. J.W. Nicholson, 1926.

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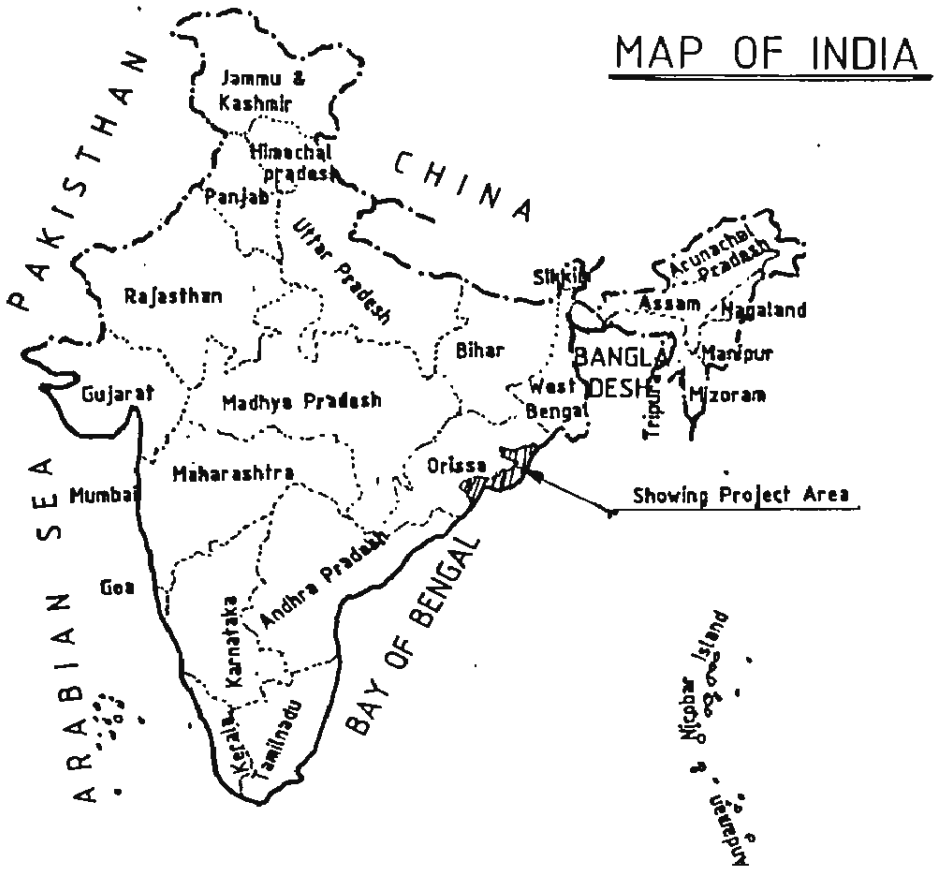
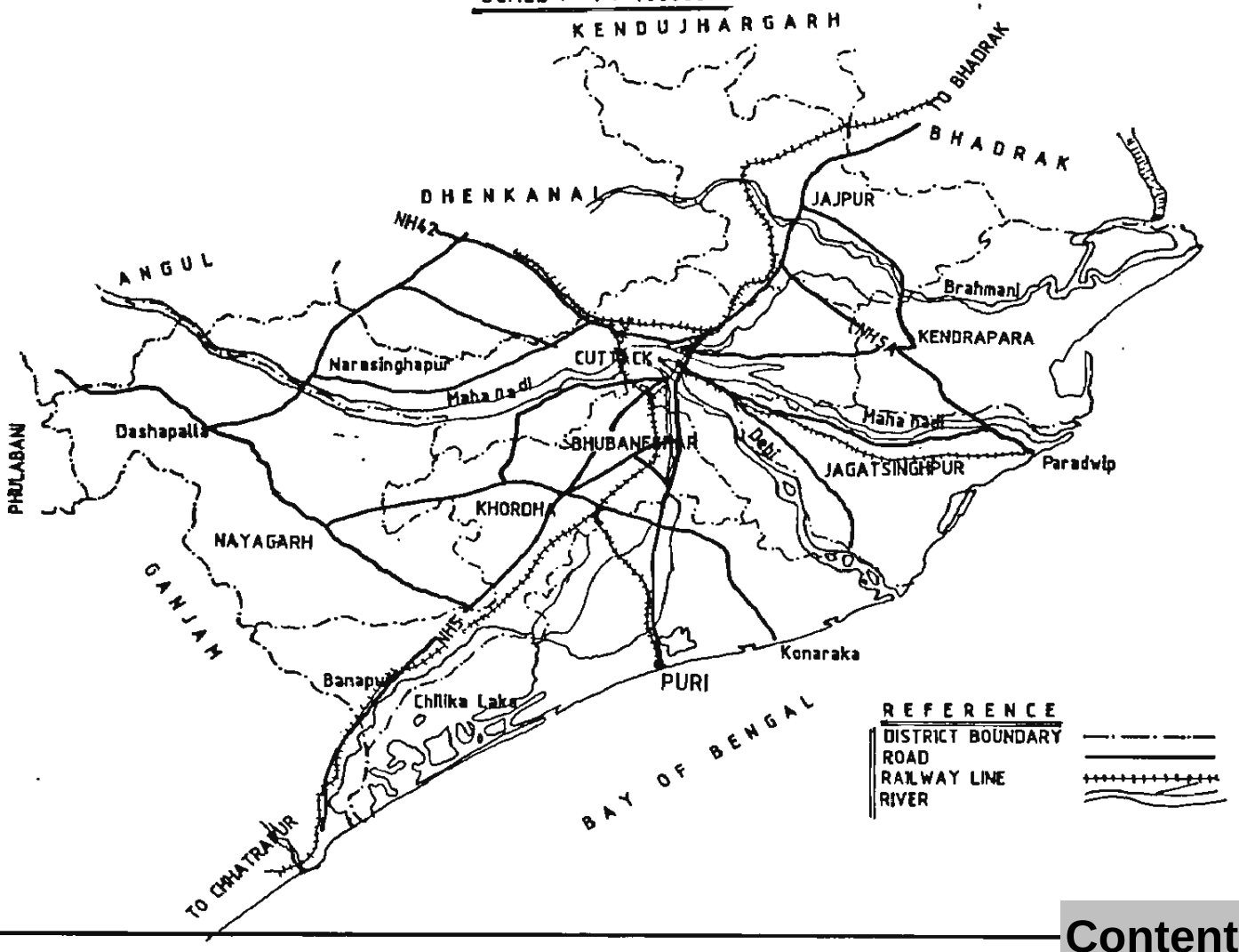


PROJECT MAP OF UNDIVIDED PURI & CUTTACK DISTRICT OF ORISSA

SCALE :- 1 : 400000



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FOREST SURVEY OF INDIA
INVENTORY DESIGN

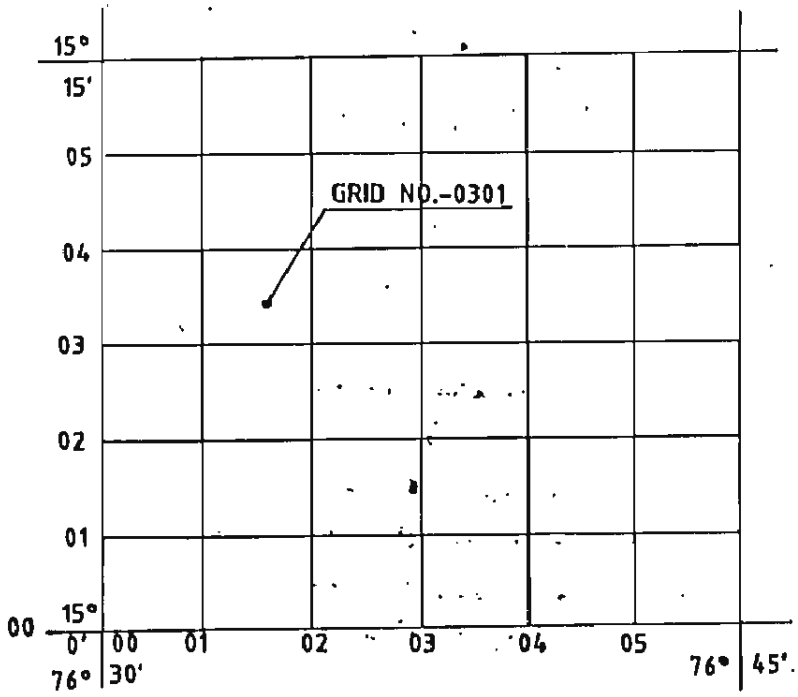
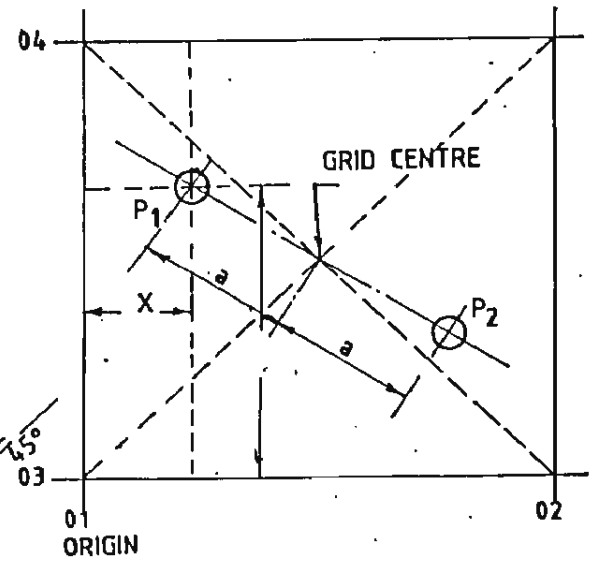


DIAGRAM-1

DIAGRAM SHOWING IDENTIFICATION OF GRIDS ON 1:50,000 OR 1:63,360 SCALE TOPO SHEETS.

DIAGRAM-2

DIAGRAM SHOWING MARKING OF PLOT IN 2 1/2 X 2 1/2 GRID 'X' & 'Y' ARE THE DISTANCES ALONG 'X' & 'Y' AXES WITH S.W. CORNER AS THE ORIGIN.



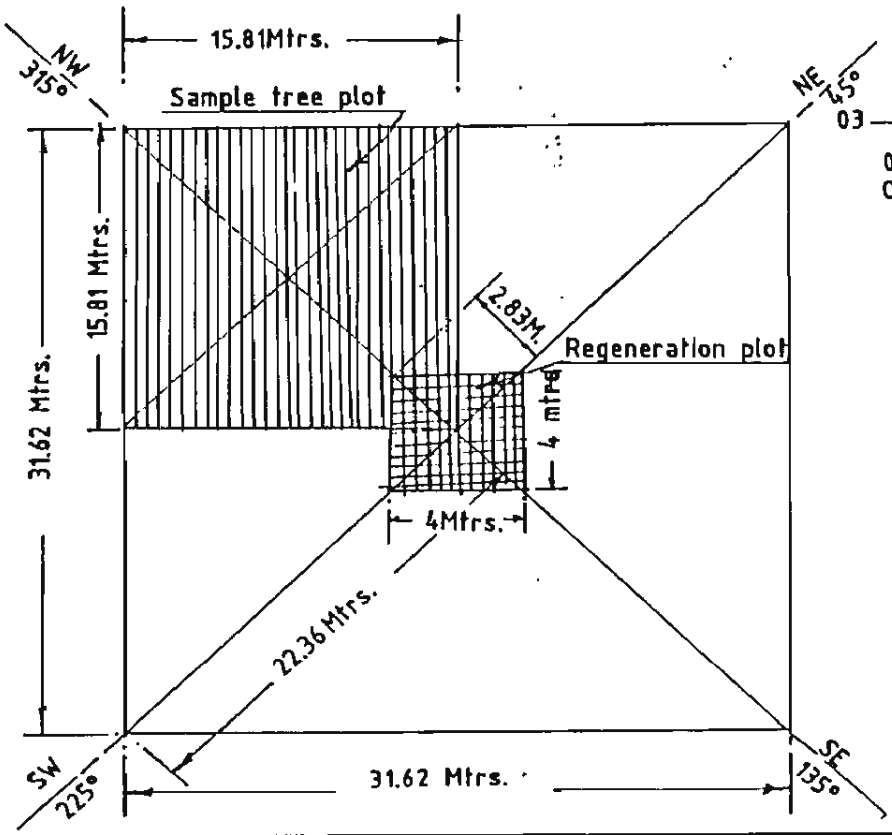


DIAGRAM-3

DIAGRAM SHOWING LAY OUT OF PLOT

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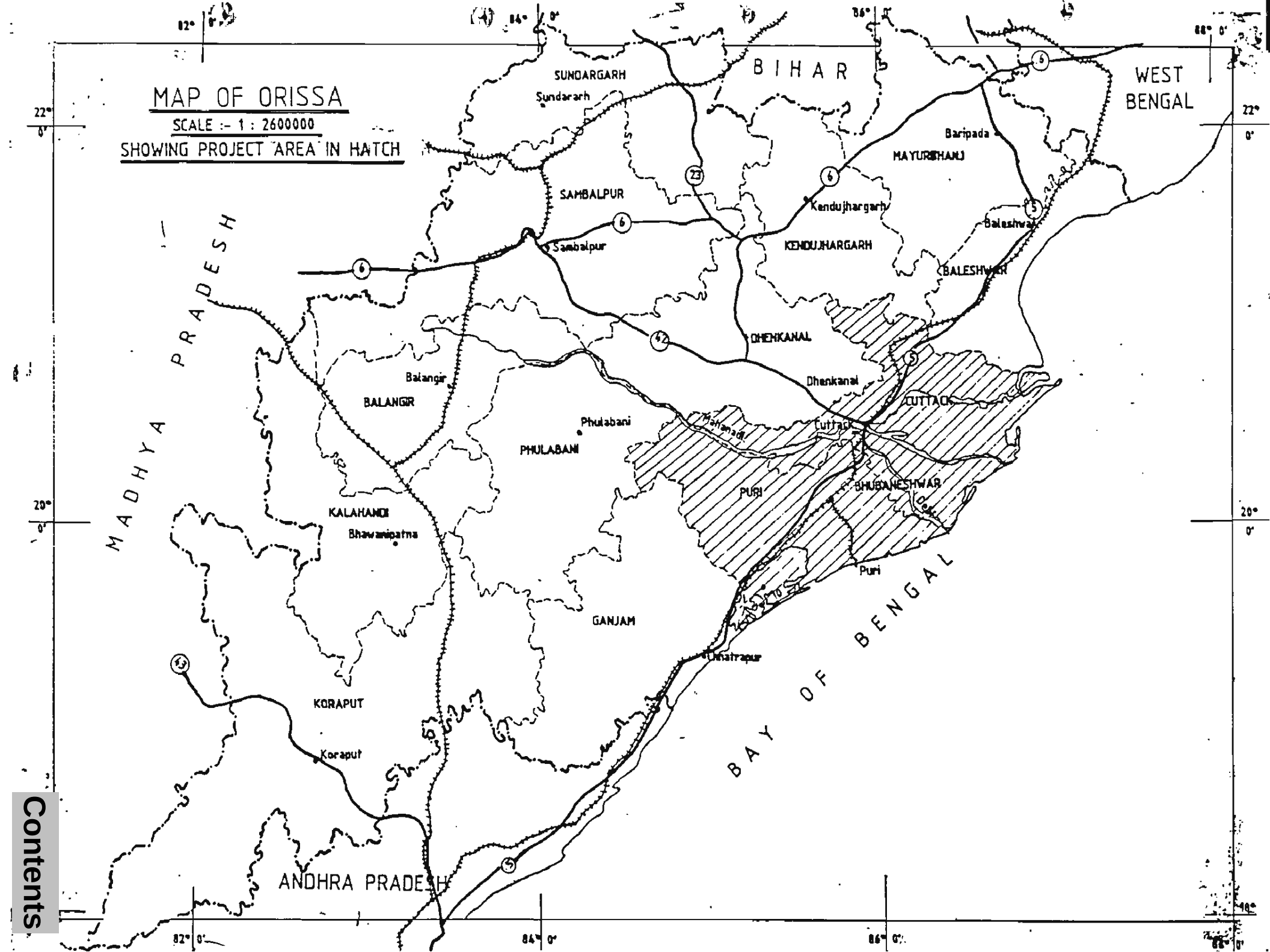
MAP OF ORISSA
SCALE :- 1 : 2600000
SHOWING PROJECT AREA IN HATCH
BIHAR
WEST BENGAL
MADHYA PRADESH
ANDHRA PRADESH
BAY OF BENGAL
SUNDARGARH
Sundararh
SAMBALPUR
Sambalpur
Baripada
MAYURBHANJ
Kendujhargarh
KENDUJHARGARH
Baleshwar
BALESHWAR
DHENKANAL
Dhenkanal
CUTTACK
Cuttack
Mahanadi
BHUBANESHWAR
PURI
Puri
Phulabani
PHULABANI
Balangir
BALANGIR
KALAHANDI
Bhawanipatna
GANJAM
Chhatrapur
KORAPUT
Koraput
82°
84°
86°
88°
22°
20°
18°

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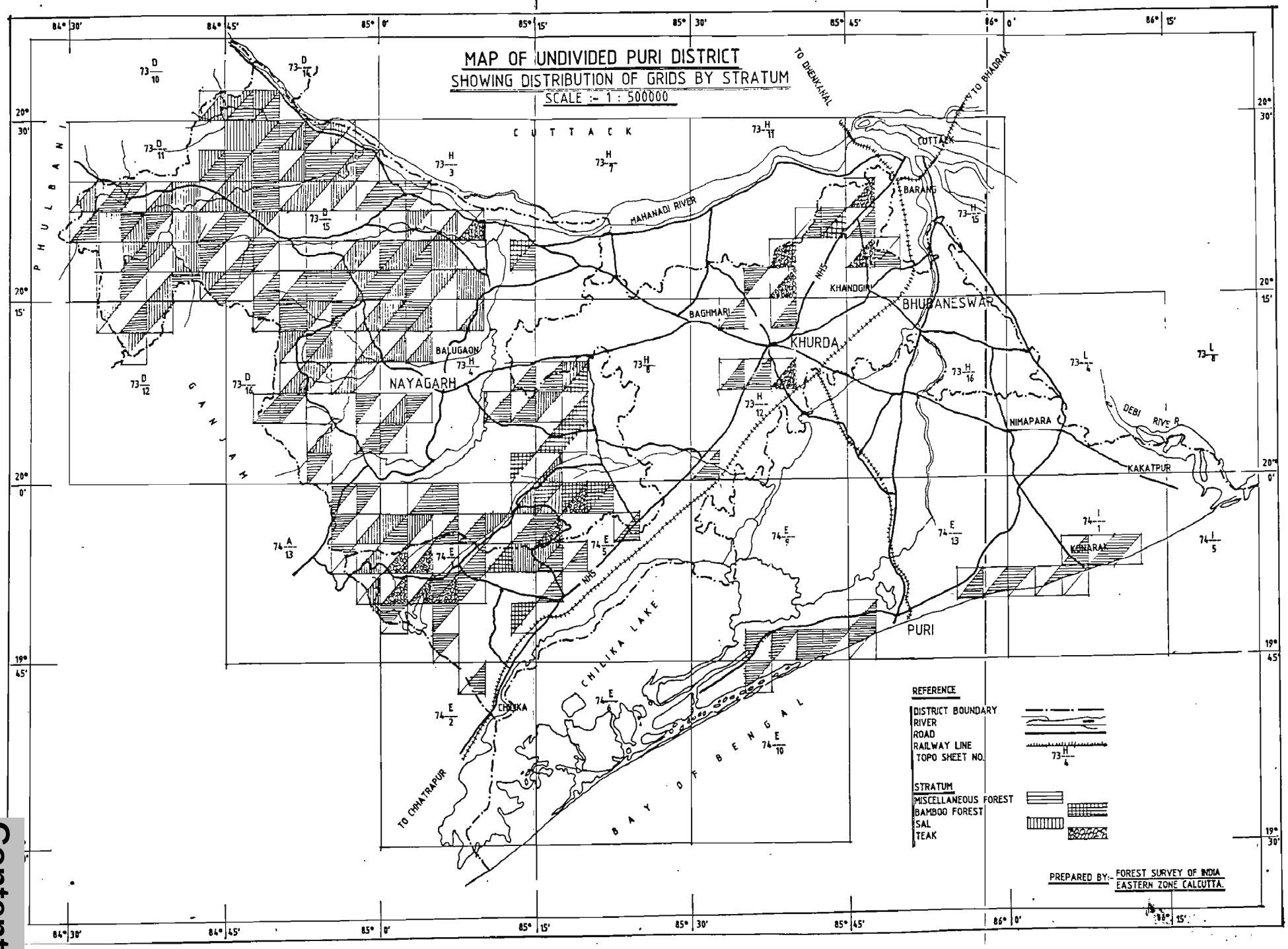
MAP OF UNDIVIDED PURI DISTRICT
SHOWING DISTRIBUTION OF GRIDS BY STRATUM
SCALE :- 1 : 500000
CUTTACK
PHULBANI
GANJAM
MAHANADI RIVER
TO DHENKANAL
TO BHADRAK
CUTTACK
BARANG
KHANDGIRI
BHUBANESWAR
BAGHMARI
KHURDA
BALUGAON
NAYAGARH
NIMAPARA
DEBI RIVER
KAKATPUR
KONARAK
PURI
CHILIKA LAKE
CHILIKA
TO CHHATRAPUR
BAY OF BENGAL
NH5
REFERENCE
DISTRICT BOUNDARY
RIVER
ROAD
RAILWAY LINE
TOPO SHEET NO.
STRATUM
MISCELLANEOUS FOREST
BAMBOO FOREST
SAL
TEAK
PREPARED BY:- FOREST SURVEY OF INDIA
EASTERN ZONE CALCUTTA.

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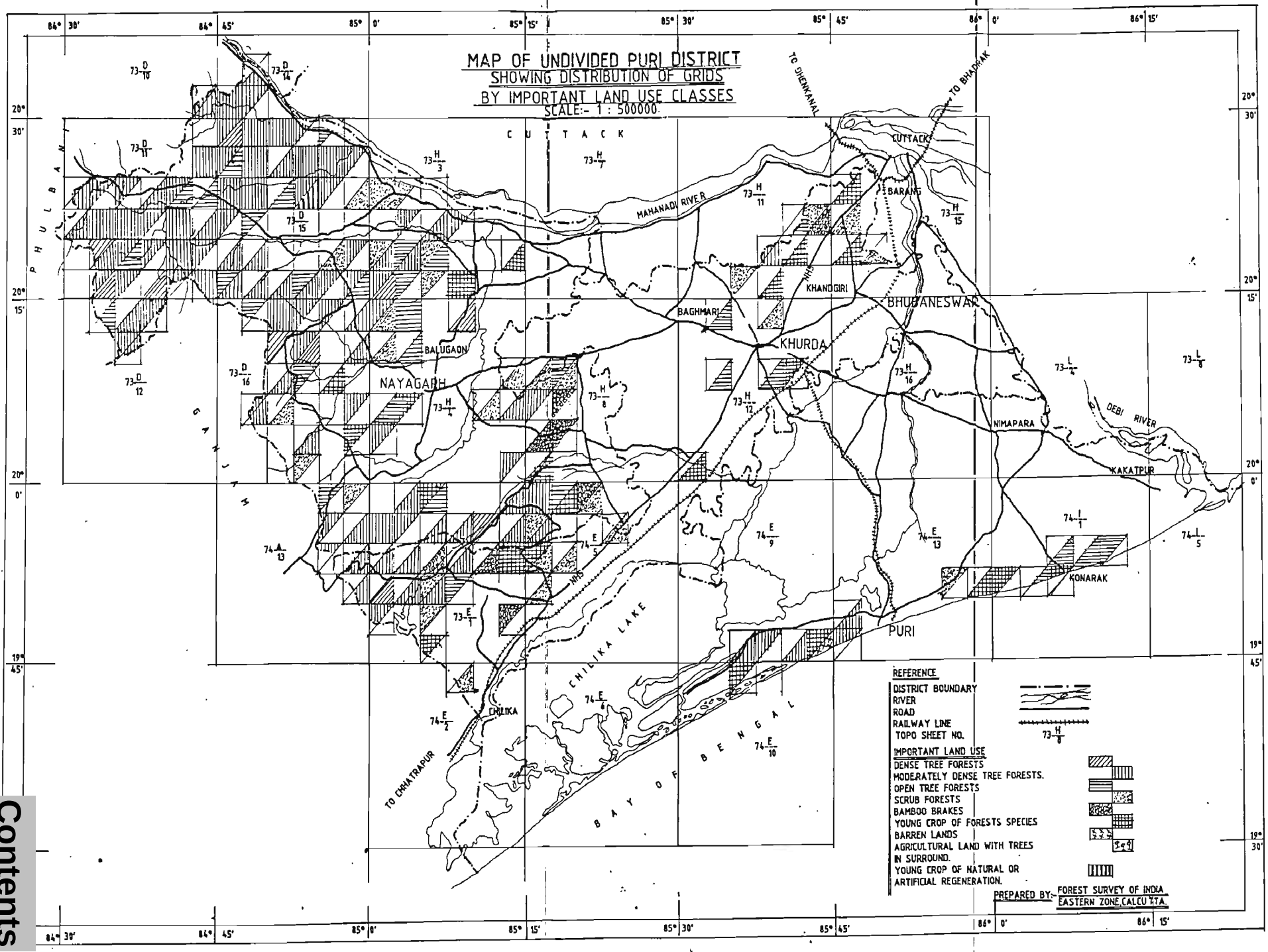
MAP OF UNDIVIDED PURI DISTRICT
SHOWING DISTRIBUTION OF GRIDS
BY IMPORTANT LAND USE CLASSES
SCALE:- 1 : 500000.
CUTTACK
PHULBANI
GANJAM
MAHANADI RIVER
TO DHENKANAL
TO BHADRAK
CUTTACK
BARANG
KHANDGIRI
BHUBANESWAR
BAGHMARI
KHURDA
BALUGAON
NAYAGARH
NIMAPARA
DEBI RIVER
KAKATPUR
KONARAK
PURI
CHILIKA LAKE
CHILIKA
TO CHHATRAPUR
BAY OF BENGAL
REFERENCE
DISTRICT BOUNDARY
RIVER
ROAD
RAILWAY LINE
TOPO SHEET NO.
IMPORTANT LAND USE
DENSE TREE FORESTS
MODERATELY DENSE TREE FORESTS.
OPEN TREE FORESTS
SCRUB FORESTS
BAMBOO BRAKES
YOUNG CROP OF FORESTS SPECIES
BARREN LANDS
AGRICULTURAL LAND WITH TREES IN SURROUND.
YOUNG CROP OF NATURAL OR ARTIFICIAL REGENERATION.
PREPARED BY:- FOREST SURVEY OF INDIA
EASTERN ZONE, CALCUTTA.

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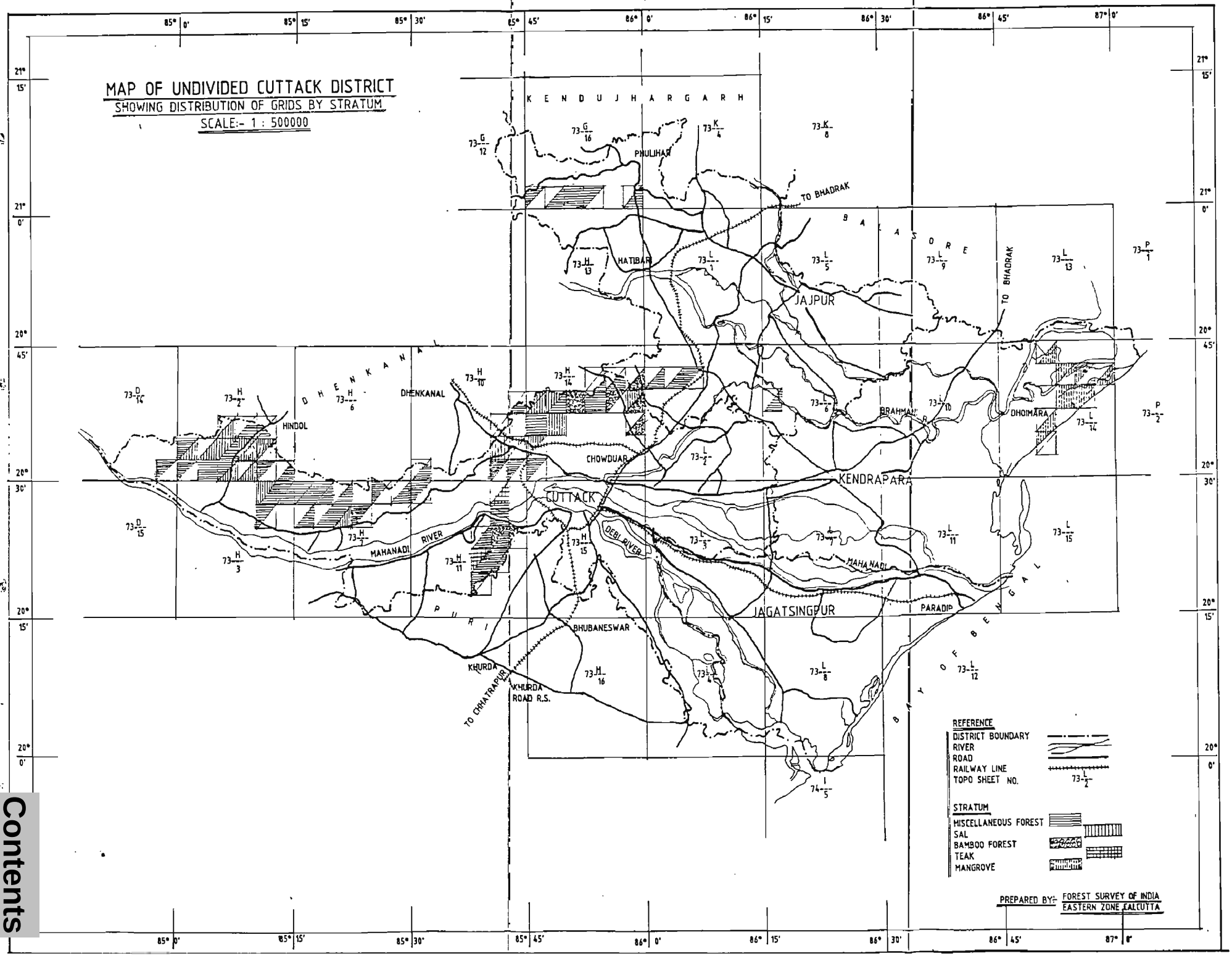
MAP OF UNDIVIDED CUTTACK DISTRICT
SHOWING DISTRIBUTION OF GRIDS BY STRATUM
SCALE:- 1 : 500000
KENDUJHARGARH
PHULHAR
TO BHADRAK
BALASORE
HATIBAR
JAJPUR
TO BHADRAK
DHENKANAL
DHENKANAL
HINDOL
CHOWDUAR
BRAHMANI R.
DHOIMARA
KENDRAPARA
CUTTACK
DEBI RIVER
MAHANADI RIVER
MAHANADI
JAGATSINGPUR
PARADIP
PURI
BHUBANESWAR
KHURDA
KHURDA ROAD R.S.
TO CHHATRAPUR
BAY OF BENGAL
REFERENCE
DISTRICT BOUNDARY
RIVER
ROAD
RAILWAY LINE
TOPO SHEET NO.
STRATUM
MISCELLANEOUS FOREST
SAL
BAMBOO FOREST
TEAK
MANGROVE
PREPARED BY:- FOREST SURVEY OF INDIA
EASTERN ZONE CALCUTTA

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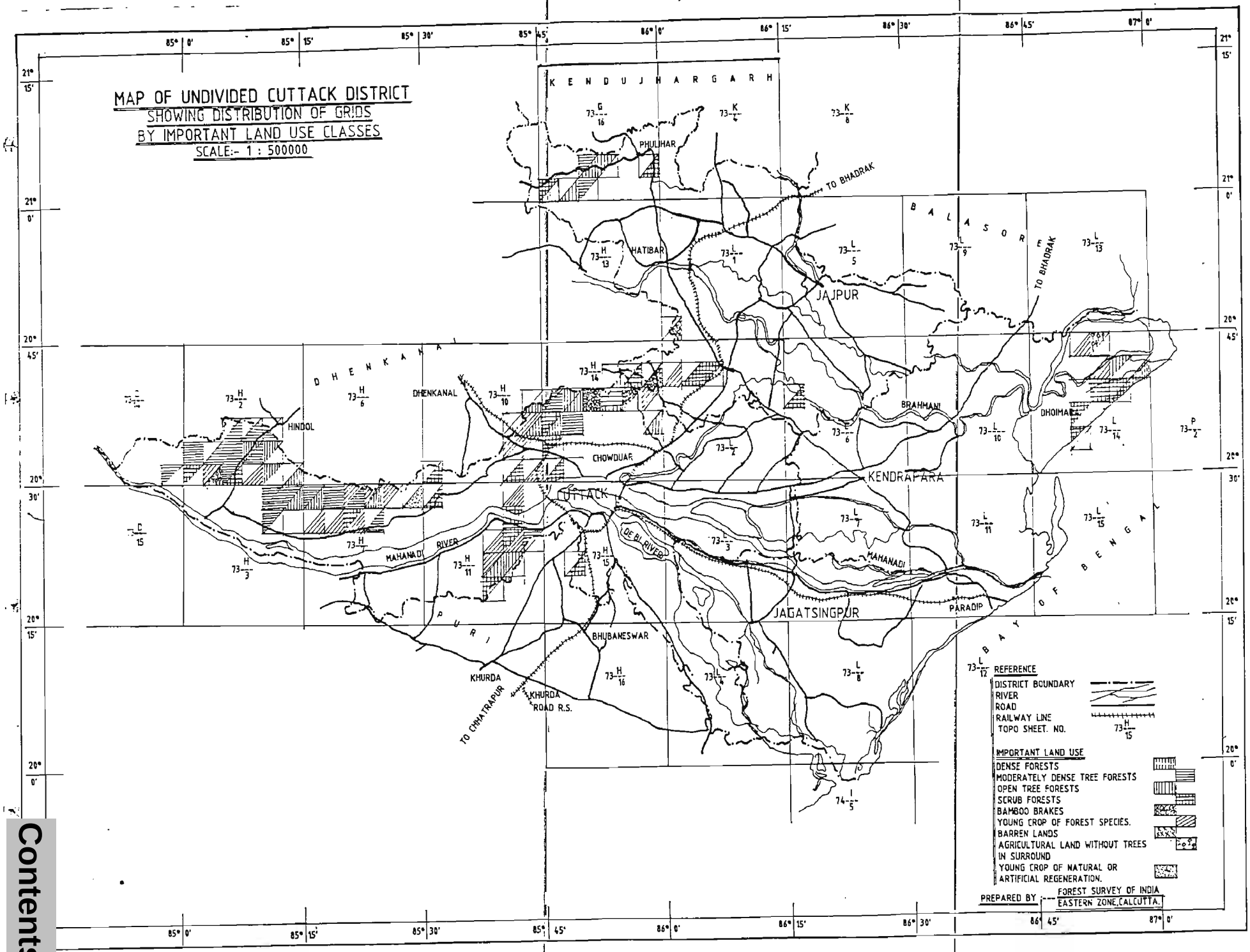
MAP OF UNDIVIDED CUTTACK DISTRICT
SHOWING DISTRIBUTION OF GRIDS
BY IMPORTANT LAND USE CLASSES
SCALE:- 1 : 500000
KENDUJHARGARH
BALASORE
PHULHAR
HATIBAR
TO BHADRAK
JAJPUR
DHENKANAL
HINDOL
CHOWDUAR
CUTTACK
KENDRAPARA
BRAHMANI
DHOIMARA
MAHANADI RIVER
DEBI RIVER
MAHANADI
JAGATSINGPUR
PARADIP
BAY OF BENGAL
PURI
BHUBANESWAR
KHURDA
KHURDA ROAD R.S.
TO CHHATRAPUR
REFERENCE
DISTRICT BOUNDARY
RIVER
ROAD
RAILWAY LINE
TOPO SHEET. NO.
IMPORTANT LAND USE
DENSE FORESTS
MODERATELY DENSE TREE FORESTS
OPEN TREE FORESTS
SCRUB FORESTS
BAMBOO BRAKES
YOUNG CROP OF FOREST SPECIES.
BARREN LANDS
AGRICULTURAL LAND WITHOUT TREES IN SURROUND
YOUNG CROP OF NATURAL OR ARTIFICIAL REGENERATION.
PREPARED BY :- FOREST SURVEY OF INDIA
EASTERN ZONE, CALCUTTA.

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PART - II

(STATISTICAL TABLES)

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Puri and Cuttack Distrcit

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1.1.3.	Do	Do	Bamboo	8
1.1.4.	Do	Do	Teak	9
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1.2.2.	Do	Do	Sal	14,15
1.2.3..	Do	Do	Bamboo	16
1.2.4.	Do	Do	Teak	17
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1.3.3.	Do	Do	Bamboo	25
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2.2.3..	Do	Do	Bamboo	45
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2.3.1.	Distribution of volume(m3)/ha. by species and diameter class (in cm.)	Do	Miscellaneous	47,48
2.3.2..	Do	Do	Sal	49,50
2.3.3.	Do	Do	Bamboo	51
2.3.4.	Do	Do	Mangrove	52
2.4.1.	Distribution of total volume (m^3) by species and diameter class (in cm.)	Do	Miscelloneous	53,54
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TABLE NO.1.1.1.

STEMS PER HECTARE(NO) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT- PURI STRATA - MISCELLANEOUS

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Acacia catechu	6	.085	.000	.000	.000	.000	.000	.000	.000	.000	.000	.085
Acacia species	14	.256	.000	.000	.000	.000	.000	.000	.000	.000	.000	.256
Adina cordifolia	28	.684	.256	.000	.000	.085	.000	.000	.000	.000	.000	1.026
Aegle marmelos	32	.940	.427	.000	.000	.000	.000	.000	.000	.000	.000	1.368
Ailanthus excelsa	40	.342	.171	.000	.000	.000	.000	.000	.000	.000	.000	.513
Albizzia lebbek	46	.342	.085	.085	.000	.085	.000	.000	.000	.000	.000	.598
Albizzia species	51	.769	.427	.171	.085	.000	.000	.000	.000	.000	.000	1.453
Anacardium occidentale	66	9.231	1.111	.342	.000	.000	.000	.000	.000	.000	.000	10.684
Anogeissus acuminata	71	.085	.000	.000	.000	.000	.000	.000	.000	.000	.000	.085
Anogeissus latifolia	72	1.966	1.026	1.453	.256	.000	.000	.000	.000	.000	.000	4.701
Azadirachta indica	103	.342	.000	.000	.000	.000	.000	.000	.000	.000	.000	.342
Bauhinia retusa	116	.171	.000	.085	.000	.000	.000	.000	.000	.000	.000	.256
Bombax ceiba	131	.256	.342	.342	.000	.085	.000	.000	.000	.000	.000	1.026
Borassus flabellifer	132	.000	.000	.085	.085	.000	.000	.000	.000	.000	.000	.171
Bridelia retusa	138	1.368	.256	.171	.000	.000	.000	.000	.000	.000	.000	1.795
Buchanania lanzan	143	2.137	.000	.085	.000	.000	.000	.000	.000	.000	.000	2.222
Bursera delpechinen	145	.940	.427	.085	.085	.085	.000	.000	.000	.000	.000	1.624
Butea monosperma	146	.171	.000	.000	.000	.000	.000	.000	.000	.000	.000	.171
Careya arborea	177	1.709	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.709
Careya nepalensis	178	.000	.085	.085	.000	.000	.000	.000	.000	.000	.000	.171
Casearia tomentosa	183	.427	.000	.000	.000	.000	.000	.000	.000	.000	.000	.427
Cassia fistula	186	.940	.256	.000	.000	.000	.000	.000	.000	.000	.000	1.197
Casurina equisetifolia	195	6.667	1.026	.427	.085	.000	.000	.000	.000	.000	.000	8.205
Chloroxylon swietenia	206	.000	.085	.000	.000	.000	.000	.000	.000	.000	.000	.085
Cleistanthus collinus	218	18.547	4.103	.342	.085	.000	.000	.000	.000	.000	.000	23.077
Cochlospermum religiosum	223	.000	.085	.000	.000	.000	.000	.000	.000	.000	.000	.085
Congea tomentosa	228	.085	.000	.000	.000	.000	.000	.000	.000	.000	.000	.085
Dalbergia latifolia	266	.256	.598	.000	.000	.000	.000	.000	.000	.000	.000	.855
Dalbergia paniculata	267	.769	.769	.684	.513	.000	.000	.085	.000	.000	.000	2.821
Dalbergia sissoo	268	.171	.000	.000	.000	.000	.000	.000	.000	.000	.000	.171

Contents

Cont. of Table No.1.1.1.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-	TOTAL
Dillenia indica	277	.000	.000	.085	.085	.000	.000	.000	.000	.000	.000	.171
Dillenia pentagyna	279	.769	.940	.256	.256	.171	.085	.000	.000	.000	.000	2.479
Diospyros melanoxylon	285	1.538	.598	.598	.342	.085	.000	.000	.000	.000	.000	3.162
Diospyros species	292	2.222	.427	.085	.085	.000	.000	.000	.000	.000	.000	2.82
Ehretia laevis	310	.085	.085	.000	.000	.000	.000	.000	.000	.000	.000	.171
Elaeocarpus glaucum	321	.171	.000	.000	.000	.000	.000	.000	.000	.000	.000	.171
Emblica officinalis	325	.598	.256	.000	.000	.000	.000	.000	.000	.000	.000	.855
Erythrina stricta	339	.000	.000	.085	.000	.000	.000	.000	.000	.000	.000	.085
Eucalyptus hybrid	346	.427	.085	.000	.000	.000	.000	.000	.000	.000	.000	.513
Eugenia species	358	.427	.256	.000	.000	.085	.000	.000	.000	.000	.000	.769
Ficus bengalensis	375	.085	.085	.171	.085	.000	.000	.000	.000	.000	.000	.427
Ficus religiosa	381	.000	.085	.000	.000	.000	.000	.000	.000	.000	.000	.085
Ficus species	385	.085	.171	.000	.000	.000	.085	.085	.000	.000	.000	.427
Flacourtia species	391	.171	.085	.000	.000	.000	.000	.000	.000	.000	.000	.256
Gardenia resinifera	405	.769	.427	.171	.000	.000	.000	.000	.000	.000	.000	1.368
Gardenia species	406	.598	.000	.000	.000	.000	.000	.000	.000	.000	.000	.598
Garuga pinnata	407	.085	.085	.000	.000	.000	.000	.000	.000	.000	.000	.171
Glochidion species	416	.513	.085	.000	.000	.000	.000	.000	.000	.000	.000	.598
Gmelina arborea	420	.000	.000	.085	.000	.000	.000	.000	.000	.000	.000	.085
Grewia tiliaefolia	431	3.846	.684	.256	.000	.000	.000	.000	.000	.000	.000	4.786
Hollarrhena antidysenteric	452	.342	.000	.000	.085	.000	.000	.000	.000	.000	.000	.427
Hopea recopholoea	461	.000	.085	.000	.000	.000	.000	.000	.000	.000	.000	.085
Hymenodictyon excelsum	470	.085	.000	.000	.085	.000	.000	.000	.000	.000	.000	.171
Ixora arborea	482	.256	.000	.000	.000	.000	.000	.000	.000	.000	.000	.256
Ixora species	485	.171	.085	.000	.000	.000	.000	.000	.000	.000	.000	.256
Kydia calycina	501	.342	.085	.000	.000	.000	.000	.000	.000	.000	.000	.427
Lagerstroemia lanceolata	504	.000	.085	.000	.000	.000	.000	.000	.000	.000	.000	.085
Lagerstroemia parviflora	505	.769	.427	.171	.085	.000	.000	.085	.000	.000	.000	1.538
Lannea coromandelica	509	4.017	.684	.256	.000	.085	.000	.000	.000	.000	.000	5.043
Madhuca latifolia	561	1.197	.684	.513	.171	.085	.000	.000	.000	.000	.000	2.650
Mallotus philippinensis	565	1.966	.513	.000	.000	.000	.000	.000	.000	.000	.000	2.479

Contents

Cont. of Table No.1.1.1.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Mallotus species	566	.000	.085	.000	.000	.000	.000	.000	.000	.000	.000	.085
Mangifera indica	569	.085	.085	.000	.000	.000	.171	.085	.000	.085	.000	.513
Melia composita	584	.256	.000	.000	.000	.000	.000	.000	.000	.000	.000	.256
Miliusa species	604	.171	.000	.000	.000	.000	.000	.000	.000	.000	.000	.171
Mitragyna parviflora	611	.085	.000	.000	.000	.000	.000	.000	.000	.000	.000	.085
Morinda tinctoria	613	.513	.085	.000	.000	.000	.000	.000	.000	.000	.000	.598
Myristica species	630	.085	.000	.000	.000	.000	.000	.000	.000	.000	.000	.085
Nauclea gageana	631	.000	.085	.000	.000	.000	.000	.000	.000	.000	.000	.085
Nyctanthes arbortristis	637	.171	.000	.000	.000	.000	.000	.000	.000	.000	.000	.171
Odina wodier	644	1.111	1.111	.769	.085	.171	.000	.000	.000	.000	.000	3.248
Ougeinia dalbergoiides	653	1.453	.855	.085	.000	.000	.000	.000	.000	.000	.000	2.393
Perishia insignis	664	.000	.085	.000	.000	.000	.000	.000	.000	.000	.000	.085
Pongamia pinnata	701	.171	.000	.000	.000	.000	.000	.000	.000	.000	.000	.171
Pterocarpus marsupium	722	.598	.171	.000	.171	.000	.000	.000	.000	.000	.000	.940
Pterospermum heyncanum	727	1.966	.598	.171	.000	.000	.000	.000	.000	.000	.000	2.735
Randia dumetorum	756	.085	.000	.000	.000	.000	.000	.000	.000	.000	.000	.085
Saccopetalum tomentosum	770	.085	.171	.000	.000	.000	.000	.000	.000	.000	.000	.256

Contents

Cont. of Table No.1.1.1.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Schleichera trijuga	795	1.624	1.282	.256	.171	.256	.171	.000	.171	.000	.000	3.932
Semecarpus anacardium	798	1.026	.342	.085	.000	.000	.000	.000	.000	.000	.000	1.453
Shorea robusta	802	1.966	.171	.171	.085	.085	.000	.000	.000	.000	.000	2.479
Soymida febrifuga	809	.598	.085	.000	.000	.000	.000	.000	.000	.000	.000	.684
Sterculia urens	820	.171	.000	.000	.000	.000	.000	.000	.000	.000	.000	.171
Sterculia villosa	821	.000	.171	.000	.000	.000	.000	.000	.000	.000	.000	.171
Stereospermum personatum	824	.085	.085	.000	.000	.000	.000	.000	.000	.000	.000	.171
Stereospermum suaveolens	825	1.368	.427	.256	.000	.000	.000	.000	.000	.000	.000	2.051
Stereospermum species	827	.085	.000	.000	.000	.000	.000	.000	.000	.000	.000	.085
Stranvaesia glaucescens	828	.085	.000	.000	.000	.000	.000	.000	.000	.000	.000	.085
Strychnos nuxvomica	831	.085	.000	.000	.000	.000	.000	.000	.000	.000	.000	.085
Strychnos potatorum	832	.342	.427	.000	.085	.000	.085	.000	.000	.000	.000	.940
Syzygium cumini	843	.256	.085	.000	.000	.000	.000	.000	.000	.000	.000	.342
Tectona grandis	858	.513	.256	.000	.000	.000	.000	.000	.000	.000	.000	.769
Terminalia belerica	861	.342	.000	.085	.000	.000	.000	.000	.000	.000	.000	.427
Terminalia chebula	864	.684	.000	.085	.000	.000	.000	.000	.000	.000	.000	.769
Terminalia citrina	865	.000	.085	.000	.085	.000	.000	.000	.000	.000	.000	.171
Terminalia crenulata	866	2.137	.769	.342	.171	.085	.085	.085	.000	.000	.000	3.675
Terminalia species	871	.427	.256	.342	.000	.000	.000	.000	.000	.000	.000	1.026
Trema orientalis	879	.085	.000	.000	.000	.000	.000	.000	.000	.000	.000	.085
Vitex penducularis	901	.598	.085	.000	.000	.000	.000	.000	.000	.000	.000	.684
Zizyphus zylopyra	929	1.966	.342	.000	.000	.085	.000	.000	.000	.000	.085	2.479
Unidentified trees	944	10.000	2.308	.769	.171	.000	.000	.000	.000	.000	.000	13.248
Acacia Auriculiformis(A06)	A06	5.726	.171	.000	.000	.000	.000	.000	.000	.000	.000	5.897
TOTAL		108.205	29.231	10.598	3.504	1.538	.684	.427	.171	.085	.085	154.530
PERCENTAGE		70.02	18.92	6.86	2.27	1.00	.44	.28	.11	.06	.06	100.00

Contents

TABLE NO.1.1.2

STEMS PER HECTARE(NO) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT- PURI STRATA - SAL

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Acacia species	14	.122	.000	.000	.000	.000	.000	.000	.000	.000	.000	.122
Adina cordifolia	28	1.341	.732	.000	.122	.244	.000	.000	.000	.000	.000	2.439
Aegle marmelos	32	.854	.122	.000	.000	.000	.000	.000	.000	.000	.000	.976
Albizzia lebbek	46	.122	.244	.000	.000	.000	.000	.000	.000	.000	.000	.366
Albizzia odoratissima	49	.488	.488	.122	.000	.000	.000	.000	.000	.000	.000	1.098
Albizzia procera	50	.244	.000	.122	.000	.000	.000	.000	.000	.000	.000	.366
Albizzia species	51	.122	.122	.000	.122	.000	.000	.000	.000	.000	.000	.366
Anogeissus latifolia	72	1.829	.976	.854	.244	.000	.000	.000	.000	.000	.000	3.902
Artocarpus heterophyllus	91	.000	.000	.000	.000	.000	.000	.000	.000	.000	.122	.122
Bauhinia retusa	116	.366	.244	.000	.000	.000	.000	.000	.000	.000	.000	.610
Bridelia retusa	138	.732	.244	.000	.122	.122	.000	.000	.000	.000	.000	1.220
Buchanania lanzan	143	12.195	.610	.000	.000	.000	.000	.000	.000	.000	.000	12.805
Bursera delpechinen	145	.488	.610	.122	.000	.000	.000	.000	.000	.000	.000	1.220
Careya arborea	177	1.707	.366	.000	.244	.000	.000	.000	.000	.000	.000	2.317
Casearia tomentosa	183	1.707	.122	.000	.000	.000	.000	.000	.000	.000	.000	1.829
Cassia fistula	186	.732	.000	.000	.000	.000	.000	.000	.000	.000	.000	.732
Chloroxylon swietenia	206	.122	.000	.000	.000	.000	.000	.000	.000	.000	.000	.122
Cleistanthus collinus	218	9.024	3.171	.488	.000	.000	.000	.000	.000	.000	.000	12.683
Dalbergia latifolia	266	.244	.000	.000	.000	.000	.000	.000	.000	.000	.000	.244
Dalbergia paniculata	267	.732	.854	.366	.122	.000	.000	.000	.000	.000	.000	2.073
Dalbergia species	269	.000	.122	.000	.000	.000	.000	.000	.000	.000	.000	.122
Dillenia pentagyna	278	.732	.488	.244	.000	.000	.000	.000	.000	.000	.000	1.463
Diospyros melanoxylon	285	2.927	1.098	.610	.122	.244	.000	.122	.000	.000	.000	5.122
Diospyros species	292	.854	.122	.000	.000	.000	.000	.000	.000	.000	.000	.976
Emblica officinalis	325	1.098	.122	.000	.000	.000	.000	.000	.000	.000	.000	1.220

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Cont. of Table No.1.1.2

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Eugenia species	358	1.220	.366	.122	.000	.000	.000	.000	.000	.000	.000	1.707
Ficus bengalensis	375	.000	.000	.000	.000	.000	.000	.000	.000	.000	.122	.122
Ficus species	385	.122	.000	.000	.000	.000	.000	.000	.000	.000	.000	.122
Flacourtia indica	389	.732	.000	.000	.000	.000	.000	.000	.000	.000	.000	.732
Flacourtia species	391	.122	.000	.000	.000	.000	.000	.000	.000	.000	.000	.122
Gardenia resinifera	405	.366	.000	.122	.000	.000	.000	.000	.000	.000	.000	.488
Glochidion species	416	.000	.122	.000	.000	.000	.000	.000	.000	.000	.000	.122
Gmelina arborea	420	.122	.000	.000	.000	.000	.000	.000	.000	.000	.000	.122
Grewia tiliaefolia	431	.732	.244	.000	.000	.000	.000	.000	.000	.000	.000	.976
Hollarrhena antidysenterica	452	1.220	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.220
Hymenodictyon excelsum	470	.244	.000	.000	.000	.000	.000	.000	.000	.000	.000	.244
Ixora species	485	.610	.000	.000	.000	.000	.000	.000	.000	.000	.000	.610
Kydia calycina	501	.732	.366	.000	.000	.000	.000	.000	.000	.000	.000	1.098
Lagerstroemia parviflora	505	1.707	.366	.122	.000	.000	.000	.000	.000	.000	.000	2.195
Lannea coromandelica	509	1.829	.854	.244	.000	.000	.000	.000	.000	.000	.000	2.927
Macranga peltata	548	.000	.000	.122	.000	.000	.000	.000	.000	.000	.000	.122
Madhuca latifolia	561	5.854	1.220	.610	.366	.122	.000	.122	.000	.000	.000	8.293
Mallotus philippinensis	565	3.049	.244	.000	.000	.000	.000	.000	.000	.000	.000	3.293
Mangifera indica	569	.000	.000	.000	.000	.000	.000	.000	.122	.000	.000	.122
Mitragyna parviflora	611	.244	.610	.000	.122	.122	.000	.000	.000	.000	.000	1.098
Morinda tinctoria	613	1.098	.122	.000	.000	.000	.000	.000	.000	.000	.000	1.220
Morus laevigata	617	.122	.000	.000	.000	.000	.000	.000	.000	.000	.000	.122
Nyctanthes arbortristis	637	.122	.000	.000	.000	.000	.000	.000	.000	.000	.000	.122
Odina wodier	644	.610	.122	.122	.000	.000	.000	.000	.000	.000	.000	.854
Ougeinia dalbergoiides	653	.610	1.098	.366	.000	.000	.000	.000	.000	.000	.000	2.073
Polyalthia species	699	.122	.000	.000	.000	.000	.000	.000	.000	.000	.000	.122
Pterocarpus marsupium	722	1.585	.610	.122	.122	.000	.000	.000	.000	.000	.000	2.439
Pterospermum heyncanum	727	.976	.244	.122	.000	.000	.000	.000	.000	.000	.000	1.341
Saccopetalum tomentosum	770	.244	.244	.000	.000	.000	.000	.000	.000	.000	.000	.488

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Cont. of Table No.1.1.2

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Schleichera trijuga	795	1.341	.122	.244	.366	.366	.122	.000	.122	.000	.000	2.683
Semecarpus anacardium	798	2.317	.244	.000	.000	.000	.000	.000	.000	.000	.000	2.561
Shorea robusta	802	66.829	21.585	14.146	5.366	.610	.122	.000	.000	.000	.000	108.657
Soymida febrifuga	809	.610	.122	.000	.000	.000	.000	.000	.000	.000	.000	.732
Stereospermum suaveolens	825	.732	.366	.244	.000	.000	.000	.000	.000	.000	.000	1.341
Stereospermum species	827	.000	.122	.000	.000	.000	.000	.000	.000	.000	.000	.122
Strychnos nuxvomica	831	.122	.244	.000	.000	.000	.000	.000	.000	.000	.000	.366
Syzygium cumini	843	2.195	1.220	.610	.000	.000	.000	.000	.000	.000	.000	4.024
Terminalia belerica	861	.854	.488	.000	.000	.000	.000	.000	.000	.000	.000	1.341
Terminalia chebula	864	.854	.488	.122	.122	.000	.000	.000	.000	.000	.000	1.585
Terminalia citrina	865	.122	.000	.000	.000	.000	.000	.000	.000	.000	.000	.122
Terminalia crenulata	866	7.317	1.341	.854	.244	.000	.000	.000	.000	.000	.000	9.756
Terminalia species	871	.122	.000	.000	.122	.000	.000	.000	.000	.000	.000	.244
Vitex penducularis	901	.244	.000	.000	.000	.000	.000	.000	.000	.000	.000	.244
Zanthoxylum rhetsa	914	.000	.000	.000	.000	.000	.000	.000	.000	.122	.000	.122
Zizyphus xylopyra	929	.366	.122	.000	.000	.000	.000	.000	.000	.000	.000	.488
Unidentified trees	944	5.732	.610	.488	.000	.000	.000	.000	.000	.000	.000	6.829
TOTAL		152.925	44.756	21.707	7.927	1.829	.244	.244	.244	.122	.244	230.242
PERCENTAGE		66.42	19.44	9.43	3.44	.79	.11	.11	.11	.05	.11	100.00

Contents

TABLE NO.1.1.3.

STEMS PER HECTARE(NO) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT- PURI STRATA - BAMBOO

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Acacia species	14	.833	.833	.000	.000	.000	.000	.000	.000	.000	.000	1.667
Bridelia retusa	138	1.667	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.667
Feronia limonia	395	.833	.000	.000	.000	.000	.000	.000	.000	.000	.000	.833
Ixora arborea	482	.833	.000	.000	.000	.000	.000	.000	.000	.000	.000	.833
Lagerstroemia parviflora	505	1.667	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.667
Odina wodier	644	1.667	2.500	.000	.000	.000	.000	.000	.000	.000	.000	4.167
Syzygium cumini	843	.833	.000	.000	.000	.000	.000	.000	.000	.000	.000	.833
Unidentified trees	944	2.500	.833	.000	.000	.000	.000	.000	.000	.000	.000	3.335
TOTAL		10.833	4.167	.000	.000	.000	.000	.000	.000	.000	.000	15.000
PERCENTAGE		72.22	27.78	.00	.00	.00	.00	.00	.00	.00	.00	100.00

Contents

TABLE NO.1.1.4

STEMS PER HECTARE(NO) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT- PURI STRATA - TEAK

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Adina cordifolia	28	.000	.769	.000	.000	.000	.000	.000	.000	.000	.000	.769
Albizzia species	51	.769	.000	.000	.000	.000	.000	.000	.000	.000	.000	.769
Bauhinia species	118	1.538	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.538
Bombax ceiba	131	.769	.000	.000	.000	.000	.000	.000	.000	.000	.000	.769
Bridelia retusa	138	6.923	3.077	.000	.000	.000	.000	.000	.000	.000	.000	10.000
Dillenia pentagyna	278	.769	.000	.000	.000	.000	.000	.000	.000	.000	.000	.769
Ficus species	385	1.538	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.538
Glochidion species	416	.000	.769	.000	.000	.000	.000	.000	.000	.000	.000	.769
Gmelina arborea	420	.000	.769	.000	.000	.000	.000	.000	.000	.000	.000	.769
Grewia tiliaefolia	431	2.308	.000	.000	.000	.000	.000	.000	.000	.000	.000	2.308
Hollarrhena antidysenterica	452	.769	.000	.000	.000	.000	.000	.000	.000	.000	.000	.769
Lagerstroemia parviflora	505	3.077	.000	.000	.000	.000	.000	.000	.000	.000	.000	3.077
Macranga peltata	548	1.538	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.538
Mallotus philippinensis	565	6.923	.769	.000	.769	.000	.000	.000	.000	.000	.000	8.462
Mangifera indica	569	.769	.000	.000	.000	.000	.000	.000	.000	.000	.000	.769
Odina wodier	644	.000	.000	.769	.000	.000	.000	.000	.000	.000	.000	.769
Strychnos nuxvomica	831	.769	.000	.000	.000	.000	.000	.000	.000	.000	.000	.769
Syzygium cumini	843	.769	.000	.000	.000	.000	.000	.000	.000	.000	.000	.769
Tectona grandis	858	60.769	6.923	10.000	5.385	1.538	.769	.000	.769	.769	.000	86.923
Terminalia crenulata	866	1.538	.769	.000	.000	.000	.000	.000	.000	.000	.000	2.308
Unidentified trees	944	20.000	1.538	.769	.000	.000	.000	.000	.000	.000	.000	22.308
TOTAL		111.538	15.385	11.538	6.154	1.538	.769	.000	.769	.769	.000	148.461
PERCENTAGE		75.13	10.36	7.77	4.15	1.04	.52	.00	.52	.52	.00	100.00

Contents

TABLE NO.1.2.1.

TOTAL STEMS(IN NO.) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT - PURI STRATA-:MISCELLANEOUS.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Acacia catechu	6	10603	0	0	0	0	0	0	0	0	0	10603
Acacia species	14	31935	0	0	0	0	0	0	0	0	0	31935
Adina cordifolia	28	85326	31935	0	0	10603	0	0	0	0	0	127990
Aegle marmelos	32	117262	53266	0	0	0	0	0	0	0	0	170653
Ailanthus excelsa	40	42663	21331	0	0	0	0	0	0	0	0	63995
Albizzia lebbek	46	42663	10603	10603	0	10603	0	0	0	0	0	74598
Albizzia species	51	95930	53266	21331	10603	0	0	0	0	0	0	181257
Anacardium occidentale	66	1151539	138593	42663	0	0	0	0	0	0	0	1332797
Anogeissus acuminata	71	10603	0	0	0	0	0	0	0	0	0	10603
Anogeissus latifolia	72	245252	127990	181257	31935	0	0	0	0	0	0	586435
Azadirachta indica	103	42663	0	0	0	0	0	0	0	0	0	42663
Bauhinia retusa	116	21331	0	10603	0	0	0	0	0	0	0	31935
Bombax ceiba	131	31935	42663	42663	0	10603	0	0	0	0	0	127990
Borassus flabellifer	132	0	0	10603	10603	0	0	0	0	0	0	21331
Bridelia retusa	138	170653	31935	21331	0	0	0	0	0	0	0	223920
Buchanania lanzan	143	266584	0	10603	0	0	0	0	0	0	0	277187
Bursera delpechinen	145	117262	53266	10603	10603	10603	0	0	0	0	0	202589
Butea monosperma	146	21331	0	0	0	0	0	0	0	0	0	21331
Careya arborea	177	213192	0	0	0	0	0	0	0	0	0	213192
Careya nepalensis	178	0	10603	10603	0	0	0	0	0	0	0	21331
Casearia tomentosa	183	53266	0	0	0	0	0	0	0	0	0	53266
Cassia fistula	186	117262	31935	0	0	0	0	0	0	0	0	149322
Casurina equisetifolia	195	831688	127990	53266	10603	0	0	0	0	0	0	1023549
Chloroxylon swietenia	206	0	10603	0	0	0	0	0	0	0	0	10603
Cleistanthus collinus	218	2313682	511836	42663	10603	0	0	0	0	0	0	2878786
Cochlospermum religiosum	223	0	10603	0	0	0	0	0	0	0	0	10603
Congea tomentosa	228	10603	0	0	0	0	0	0	0	0	0	10603
Dalbergia latifolia	266	31935	74598	0	0	0	0	0	0	0	0	106658
Dalbergia paniculata	267	95930	95930	85326	63995	0	0	10603	0	0	0	351911

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Cont. of Table No.1.2.1.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Dalbergia sissoo	268	21331	0	0	0	0	0	0	0	0	0	21331
Dillenia indica	277	0	0	10603	10603	0	0	0	0	0	0	21331
Dillenia pentagyna	278	95930	117262	31935	31935	21331	10603	0	0	0	0	309247
Diospyros melanoxylon	285	191860	74598	74598	42663	10603	0	0	0	0	0	394450
Diospyros species	292	277187	53266	10603	10603	0	0	0	0	0	0	351911
Ehretia laevis	310	10603	10603	0	0	0	0	0	0	0	0	21331
Elaeodendron glaucum	321	21331	0	0	0	0	0	0	0	0	0	21331
Emblica officinalis	325	74598	31935	0	0	0	0	0	0	0	0	106658
Erythrina stricta	339	0	0	10603	0	0	0	0	0	0	0	10603
Eucalyptus hybrid	346	53266	10603	0	0	0	0	0	0	0	0	63995
Eugenia species	358	53266	31935	0	0	10603	0	0	0	0	0	95930
Ficus bengalensis	375	10603	10603	21331	10603	0	0	0	0	0	0	53266
Ficus religiosa	381	0	10603	0	0	0	0	0	0	0	0	10603
Ficus species	385	10603	21331	0	0	0	10603	10603	0	0	0	53266
Flacourtia species	391	21331	10603	0	0	0	0	0	0	0	0	31935
Gardenia resinifera	405	95930	53266	21331	0	0	0	0	0	0	0	170653
Gardenia species	406	74598	0	0	0	0	0	0	0	0	0	74598
Garuga pinnata	407	10603	10603	0	0	0	0	0	0	0	0	21331
Glochidion species	416	63995	10603	0	0	0	0	0	0	0	0	74598
Gmelina arborea	420	0	0	10603	0	0	0	0	0	0	0	10603
Grewia tiliaefolia	431	479776	85326	31935	0	0	0	0	0	0	0	597039
Hollarrhena antidysenteric	452	42663	0	0	10603	0	0	0	0	0	0	53266
Hopea recopholoea	461	0	10603	0	0	0	0	0	0	0	0	10603
Hymenodictyon excelsum	470	10603	0	0	10603	0	0	0	0	0	0	21331
Ixora arborea	482	31935	0	0	0	0	0	0	0	0	0	31935
Ixora species	485	21331	10603	0	0	0	0	0	0	0	0	31935
Kydia calycina	501	42663	10603	0	0	0	0	0	0	0	0	53266
Lagerstroemia lanceolata	504	0	10603	0	0	0	0	0	0	0	0	10603
Lagerstroemia parviflora	505	95930	53266	21331	10603	0	0	10603	0	0	0	191860
Lannea coromandelica	509	501108	85326	31935	0	10603	0	0	0	0	0	629099
Madhuca latifolia	561	149322	85326	63995	21331	10603	0	0	0	0	0	330579
Mallotus philippinensis	565	245252	63995	0	0	0	0	0	0	0	0	309247
llotus species	566	0	10603	0	0	0	0	0	0	0	0	10603
ngifera indica	569	10603	10603	0	0	0	21331	10603	0	10603	0	63995
lia composita	584	31935	0	0	0	0	0	0	0	0	0	31935

Cont. of Table No.1.2.1.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Millusa species	604	21331	0	0	0	0	0	0	0	0	0	21331
Mitragyna parviflora	611	10603	0	0	0	0	0	0	0	0	0	10603
Morinda tinctoria	613	63995	10603	0	0	0	0	0	0	0	0	74598
Myristica species	630	10603	0	0	0	0	0	0	0	0	0	10603
Nauclea gageana	631	0	10603	0	0	0	0	0	0	0	0	10603
Nyctanthes arbortristis	637	21331	0	0	0	0	0	0	0	0	0	21331
Odina wodier	644	138593	138593	95930	10603	21331	0	0	0	0	0	405178
Ougeinia dalbergoiides	653	181257	106658	10603	0	0	0	0	0	0	0	298519
Perishia insignis	664	0	10603	0	0	0	0	0	0	0	0	10603
Pongamia pinnata	701	21331	0	0	0	0	0	0	0	0	0	21331
Pterocarpus marsupium	722	74598	21331	0	21331	0	0	0	0	0	0	117262
Pterospermum heyncanum	727	245252	74598	21331	0	0	0	0	0	0	0	341183
Randia dumetorum	756	10603	0	0	0	0	0	0	0	0	0	10603
Saccopetalum tomentosum	770	10603	21331	0	0	0	0	0	0	0	0	31935
Schleichera trijuga	795	202589	159925	31935	21331	31935	21331	0	21331	0	0	490505

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Cont. of Table No.1.2.1.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Semecarpus anacardium	798	127990	42663	10603	0	0	0	0	0	0	0	181257
Shorea robusta	802	245252	21331	21331	10603	10603	0	0	0	0	0	309247
Soymida febrifuga	809	74598	10603	0	0	0	0	0	0	0	0	85326
Sterculia urens	820	21331	0	0	0	0	0	0	0	0	0	21331
Sterculia villosa	821	0	21331	0	0	0	0	0	0	0	0	21331
Stereospermum personatum	824	10603	10603	0	0	0	0	0	0	0	0	21331
Stereospermum suaveolens	825	170653	53266	31935	0	0	0	0	0	0	0	255856
Stereospermum species	827	10603	0	0	0	0	0	0	0	0	0	10603
Strambaesia glaucescens	828	10603	0	0	0	0	0	0	0	0	0	10603
Strychnos nux-vomica	831	10603	0	0	0	0	0	0	0	0	0	10603
Strychnos potatorum	832	42663	53266	0	10603	0	10603	0	0	0	0	117262
Syzygium cumini	843	31935	10603	0	0	0	0	0	0	0	0	42663
Tectona grandis	858	63995	31935	0	0	0	0	0	0	0	0	95930
Terminalia belerica	861	42663	0	10603	0	0	0	0	0	0	0	53266
Terminalia crebula	864	85326	0	10603	0	0	0	0	0	0	0	95930
Terminalia citrina	865	0	10603	0	10603	0	0	0	0	0	0	21331
Terminalia crenulata	866	266584	95930	42663	21331	10603	10603	10603	0	0	0	458445
Terminalia species	871	53266	31935	42663	0	0	0	0	0	0	0	127990
Trema orientalis	879	10603	0	0	0	0	0	0	0	0	0	10603
Vitex penducularis	901	74598	10603	0	0	0	0	0	0	0	0	85326
Zizyphus xylopyra	929	245252	42663	0	0	10603	0	0	0	0	10603	309247
Unidentified trees	944	1247470	287916	95930	21331	0	0	0	0	0	0	1652648
Acacia Auriculiformis(A06)	A06	714301	21331	0	0	0	0	0	0	0	0	735633
TOTAL		013498249	3646479	1322068	437113	191860	85326	53266	21331	10603	10603	19277154

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TABLE NO.1.2.2.

TOTAL STEMS(IN NO.) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT - PURI STRATA-: SAL

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Acacia species	14	10666	0	0	0	0	0	0	0	0	0	10666
Adina cordifolia	28	117243	63998	0	10666	21332	0	0	0	0	0	213241
Aegle marmelos	32	74665	10666	0	0	0	0	0	0	0	0	85331
Albizzia lebbek	46	10666	21332	0	0	0	0	0	0	0	0	31999
Albizzia odoratissima	49	42665	42665	10666	0	0	0	0	0	0	0	95998
Albizzia procera	50	21332	0	10666	0	0	0	0	0	0	0	31999
Albizzia species	51	10666	10666	0	10666	0	0	0	0	0	0	31999
Anogeissus latifolia	72	159909	85331	74665	21332	0	0	0	0	0	0	341151
Artocarpus heterophyllus	91	0	0	0	0	0	0	0	0	0	10666	10666
Bauhinia retusa	116	31999	21332	0	0	0	0	0	0	0	0	53332
Bridelia retusa	138	63998	21332	0	10666	10666	0	0	0	0	0	106664
Buchanania lanzan	143	1066208	53332	0	0	0	0	0	0	0	0	1119541
Bursera delpechinen	145	42665	53332	10666	0	0	0	0	0	0	0	106664
Careya arborea	177	149243	31999	0	21332	0	0	0	0	0	0	202575
Casearia tomentosa	183	149243	10666	0	0	0	0	0	0	0	0	159909
Cassia fistula	186	63998	0	0	0	0	0	0	0	0	0	63998
Chloroxylon swietenia	206	10666	0	0	0	0	0	0	0	0	0	10666
Cleistanthus collinus	218	788968	277240	42665	0	0	0	0	0	0	0	1108874
Dalbergia latifolia	266	21332	0	0	0	0	0	0	0	0	0	21332
Dalbergia paniculata	267	63998	74665	31999	10666	0	0	0	0	0	0	181242
Dalbergia species	269	0	10666	0	0	0	0	0	0	0	0	10666
Dillenia pentagyna	278	63998	42665	21332	0	0	0	0	0	0	0	127910
Diospyros melanoxylon	285	255907	95998	53332	10666	21332	0	10666	0	0	0	447816
Diospyros species	292	74665	10666	0	0	0	0	0	0	0	0	85331
Emblica officinalis	325	95998	10666	0	0	0	0	0	0	0	0	106664
Eugenia species	358	106664	31999	10666	0	0	0	0	0	0	0	149243
Ficus bengalensis	375	0	0	0	0	0	0	0	0	0	10666	10666
Ficus species	385	10666	0	0	0	0	0	0	0	0	0	10666
Flacourtia indica	389	63998	0	0	0	0	0	0	0	0	0	63998
Flacourtia species	391	10666	0	0	0	0	0	0	0	0	0	10666
Gardenia resinifera	405	31999	0	10666	0	0	0	0	0	0	0	42665
Lochidion species	416	0	10666	0	0	0	0	0	0	0	0	10666
Melina arborea	420	10666	0	0	0	0	0	0	0	0	0	10666
Mitrewia tiliaefolia	431	63998	21332	0	0	0	0	0	0	0	0	85331

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Cont. of Table No.1.2.2.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Hollarrhena antidysenterica	452	106664	0	0	0	0	0	0	0	0	0	106664
Hymenodictyon excelsum	470	21332	0	0	0	0	0	0	0	0	0	21332
Ixora species	485	53332	0	0	0	0	0	0	0	0	0	53332
Kydia calycina	501	63998	31999	0	0	0	0	0	0	0	0	95998
Lagerstroemia parviflora	505	149243	31999	10666	0	0	0	0	0	0	0	191908
Lannea coromandelica	509	159909	74665	21332	0	0	0	0	0	0	0	255907
Macranga peltata	548	0	0	10666	0	0	0	0	0	0	0	10666
Madhuca latifolia	561	511815	106664	53332	31999	10666	0	10666	0	0	0	725057
Mallotus philippinensis	565	266574	21332	0	0	0	0	0	0	0	0	287907
Mangifera indica	569	0	0	0	0	0	0	0	10666	0	0	10666
Mitragyna parviflora	611	21332	53332	0	10666	10666	0	0	0	0	0	95998
Morinda tinctoria	613	95998	10666	0	0	0	0	0	0	0	0	106664
Morus laevigata	617	10666	0	0	0	0	0	0	0	0	0	10666
Nyctanthes arbortristis	637	10666	0	0	0	0	0	0	0	0	0	10666
Odina wodier	644	53332	10666	10666	0	0	0	0	0	0	0	74665
Ougeinia dalbergoiides	653	53332	95998	31999	0	0	0	0	0	0	0	181242
Polyalthia species	699	10666	0	0	0	0	0	0	0	0	0	10666
Pterocarpus marsupium	722	138576	53332	10666	10666	0	0	0	0	0	0	213241
Pterospermum heyncanum	727	85331	21332	10666	0	0	0	0	0	0	0	117243
Saccopetalum tomentosum	770	21332	21332	0	0	0	0	0	0	0	0	42665
Schleichera trijuga	795	117243	10666	21332	31999	31999	10666	0	10666	0	0	234574
Semecarpus anacardium	798	202575	21332	0	0	0	0	0	0	0	0	223908
Shorea robusta	802	5842859	1887176	1236784	469149	53332	10666	0	0	0	0	9499881
Soymida febrifuga	809	53332	10666	0	0	0	0	0	0	0	0	63998
Stereospermum suaveolens	825	63998	31999	21332	0	0	0	0	0	0	0	117243
Stereospermum species	827	0	10666	0	0	0	0	0	0	0	0	10666
Strychnos nuxvomica	831	10666	21332	0	0	0	0	0	0	0	0	31999
Syzygium cumini	843	191908	106664	53332	0	0	0	0	0	0	0	351818
Terminalia belerica	861	74665	42665	0	0	0	0	0	0	0	0	117243
Terminalia chebula	864	74665	42665	10666	10666	0	0	0	0	0	0	138576
Terminalia citrina	865	10666	0	0	0	0	0	0	0	0	0	10666
Terminalia crenulata	866	639725	117243	74665	21332	0	0	0	0	0	0	852967
Terminalia species	871	10666	0	0	10666	0	0	0	0	0	0	21332
Vitex penducularis	901	21332	0	0	0	0	0	0	0	0	0	21332
Xanthophyllum rhetsa	914	0	0	0	0	0	0	0	0	10666	0	10666
Zizyphus zylopyra	929	31999	10666	0	0	0	0	0	0	0	0	42665
Unidentified trees	944	501148	53332	42665	0	0	0	0	0	0	0	597059
TOTAL		013370233	3913017	1897843	693057	159909	21332	21332	21332	10666	21332	20130058

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TABLE NO.1.2.3.

TOTAL STEMS(IN NO.) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT - PURI STRATA-: BAMBOO

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Acacia species	14	10657	10657	0	0	0	0	0	0	0	0	21327
Bridelia retusa	138	21327	0	0	0	0	0	0	0	0	0	21327
Feronia limonia	395	10657	0	0	0	0	0	0	0	0	0	10657
Ixora arborea	482	10657	0	0	0	0	0	0	0	0	0	10657
Lagerstroemia parviflora	505	21327	0	0	0	0	0	0	0	0	0	21327
Odina wodier	644	21327	31985	0	0	0	0	0	0	0	0	53312
Syzygium cumini	843	10657	0	0	0	0	0	0	0	0	0	10657
Unidentified trees	944	31985	10657	0	0	0	0	0	0	0	0	42642
TOTAL		138597	53312	0	0	0	0	0	0	0	0	191910

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TABLE NO.1.2.4.

TOTAL STEMS(IN NO.) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT - PURI STRATA-: TEAK

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Adina cordifolia	28	0	10659	0	0	0	0	0	0	0	0	10659
Albizzia species	51	10659	0	0	0	0	0	0	0	0	0	10659
Bauhinia species	118	21318	0	0	0	0	0	0	0	0	0	21318
Bombax ceiba	131	10659	0	0	0	0	0	0	0	0	0	10659
Bridelia retusa	138	95959	42650	0	0	0	0	0	0	0	0	138610
Dillenia pentagyna	278	10659	0	0	0	0	0	0	0	0	0	10659
Ficus species	385	21318	0	0	0	0	0	0	0	0	0	21318
Glochidion species	416	0	10659	0	0	0	0	0	0	0	0	10659
Gmelina arborea	420	0	10659	0	0	0	0	0	0	0	0	10659
Grewia tiliaefolia	431	31991	0	0	0	0	0	0	0	0	0	31991
Holiarrhena antidysenterica	452	10659	0	0	0	0	0	0	0	0	0	10659
Laderstroemia parviflora	505	42650	0	0	0	0	0	0	0	0	0	42650
Macranga peltata	548	21318	0	0	0	0	0	0	0	0	0	21318
Mallotus philippinensis	565	95959	10659	0	10659	0	0	0	0	0	0	117291
Mangifera indica	569	10659	0	0	0	0	0	0	0	0	0	10659
Odina wodier	644	0	0	10659	0	0	0	0	0	0	0	10659
Strychnos nuxvomica	831	10659	0	0	0	0	0	0	0	0	0	10659
Syzygium cumini	843	10659	0	0	0	0	0	0	0	0	0	10659
Tectona grandis	858	842319	95959	138610	74641	21318	10659	0	10659	10659	0	1204839
Terminalia crenulata	866	21318	10659	0	0	0	0	0	0	0	0	31991
Unidentified trees	944	277220	21318	10659	0	0	0	0	0	0	0	309211
TOTAL		1546028	213251	159928	85300	21318	10659	0	10659	10659	0	2057817

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TABLE NO.1.3.1.

VOLUME(IN M3) PER HECTARE BY SPECIES AND DIAMETERCLASSES(IN CM.)

DISTRICT- PURI STRATA-MISCELLANEOUS

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Acacia catechu	6	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003
Acacia species	14	.013	.000	.000	.000	.000	.000	.000	.000	.000	.000	.013
Adina cordifolia	28	.035	.065	.000	.000	.178	.000	.000	.000	.000	.000	.278
Aegle marmelos	32	.062	.071	.000	.000	.000	.000	.000	.000	.000	.000	.134
Ailanthus excelsa	40	.019	.040	.000	.000	.000	.000	.000	.000	.000	.000	.059
Albizzia lebbek	46	.033	.017	.048	.000	.188	.000	.000	.000	.000	.000	.285
Albizzia species	51	.050	.080	.113	.121	.000	.000	.000	.000	.000	.000	.364
Anacardium occidentale	66	.517	.205	.161	.000	.000	.000	.000	.000	.000	.000	.883
Anogeissus acuminata	71	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003
Anogeissus latifolia	72	.179	.404	1.283	.345	.000	.000	.000	.000	.000	.000	2.210
Azadirachta indica	103	.023	.000	.000	.000	.000	.000	.000	.000	.000	.000	.023
Bauhinia retusa	116	.007	.000	.060	.000	.000	.000	.000	.000	.000	.000	.067
Bombax ceiba	131	.006	.083	.213	.000	.169	.000	.000	.000	.000	.000	.473
Borassus flabellifer	132	.000	.000	.052	.078	.000	.000	.000	.000	.000	.000	.130
Bridelia retusa	138	.121	.059	.103	.000	.000	.000	.000	.000	.000	.000	.282
Buchanania lanzan	143	.131	.000	.045	.000	.000	.000	.000	.000	.000	.000	.175
Bursera delpechinen	145	.071	.122	.045	.115	.159	.000	.000	.000	.000	.000	.511
Butea monosperma	146	.019	.000	.000	.000	.000	.000	.000	.000	.000	.000	.019
Careya arborea	177	.117	.000	.000	.000	.000	.000	.000	.000	.000	.000	.117
Careya nepalensis	178	.000	.013	.064	.000	.000	.000	.000	.000	.000	.000	.077
Casearia tomentosa	183	.018	.000	.000	.000	.000	.000	.000	.000	.000	.000	.018
Cassia fistula	186	.051	.071	.000	.000	.000	.000	.000	.000	.000	.000	.122
Casurina equisetifolia	195	.363	.218	.199	.078	.000	.000	.000	.000	.000	.000	.858
Chloroxylon swietenia	206	.000	.023	.000	.000	.000	.000	.000	.000	.000	.000	.023
Cleistanthus collinus	218	1.215	.846	.168	.061	.000	.000	.000	.000	.000	.000	2.290
Cochlospermum religiosum	223	.000	.029	.000	.000	.000	.000	.000	.000	.000	.000	.029
Congea tomentosa	228	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003
Dalbergia latifolia	266	.009	.124	.000	.000	.000	.000	.000	.000	.000	.000	.133
Dalbergia paniculata	267	.056	.218	.440	.607	.000	.000	.316	.000	.000	.000	1.637
Dalbergia sissoo	268	.010	.000	.000	.000	.000	.000	.000	.000	.000	.000	.010

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Cont. of Table No.1.3.1.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Dillenia indica	277	.000	.000	.064	.098	.000	.000	.000	.000	.000	.000	.162
Dillenia pentagyna	278	.053	.206	.144	.285	.360	.203	.000	.000	.000	.000	1.251
Diospyros melanoxylon	285	.074	.210	.411	.444	.173	.000	.000	.000	.000	.000	1.313
Diospyros species	292	.124	.089	.069	.078	.000	.000	.000	.000	.000	.000	.360
Ehretia laevis	310	.003	.015	.000	.000	.000	.000	.000	.000	.000	.000	.017
Elaeodendron glaucum	321	.021	.000	.000	.000	.000	.000	.000	.000	.000	.000	.021
Emblica officinalis	325	.030	.048	.000	.000	.000	.000	.000	.000	.000	.000	.078
Erythrina stricta	339	.000	.000	.064	.000	.000	.000	.000	.000	.000	.000	.064
Eucalyptus hybrid	346	.027	.029	.000	.000	.000	.000	.000	.000	.000	.000	.055
Eugenia species	358	.038	.046	.000	.000	.146	.000	.000	.000	.000	.000	.230
Ficus bengalensis	375	.008	.021	.108	.103	.000	.000	.000	.000	.000	.000	.240
Ficus religiosa	381	.000	.013	.000	.000	.000	.000	.000	.000	.000	.000	.013
Ficus species	385	.003	.031	.000	.000	.000	.203	.336	.000	.000	.000	.573
Flacourtia species	391	.007	.013	.000	.000	.000	.000	.000	.000	.000	.000	.019
Gardenia resinifera	405	.036	.119	.098	.000	.000	.000	.000	.000	.000	.000	.253
Gardenia species	406	.040	.000	.000	.000	.000	.000	.000	.000	.000	.000	.040
Garuga pinnata	407	.002	.019	.000	.000	.000	.000	.000	.000	.000	.000	.022
Glochidion species	416	.022	.013	.000	.000	.000	.000	.000	.000	.000	.000	.035
Gmelina arborea	420	.000	.000	.041	.000	.000	.000	.000	.000	.000	.000	.041
Grewia tiliaefolia	431	.246	.136	.170	.000	.000	.000	.000	.000	.000	.000	.552
Hollarrhena antidysenterica	452	.012	.000	.000	.093	.000	.000	.000	.000	.000	.000	.105
Hopea recopholoea	461	.000	.032	.000	.000	.000	.000	.000	.000	.000	.000	.032
Hymenodictyon excelsum	470	.004	.000	.000	.121	.000	.000	.000	.000	.000	.000	.125
Ixora arborea	482	.022	.000	.000	.000	.000	.000	.000	.000	.000	.000	.022
Ixora species	485	.017	.019	.000	.000	.000	.000	.000	.000	.000	.000	.035
Kydia calycina	501	.028	.021	.000	.000	.000	.000	.000	.000	.000	.000	.049
Lagerstroemia lanceolata	504	.000	.035	.000	.000	.000	.000	.000	.000	.000	.000	.035
Lagerstroemia parviflora	505	.047	.123	.105	.126	.000	.000	.348	.000	.000	.000	.750
Lannea coromandelica	509	.187	.161	.145	.000	.117	.000	.000	.000	.000	.000	.610

Contents

Cont. of Table No.1.3.1.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Madhuca latifolia	561	.073	.163	.268	.230	.133	.000	.000	.000	.000	.000	.866
Mallotus philippinensis	565	.113	.115	.000	.000	.000	.000	.000	.000	.000	.000	.228
Mallotus species	566	.000	.013	.000	.000	.000	.000	.000	.000	.000	.000	.013
Mangifera indica	569	.009	.035	.000	.000	.000	.496	.297	.000	.566	.000	1.403
Melia composita	584	.015	.000	.000	.000	.000	.000	.000	.000	.000	.000	.015
Miliusa species	604	.008	.000	.000	.000	.000	.000	.000	.000	.000	.000	.008
Mitragyna parviflora	611	.004	.000	.000	.000	.000	.000	.000	.000	.000	.000	.004
Morinda tinctoria	613	.034	.013	.000	.000	.000	.000	.000	.000	.000	.000	.047
Myristica species	630	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003
Nauclea gageana	631	.000	.015	.000	.000	.000	.000	.000	.000	.000	.000	.015
Nyctanthes arbortristis	637	.010	.000	.000	.000	.000	.000	.000	.000	.000	.000	.010
Odina wodier	644	.065	.287	.460	.088	.291	.000	.000	.000	.000	.000	1.191
Ougeinia dalbergoides	653	.101	.186	.048	.000	.000	.000	.000	.000	.000	.000	.335
Perishia insignis	664	.000	.017	.000	.000	.000	.000	.000	.000	.000	.000	.017
Pongamia pinnata	701	.007	.000	.000	.000	.000	.000	.000	.000	.000	.000	.007
Pterocarpus marsupium	722	.045	.048	.000	.200	.000	.000	.000	.000	.000	.000	.294
Pterospermum heyncanum	727	.125	.134	.076	.000	.000	.000	.000	.000	.000	.000	.334
Randia dumetorum	756	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003
Saccopetalum tomentosum	770	.003	.055	.000	.000	.000	.000	.000	.000	.000	.000	.058
Schleichera trijuga	795	.090	.329	.138	.218	.519	.495	.000	.886	.000	.000	2.677
Semecarpus anacardium	798	.056	.056	.038	.000	.000	.000	.000	.000	.000	.000	.151
Shorea robusta	802	.102	.052	.113	.100	.183	.000	.000	.000	.000	.000	.550
Soymida febrifuga	809	.025	.032	.000	.000	.000	.000	.000	.000	.000	.000	.057
Sterculia urens	820	.010	.000	.000	.000	.000	.000	.000	.000	.000	.000	.010
Sterculia villosa	821	.000	.035	.000	.000	.000	.000	.000	.000	.000	.000	.035

Contents

Cont. of Table No.1.3.1.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Stereospermum personatum	824	.008	.015	.000	.000	.000	.000	.000	.000	.000	.000	.023
Stereospermum suaveolens	825	.082	.110	.157	.000	.000	.000	.000	.000	.000	.000	.349
Stereospermum species	827	.007	.000	.000	.000	.000	.000	.000	.000	.000	.000	.007
Stranvaesia glaucescens	828	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003
Strychnos nuxvomica	831	.009	.000	.000	.000	.000	.000	.000	.000	.000	.000	.009
Strychnos potatorum	832	.017	.087	.000	.088	.000	.219	.000	.000	.000	.000	.410
Syzygium cumini	843	.012	.019	.000	.000	.000	.000	.000	.000	.000	.000	.031
Tectona grandis	858	.023	.050	.000	.000	.000	.000	.000	.000	.000	.000	.073
Terminalia belerica	861	.018	.000	.038	.000	.000	.000	.000	.000	.000	.000	.056
Terminalia chebula	864	.047	.000	.041	.000	.000	.000	.000	.000	.000	.000	.088
Terminalia citrina	865	.000	.023	.000	.093	.000	.000	.000	.000	.000	.000	.116
Terminalia crenulata	866	.121	.188	.224	.244	.191	.280	.434	.000	.000	.000	1.684
Terminalia species	871	.020	.048	.215	.000	.000	.000	.000	.000	.000	.000	.284
Trema orientalis	879	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003
Vitex penducularis	901	.036	.015	.000	.000	.000	.000	.000	.000	.000	.000	.051
Zizyphus zylopyra	929	.105	.071	.000	.000	.133	.000	.000	.000	.000	.632	.941
Acacia Auriculiformis(A06)	943	.311	.027	.000	.000	.000	.000	.000	.000	.000	.000	.339
Unidentified trees	944	.594	.510	.476	.170	.000	.000	.000	.000	.000	.000	1.750
TOTAL		6.506	6.829	6.705	4.182	2.939	1.896	1.732	.886	.566	.632	32.873

Contents

TABLE NO.1.3.2.

VOLUME(IN M3) PER HECTARE BY SPECIES AND DIAMETERCLASSES(IN CM.)

DISTRICT- PURI STRATA-SAL

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Acacia species	14	.008	.000	.000	.000	.000	.000	.000	.000	.000	.000	.008
Adina cordifolia	28	.110	.194	.000	.142	.463	.000	.000	.000	.000	.000	.909
Aegle marmelos	32	.039	.021	.000	.000	.000	.000	.000	.000	.000	.000	.060
Albizzia lebbek	46	.007	.047	.000	.000	.000	.000	.000	.000	.000	.000	.054
Albizzia odorotissima	49	.046	.161	.054	.000	.000	.000	.000	.000	.000	.000	.260
Albizzia procera	50	.008	.000	.069	.000	.000	.000	.000	.000	.000	.000	.077
Albizzia species	51	.007	.024	.000	.148	.000	.000	.000	.000	.000	.000	.178
Anogeissus latifolia	72	.173	.337	.744	.349	.000	.000	.000	.000	.000	.000	1.603
Artocarous heterophyllus	91	.000	.000	.000	.000	.000	.000	.000	.000	.000	.902	.902
Bauhinia retusa	116	.023	.055	.000	.000	.000	.000	.000	.000	.000	.000	.078
Bridelia retusa	138	.038	.078	.000	.184	.249	.000	.000	.000	.000	.000	.549
Buchanania lanzan	143	.603	.149	.000	.000	.000	.000	.000	.000	.000	.000	.752
Bursera delpechinen	145	.046	.115	.069	.000	.000	.000	.000	.000	.000	.000	.230
Careya arborea	177	.095	.082	.000	.292	.000	.000	.000	.000	.000	.000	.468
Casearia tomentosa	183	.083	.027	.000	.000	.000	.000	.000	.000	.000	.000	.109
Cassia fistula	186	.042	.000	.000	.000	.000	.000	.000	.000	.000	.000	.042
Chloroxylon swietenia	206	.004	.000	.000	.000	.000	.000	.000	.000	.000	.000	.004
Cleistanthus collinus	218	.583	.628	.266	.000	.000	.000	.000	.000	.000	.000	1.477
Dalbergia latifolia	266	.017	.000	.000	.000	.000	.000	.000	.000	.000	.000	.017
Dalbergia paniculata	267	.053	.210	.226	.140	.000	.000	.000	.000	.000	.000	.628
Dalbergia species	269	.000	.018	.000	.000	.000	.000	.000	.000	.000	.000	.018
Dillenia pentagyna	278	.038	.152	.144	.000	.000	.000	.000	.000	.000	.000	.334
Diospyros melanoxylon	285	.169	.361	.375	.152	.455	.000	.476	.000	.000	.000	1.988
Diospyros species	292	.050	.024	.000	.000	.000	.000	.000	.000	.000	.000	.073
Emblica officinalis	325	.062	.021	.000	.000	.000	.000	.000	.000	.000	.000	.083
Eugenia species	358	.091	.094	.092	.000	.000	.000	.000	.000	.000	.000	.277
Ficus bengalensis	375	.000	.000	.000	.000	.000	.000	.000	.000	.000	.902	.902
Ficus species	385	.010	.000	.000	.000	.000	.000	.000	.000	.000	.000	.010
Flacourtia indica	389	.037	.000	.000	.000	.000	.000	.000	.000	.000	.000	.037
Flacourtia species	391	.004	.000	.000	.000	.000	.000	.000	.000	.000	.000	.004

Contents

Cont. of Table No. 1.3.2.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Gardenia resinifera	405	.026	.000	.098	.000	.000	.000	.000	.000	.000	.000	.124
Glochidion species	416	.000	.030	.000	.000	.000	.000	.000	.000	.000	.000	.030
Gmelina arborea	420	.006	.000	.000	.000	.000	.000	.000	.000	.000	.000	.006
Grewia tiliaefolia	431	.047	.086	.000	.000	.000	.000	.000	.000	.000	.000	.134
Hollarrhena antidysenterica	452	.048	.000	.000	.000	.000	.000	.000	.000	.000	.000	.048
Hymenodictyor excelsum	470	.014	.000	.000	.000	.000	.000	.000	.000	.000	.000	.014
Ixora species	485	.044	.000	.000	.000	.000	.000	.000	.000	.000	.000	044
Kydia calycina	501	.039	.097	.000	.000	.000	.000	.000	.000	.000	.000	.136
Lagerstroemia parviflora	505	.084	.092	.072	.000	.000	.000	.000	.000	.000	.000	.248
Lannea coromandelica	509	.086	.209	.099	.000	.000	.000	.000	.000	.000	.000	.394
Macranga peltata	548	.000	.000	.054	.000	.000	.000	.000	.000	.000	.000	.054
Madhuca latifolia	561	.304	.303	.403	.467	.237	.000	.523	.000	.000	.000	2.236
Mallotus philippinensis	565	.166	.051	.000	.000	.000	.000	.000	.000	.000	.000	.218
Mangifera indica	569	.000	.000	.000	.000	.000	.000	.000	.649	.000	.000	.649
Mitragyna parviflora	611	.014	.107	.000	.148	.189	.000	.000	.000	.000	.000	.458
Morinda tinctoria	613	.054	.018	.000	.000	.000	.000	.000	.000	.000	.000	.072
Morus laevigata	617	.010	.000	.000	.000	.000	.000	.000	.000	.000	.000	.010
Nyctanthes arbortristis	637	.005	.000	.000	.000	.000	.000	.000	.000	.000	.000	.005
Odina wodier	644	.036	.033	.098	.000	.000	.000	.000	.000	.000	.000	.167
Ougeinia dalbergoiides	653	.056	.266	.250	.000	.000	.000	.000	.000	.000	.000	.572
Polyalthia species	699	.004	.000	.000	.000	.000	.000	.000	.000	.000	.000	.004
Pterocarpus marsupium	722	.127	.214	.109	.147	.000	.000	.000	.000	.000	.000	.596
Pterospermum heyncanum	727	.039	.051	.074	.000	.000	.000	.000	.000	.000	.000	.165

Contents

Cont. of Table No. 1.3.2.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Saccopetalum tomentosum	770	.015	.036	.000	.000	.000	.000	.000	.000	.000	.000	.052
Schleichera trijuga	795	.088	.027	.122	.391	.701	.347	.000	.632	.000	.000	2.308
Semecarpus anacardium	798	.135	.062	.000	.000	.000	.000	.000	.000	.000	.000	.196
Shorea robusta	802	4.070	6.053	9.907	6.584	1.173	.415	.000	.000	.000	.000	28.203
Soymida febrifuga	809	.024	.018	.000	.000	.000	.000	.000	.000	.000	.000	.043
Stereospermum suaveolens	825	.055	.077	.132	.000	.000	.000	.000	.000	.000	.000	.264
Stereospermum species	827	.000	.024	.000	.000	.000	.000	.000	.000	.000	.000	.024
Strychnos nuxvomica	831	.008	.039	.000	.000	.000	.000	.000	.000	.000	.000	.047
Syzygium cumini	843	.129	.328	.400	.000	.000	.000	.000	.000	.000	.000	.857
Terminalia belerica	861	.039	.101	.000	.000	.000	.000	.000	.000	.000	.000	.140
Terminalia chebula	864	.045	.107	.059	.156	.000	.000	.000	.000	.000	.000	.366
Terminalia citrina	865	.005	.000	.000	.000	.000	.000	.000	.000	.000	.000	.005
Terminalia crenulata	866	.471	.391	.654	.307	.000	.000	.000	.000	.000	.000	1.822
Terminalia species	871	.007	.000	.000	.125	.000	.000	.000	.000	.000	.000	.132
Vitex penducularis	901	.017	.000	.000	.000	.000	.000	.000	.000	.000	.000	.017
Zanthophyllum rhetsa	914	.000	.000	.000	.000	.000	.000	.000	.000	.807	.000	.807
Zizyphus zylopyra	929	.028	.018	.000	.000	.000	.000	.000	.000	.000	.000	.046
Unidentified trees	944	.288	.135	.305	.000	.000	.000	.000	.000	.000	.000	.727
TOTAL		9.080	11.770	14.873	9.730	3.468	.762	.999	1.281	.807	1.805	54.574

Contents

TABLE NO.1.3.3.

VOLUME(IN M3) PER HECTARE BY SPECIES AND DIAMETERCLASSES(IN CM.)

DISTRICT- PURI STRATA-BAMBOO

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Acacia species	14	.034	.142	.000	.000	.000	.000	.000	.000	.000	.000	.175
Bridelia retusa	138	.070	.000	.000	.000	.000	.000	.000	.000	.000	.000	.070
Feronia limonia	395	.026	.000	.000	.000	.000	.000	.000	.000	.000	.000	.026
Ixora arborea	482	.034	.000	.000	.000	.000	.000	.000	.000	.000	.000	.034
Lagerstroemia parviflora	505	.069	.000	.000	.000	.000	.000	.000	.000	.000	.000	.069
Odina wodier	644	.059	.617	.000	.000	.000	.000	.000	.000	.000	.000	.676
Syzygium cumini	843	.047	.000	.000	.000	.000	.000	.000	.000	.000	.000	.047
Unidentified trees	944	.122	.142	.000	.000	.000	.000	.000	.000	.000	.000	.263
TOTAL		.460	.900	.000	.000	.000	.000	.000	.000	.000	.000	1.360

Contents

TABLE NO.1.3.4

VOLUME(IN M3) PER HECTARE BY SPECIES AND DIAMETERCLASSES(IN CM.)

DISTRICT- PURI STRATA-TEAK

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Adina cordifolia	28	.000	.230	.000	.000	.000	.000	.000	.000	.000	.000	.230
Albizzia species	51	.024	.000	.000	.000	.000	.000	.000	.000	.000	.000	.024
Bauhinia species	118	.147	.000	.000	.000	.000	.000	.000	.000	.000	.000	.147
Bombax ceiba	131	.070	.000	.000	.000	.000	.000	.000	.000	.000	.000	.070
Bridelia retusa	138	.756	.697	.000	.000	.000	.000	.000	.000	.000	.000	1.453
Dillenia pentagyna	278	.037	.000	.000	.000	.000	.000	.000	.000	.000	.000	.037
Ficus species	385	.138	.000	.000	.000	.000	.000	.000	.000	.000	.000	.138
Glochicion species	416	.000	.168	.000	.000	.000	.000	.000	.000	.000	.000	.168
Gmelina arborea	420	.000	.114	.000	.000	.000	.000	.000	.000	.000	.000	.114
Grewia tiliaefolia	431	.110	.000	.000	.000	.000	.000	.000	.000	.000	.000	.110
Hollarrhena antidysenterica	452	.037	.000	.000	.000	.000	.000	.000	.000	.000	.000	.037
Lagerstroemia parviflora	505	.103	.000	.000	.000	.000	.000	.000	.000	.000	.000	.103
Macranga peltata	548	.117	.000	.000	.000	.000	.000	.000	.000	.000	.000	.117
Mallotus philippinensis	565	.365	.149	.000	.700	.000	.000	.000	.000	.000	.000	1.214
Mangifera indica	569	.027	.000	.000	.000	.000	.000	.000	.000	.000	.000	.027
Odina wodier	644	.000	.000	.434	.000	.000	.000	.000	.000	.000	.000	.434
Strychnos nuxvomica	831	.027	.000	.000	.000	.000	.000	.000	.000	.000	.000	.027
Syzygium cumini	843	.031	.000	.000	.000	.000	.000	.000	.000	.000	.000	.031
Tectona grandis	858	2.804	1.786	6.134	6.648	2.447	2.426	.000	3.489	4.746	.000	30.480
Terminalia crenulata	866	.078	.131	.000	.000	.000	.000	.000	.000	.000	.000	.209
Unidentified trees	944	1.030	.356	.370	.000	.000	.000	.000	.000	.000	.000	1.756
TOTAL		5.899	3.632	6.938	7.348	2.447	2.426	.000	3.489	4.746	.000	36.924

Contents

TABLE NO.1.4.1

TOTAL VOLUME(IN M3) BY SPECIES AND DIAMETER CLASSES(IN CM.)

STRATA-:MISCELLANEOUS DISTRICT: PURI

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Acacia catechu	6	374	0	0	0	0	0	0	0	0	0	374
Acacia species	14	1621	0	0	0	0	0	0	0	0	0	1621
Adina cordifolia	28	4366	8108	0	0	22204	0	0	0	0	0	34679
Aegle. marmelos	32	7734	8857	0	0	0	0	0	0	0	0	16716
Ailanthus excelsa	40	2370	4989	0	0	0	0	0	0	0	0	7235
Albizzia lebbek	46	4116	2120	5987	0	23452	0	0	0	0	0	35552
Albizzia species	51	6237	9979	14096	15094	0	0	0	0	0	0	45407
Anacardium occidentale	66	64494	25573	20084	0	0	0	0	0	0	0	110151
Anogeissus acuminata	71	374	0	0	0	0	0	0	0	0	0	374
Anogeissus latifolia	72	22329	50397	160050	43037	0	0	0	0	0	0	275690
Azadirachta indica	103	2869	0	0	0	0	0	0	0	0	0	2869
Bauhinia retusa	116	873	0	7484	0	0	0	0	0	0	0	8358
Bombax ceiba	131	997	10354	26571	0	21082	0	0	0	0	0	59005
Borassus flabellifer	132	0	0	6486	9730	0	0	0	0	0	0	16217
Bridelia retusa	138	15094	7360	12848	0	0	0	0	0	0	0	35178
Buchanania lanzan	143	16341	0	5613	0	0	0	0	0	0	0	21830
Bursera delpechinen	145	8857	15219	5613	14345	19834	0	0	0	0	0	63745
Butea monosperma	146	2370	0	0	0	0	0	0	0	0	0	2370
Careya arborea	177	14595	0	0	0	0	0	0	0	0	0	14595
Careya nepalensis	178	0	1621	7983	0	0	0	0	0	0	0	9605
Casearia tomentosa	183	2245	0	0	0	0	0	0	0	0	0	2245
Cassia fistula	186	6362	8857	0	0	0	0	0	0	0	0	15219
Casurina equisetifolia	195	45283	27194	24824	9730	0	0	0	0	0	0	107032
Chloroxylon swietenia	206	0	2869	0	0	0	0	0	0	0	0	2869
Cleistanthus collinus	218	151567	105535	20957	7609	0	0	0	0	0	0	285670
Cochlospermum religiosum	223	0	3617	0	0	0	0	0	0	0	0	3617
Congea tomentosa	228	374	0	0	0	0	0	0	0	0	0	374
Dalbergia latifolia	266	1122	15468	0	0	0	0	0	0	0	0	16591
Dalbergia paniculata	267	6985	27194	54888	75721	0	0	39420	0	0	0	204210
Dalbergia sissoo	268	1247	0	0	0	0	0	0	0	0	0	1247

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CONT. OF TABLE NO. 1.4.1

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Dillenia indica	277	0	0	7983	12225	0	0	0	0	0	0	20209
Dillenia pentagyna	278	6611	25697	17963	35552	44908	25323	0	0	0	0	156058
Diospyros melanoxylon	285	9231	26196	51271	55387	21581	0	0	0	0	0	163792
Diospyros species	292	15468	11102	8607	9730	0	0	0	0	0	0	44908
Ehretia laevis	310	374	1871	0	0	0	0	0	0	0	0	2120
Elaeodendron glaucum	321	2619	0	0	0	0	0	0	0	0	0	2619
Emblica officinalis	325	3742	5987	0	0	0	0	0	0	0	0	9730
Erythrina stricta	339	0	0	7983	0	0	0	0	0	0	0	7983
Eucalyptus hybrid	346	3368	3617	0	0	0	0	0	0	0	0	6861
Eugenia species	358	4740	5738	0	0	18213	0	0	0	0	0	28691
Ficus bengalensis	375	997	2619	13472	12848	0	0	0	0	0	0	29939
Ficus religiosa	381	0	1621	0	0	0	0	0	0	0	0	1621
Ficus species	385	374	3867	0	0	0	25323	41914	0	0	0	71480
Flacourtia species	391	873	1621	0	0	0	0	0	0	0	0	2370
Gardenia resinifera	405	4490	14844	12225	0	0	0	0	0	0	0	31560
Gardenia species	406	4989	0	0	0	0	0	0	0	0	0	4989
Garuga pinnata	407	249	2370	0	0	0	0	0	0	0	0	2744
Glochidion species	416	2744	1621	0	0	0	0	0	0	0	0	4366
Gmelina arborea	420	0	0	5114	0	0	0	0	0	0	0	5114
Grewia tiliaefolia	431	30687	16965	21206	0	0	0	0	0	0	0	68860
Hollarrhena antidysenterica	452	1496	0	0	11601	0	0	0	0	0	0	13098
Hopea recopholoea	461	0	3991	0	0	0	0	0	0	0	0	3991
Hymenodictyon excelsum	470	498	0	0	15094	0	0	0	0	0	0	15593
Ixora arborea	482	2744	0	0	0	0	0	0	0	0	0	2744
Ixora species	485	2120	2370	0	0	0	0	0	0	0	0	4366
Kydia calycina	501	3492	2619	0	0	0	0	0	0	0	0	6112
Lagerstroemia lanceolata	504	0	4366	0	0	0	0	0	0	0	0	4366
Lagerstroemia parviflora	505	5863	15343	13098	15718	0	0	43411	0	0	0	93560
Lannea coromandelica	509	23327	20084	18088	0	14595	0	0	0	0	0	76095
Madhuca latifolia	561	9106	20333	33432	28691	16591	0	0	0	0	0	108030
Mallotus philippinensis	565	14096	14345	0	0	0	0	0	0	0	0	28442
Mallotus species	566	0	1621	0	0	0	0	0	0	0	0	1621
Mangifera indica	569	1122	4366	0	0	0	61874	37049	0	70606	0	175020
[illegible]lia composita	584	1871	0	0	0	0	0	0	0	0	0	1871
[illegible]liusa species	604	997	0	0	0	0	0	0	0	0	0	997

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CONT. OF TABLE NO. 1.4.1

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Mitragyna parviflora	611	498	0	0	0	0	0	0	0	0	0	498
Morinda tinctoria	613	4241	1621	0	0	0	0	0	0	0	0	5863
Myristica species	630	374	0	0	0	0	0	0	0	0	0	374
Nauclea gageana	631	0	1871	0	0	0	0	0	0	0	0	1871
Nyctanthes arbortristis	637	1247	0	0	0	0	0	0	0	0	0	1247
Odina wodier	644	8108	35802	57383	10977	36301	0	0	0	0	0	148573
Ougeinia dalbergoides	653	12599	23202	5987	0	0	0	0	0	0	0	41790
Perishia insignis	664	0	2120	0	0	0	0	0	0	0	0	2120
Pongamia pinnata	701	873	0	0	0	0	0	0	0	0	0	873
Pterocarpus marsupium	722	5613	5987	0	24949	0	0	0	0	0	0	36675
Pterospermum heyncanum	727	15593	16716	9480	0	0	0	0	0	0	0	41665
Randia dumetorum	756	374	0	0	0	0	0	0	0	0	0	374
Saccopetalum tomentosum	770	374	6861	0	0	0	0	0	0	0	0	7235
Schleichera trijuga	795	11227	41041	17215	27194	64743	61749	0	110525	0	0	333947
Semecarpus anacardium	798	6985	6985	4740	0	0	0	0	0	0	0	18836
Shorea robusta	802	12724	6486	14096	12474	22828	0	0	0	0	0	68610
Soymida febrifuga	809	3118	3991	0	0	0	0	0	0	0	0	7110
Sterculia urens	820	1247	0	0	0	0	0	0	0	0	0	1247
Sterculia villosa	821	0	4366	0	0	0	0	0	0	0	0	4366
Stereospermum personatum	824	997	1871	0	0	0	0	0	0	0	0	2869
Stereospermum suaveolens	825	10229	13722	19585	0	0	0	0	0	0	0	43536
Stereospermum species	827	873	0	0	0	0	0	0	0	0	0	873
Stranvaesia glaucescens	828	374	0	0	0	0	0	0	0	0	0	374
Strychnos nuxvomica	831	1122	0	0	0	0	0	0	0	0	0	1122
Strychnos potatorum	832	2120	10852	0	10977	0	27319	0	0	0	0	51146
Syzygium cumini	843	1496	2370	0	0	0	0	0	0	0	0	3867
Tectona grandis	858	2869	6237	0	0	0	0	0	0	0	0	9106
Terminalia belerica	861	2245	0	4740	0	0	0	0	0	0	0	6985
Terminalia chebula	864	5863	0	5114	0	0	0	0	0	0	0	10977
Terminalia citrina	865	0	2869	0	11601	0	0	0	0	0	0	14470
Terminalia crenulata	866	15094	23452	27943	30438	23826	34929	54140	0	0	0	210073
Terminalia species	871	2494	5987	26820	0	0	0	0	0	0	0	35428
Trema orientalis	879	374	0	0	0	0	0	0	0	0	0	374
Vitex penducularis	901	4490	1871	0	0	0	0	0	0	0	0	6362
Zizyphus zylopyra	929	13098	8857	0	0	16591	0	0	0	0	78840	117386
Unidentified trees	944	74099	63620	59379	21206	0	0	0	0	0	0	218307
Acacia Auriculiformis(A06)	A06	38796	3368	0	0	0	0	0	0	0	0	42289
TOTAL		811604	851897	836428	521691	366631	236520	216061	110525	70606	78840	4100808

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TABLE NO.1.4.2

TOTAL VOLUME(IN M3) BY SPECIES AND DIAMETER CLASSES(IN CM.)

STRATA-:SAL DISTRICT: PURI

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Acacia species	14	699	0	0	0	0	0	0	0	0	0	699
Adina cordifolia	28	9617	16961	0	12415	40480	0	0	0	0	0	79473
Aegle marmelos	32	3409	1836	0	0	0	0	0	0	0	0	5245
Albizzia lebbek	46	612	4109	0	0	0	0	0	0	0	0	4721
Albizzia odoratissima	49	4021	14076	4721	0	0	0	0	0	0	0	22731
Albizzia procera	50	699	0	6032	0	0	0	0	0	0	0	6732
Albizzia species	51	612	2098	0	12939	0	0	0	0	0	0	15562
Anogeissus latifolia	72	15125	29463	65047	30513	0	0	0	0	0	0	140150
Artocarpus heterophyllus	91	0	0	0	0	0	0	0	0	0	78861	78861
Bauhinia retusa	116	2010	4808	0	0	0	0	0	0	0	0	6819
Bridelia retusa	138	3322	6819	0	16087	21770	0	0	0	0	0	47999
Buchanania lanzan	143	52720	13027	0	0	0	0	0	0	0	0	65747
Bursera delbechinen	145	4021	10054	6032	0	0	0	0	0	0	0	20108
Careya arborea	177	8305	7169	0	25529	0	0	0	0	0	0	40917
Casearia tomentosa	183	7256	2360	0	0	0	0	0	0	0	0	9529
Cassia fistula	186	3672	0	0	0	0	0	0	0	0	0	3672
Chloroxylon swietenia	206	349	0	0	0	0	0	0	0	0	0	349
Cleistanthus collinus	218	50971	54906	23256	0	0	0	0	0	0	0	129134
Dalbergia latifolia	266	1486	0	0	0	0	0	0	0	0	0	1486
Dalbergia paniculata	267	4633	18360	19759	12240	0	0	0	0	0	0	54906
Dalbergia species	269	0	1573	0	0	0	0	0	0	0	0	1573
Dillenia pentagyna	278	3322	13289	12589	0	0	0	0	0	0	0	29201
Diospyros melanoxylon	285	14775	31562	32786	13289	39780	0	41616	0	0	0	173810

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CONT. OF TABLE NO. 1.4.2

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Diospyros species	292	4371	2098	0	0	0	0	0	0	0	0	6382
Emblica officinalis	325	5420	1836	0	0	0	0	0	0	0	0	7256
Eugenia species	358	7956	8218	8043	0	0	0	0	0	0	0	24218
Ficus bengalensis	375	0	0	0	0	0	0	0	0	0	78861	78861
Ficus species	385	874	0	0	0	0	0	0	0	0	0	874
Flacourtia indica	389	3234	0	0	0	0	0	0	0	0	0	3234
Flacourtia species	391	349	0	0	0	0	0	0	0	0	0	349
Gardenia resinifera	405	2273	0	8568	0	0	0	0	0	0	0	10841
Glochidion species	416	0	2622	0	0	0	0	0	0	0	0	2622
Gmelina arborea	420	524	0	0	0	0	0	0	0	0	0	524
Grewia tiliaefolia	431	4109	7518	0	0	0	0	0	0	0	0	11715
Hollarrhena antidysenterica	452	4196	0	0	0	0	0	0	0	0	0	4196
Hymenodictyon excelsum	470	1224	0	0	0	0	0	0	0	0	0	1224
Ixora species	485	3846	0	0	0	0	0	0	0	0	0	3846
Kydia calycina	501	3409	8480	0	0	0	0	0	0	0	0	11890
Lagerstroemia parviflora	505	7344	8043	6294	0	0	0	0	0	0	0	21682
Lannea coromandelica	509	7518	18272	8655	0	0	0	0	0	0	0	34447
Macranga peltata	548	0	0	4721	0	0	0	0	0	0	0	4721
Madhuca latifolia	561	26578	26491	35234	40829	20720	0	45725	0	0	0	195493
Mallotus philippinensis	565	14513	4458	0	0	0	0	0	0	0	0	19059
Mangifera indica	569	0	0	0	0	0	0	0	56742	0	0	56742
Mitragyna parviflora	611	1224	9355	0	12939	16524	0	0	0	0	0	40042
Morinda tinctoria	613	4721	1573	0	0	0	0	0	0	0	0	6294
Morus laevigata	617	874	0	0	0	0	0	0	0	0	0	874
Nyctanthes arbortristis	637	437	0	0	0	0	0	0	0	0	0	437
Odina wodier	644	3147	2885	8568	0	0	0	0	0	0	0	14600
Ougeinia dalbergoiides	653	4896	23256	21857	0	0	0	0	0	0	0	50009
Polyalthia species	699	349	0	0	0	0	0	0	0	0	0	349
Pterocarpus marsupium	722	11103	18710	9529	12852	0	0	0	0	0	0	52108
Pterospermum heyncanum	727	3409	4458	6469	0	0	0	0	0	0	0	14425

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CONT. OF TABLE NO. 1.4.2

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Saccopetalum tomentosum	770	1311	3147	0	0	0	0	0	0	0	0	4546
Schleichera trijuga	795	7693	2360	10666	34185	61288	30338	0	55255	0	0	201788
Semecarpus anacardium	798	11803	5420	0	0	0	0	0	0	0	0	17136
Shorea robusta	802	355840	529213	866169	575639	102555	36283	0	0	0	0	2465783
Soymida febrifuga	809	2098	1573	0	0	0	0	0	0	0	0	3759
Stereospermum suaveolens	825	4808	6732	11540	0	0	0	0	0	0	0	23081
Stereospermum species	827	0	2098	0	0	0	0	0	0	0	0	2098
Strychnos nuxvomica	831	699	3409	0	0	0	0	0	0	0	0	4109
Syzygium cumini	843	11278	28677	34972	0	0	0	0	0	0	0	74927
Terminalia belerica	861	3409	8830	0	0	0	0	0	0	0	0	12240
Terminalia chebula	864	3934	9355	5158	13639	0	0	0	0	0	0	31999
Terminalia citrina	865	437	0	0	0	0	0	0	0	0	0	437
Terminalia crenulata	866	41179	34185	57179	26841	0	0	0	0	0	0	159297
Terminalia species	871	612	0	0	10928	0	0	0	0	0	0	11540
Vitex peduncularis	901	1486	0	0	0	0	0	0	0	0	0	1486
Zanthoxylum rhetsa	914	0	0	0	0	0	0	0	0	70556	0	70556
Zizyphus xylopyra	929	2448	1573	0	0	0	0	0	0	0	0	4021
Unidentified trees	944	25179	11803	26666	0	0	0	0	0	0	0	63561
TOTAL		793864	1029051	1300346	850693	303207	66621	87342	111997	70556	157811	4771405

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TABLE NO.1.4.3

TOTAL VOLUME(IN M3) BY SPECIES AND DIAMETER CLASSES(IN CM.)

STRATA-:BAMBOO DISTRICT: PURI

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Acacia species	14	434	1816	0	0	0	0	0	0	0	0	2238
Bridelia retusa	138	895	0	0	0	0	0	0	0	0	0	895
Feronia limonia	395	332	0	0	0	0	0	0	0	0	0	332
Ixora arborea	482	434	0	0	0	0	0	0	0	0	0	434
Lagerstroemia parviflora	505	882	0	0	0	0	0	0	0	0	0	882
Odina wodier	644	754	7893	0	0	0	0	0	0	0	0	8648
Syzygium cumini	843	601	0	0	0	0	0	0	0	0	0	601
Unidentified trees	944	1560	1816	0	0	0	0	0	0	0	0	3364
TOTAL	0	5885	11514	0	0	0	0	0	0	0	0	17399

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TABLE NO.1.4.4

TOTAL VOLUME(IN M3) BY SPECIES AND DIAMETER CLASSES(IN CM.)

STRATA-:TEAK DISTRICT: PURI

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Adina cordifolia	28	0	3188	0	0	0	0	0	0	0	0	3188
Albizzia species	51	332	0	0	0	0	0	0	0	0	0	332
Bauhinia species	118	2037	0	0	0	0	0	0	0	0	0	2037
Bombax ceiba	131	970	0	0	0	0	0	0	0	0	0	970
Bridelia retusa	138	10478	9661	0	0	0	0	0	0	0	0	20140
Dillenia pentagyna	278	512	0	0	0	0	0	0	0	0	0	512
Ficus species	385	1912	0	0	0	0	0	0	0	0	0	1912
Glochidion species	416	0	2328	0	0	0	0	0	0	0	0	2328
Gmelina arborea	420	0	1580	0	0	0	0	0	0	0	0	1580
Grewia tiliaefolia	431	1524	0	0	0	0	0	0	0	0	0	1524
Hollarrhena antidysenterica	452	512	0	0	0	0	0	0	0	0	0	512
Lagerstroemia parviflora	505	1427	0	0	0	0	0	0	0	0	0	1427
Macranga peltata	548	1621	0	0	0	0	0	0	0	0	0	1621
Mallotus philippinensis	565	5059	2065	0	9702	0	0	0	0	0	0	16827
Mangifera indica	569	374	0	0	0	0	0	0	0	0	0	374
Odina wodier	644	0	0	6015	0	0	0	0	0	0	0	6015
Strychnos nuxvomica	831	374	0	0	0	0	0	0	0	0	0	374
Syzygium cumini	843	429	0	0	0	0	0	0	0	0	0	429
Tectona grandis	858	38866	24755	85023	92147	33917	33626	0	48361	65784	0	422483
Terminalia crenulata	866	1081	1815	0	0	0	0	0	0	0	0	2896
Unidentified trees	944	14276	4934	5128	0	0	0	0	0	0	0	24339
TOTAL		81766	50343	96167	101850	33917	33626	0	48361	65784	0	511803

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TABLE NO.2.1.1

STEMS PER HECTARE(NO) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT- CUTTAK STRATA - MISCELLANEOUS

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Adina cordifolia	28	.492	.000	.000	.000	.000	.000	.000	.000	.000	.000	.492
Aegle marmelos	32	.984	.000	.000	.000	.000	.000	.000	.000	.000	.000	.984
Anacardium occidentale	66	2.787	.656	.000	.000	.000	.000	.000	.000	.000	.000	3.443
Anogeissus latifolia	72	.164	.492	.000	.164	.000	.000	.000	.000	.000	.000	.820
Barringtonia acutangula	108	.000	.000	.000	.164	.000	.000	.000	.000	.000	.000	.164
Bombax ceiba	131	.000	.164	.000	.000	.164	.000	.000	.000	.000	.000	.328
Bridelia retusa	138	1.311	.164	.000	.000	.000	.000	.000	.000	.000	.000	1.475
Buchanania lanzan	143	.000	.164	.000	.000	.000	.000	.000	.000	.000	.000	.164
Careya arborea	177	.656	.164	.000	.000	.000	.000	.000	.000	.000	.000	.820
Casearia tomentosa	183	.328	.000	.000	.000	.000	.000	.000	.000	.000	.000	.328
Cassia fistula	186	.492	.000	.000	.000	.000	.000	.000	.000	.000	.000	.492
Cassia siamea	188	1.148	.984	.000	.000	.000	.000	.000	.000	.000	.000	2.131
Chloroxylon swietenia	206	.164	.000	.000	.000	.000	.000	.000	.000	.000	.000	.164
Cleistanthus collinus	218	3.443	.656	.164	.000	.000	.000	.000	.000	.000	.000	4.262
Dalbergia paniculata	267	.984	.000	.164	.164	.164	.000	.000	.000	.000	.000	1.475
Dalbergia species	269	.164	.000	.000	.000	.000	.000	.000	.000	.000	.000	.164
Dillenia pentagyna	278	.000	.000	.164	.000	.000	.000	.000	.000	.000	.000	.164
Diospyros melanoxylon	285	.492	.000	.000	.000	.000	.000	.000	.000	.000	.000	.492
Diospyros species	292	.492	.164	.000	.000	.000	.000	.000	.000	.000	.000	.656
Emblica officinalis	325	.328	.000	.000	.000	.000	.000	.000	.000	.000	.000	.328
Erythrina variegata	341	.328	.000	.000	.000	.000	.000	.000	.000	.000	.000	.328
Erythrina species	342	.000	.164	.000	.000	.000	.000	.000	.000	.000	.000	.164
Ficus species	385	.164	.492	.328	.164	.000	.000	.000	.000	.000	.000	1.148
Gardenia resinifera	405	.164	.164	.000	.000	.000	.000	.000	.000	.000	.000	.328
Grewia tiliaefolia	431	.656	.000	.000	.000	.000	.000	.000	.000	.000	.000	.656
Hollarrhena antidysenterica	452	3.279	.328	.000	.000	.000	.000	.000	.000	.000	.000	3.607
Ixora species	485	.492	.164	.000	.000	.000	.000	.000	.000	.000	.000	.656

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Cont. of Table No.2.1.1

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Kydia calycina	501	.164	.000	.000	.000	.000	.000	.000	.000	.000	.000	.164
Lagerstroemia parviflora	505	.328	.000	.000	.000	.000	.000	.000	.000	.000	.000	.328
Lannea coromandelica	509	.820	.164	.164	.000	.000	.164	.000	.000	.000	.000	1.311
Madhuca latifolia	561	.000	.000	.164	.000	.164	.000	.000	.000	.000	.000	.328
Mallotus philippinensis	565	.164	.000	.000	.000	.000	.000	.000	.000	.000	.000	.164
Mangifera indica	569	.000	.000	.000	.000	.000	.164	.164	.000	.000	.000	.328
Pterocarpus marsupium	722	.000	.164	.000	.000	.000	.000	.000	.000	.000	.000	.164
Pterospermum heyncanum	727	.984	.328	.164	.000	.000	.000	.000	.000	.000	.000	1.475
Saccopetalum tomentosum	770	.656	.164	.000	.000	.000	.000	.000	.000	.000	.000	.820
Schleichera trijuga	795	.492	.164	.000	.000	.000	.000	.000	.000	.000	.000	.656
Semecarpus anacardium	798	.656	.000	.328	.000	.000	.000	.000	.000	.000	.000	.984
Shorea robusta	802	1.148	.328	.164	.000	.164	.000	.000	.000	.000	.000	1.803
Spondias species	813	.000	.164	.000	.000	.000	.000	.000	.000	.000	.000	.164
Stereospermum suaveolens	825	.492	.164	.000	.000	.000	.000	.000	.000	.000	.000	.656
Strychnos nuxvomica	831	.164	.164	.000	.000	.000	.000	.000	.000	.000	.000	.328
Strychnos potatorum	832	.656	.328	.000	.000	.000	.000	.000	.000	.000	.000	.984
Tectona grandis	858	2.131	.000	.000	.000	.000	.000	.000	.000	.000	.000	2.131
Terminalia belerica	861	.492	.000	.000	.000	.000	.000	.000	.000	.000	.000	.492
Terminalia chebula	864	.000	.328	.000	.000	.000	.000	.000	.000	.000	.000	.328
Terminalia crenulata	866	.328	.328	.000	.000	.000	.000	.000	.000	.000	.000	.656
Terminalia species	871	.820	.000	.000	.000	.000	.000	.000	.000	.000	.000	.820
Vitex penducularis	901	.328	.000	.000	.000	.000	.000	.000	.000	.000	.000	.328
Xylia xylocarpa	919	2.623	.164	.492	.328	.000	.000	.000	.000	.000	.000	3.607
Zizyphus zylopyra	929	.820	.000	.000	.000	.000	.000	.000	.000	.000	.000	.820
Unidentified trees	944	5.082	1.475	.328	.000	.000	.164	.000	.000	.000	.000	7.049
TOTAL		38.852	9.344	2.623	.984	.656	.492	.164	.000	.000	.000	53.115
PERCENTAGE		73.15	17.59	4.94	1.85	1.23	.93	.31	.00	.00	.00	100.00

Contents

TABLE NO.2.1.2.

STEMS PER HECTARE(NO) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT- CUTTAK STRATA - SAL

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Adina cordifolia	28	1.818	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.818
Aegle marmelos	32	.455	.000	.000	.000	.000	.000	.000	.000	.000	.000	.455
Alangium salvifolium	42	.455	.000	.000	.000	.000	.000	.000	.000	.000	.000	.455
Albizzia lebbek	46	.000	.455	.000	.000	.000	.000	.000	.000	.000	.000	.455
Albizzia procera	50	.455	.000	.000	.000	.000	.000	.000	.000	.000	.000	.455
Anogeissus latifolia	72	.455	.000	.455	.000	.000	.000	.000	.000	.000	.000	.909
Bridelia retusa	138	1.818	.000	.455	.000	.000	.000	.000	.000	.000	.000	2.273
Buchanania lanzan	143	3.182	.000	.000	.000	.000	.000	.000	.000	.000	.000	3.182
Bursera delpechinen	145	1.364	.000	.000	.455	.000	.000	.000	.000	.000	.000	1.818
Careya arborea	177	.455	.000	.000	.000	.000	.000	.000	.000	.000	.000	.455
Casearia tomentosa	183	3.182	.000	.000	.000	.000	.000	.000	.000	.000	.000	3.182
Chloroxylon swietenia	206	.455	.000	.000	.000	.000	.000	.000	.000	.000	.000	.455
Cleistanthus collinus	218	6.364	.455	.000	.000	.000	.000	.000	.000	.000	.000	6.818
Dalbergia latifolia	266	.455	.000	.000	.000	.000	.000	.000	.000	.000	.000	.455
Dalbergia paniculata	267	1.364	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.364
Diospyros melanoxylon	285	.909	.000	.000	.000	.909	.000	.000	.000	.000	.000	1.818
Diospyros tupru	290	.000	.455	.000	.000	.000	.000	.000	.000	.000	.000	.455
Diospyros species	292	1.818	.455	.000	.000	.000	.000	.000	.000	.000	.000	2.273
Emblica officinalis	325	1.818	.455	.000	.000	.000	.000	.000	.000	.000	.000	2.273
Feronia elephantum	373	.455	.000	.000	.000	.000	.000	.000	.000	.000	.000	.455
Hollarrhena antidysenterica	452	.909	.000	.000	.000	.000	.000	.000	.000	.000	.000	.909
Hymenodictyon excelsum	470	.455	.000	.000	.000	.000	.000	.000	.000	.000	.000	.455
Ixora species	485	1.818	.455	.000	.000	.000	.000	.000	.000	.000	.000	2.273
Kydia calycina	501	.909	.000	.000	.000	.000	.000	.000	.000	.000	.000	.909
Lannea coromandelica	509	.455	.455	.000	.000	.000	.000	.000	.000	.000	.000	.909
Madhuca latifolia	561	1.364	.455	.000	.000	.000	.000	.000	.000	.000	.000	1.818

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CONT.OF TABLE NO.2.1.2

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Mallotus philippinensis	565	.455	.000	.000	.000	.000	.000	.000	.000	.000	.000	.455
Melia composita	584	.000	.455	.000	.000	.000	.000	.000	.000	.000	.000	.455
Morinda tinctoria	613	.455	.000	.000	.000	.000	.000	.000	.000	.000	.000	.455
Pterocarpus marsupium	722	.909	.000	.000	.000	.000	.000	.000	.000	.000	.000	.909
Pterospermum heyncanum	727	.909	.000	.455	.000	.000	.000	.000	.000	.000	.000	1.364
Saccopetalum tomentosum	770	2.273	.000	.000	.000	.000	.000	.000	.000	.000	.000	2.273
Schleichera trijuga	795	.000	.455	.000	.455	.000	.000	.000	.000	.000	.000	.909
Shorea robusta	802	74.545	4.091	5.000	1.364	.000	.000	.000	.455	.000	.000	85.454
Stereospermum personatum	824	.455	.000	.000	.000	.000	.000	.000	.000	.000	.000	.455
Strychnos nux-vomica	831	.455	.000	.000	.000	.000	.000	.000	.000	.000	.000	.455
Syzygium cumini	843	.455	.455	.000	.000	.000	.000	.000	.000	.000	.000	.909
Terminalia belerica	861	3.182	.000	.000	.000	.000	.000	.000	.000	.000	.000	3.182
Terminalia chenulata	866	7.727	.000	1.364	.909	.000	.000	.000	.000	.000	.000	10.000
Terminalia species	871	.000	.455	.455	.455	.455	.000	.000	.000	.000	.000	1.818
Xylia xylocarpa	919	2.273	.000	.000	.000	.455	.000	.000	.000	.000	.000	2.727
Zizyphus zylopyra	929	.909	.000	.000	.000	.000	.000	.000	.000	.000	.000	.909
Unidentified trees	944	4.545	.000	.000	.000	.000	.000	.000	.000	.000	.000	4.545
TOTAL		132.727	9.545	8.182	3.636	1.818	.000	.000	.455	.000	.000	156.363
PERCENTAGE		84.88	6.10	5.23	2.33	1.16	.00	.00	.29	.00	.00	100.00

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TABLE NO.2.1.3

STEMS PER HECTARE(NO) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT- CUTTAK STRATA - BAMBOO

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Anacardium occidentale	66	5.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	5.000
Cleistanthus collinus	218	1.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.250
Erythrina variegata	341	.000	1.250	.000	.000	.000	.000	.000	.000	.000	.000	1.250
Lagerstroeria parviflora	505	5.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	5.000
Mangifera indica	569	.000	.000	.000	.000	.000	.000	1.250	.000	.000	.000	1.250
Tectona grandis	858	2.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	2.500
Unidentified trees	944	5.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	5.000
TOTAL		18.750	1.250	.000	.000	.000	.000	1.250	.000	.000	.000	21.250
PERCENTAGE		88.24	5.88	.00	.00	.00	.00	5.88	.00	.00	.00	100.00

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TABLE NO.2.1.4

STEMS PER HECTARE(NO) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT- CUTTAK STRATA - MANGROVE

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Avicennia officinalis	102	24.286	.000	.000	.000	.000	.000	.000	.000	.000	.000	24.286
Excoecaria agallocha	371	2.857	.000	.000	.000	.000	.000	.000	.000	.000	.000	2.857
Heritiera littoralis	444	7.143	.000	.000	.000	.000	.000	.000	.000	.000	.000	7.143
Pongamia pinnata	701	2.857	.000	.000	.000	.000	.000	.000	.000	.000	.000	2.857
Rhizophora species	759	4.286	.000	.000	.000	.000	.000	.000	.000	.000	.000	4.286
Unidentified trees	944	5.714	.000	.000	.000	.000	.000	.000	.000	.000	.000	5.714
TOTAL		47.143	.000	.000	.000	.000	.000	.000	.000	.000	.000	47.143
PERCENTAGE		100.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	100.00

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TABLE NO.2.2.1.

TOTAL STEMS(IN NO.) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT- CUTTAK STRATA-: MISCELLANEOUS

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Adina cordifolia	28	38663	0	0	0	0	0	0	0	0	0	38663
Aegle marmelos	32	77327	0	0	0	0	0	0	0	0	0	77327
Anacardium occidentale	66	219016	51551	0	0	0	0	0	0	0	0	270568
Anogeissus latifolia	72	12887	38663	0	12887	0	0	0	0	0	0	64439
Barringtonia acutangula	108	0	0	0	12887	0	0	0	0	0	0	12887
Bombax ceiba	131	0	12887	0	0	12887	0	0	0	0	0	25775
Bridelia retusa	138	103024	12887	0	0	0	0	0	0	0	0	115912
Buchanania lanzan	143	0	12887	0	0	0	0	0	0	0	0	12887
Careya arborea	177	51551	12887	0	0	0	0	0	0	0	0	64439
Casearia tomentosa	183	25775	0	0	0	0	0	0	0	0	0	25775
Cassia fistula	186	38663	0	0	0	0	0	0	0	0	0	38663
Cassia siamea	188	90215	77327	0	0	0	0	0	0	0	0	167464
Chloroxylon swietenia	206	12887	0	0	0	0	0	0	0	0	0	12887
Cleistantnus collinus	218	270568	51551	12887	0	0	0	0	0	0	0	334929
Dalbergia paniculata	267	77327	0	12887	12887	12887	0	0	0	0	0	115912
Dalbergia species	269	12887	0	0	0	0	0	0	0	0	0	12887
Dillenia pentagyna	278	0	0	12887	0	0	0	0	0	0	0	12887
Diospyros melanoxylon	285	38663	0	0	0	0	0	0	0	0	0	38663
Diospyros species	292	38663	12887	0	0	0	0	0	0	0	0	51551
Emblica officinalis	325	25775	0	0	0	0	0	0	0	0	0	25775
Erythrina variegata	341	25775	0	0	0	0	0	0	0	0	0	25775
Erythrina species	342	0	12887	0	0	0	0	0	0	0	0	12887
Ficus species	385	12887	38663	25775	12887	0	0	0	0	0	0	90215
Gardenia resinifera	405	12887	12887	0	0	0	0	0	0	0	0	25775

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Cont. of Table No.2.2.1

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Grewia tiliaefolia	431	51551	0	0	0	0	0	0	0	0	0	51551
Hollarrhena antidysenterica	452	257680	25775	0	0	0	0	0	0	0	0	283456
Ixora species	485	38663	12887	0	0	0	0	0	0	0	0	51551
Kydia calycina	501	12887	0	0	0	0	0	0	0	0	0	12887
Lagerstroemia parviflora	505	25775	0	0	0	0	0	0	0	0	0	25775
Lannea coromandelica	509	64439	12887	12887	0	0	12887	0	0	0	0	103024
Madhuca latifolia	561	0	0	12887	0	12887	0	0	0	0	0	25775
Mallotus philippinensis	565	12887	0	0	0	0	0	0	0	0	0	12887
Mangifera indica	569	0	0	0	0	0	12887	12887	0	0	0	25775
Pterocarpus marsupium	722	0	12887	0	0	0	0	0	0	0	0	12887
Pterospermum heyncanum	727	77327	25775	12887	0	0	0	0	0	0	0	115912
Saccopetalum tomentosum	770	51551	12887	0	0	0	0	0	0	0	0	64439
Schleichera trijuga	795	38663	12887	0	0	0	0	0	0	0	0	51551
Semecarpus anacardium	798	51551	0	25775	0	0	0	0	0	0	0	77327
Shorea robusta	802	90215	25775	12887	0	12887	0	0	0	0	0	141688
Spondias species	813	0	12887	0	0	0	0	0	0	0	0	12887
Stereospermum suaveolens	825	38663	12887	0	0	0	0	0	0	0	0	51551
Strychnos nuxvomica	831	12887	12887	0	0	0	0	0	0	0	0	25775
Strychnos potatorum	832	51551	25775	0	0	0	0	0	0	0	0	77327
Tectona grandis	858	167464	0	0	0	0	0	0	0	0	0	167464
Terminalia belerica	861	38663	0	0	0	0	0	0	0	0	0	38663
Terminalia chebula	864	0	25775	0	0	0	0	0	0	0	0	25775
Terminalia crenulata	866	25775	25775	0	0	0	0	0	0	0	0	51551
Terminalia species	871	64439	0	0	0	0	0	0	0	0	0	64439
Vitex penducularis	901	25775	0	0	0	0	0	0	0	0	0	25775
Xylia xylocarpa	919	206128	12887	38663	25775	0	0	0	0	0	0	283456
Zizyphus zylopyra	929	64439	0	0	0	0	0	0	0	0	0	64439
Unidentified trees	944	399368	115912	25775	0	0	12887	0	0	0	0	553945
TOTAL		3053184	734298	206128	77327	51551	38663	12887	0	0	0	4174042

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TABLE NO.2.2.2.

TOTAL STEMS(IN NO.) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT- CUTTAK STRATA-: SAL

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Adina cordifolia	28	51525	0	0	0	0	0	0	0	0	0	51525
Aegle marmelos	32	12895	0	0	0	0	0	0	0	0	0	12895
Alangium salvifolium	42	12895	0	0	0	0	0	0	0	0	0	12895
Albizzia lebbek	46	0	12895	0	0	0	0	0	0	0	0	12895
Albizzia procera	50	12895	0	0	0	0	0	0	0	0	0	12895
Anogeissus latifolia	72	12895	0	12895	0	0	0	0	0	0	0	25762
Bridelia retusa	138	51525	0	12895	0	0	0	0	0	0	0	64421
Buchanania lanzan	143	90184	0	0	0	0	0	0	0	0	0	90184
Bursera delpechinen	145	38658	0	0	12895	0	0	0	0	0	0	51525
Careya arborea	177	12895	0	0	0	0	0	0	0	0	0	12895
Casearia tomentosa	183	90184	0	0	0	0	0	0	0	0	0	90184
Chloroxylon swietenia	206	12895	0	0	0	0	0	0	0	0	0	12895
Cleistanthus collinus	218	180368	12895	0	0	0	0	0	0	0	0	193235
Dalbergia latifolia	266	12895	0	0	0	0	0	0	0	0	0	12895
Dalbergia paniculata	267	38658	0	0	0	0	0	0	0	0	0	38658
Diospyros melanoxylon	285	25762	0	0	0	25762	0	0	0	0	0	51525
Diospyros tupru	290	0	12895	0	0	0	0	0	0	0	0	12895
Diospyros species	292	51525	12895	0	0	0	0	0	0	0	0	64421
Emblica officinalis	325	51525	12895	0	0	0	0	0	0	0	0	64421
Feronia elephantum	373	12895	0	0	0	0	0	0	0	0	0	12895

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Cont. of Table No.2.2.2.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Holarrhena antidysenterica	452	25762	0	0	0	0	0	0	0	0	0	25762
Hymenodictyon excelsum	470	12895	0	0	0	0	0	0	0	0	0	12895
Ixora species	485	51525	12895	0	0	0	0	0	0	0	0	64421
Kydia calycina	501	25762	0	0	0	0	0	0	0	0	0	25762
Lannea coromandelica	509	12895	12895	0	0	0	0	0	0	0	0	25762
Madhuca latifolia	561	38658	12895	0	0	0	0	0	0	0	0	51525
Mallotus philippinensis	565	12895	0	0	0	0	0	0	0	0	0	12895
Melia composita	584	0	12895	0	0	0	0	0	0	0	0	12895
Morinda tinctoria	613	12895	0	0	0	0	0	0	0	0	0	12895
Pterocarpus marsupium	722	25762	0	0	0	0	0	0	0	0	0	25762
Pterospermum heyncanum	727	25762	0	12895	0	0	0	0	0	0	0	38658
Saccopetalum tomentosum	770	64421	0	0	0	0	0	0	0	0	0	64421
Schleichera trijuga	795	0	12895	0	12895	0	0	0	0	0	0	25762
Shorea robusta	802	2112754	115947	141710	38658	0	0	0	12895	0	0	2421937
Stereospermum personatum	824	12895	0	0	0	0	0	0	0	0	0	12895
Strychnos nuxvomica	831	12895	0	0	0	0	0	0	0	0	0	12895
Syzygium cumini	843	12895	12895	0	0	0	0	0	0	0	0	25762
Terminalia belerica	861	90184	0	0	0	0	0	0	0	0	0	90184
Terminalia crenulata	866	218998	0	38658	25762	0	0	0	0	0	0	283420
Terminalia species	871	0	12895	12895	12895	12895	0	0	0	0	0	51525
Xylia xylocarpa	919	64421	0	0	0	12895	0	0	0	0	0	77288
Zizyphus zylopyra	929	25762	0	0	0	0	0	0	0	0	0	25762
Unidentified trees	944	128814	0	0	0	0	0	0	0	0	0	128814
TOTAL		3761748	270524	231894	103051	51525	0	0	12895	0	0	4431555

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TABLE NO.2.2.3.

TOTAL STEMS(IN NO.) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT- CUTTAK STRATA-: BAMBOO

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Anacardium occidentale	66	51530	0	0	0	0	0	0	0	0	0	51530
Cleistanthus collinus	218	12882	0	0	0	0	0	0	0	0	0	12882
Erythrina variegata	341	0	12882	0	0	0	0	0	0	0	0	12882
Lagerstroemia parviflora	505	51530	0	0	0	0	0	0	0	0	0	51530
Mangifera indica	569	0	0	0	0	0	0	12882	0	0	0	12882
Tectona grandis	858	25765	0	0	0	0	0	0	0	0	0	25765
Unidentified trees	944	51530	0	0	0	0	0	0	0	0	0	51530
TOTAL		193237	12882	0	0	0	0	12882	0	0	0	219002

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TABLE NO.2.2.4.

TOTAL STEMS(IN NO.) BY SPECIES AND DIAMETER CLASSES(IN CM.)

DISTRICT- CUTTAK STRATA-: MANGROVE

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Avicennia officinalis	102	219011	0	0	0	0	0	0	0	0	0	219011
Excoecaria agallocha	371	25764	0	0	0	0	0	0	0	0	0	25764
Heritiera littoralis	444	64415	0	0	0	0	0	0	0	0	0	64415
Pongamia pinnata	701	25764	0	0	0	0	0	0	0	0	0	25764
Rhizophora species	759	38651	0	0	0	0	0	0	0	0	0	38651
Unidentified trees	944	51528	0	0	0	0	0	0	0	0	0	51528
TOTAL		425135	0	0	0	0	0	0	0	0	0	425135

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TABLE NO.2.3.1.

VOLUME(IN M3) PER HECTARE BY SPECIES AND DIAMETERCLASSES(IN CM.)

DISTRICT- CUTTACK STRATA-MISCELLANEOUS

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Adina cordifolia	28	.017	.000	.000	.000	.000	.000	.000	.000	.000	.000	.017
Aegle marmelos	32	.045	.000	.000	.000	.000	.000	.000	.000	.000	.000	.045
Anacardium occidentale	66	.150	.121	.000	.000	.000	.000	.000	.000	.000	.000	.270
Anogeissus latifolia	72	.010	.169	.000	.253	.000	.000	.000	.000	.000	.000	.432
Barringtonia acutangula	108	.000	.000	.000	.149	.000	.000	.000	.000	.000	.000	.149
Bombax ceiba	131	.000	.021	.000	.000	.354	.000	.000	.000	.000	.000	.375
Bridelia retusa	138	.079	.045	.000	.000	.000	.000	.000	.000	.000	.000	.124
Buchanania lanzan	143	.000	.024	.000	.000	.000	.000	.000	.000	.000	.000	.024
Careya arborea	177	.036	.050	.000	.000	.000	.000	.000	.000	.000	.000	.085
Casearia tomentosa	183	.019	.000	.000	.000	.000	.000	.000	.000	.000	.000	.019
Cassia fistula	186	.022	.000	.000	.000	.000	.000	.000	.000	.000	.000	.022
Cassia siamea	188	.114	.207	.000	.000	.000	.000	.000	.000	.000	.000	.321
Chloroxylon swietenia	206	.011	.000	.000	.000	.000	.000	.000	.000	.000	.000	.011
Cleistanthus collinus	218	.217	.150	.105	.000	.000	.000	.000	.000	.000	.000	.473
Dalbergia paniculata	267	.053	.000	.140	.158	.360	.000	.000	.000	.000	.000	.711
Dalbergia species	269	.007	.000	.000	.000	.000	.000	.000	.000	.000	.000	.007
Dillenia pentagyna	278	.000	.000	.107	.000	.000	.000	.000	.000	.000	.000	.107
Diospyros melanoxylon	285	.036	.000	.000	.000	.000	.000	.000	.000	.000	.000	.036
Diospyros species	292	.036	.028	.000	.000	.000	.000	.000	.000	.000	.000	.064
Emblica officinalis	325	.019	.000	.000	.000	.000	.000	.000	.000	.000	.000	.019
Erythrina variegata	341	.021	.000	.000	.000	.000	.000	.000	.000	.000	.000	.021
Erythrina species	342	.000	.032	.000	.000	.000	.000	.000	.000	.000	.000	.032
Ficus species	385	.018	.143	.255	.149	.000	.000	.000	.000	.000	.000	.565
Gardenia resinifera	405	.016	.040	.000	.000	.000	.000	.000	.000	.000	.000	.056
Grewia tiliaefolia	431	.021	.000	.000	.000	.000	.000	.000	.000	.000	.000	.021

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Cont. of Table No.2.3.1.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Holiarrhena antidysenterica	452	.177	.060	.000	.000	.000	.000	.000	.000	.000	.000	.237
Ixora species	485	.027	.050	.000	.000	.000	.000	.000	.000	.000	.000	.077
Kycia calycina	501	.008	.000	.000	.000	.000	.000	.000	.000	.000	.000	.008
Lagerstroemia parviflora	505	.012	.000	.000	.000	.000	.000	.000	.000	.000	.000	.012
Lannea coromandelica	509	.044	.028	.116	.000	.000	.341	.000	.000	.000	.000	.529
Madhuca latifolia	561	.000	.000	.140	.000	.360	.000	.000	.000	.000	.000	.500
Mallotus philippinensis	565	.005	.000	.000	.000	.000	.000	.000	.000	.000	.000	.005
Mangifera indica	569	.000	.000	.000	.000	.000	.467	.588	.000	.000	.000	1.055
Pterocarpus marsupium	722	.000	.031	.000	.000	.000	.000	.000	.000	.000	.000	.031
Pterospermum heyncanum	727	.041	.085	.123	.000	.000	.000	.000	.000	.000	.000	.249
Saccopetalum tomentosum	770	.043	.050	.000	.000	.000	.000	.000	.000	.000	.000	.093
Schleichera trijuga	795	.028	.050	.000	.000	.000	.000	.000	.000	.000	.000	.077
Semecarpus anacardium	798	.021	.000	.207	.000	.000	.000	.000	.000	.000	.000	.228
Shorea robusta	802	.071	.096	.149	.000	.382	.000	.000	.000	.000	.000	.698
Spondias species	813	.000	.050	.000	.000	.000	.000	.000	.000	.000	.000	.050
Stereospermum suaveolens	825	.026	.055	.000	.000	.000	.000	.000	.000	.000	.000	.081
Strychnos nuxvomica	831	.007	.066	.000	.000	.000	.000	.000	.000	.000	.000	.073
Strychnos potatorum	832	.035	.063	.000	.000	.000	.000	.000	.000	.000	.000	.099
Tectona grandis	858	.132	.000	.000	.000	.000	.000	.000	.000	.000	.000	.132
Terminalia belerica	861	.039	.000	.000	.000	.000	.000	.000	.000	.000	.000	.039
Terminalia chebula	864	.000	.081	.000	.000	.000	.000	.000	.000	.000	.000	.081
Terminalia crenulata	866	.032	.082	.000	.000	.000	.000	.000	.000	.000	.000	.114
Terminalia species	871	.031	.000	.000	.000	.000	.000	.000	.000	.000	.000	.031
Vitex penducularis	901	.020	.000	.000	.000	.000	.000	.000	.000	.000	.000	.020
Xylia xylocarpa	919	.149	.032	.295	.358	.000	.000	.000	.000	.000	.000	.834
Zizyphus zylopyra	929	.042	.000	.000	.000	.000	.000	.000	.000	.000	.000	.042
Unidentified trees	944	.273	.387	.219	.000	.000	.404	.000	.000	.000	.000	1.283
TOTAL		2.209	2.295	1.857	1.068	1.455	1.212	.588	.000	.000	.000	10.683

Contents

TABLE NO 2.3.2.

VOLUME(IN M3) PER HECTARE BY SPECIES AND DIAMETERCLASSES(IN CM.)

DISTRICT- CUTTACK STRATA-SAL

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Adina cordifolia	28	.070	.000	.000	.000	.000	.000	.000	.000	.000	.000	.070
Aegle marmelos	32	.018	.000	.000	.000	.000	.000	.000	.000	.000	.000	.018
Alangium salvifolium	42	.016	.000	.000	.000	.000	.000	.000	.000	.000	.000	.016
Albizzia lebbek	46	.000	.124	.000	.000	.000	.000	.000	.000	.000	.000	.124
Albizzia procera	50	.016	.000	.000	.000	.000	.000	.000	.000	.000	.000	.016
Anogeissus latifolia	72	.018	.000	.423	.000	.000	.000	.000	.000	.000	.000	.441
Bridelia retusa	138	.140	.000	.254	.000	.000	.000	.000	.000	.000	.000	.394
Buchanania lanzan	143	.098	.000	.000	.000	.000	.000	.000	.000	.000	.000	.098
Bursera delpechinen	145	.058	.000	.000	.610	.000	.000	.000	.000	.000	.000	.668
Careya arborea	177	.014	.000	.000	.000	.000	.000	.000	.000	.000	.000	.014
Casearia tomentosa	183	.193	.000	.000	.000	.000	.000	.000	.000	.000	.000	.193
Chloroxylon swietenia	206	.022	.000	.000	.000	.000	.000	.000	.000	.000	.000	.022
Cleistanthus collinus	218	.443	.092	.000	.000	.000	.000	.000	.000	.000	.000	.535
Dalbergia latifolia	266	.031	.000	.000	.000	.000	.000	.000	.000	.000	.000	.031
Dalbergia paniculata	267	.093	.000	.000	.000	.000	.000	.000	.000	.000	.000	.093
Diospyros melanoxylon	285	.048	.000	.000	.000	1.913	.000	.000	.000	.000	.000	1.961
Diospyros tupru	290	.000	.099	.000	.000	.000	.000	.000	.000	.000	.000	.099
Diospyros species	292	.153	.068	.000	.000	.000	.000	.000	.000	.000	.000	.221
Emblica officinalis	325	.083	.077	.000	.000	.000	.000	.000	.000	.000	.000	.160
Feronia elephantum	373	.014	.000	.000	.000	.000	.000	.000	.000	.000	.000	.014
Hollarrhena antidysenterica	452	.036	.000	.000	.000	.000	.000	.000	.000	.000	.000	.036
Hymenodictyon excelsum	470	.022	.000	.000	.000	.000	.000	.000	.000	.000	.000	.022
Ixora species	485	.068	.068	.000	.000	.000	.000	.000	.000	.000	.000	.135
Kydia calycina	501	.028	.000	.000	.000	.000	.000	.000	.000	.000	.000	.028
Lannea coromandelica	509	.043	.087	.000	.000	.000	.000	.000	.000	.000	.000	.130

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Cont. of Table No.2.3.2.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Madhuca latifolia	561	.050	.124	.000	.000	.000	.000	.000	.000	.000	.000	.174
Mallotus philippinensis	565	.014	.000	.000	.000	.000	.000	.000	.000	.000	.000	.014
Melia composita	584	.000	.088	.000	.000	.000	.000	.000	.000	.000	.000	.088
Morinda tinctoria	613	.022	.000	.000	.000	.000	.000	.000	.000	.000	.000	.022
Pterocarpus marsupium	722	.091	.000	.000	.000	.000	.000	.000	.000	.000	.000	.091
Pterospermum heyncanum	727	.051	.000	.256	.000	.000	.000	.000	.000	.000	.000	.307
Saccopetalum tomentosum	770	.186	.000	.000	.000	.000	.000	.000	.000	.000	.000	.186
Schleichera trijuga	795	.000	.077	.000	.439	.000	.000	.000	.000	.000	.000	.517
Shorea robusta	802	3.616	1.003	3.779	1.695	.000	.000	.000	2.525	.000	.000	12.617
Stereospermum personatum	824	.014	.000	.000	.000	.000	.000	.000	.000	.000	.000	.014
Strychnos nuxvomica	831	.018	.000	.000	.000	.000	.000	.000	.000	.000	.000	.018
Syzygium cumini	843	.016	.088	.000	.000	.000	.000	.000	.000	.000	.000	.104
Terminalia belerica	861	.178	.000	.000	.000	.000	.000	.000	.000	.000	.000	.178
Terminalia crenulata	866	.328	.000	1.056	1.200	.000	.000	.000	.000	.000	.000	2.584
Terminalia species	871	.000	.088	.365	.673	.882	.000	.000	.000	.000	.000	2.008
Xylia xylocarpa	919	.131	.000	.000	.000	.958	.000	.000	.000	.000	.000	1.090
Zizypnus zylopyra	929	.032	.000	.000	.000	.000	.000	.000	.000	.000	.000	.032
Unidentified trees	944	.270	.000	.000	.000	.000	.000	.000	.000	.000	.000	.270
TOTAL		6.740	2.083	6.132	4.617	3.753	.000	.000	2.525	.000	.000	25.850

Contents

TABLE NO.2.3.3.

VOLUME(IN M3) PER HECTARE BY SPECIES AND DIAMETERCLASSES(IN CM.)

DISTRICT- CUTTACK STRATA-BAMBOO

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Anacardium occidentale	66	.271	.000	.000	.000	.000	.000	.000	.000	.000	.000	.271
Cleistanthus collinus	218	.039	.000	.000	.000	.000	.000	.000	.000	.000	.000	.039
Erythrina variegata	341	.000	.379	.000	.000	.000	.000	.000	.000	.000	.000	.379
Lagerstroemia parviflora	505	.141	.000	.000	.000	.000	.000	.000	.000	.000	.000	.141
Mangifera indica	569	.000	.000	.000	.000	.000	.000	4.344	.000	.000	.000	4.344
Tectona grandis	858	.114	.000	.000	.000	.000	.000	.000	.000	.000	.000	.114
Unicentified trees	944	.288	.000	.000	.000	.000	.000	.000	.000	.000	.000	.288
TOTAL		.854	.379	.000	.000	.000	.000	4.344	.000	.000	.000	5.578

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TABLE NO.2.3.4.

VOLUME(IN M3) PER HECTARE BY SPECIES AND DIAMETERCLASSES(IN CM.)

DISTRICT- CUTTACK STRATA-MANGROVE

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Avicennia officinalis	102	.965	.000	.000	.000	.000	.000	.000	.000	.000	.000	.965
Excoecaria agallocha	371	.107	.000	.000	.000	.000	.000	.000	.000	.000	.000	.107
Heritiera littoralis	444	.225	.000	.000	.000	.000	.000	.000	.000	.000	.000	.225
Pongamia pinnata	701	.126	.000	.000	.000	.000	.000	.000	.000	.000	.000	.126
Rhizophora species	759	.137	.000	.000	.000	.000	.000	.000	.000	.000	.000	.137
Unidentified trees	944	.206	.000	.000	.000	.000	.000	.000	.000	.000	.000	.206
TOTAL		1.766	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.766

Contents

TABLE NO.2.4.1.

TOTAL VOLUME(IN M3) BY SPECIES AND DIAMETER CLASSES(IN CM.)

STRATA-:MISCELLANEOUS DISTRICT: CUTTACK

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Adina cordifolia	28	1335	0	0	0	0	0	0	0	0	0	1335
Aegle marmelos	32	3536	0	0	0	0	0	0	0	0	0	3536
Anacardium occidentale	66	11787	9508	0	0	0	0	0	0	0	0	21217
Anogeissus latifolia	72	785	13280	0	19882	0	0	0	0	0	0	33948
Barringtonia acutangula	108	0	0	0	11709	0	0	0	0	0	0	11709
Bombax ceiba	131	0	1650	0	0	27819	0	0	0	0	0	29469
Bridelia retusa	138	6208	3536	0	0	0	0	0	0	0	0	9744
Buchanania lanzan	143	0	1886	0	0	0	0	0	0	0	0	1886
Careya arborea	177	2829	3929	0	0	0	0	0	0	0	0	6679
Casearia tomentosa	183	1493	0	0	0	0	0	0	0	0	0	1493
Cassia fistula	186	1728	0	0	0	0	0	0	0	0	0	1728
Cassia siamea	188	8958	16267	0	0	0	0	0	0	0	0	25225
Chloroxylon swietenia	206	864	0	0	0	0	0	0	0	0	0	864
Cleistanthus collinus	218	17052	11787	8251	0	0	0	0	0	0	0	37170
Dalbergia paniculata	267	4165	0	11001	12416	28290	0	0	0	0	0	55873
Dalbergia species	269	550	0	0	0	0	0	0	0	0	0	550
Dillenia pentagyna	278	0	0	8408	0	0	0	0	0	0	0	8408
Diospyros melanoxylon	285	2829	0	0	0	0	0	0	0	0	0	2829
Diospyros species	292	2829	2200	0	0	0	0	0	0	0	0	5029
Emblica officinalis	325	1493	0	0	0	0	0	0	0	0	0	1493
Erythrina variegata	341	1650	0	0	0	0	0	0	0	0	0	1650
Erythrina species	342	0	2514	0	0	0	0	0	0	0	0	2514
Ficus species	385	1414	11237	20039	11709	0	0	0	0	0	0	44400
Gardenia resinifera	405	1257	3143	0	0	0	0	0	0	0	0	4400

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Cont. of Table No. 2.4.1.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Grewia tiliaefolia	431	1650	0	0	0	0	0	0	0	0	0	1650
Hollarrhena antidysenterica	452	13906	4715	0	0	0	0	0	0	0	0	18624
Ixora species	485	2121	3929	0	0	0	0	0	0	0	0	6051
Kydia calycina	501	628	0	0	0	0	0	0	0	0	0	628
Lagerstroemia parviflora	505	943	0	0	0	0	0	0	0	0	0	943
Lannea coromandelica	509	3457	2200	9115	0	0	26797	0	0	0	0	41571
Madhuca latifolia	561	0	0	11001	0	28290	0	0	0	0	0	39292
Mallotus philippinensis	565	392	0	0	0	0	0	0	0	0	0	392
Mangifera indica	569	0	0	0	0	0	36699	46207	0	0	0	82907
Pterocarpus marsupium	722	0	2436	0	0	0	0	0	0	0	0	2436
Pterospermum reyncanum	727	3221	6679	9665	0	0	0	0	0	0	0	19567
Saccopetalum tomentosum	770	3379	3929	0	0	0	0	0	0	0	0	7308
Schleichera trijuga	795	2200	3929	0	0	0	0	0	0	0	0	6051
Semecarpus anacardium	798	1650	0	16267	0	0	0	0	0	0	0	17917
Shorea robusta	802	5579	7544	11709	0	30019	0	0	0	0	0	54852
Spondias species	813	0	3929	0	0	0	0	0	0	0	0	3929
Stereospermum suaveolens	825	2043	4322	0	0	0	0	0	0	0	0	6365
Strychnos nuxvomica	831	550	5186	0	0	0	0	0	0	0	0	5736
Strychnos potatorum	832	2750	4950	0	0	0	0	0	0	0	0	7779
Tectona grandis	858	10373	0	0	0	0	0	0	0	0	0	10373
Terminalia belerica	861	3064	0	0	0	0	0	0	0	0	0	3064
Terminalia chebula	864	0	6365	0	0	0	0	0	0	0	0	6365
Terminalia crenulata	866	2514	6443	0	0	0	0	0	0	0	0	8958
Terminalia species	871	2436	0	0	0	0	0	0	0	0	0	2436
Vitex penducularis	901	1571	0	0	0	0	0	0	0	0	0	1571
Xylia xylocarpa	919	11709	2514	23182	28133	0	0	0	0	0	0	65539
Zizyphus zylopyra	929	3300	0	0	0	0	0	0	0	0	0	3300
Unidentified trees	944	21453	30412	17210	0	0	31748	0	0	0	0	100824
TOTAL		173594	180352	145932	83928	114341	95245	46207	0	0	0	839523

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TABLE NO.2.4.2.

TOTAL VOLUME(IN M3) BY SPECIES AND DIAMETER CLASSES(IN CM.)

STRATA-:SAL DISTRICT: CUTTACK

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Adina cordifolia	28	1983	0	0	0	0	0	0	0	0	0	1983
Aegle marmelos	32	510	0	0	0	0	0	0	0	0	0	510
Alangium salvifolium	42	453	0	0	0	0	0	0	0	0	0	453
Albizzia lebbek	46	0	3514	0	0	0	0	0	0	0	0	3514
Albizzia procera	50	453	0	0	0	0	0	0	0	0	0	453
Anogeissus latifolia	72	510	0	11988	0	0	0	0	0	0	0	12498
Bridelia retusa	138	3967	0	7198	0	0	0	0	0	0	0	11166
Buchanania lanzan	143	2777	0	0	0	0	0	0	0	0	0	2777
Bursera delpechinen	145	1643	0	0	17288	0	0	0	0	0	0	18932
Careya arborea	177	396	0	0	0	0	0	0	0	0	0	396
Casearia tomentosa	183	5470	0	0	0	0	0	0	0	0	0	5470
Chloroxylon swietenia	206	623	0	0	0	0	0	0	0	0	0	623
Cleistanthus collinus	218	12555	2607	0	0	0	0	0	0	0	0	15162
Dalbergia latifolia	266	878	0	0	0	0	0	0	0	0	0	878
Dalbergia paniculata	267	2635	0	0	0	0	0	0	0	0	0	2635
Diospyros melanoxylon	285	1360	0	0	0	54218	0	0	0	0	0	55578
Diospyros tupru	290	0	2805	0	0	0	0	0	0	0	0	2805
Diospyros species	292	4336	1927	0	0	0	0	0	0	0	0	6263
Emblica officinalis	325	2352	2182	0	0	0	0	0	0	0	0	4534
Feronia elephantum	373	396	0	0	0	0	0	0	0	0	0	396
Hollarrhena antidysenterica	452	1020	0	0	0	0	0	0	0	0	0	1020
Hymenodictyon excelsum	470	623	0	0	0	0	0	0	0	0	0	623
Ixora species	485	1927	1927	0	0	0	0	0	0	0	0	3826
Kydia calycina	501	793	0	0	0	0	0	0	0	0	0	793

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Cont. of Table No.2:4.2.

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Lannea coromandelica	509	1218	2465	0	0	0	0	0	0	0	0	3684
Madhuca latifolia	561	1417	3514	0	0	0	0	0	0	0	0	4931
Mallotus philippinensis	565	396	0	0	0	0	0	0	0	0	0	396
Melia composita	584	0	2494	0	0	0	0	0	0	0	0	2494
Morinda tinctoria	613	623	0	0	0	0	0	0	0	0	0	623
Pterocarpus marsupium	722	2579	0	0	0	0	0	0	0	0	0	2579
Pterospermum heyneanum	727	1445	0	7255	0	0	0	0	0	0	0	8700
Saccopetalum tomentosum	770	5271	0	0	0	0	0	0	0	0	0	5271
Schleichera trijuga	795	0	2182	0	12442	0	0	0	0	0	0	14652
Shorea robusta	802	102484	28427	107104	48039	0	0	0	71563	0	0	357591
Stereospermum personatum	824	396	0	0	0	0	0	0	0	0	0	396
Strychnos nuxvomica	831	510	0	0	0	0	0	0	0	0	0	510
Syzygium cumini	843	453	2494	0	0	0	0	0	0	0	0	2947
Terminalia belerica	861	5044	0	0	0	0	0	0	0	0	0	5044
Terminalia crenulata	866	9296	0	29929	34010	0	0	0	0	0	0	73235
Terminalia species	871	0	2494	10344	19074	24997	0	0	0	0	0	56910
Xylia xylocarpa	919	3712	0	0	0	27151	0	0	0	0	0	30892
Zizyphus zylopyra	929	906	0	0	0	0	0	0	0	0	0	906
Unidentified trees	944	7652	0	0	0	0	0	0	0	0	0	7652
TOTAL		191025	59036	173793	130855	106367	0	0	71563	0	0	732640

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TABLE NO.2.4.3.

TOTAL VOLUME(IN M3) BY SPECIES AND DIAMETER CLASSES IN CM.)

STRATA-:BAMBOO DISTRICT: CUTTACK

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Anacardium occidentale	66	2792	0	0	0	0	0	0	0	0	0	2792
Cleistanthus collinus	218	401	0	0	0	0	0	0	0	0	0	401
Erythrina variegata	341	0	3905	0	0	0	0	0	0	0	0	3905
Lagerstroemia parviflora	505	1453	0	0	0	0	0	0	0	0	0	1453
Mangifera indica	569	0	0	0	0	0	0	44769	0	0	0	44769
Tectona grandis	858	1174	0	0	0	0	0	0	0	0	0	1174
Unidentified trees	944	2968	0	0	0	0	0	0	0	0	0	2968
TOTAL		8801	3905	0	0	0	0	44769	0	0	0	57486

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TABLE NO.2.4.4.

TOTAL VOLUME(IN M3) BY SPECIES AND DIAMETER CLASSES(IN CM.)

STRATA-:MANGROVE DISTRICT: CUTTACK

SPECIES NAME	CODE	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	TOTAL
Avicennia officinalis	102	8702	0	0	0	0	0	0	0	0	0	8702
Excoecaria agallocha	371	964	0	0	0	0	0	0	0	0	0	964
Heritiera littoralis	444	2029	0	0	0	0	0	0	0	0	0	2029
Pongamia pinnata	701	1136	0	0	0	0	0	0	0	0	0	1136
Rhizophora species	759	1235	0	0	0	0	0	0	0	0	0	1235
Unidentified trees	944	1857	0	0	0	0	0	0	0	0	0	1857
TOTAL		15925	0	0	0	0	0	0	0	0	0	15925

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