



ENVIRONMENT AND FORESTS DEPARTMENT

POLICY NOTE

DEMAND No. 54

FORESTS

2015-2016

**M.S.M. ANANDAN
MINISTER FOR FORESTS**

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**GOVERNMENT OF TAMIL NADU
2015**

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INTRODUCTION

Forests as a life support system play a very crucial role in the ecological stability and economic security. It is the forests that have preserved the soil and plays a vital role in ensuring water resources, which in turn have acted to enrich agricultural lands. Management of forests aims to conserve the forest lands and its resources besides achieving high levels of productivity.

Tamil Nadu has a great tradition of preserving its forests and environment. It has taught us to respect nature and understand the complex interrelationship between biotic and abiotic components. Article 48-A of the Constitution of India emphasizes that the State shall endeavour to protect and improve the environment and

safeguard the forests and wildlife of the country. Article 51 A (g) of the Constitution of India calls upon the citizens to protect and improve the natural environment including forests, lakes, rivers, wildlife and to have compassion for all living creatures. The said principles have guided forest management.

2. FORESTS AND CLIMATE CHANGE

Climate change and global warming are of great concern for the natural resources including the most vulnerable communities living in the low lying areas along the coast and islands. The State's strategy to this global issue has been climate change mitigation and adaptation. Forest Department plays a prominent role in ensuring climate change mitigation by enhancing the Carbon Sequestration potential of the forests by improving the quality and the cover. The programmes of Forest Department also support community initiatives for climate change adaptation.

3. FOREST AREA AND TREE COVER

Tamil Nadu has 22,877 Sq. kms. of recorded forest area, which is only 17.59% of the geographical area of the State. As per the assessment of the Forest Survey of India (India State of Forest Report, 2013), the forest cover of the State is 23,844 sq. kms., constituting 18.33% of its geographical area. The forest and tree cover is 28,710 sq.kms., which constitutes 22.07% of the total geographical area of the State as against 33.33% envisaged in National Forest Policy, 1988.

4. FOREST MISSION

Forest Mission aims at ensuring environmental stability and maintaining the ecological balance, which help in sustenance of all life forms. One of the main emphasis of the mission is to involve all stakeholders in conserving and enhancing Forest and Tree Cover of the State. The mission outlays management strategies to achieve the goals.

5. OBJECTIVES OF FOREST MANAGEMENT

To meet the increasing expectations and demands, the forests of Tamil Nadu are being managed with the following broad objectives:

- Biodiversity and genetic resource conservation by protection of forests and wildlife.
- Augmentation of water resources in forest areas.
- Rehabilitation and restoration of degraded forests to improve the quality and enhance the growing stock.
- Enhancing tree cover outside forests for livelihood security and economic prosperity.
- Welfare of tribal and forest fringe communities for assured socio-economic stability.

6. STRATEGIES

In order to meet the above objectives, the following forest strategies are in place offering

scope to meet the rapidly changing societal demands for goods and services.

1. Biodiversity and genetic resource conservation
2. Wildlife management in terrestrial and marine landscapes
3. Catchment area protection for enhanced water augmentation
4. Enhancing Carbon Stocks and Mitigating Climate Change
5. Forest health and protection
6. Increasing tree cover outside forests
7. Socio-economic development of forest dependent communities
8. Tribal Development
9. People supported Eco-tourism
10. Strengthening Infrastructure development
11. Research and Extension
12. Application of Geographic Information System (GIS), Management Information System (MIS) and E-Governance
13. Human Resources Development

6.1. Biodiversity and Genetic Resource Conservation

6.1.1 Tamil Nadu has recorded forest area of 22,877 sq. km. which includes 19,464 sq. km. of Reserved Forests, 2,159 sq. km. of Reserved Lands and 1,254 sq. km. of unclassified lands. Protected areas are managed in 46 Forest territorial Divisions wherein biodiversity and genetic resources are scientifically managed for conservation. These forests and protected areas hold immense biodiversity and genetic resource in terms of trees, herbs, shrubs including valuable medicinal plants which have immense potential for economic and social development. The Western and Eastern Ghats holding innumerable plant and animal forms offer scope for bio-prospecting novel genetic resources. The genetic resources stand to support access and benefit sharing as envisaged under the Biological diversity Act, 2002 and associated Rules 2004.

6.1.2 The State has constituted the Biodiversity Board, to manage the key biodiversity resources in the State which has formulated the guidelines. Some of the elite tree resources identified within the forests are being

used as superior resources to support TOF including Agro-forestry, Plantation forestry and Tree cultivation in Private lands.

6.1.3 The Japan International Co-operation Agency (JICA) assisted Tamil Nadu Biodiversity Conservation and Greening Project (TBGP) is implemented with biodiversity conservation as its foremost objective. The Working Plans for all Forest Divisions have contributed significantly towards enrichment and conservation of biodiversity in the State.

6.2 Wildlife Management in Terrestrial and Marine Landscapes

6.2.1 Tamil Nadu has been a pioneer State in Protected Area management and development of forest resources and wildlife. Till the year 2013-14 an extent of 6,708.14 sq. km, was brought under the network of Protected Area management to strengthen wildlife protection and biodiversity conservation. During the year 2014-15, the Government have declared "Nellai Wildlife

Sanctuary" to an extent of 356.73 sq. km. and Suchindram-Theroor-Manakudy lake area as a Conservation Reserve to an extent of 4.85 sq. km. as protected area. Thus the total protected area is enhanced to 7,069.72 sq. km. which comes to 30.9% of the State's Forest area. Under the concept of Protected Areas, there are 5 National parks, 15 Wildlife sanctuaries, 14 bird sanctuaries and two conservation reserves besides four Tiger Reserves viz. Kalakkad-Mundanthurai, Anamalai, Mudumalai and Sathyamangalam. These Protected Areas have been established under the Wildlife (Protection) Act, 1972. Further Tamil Nadu also has the distinction of having 3 Biosphere Reserves viz. Nilgiris, Gulf of Mannar and Agasthiarmalai, which are known for their richness and unique biodiversity. The Western Ghats are one of the 25 global hotspots and one of the 3 mega centers of endemism in India. The forests of Kanniyakumari, Kalakkad-Mundanthurai Tiger Reserve, Anamalai Tiger Reserve, Mudumalai Tiger Reserve, Mukurthi, Srivilliputhur and Megamalai owe their richness in flora and fauna to

their location in the Western Ghats. Site specific knowledge on complexities of issues covering wildlife areas have guided management through the approved management plan prescriptions.

6.2.2. The Protected Areas hold large habitats of viable population of wildlife, endemic species, key-stone species and provide habitat for wildlife besides landscapes and corridors for large mammals. The Protected Areas in the State are mainly managed for conservation of biodiversity, education, recreation, historical significance and unique landscapes and seascapes.

6.2.3. Tamil Nadu not only has taken initiatives for conservation of terrestrial fauna but also initiated action for conservation of marine flora and fauna by declaration of Gulf of Mannar Marine National Park.

6.2.4. Wildlife expert groups have identified 13 Elephant Corridors to enable migration of

Elephants, to meet out their food, fodder and biological requirements.

6.2.5 The State's sincere efforts in establishing range of Tiger habitats in Western and Eastern Ghats have resulted in record by raising tiger numbers from 163 in 2011 assessment to 229 in 2014 assessment. Though overall increase at National level comes to 30%, it is 40% in the State of Tamil Nadu since the last estimation in the State. Wildlife management provides attention on conservation of all wildlife within and outside of the Protected Areas.

6.2.6. Further, for conservation of wildlife, following Zoos are recognised by the Central Zoo Authority of India. These zoos play a very important role in the conservation of endangered species, education, research and studies on wildlife health besides entertainment.

1. Arignar Anna Zoological Park, Vandalur, Chennai.

2. Children's Park, Guindy, Chennai.
3. Amirdhi Zoo, Vellore.
4. Kurumbapatti Zoological Park, Salem.
5. Tiruchirappalli Zoo, Trichy.

6.3. Catchment Area Management for Enhanced Water Augmentation

The objective of catchment area management is to protect and conserve the soil, water and other natural resources. Tamil Nadu is endowed with both the perennial and non-perennial river systems. The main rivers of Tamil Nadu originate in the Western Ghats and flow eastward. Forests contribute to 85% of the catchments for all the 32 river systems, 11 major reservoirs and 61 major irrigation structures of the State. Watershed management and water augmenting approaches have enabled sustained stream flows, improved hydrological conditions ensuring restoration of biological integrity in the watersheds. Freshwater ecosystems are under pressure and through watershed programmes department has

been able to scientifically monitor the river systems understanding the quality while preserving the riparian forest health. Measuring changes in species composition and growth have generated information on watershed dynamics. The catchment area management has enabled restoration of ecologically healthy watersheds and increase the productivity. In the downstream forest areas construction of major water harvesting structures like check dams, and percolation ponds have been taken up for augmentation of water resources. These structures not only act as storage containers but also act as a catalyst for water preservation thereby recharging the ground water resources and reactivation of natural springs. The major afforestation schemes viz, the Tamil Nadu Afforestation Project, National Afforestation Programme, Western Ghats Development Programme, Hill Area Development Programme and Water Conservation and Canopy Improvement project are pursuing this approach.

People's participation has enabled successful management of forest watersheds.

6.4. Enhancing Carbon Stocks and Mitigating Climate Change

Changes in climate associated with global warming are bound to have a significant impact on the forests. Carbon storage capacity of forests and their role in climate change mitigation are receiving increasing attention in today's context of climate change. The State's Forest Cover is no exception to the climate changes. Protection of forests and restoration of degraded forest ecosystems in the State are very important as it increases the vulnerabilities of communities leading to poverty. To enhance the quality of forests, in-situ soil and moisture conservation works like gully plugging, contour trenches, vegetative barriers, catch water pits, etc. are carried out in the forest areas of the State thereby checking soil erosion and improving the quality of forests. In addition removal of exotic weeds to eradicate invasive alien species,

gap planting to assist natural regeneration have been carried out mainly under Tamil Nadu Afforestation Project, National Afforestation Programme, Western Ghats Development Programme and under Hill Area Development Programme. The Green India Mission is also launched in the State on landscape basis to enhance climate resilience of identified forests.

6.5. Forest Health and Protection

6.5.1. The forests in the State are vulnerable to anthropogenic pressures and the forest resources are under constant threat due to various factors. Illicit cutting and removal of trees, encroachment of forest lands, sandalwood smuggling, forest fire, grazing, ganja cultivation, theft of medicinal plants, poaching of wildlife, etc., pose continual threat to the protection of forest resources. The measures taken by the department to prevent these illegal activities have yielded desired results. To deal with it very effectively, at present, there are 13 Forest Protection Squads under Protection and

Vigilance wing, functioning as two groups covering the State viz. Northern Group (7 Forest Protection Squads) and Southern Group (6 Forest Protection Squads) besides 5 Flying Squads. Further, 17 Forest Stations, 112 Forest Check Posts and 11 roving Check Posts are functioning at important and vulnerable points throughout the State.

6.5.2. The Protection and Vigilance Wing of the department shares the intelligence and information collected on forest and wildlife offences with the forest divisions concerned for immediate action. The forest personnel are being given special trainings including weapon training in order to take up innovative combat and patrol strategies and methodologies for protection of forest wealth and resources. The protection works include consolidation of forest boundaries by erecting cairns, fire prevention strategies by creating new fire lines and maintenance of existing fire lines, involving local people in firefighting through the formation of Joint Fire Management Committees,

employing fire watchers during the dry season, constructing fire watch towers, employing anti-poaching watchers and preventing the use of forest land for illicit activities like ganja cultivation. The Protection and Vigilance Wing of the department has contributed very significantly in improving the protection of forests and wildlife.

6.5.3. A mandate for monitoring and maintaining health of forests is an emerging concern. The Forests and plantation health are governed by various factors like drought, fire, climate change, pests and diseases. There are many natural and man caused disturbances in the forests which affect the quality of timber in the plantations and cause disturbance in the species composition, forest structure, function, productivity and damage to wildlife habitats. Monitoring the health of forests through collaborative projects with institutes, universities and NGOs are essential to reduce the distress syndrome, which have enabled remedial actions to sustain productivity.

6.6. Increasing Tree Cover Outside Forests

6.6.1. The National Forest Policy, 1988 mandates bringing of one-third of the geographical area of the country under tree cover for ecological amelioration. As the scope for increasing the notified forest area is limited, enhancing tree cover outside the forests has been given more importance. To accomplish this mission, tree cultivation outside forests has been taken up in private farm lands, fallow lands, other common lands like the tank foreshores, poramboke lands, roadsides, railway margins, canal banks and etc., The choice of species recommended to the farmers for their lands depends on profitability and drought resistance.

6.6.2. The main focus to create tree resources outside the forest areas will be for meeting out the needs for tree products, besides availing various environmental benefits relating to the abatement of air pollution, reduction of noise pollution, carbon sequestration and prevention of soil erosion on the canal banks. In order to achieve national goal of

33.33% tree cover, major schemes like JICA assisted Tamil Nadu Biodiversity Conservation and Greening Project (TBGP), Massive Tree Planting, Teak planting on padugai lands, planting in tank foreshores, etc. have been undertaken. These programmes would also help to bridge the gap between future supply and demand of fuel wood and timber in the State.

6.7. Socio-economic Development of Forest Dependent Communities

6.7.1. People in forest fringe villages tend to rely on farms and forests for their livelihood. Degradation of forests has accentuated the poverty conditions among the forest fringe communities, as they are virtually deprived of livelihood options. Efforts have been made by the Forest Department in gradually building trust and credibility in remote forest fringe villages. The people living in these villages have realized that there is a transformation in the role of Forest Department as it is carrying out

developmental activities besides its routine forest protection activities.

6.7.2. Joint Forest Management has been given big impetus in both phases of JICA aided Tamil Nadu Afforestation Project (TAP) with the active participation of the local people in 2,317 forest fringe villages. TAP has handled the poverty alleviation as a main route towards biodiversity conservation by undertaking buffer zone activities in all TAP villages. TAP has made strong path-breaking efforts in creation of alternative employment opportunities for sustainable livelihood. Coordination with the other Government agencies has resulted in generating more resources and opportunities for the forest fringe and forest dwelling communities for their development under TAP. Therefore, the current approach is based on the lessons learnt in two phases of TAP implementation. Efforts will be focused on developing opportunities for harmonious existence of the forest fringe and dwelling communities to

seek their participation in forest conservation and development. The approach will be based on two premises viz. (i) building the social capital by enhancing the individual income and (ii) augmenting natural capital by way of promoting natural resource based activities. Traditional skills and indigenous wisdom will be utilized for conservation gains.

6.8. Tribal Development

6.8.1. The tribals have always lived in harmony with nature using the resources in a sustainable manner without destroying them and have helped the Forest Department, all along in the forest management and conservation efforts. The tribal communities have a symbiotic relationship to the advantage of forest conservation. Government policies also insist to have special programmes in tribal areas to improve their quality of life. Hence, Forest Department has been involved in tribal education, employment generation and other welfare activities for the tribals. Primary education to tribals in Jawadi hills

was started by the Forest Department as early as in 1951 at Jamanamarathur and extended it to other villages. The Forest Department in Tamil Nadu has taken special care to impart the best education for tribals by running 20 schools in tribal areas covering Tiruvannamalai, Vellore and Coimbatore districts. Over 4500 students are studying in these schools. Cash awards are being given to the 3 top scorers each in boys and girls category for Class 10th and 12th from the tribal schools run by Forest Department. Recognising the role of tribals for sourcing forest usufructs, this State has also issued orders providing for free collection and use of Minor Forest Produce (MFP) by tribals. The services of tribals have been utilized in all the major afforestation and development activities of the forest department. This is enabling their harmonious existence in the forests and their participation in forest conservation and development.

6.8.2. With the objective of involving local tribals in Forest Protection, the Department had taken

special initiative to employ local tribals youth as Tribal Anti-Poaching Watchers.

6.8.3. Creation of Tribal Education infrastructure facilities is a major priority area of the Forest Department and with the cooperation of Tribal Welfare Department, all the tribal schools have been renovated thereby improving the standard of tribal Education.

6.8.4. Tribal housing is one of the priority items of the department and tribal houses in interior tribal areas have been renovated thereby improving the standard of the tribal life.

6.8.5. Having realized the importance of communication in interior tribal areas, the Department has taken effort to improve interior connecting roads in tribal hamlets. In addition to this, long pending road work of Erikadu to Gundur in Pachamalais is being taken up during this year with the help of Tribal Department.

6.8.6. As a pioneering State, the Tamil Nadu Forest Department is giving 100 % of Minor Forest Produces to tribals through Village Forest Tribal Committees.

6.9. People Supported Eco-tourism

6.9.1. Tamil Nadu, with its varied geography and diverse climatic zones, offers several forest areas to enjoy the scenic, aesthetic, socio-cultural, and educational aspects of nature in its pristine glory. The forests encompass some of the highest peaks in South India such as Doddabetta on one hand and coastal plains on the other. Further, sanctuaries, national parks, mangrove areas such as Muthupet and Pitchavaram and coastal sand dunes offer immense scope for developing eco-tourism ventures.

6.9.2. Eco-tourism has huge potential for creating substantial livelihoods for local people, even while conserving the natural sites. Eco-tourism is considered as a nature based tourism activity that

involves environmental conservation alongwith local economic development. For successful eco-tourism, measures like improvement of infrastructure facilities for the visitors, capacity building and training programmes for forest personnel, publicity, formation of reception centres, vehicles for visitors, watch towers, telescope for viewing wildlife in birds / wildlife sanctuaries and providing eco-guides for tourists have been taken up.

6.9.3. In order to improve participatory Eco-Tourism in the state, under TBGP, 25 Eco Tourism spots have been identified and eco-tourism activities have commenced in these areas with the involvement of the local communities. Similarly potential areas like Pachamalais were taken up under Eco-Tourism with the involvement of District Administration and local people.

6.10. Strengthening Infrastructure

6.10.1. Improving the infrastructure of the Forest Department through construction and maintenance of buildings, interpretation centres, staff quarters and provision of equipments and vehicles is necessary for the efficient functioning of the department. At the same time, infrastructures in forest areas such as roads, housing, schools, and dispensaries also need improvement. As most of the staff of Forest Department are working in remote areas, buildings including residential, non-residential, protection-linked structures like check posts, anti-poaching sheds cum watch towers will be provided as per requirement besides carrying out maintenance of existing departmental buildings.

6.10.2. A total length of 3,350 kms. of roads including 1,631.5 kms. of WBM roads and black topped roads, 1,718.5 kms. of gravel roads are under the control of Forest Department. Improvement and periodical maintenance of forest

roads inside the forest areas is necessary to facilitate faster movement of protection staff, labour and transport of exploited timber and other forest produce to the nearby market, apart from periodical inspection of interior forest areas by protection staff and senior officers. To strengthen communication facilities, provision of vehicles to field officials who are engaged in protection and provision of communication equipments like wireless, GPS, cell phones, etc. for field staff are being made.

6.11. Forest Research and Extension

6.11.1. Credible and reliable forest management packages and practices can be established only through strong forest awareness, research, education and extension support. More emphasis has been laid on scientific forestry research after recognizing the impact of forests on ecological security, energy and employment. Forest research has provided new thrust to the latest dimension of forest activities, in areas of tree cultivation in private lands, seed biology, medicinal plants conservation,

MFP, post-harvest technology, etc. The main focus of forest research in Tamil Nadu is to improve the quality of forests, bio-diversity conservation, improve productivity and ensure sustained goods and services for the benefit of people. The innumerable need based, cost effective research trials covering various economically important tree species across Agro-climatic zones in the research centers have generated valuable information to support tree cultivation, the technology of which is disseminated through the Forestry Extension Centres in the district. Research has been undertaken in multipurpose tree species, non-wood forest produce and other thrust areas like silviculture, bio-diversity conservation, restoration ecology, soil nutrient management, medicinal plants improvement and tree husbandry, bio-fertilizer production, post-harvest technology. Remarkable achievements and findings of forest research will be transferred to the field for successful restoration and rehabilitation of degraded forests and to improve productivity in

tree cultivation efforts in private lands. Forestry research focuses on tree improvement for quality seedling stock production and clonal seedlings production. Genetic selection of fast growing short rotation trees, disease resistant varieties and tailor made trees for various end uses are the research efforts in forest genetic resource domestication.

6.11.2. Under Tamil Nadu Biodiversity Conservation and Greening Project (TBGP), necessary attention has been given to conduct various types of research for increasing the natural resource base. The main emphasis is to increase the wood production outside the forest area. Management interventions are needed on production forestry and agro-forestry in different agro-climatic zones. Research on wood market and research on Non Timber Forest Produce (NTFP) management have been initiated. Research on invasive species of weeds like *Lantana camara* and *Prosopis juliflora* has been envisaged.

6.11.3. In order to expand our tree resources outside the natural forest area as well as to meet the ever-increasing demand of the forest produce, 31 Forestry Extension centres were formed. These centres provide forestry extension services and technology support for raising quality tree seedlings like thornless bamboo, casuarina, teak, neem, Melia dubia, grafted tamarind, nelli, etc. These seedlings are planted in private lands and serve as demonstration plots established in farmlands. They also provide platform for eco-education and encourage discussion among youths and children. The Forestry Extension wing is actively associating with a NGO called Society for Social Forestry Research and Development Tamil Nadu (SSFRDT) in formation of Tree Grower's societies in various districts by recommending suitable tree species for various soil and agro climatic condition, technical know-how on tree growing, providing marketing information, tie-up arrangements with the buyers of trees and Non-Timber Forest Produce.

6.12. Application and development of GIS, MIS and E-Governance

Forestry involves vast database on human resource development, land based information, project related activities, products and services, research and extension and public utilities. The use of Information Technology has come to play a vital role in planning, management and monitoring in forestry sector. Hence Geographical Information System (GIS) is vital for efficient forest management practice. The specific applications of this technology have effectively been utilized in the forest cover / type mapping and change analysis, preparation of the district-wise forest atlases, forest fire monitoring, working plan / management plan preparation etc. Digital district Forest Atlases were prepared for all the districts of Tamil Nadu by using satellite Remote Sensing and GIS. Forest fire mapping with use of satellite imagery was also completed for entire Western Ghats and Eastern Ghats of Tamil Nadu, which is helpful in managing forest fire in the divisions. Management Information

System (MIS) is a very important tool for systematic and effective management of the activities. It helps in periodical progress monitoring and timely and effective decision making. In order to orient the Forest Department into Information Technology mode, web-based user friendly MIS software is under development. Tamil Nadu Statewide Area Network (TNSWAN) has been identified as one of the core e-Governance initiatives including National e-Governance Action Plan (NeGP). Capitalizing on the recent developments in information technology, a full-fledged MIS facility has been established with Wide Area Network (WAN), and appropriate skills of the Forest Department staff are continuously being upgraded.

6.13. Human Resources Development

6.13.1. Human resources play a vital role in the field of forestry and have become one of the most important assets of the Forest Department which is one of the oldest departments in the State. Over the

years, it has made significant contribution in conservation and development of forests of the State through its skilled human resources. At present, the department is running two training institutions viz. Tamil Nadu Forest Academy (TNFA), Coimbatore and Tamil Nadu Forestry Training College, Vaigai Dam for imparting training to departmental personnel including senior, middle and lower level officers.

6.13.2. In Tamil Nadu Forest Academy, Coimbatore, training is imparted to Forest Range Officers and Foresters while in Tamil Nadu Forestry Training College, Vaigai Dam training is imparted to Forest Guards. Training is being imparted to the forest staff to effectively cope up the challenges in protection and conservation of forests and wildlife. The periodical / refresher programme will be imparted to officers, subordinates, ministerial staff, Village Forest Committee (VFC) members, NGOs, etc. on advanced plant production techniques, wildlife management, legal aspects,

biodiversity conservation, usage of weapons, fire control, application of GIS and handheld GPS, designing of civil works, wood technology, participatory forest management, etc.

6.13.3. Further action has been taken to fill up 30% of the total vacancies for direct recruitment to the post of Forest Watchers in Hill districts from amongst the local Schedule Tribes candidates subject to their eligibility.

7. HIGHLIGHTS OF 2014-15

- Nellai Wildlife Sanctuary has been declared as 15th Wildlife Sanctuary in the State.
- Suchindram-Theroor-Manakudy lake area in Kanniyakumari District has been declared as 2nd Conservation Reserve in Tamil Nadu.
- Extended the benefit of Risk allowance to Supernumerary Anti-poaching Watchers

and Supernumerary Plot Watchers @ Rs.400/- per month.

- A sum of Rs.38.36 crore has been realised as revenue to Government by sale of 51.43 metric tonnes of sandalwood through tender cum auction.
- A sum of Rs.2.98 crore has been realised as revenue to Government by sale of 1054.96 cubic metres of teak wood through open auction.
- A sum of Rs.17.76 crore has been fetched as revenue by sale of Social Forestry Plantations. The Government have ordered for distribution of share out of the revenue from 2012-13 Social Forestry plantations to Panchayats at a cost of Rs.6.77 crores through Rural Development and Panchayat Raj Department.

- Recognition of Tamil Nadu Forest Academy (TNFA) as a training centre for Forest Range Officers by the Government of India.
- 513.73 hectares have been notified as Reserved Forests and 1274.45 Ha. as Reserved Land.
- The Tamil Nadu Forest Uniformed Service Recruitment Committee had issued notification for filling up of 181 posts in the cadre of Forester and the state level examination was conducted for the first time on 22.02.2015.

8. GOLDEN MOMENTS OF TAMIL NADU FOREST DEPARTMENT

8.1. Participation in the Republic Day Parade

For the first time in the history of Tamil Nadu Forest Department, its contingent had participated

in the Republic Day parade held at Chennai on 26.1.2015.

8.2. Rise in Tiger population in Tamil Nadu

On 20.01.2015, Ministry of Environment, Forests and Climate Change Government of India has released the report titled "Status of Tiger in India, 2014" at New Delhi. In respect of Tamil Nadu, it has been recorded as a significant rise in numbers of tiger from 163 in 2011 to 229 in the assessment made during 2014.

8.3. National Tiger Conservation Authority (NTCA) Award for Excellence

Anamalai Tiger Reserve has received NTCA award for Excellence for the Block of years 2012- 14 in the category of "Communication strategy".

8.4. Kalakkad-Mundanthurai Tiger Reserve turned 25

Kalakkad-Mundanthurai Tiger Reserve (KMTR), the first tiger reserve in Tamil Nadu which

also is an important biodiversity hotspot in Western Ghats, has completed 25 years during the year 2013-14.

8.5. Lowest diversion of forest areas

Tamil Nadu has always been the forerunner of all the forest protection and conservation measures as it implements various enactments vigorously. The diversion of forest lands for non-forestry purposes in Tamil Nadu is lowest in the country. In a long span of more than 30 years, the diversion is only about 4,490 hectares involving 374 cases.

8.6. Selection of woman Forest Apprentices (Forest Range Officers)

79 Forest Range officers (Forest Apprentices) have been selected by Tamil Nadu Public Service Commission after a gap of nearly ten years and allotted. 74 candidates are undergoing training, among them 63 are Men and 11 are Women Apprentices. Women as Range Officers have been

selected for the first time in the history of Forest Department.

9. FOREST REVENUE AND EXPENDITURE

9.1. Forest Revenue

Major sources of revenue are by sale of sandalwood, timber and sale of farm forestry plantations (Annexure-1). Dead sandalwood trees alone are extracted for sale. Matured teak trees aged over 30 years are being harvested every year. Supply of pulpwood raw materials is made from matured plantations, which are allotted by the Government to paper and tannin industries. The farm forestry plantations are raised in irrigation tanks and sold in auction to raise revenue.

9.2. Expenditure

All the development programmes including afforestation, soil and water conservation, habitat improvement works in various sanctuaries and Tiger reserves, intensive care towards protection of

forest wealth, creation of awareness among the rural people have been continued in an effective manner. The necessary provisions for schemes have been made in the budget are narrated in Annexure-2.

10. MAJOR ONGOING SCHEMES – 2015-16

STATE SCHEMES

10.1. Tamil Nadu Biodiversity Conservation and Greening Project

An externally aided 'Tamil Nadu Biodiversity Conservation and Greening Project' (TBGP) at an outlay of Rs.686 crore is under implementation from 2011-12, which will continue till 2018-19. This project aided by Japan International Cooperation Agency (JICA) focuses on biodiversity conservation through forest protection and socio-economic development of forest fringe villagers and tribal communities. It will also help to continue the State's efforts in increasing tree cover outside forests by taking up tree cultivation in

private lands. A Project Management Unit which has been registered as Tamil Nadu Biodiversity Conservation and Greening Society under Tamil Nadu Societies Registration Act 1975 is implementing the project. During 2014-15, the project was implemented at an outlay of Rs.82.78 crore. This scheme is being continued in 2015-16 with an outlay of Rs.114.55 crore.

10.2. Massive Tree Planting Programme

In order to make tree planting as a massive people oriented exercise as well as to increase green cover in the State, a massive tree planting programme has been sanctioned for implementation 2011-12 to 2014-15 for planting and maintenance of 1.95 crore seedlings in the 32 districts throughout Tamil Nadu. Implementation of planting 67 lakh seedlings during 2015-16 at an outlay of Rs.53.72 crore is under progress.

10.3. Raising teak plantations on padugai lands

The objectives of the scheme are to create timber resources in the State, to increase tree cover outside the Reserve Forests and to prevent soil erosion in the canal banks. During 2014-15, teak plantations have been raised over an area of 3260 ha. besides carrying out maintenance works in the padugais of Thanjavur, Tiruvarur, Trichy, Dindigul and Villupuram districts at an outlay of Rs.13.97 crore.

10.4. 13th Finance Commission

The 13th Finance Commission has recommended allocation of a sum of Rs.142.48 crore under Grants in-aid for maintenance of forests for the period from 2010-11 to 2014-15 for Tamil Nadu Forest Department. The objective is to provide fiscal resources, in support of State's commitment in forest and bio-diversity conservation. During 2014-15, this scheme is implemented with an outlay of Rs.35.62 crore.

10.5. Water conservation and canopy improvement project

A comprehensive scheme with an outlay of Rs.50 crore is under implementation every year from 2012-13 to undertake extensive water harvesting works with funding assistance from NABARD. Main objectives of the scheme are to improve the soil moisture regime, to recharge ground water aquifer and to increase the availability of water for cultivation activities. During, 2013-14, this scheme was implemented in 10 districts of the State at an outlay of Rs.50.00 crore.

10.6. Nature Conservation

The objective of the scheme is to maintain and carry out the works such as the improvement of existing animal enclosures in Guindy National Park and construction of compound wall for protection of Forest & Wildlife and Establishment of irrigated fodder plot including tree fodder for herbivores etc. in Tamil Nadu Forestry Training College at Vaigai Dam. In addition to it the schemes, of Rescue,

rehabilitation and sterilization of Spotted deer in Chennai City, Upgrading the information Centre at "Zero" point and Suchindrum-Theroor Birds Conservation Reserve, Conducting Wildlife Census and Erection of spotted deer alert signage boards with solar sensor are implemented during 2014-15 with an outlay of Rs.1.377 crore. It is proposed to continue the scheme at an outlay of Rs.68.07 lakhs during 2015-16.

10.7. Payment of compensation for the damages caused by wildlife

10.7.1. Increase in human population, urbanization and industrialization have resulted in reduction in quality of animal habitats, besides fragmentation of habitats, as a result of which wildlife have started straying out of the forests into human settlements. This results in man animal conflict. It is essential to tackle this problem on a war footing through erection of appropriate physical barriers in the vulnerable areas, augmenting fodder resources and providing water holes inside the forests for wildlife

and timely payment of compensation to the victims for the loss of human life, injury, damage to agricultural crops and property. During 2011-12, the Government have enhanced the rate of compensation amount to be paid for damages to crops, properties and human death caused by wildlife.

10.7.2. The compensation for human death and permanent incapacitation has been raised from Rs.1.50 lakh to Rs.3.00 lakh and for crop damages from Rs.0.15 lakh per acre to Rs.0.25 lakh per acre. An amount of Rs.4.92 crore has been sanctioned under various schemes for payment of compensation during 2014-15. During 2015-16, this scheme is proposed to be implemented at an outlay of Rs.3.53 crore.

10.8. Asian elephants depredation and mitigation measures

10.8.1. Human wildlife conflict is a complex problem to be managed by adopting a multi- pronged

strategy involving habitat improvement including improving water sources, trap crop management (growing crops which are preferred by wild animals as fodder inside the forest area itself), formation of physical barriers along the forest boundary, capacity building of the villagers, awareness creation and timely payment of compensation to the victims for loss of human life, injury and damage to agricultural crops and property.

10.8.2. The construction of barriers like solar power fence and elephant proof trench along forest boundaries to prevent man-animal conflicts has been appreciated by the people. During 2013-14, the State Government sanctioned Rs.31.35 crore for mitigation of elephant depredation in Vellore, Thiruvannamalai, Coimbatore, Nilgiris, Dharmapuri, Krishnagiri, Erode, Dindigul, Tirunelveli, Kanniyakumari and Tiruppur districts. One of the prominent tasks undertaken under this scheme is digging of elephant proof trenches for controlling the

movement of elephants and other larger mammals to come outside the forest areas. During 2013-14, Elephant Proof Trenches were dug to a length of 637.50 Km along the forest boundaries and other activities like, maintenance of Elephant proof trenches, constructions of percolation ponds, water troughs, maintenance of check dams, early warning system, trip wire alarm system and tranquilizing and translocation operation for problematic elephants in Vellore, Salem and Dharmapuri circles etc. at a cost of Rs.25.75 crore. This scheme was implemented at a cost of Rs.2.95 crore in 2014-15. This scheme will be continued during the year 2015-16.

10.9. Creation of fodder resources and improvement of wildlife habitats

With a view to restrict the elephant movement within the forests, activities like raising green fodder bank inside the Reserved Forest areas, providing salt licks to meet the micro nutrient requirements of the elephants, creation of water

holes, construction of check dams and percolation ponds to meet their water demand in summer season have been undertaken. The Government have sanctioned Rs.20.87 crore for implementation of this scheme for a period of five years from 2011-12 to 2015-16. During 2014-15, this scheme was implemented at a cost of Rs.4.17 crore. It will be continued with an outlay of Rs.2.74 crore during 2015-16.

10.10. Pallikaranai Marshland

10.10.1. The Pallikaranai marshland is a unique fresh water swamp located within the Chennai metropolitan area. This wetland is situated in Perungudi, Pallikaranai and Thoraipakkam villages of Kancheepuram District. Hon'ble Chief Minister of Tamil Nadu had directed to protect this marshland during 2002. As on date, 690.65 ha. out of the total marshland area of nearly 931.50 ha. is so far brought under the control of Forest Department.

10.10.2. In order to preserve the marshland to discharge its ecological functions, a comprehensive scheme has been sanctioned for a period of five years from 2011-12 to 2015-16 with an outlay of Rs.15.75 crore, for taking up various restoration activities like habitat improvement, protection, research, monitoring, publicity, awareness, etc. In order to ensure the implementation of the restoration works during the summer months on continuous basis and to receive funds from other funding agencies and donors, the "Conservation Authority of Pallikaranai Marshland" has been set up with approval of the Government. During 2014- 15, this scheme was implemented at a outlay of Rs.1.48 crore. This scheme will be continued during 2015-16 at a cost of Rs.1.48 crore.

10.11. Butterfly Park and Nakshatravanam at Srirangam, Trichy

A special scheme for establishing a butterfly park in an area of 10 ha. in Upper Anaicut Reserve Forest near Srirangam for creation of

Nakshatravanam and to conserve and exhibit the butterflies for the benefit of pilgrims and tourists is under implementation at an outlay of Rs.7.35 crore. During 2014-15, this scheme was implemented at an outlay of Rs.2.63 crore.

10.12. Advanced Institute for Wildlife Conservation

Establishment of Advanced Institute for Wildlife Conservation (Research, Training and Education) at Arignar Anna Zoological Park has been undertaken for a period of three years from 2012-13 to 2014-15 with an outlay of Rs.27.13 crore. This institute will have centres for reproductive biology, animal care science, conservation ecology, conservation education and sustainability, conservation and evolutionary genetics, migratory birds, species survival, wildlife forensic lab and hostel for scientists. During 2014-15, this scheme has been implemented at a cost of Rs.5.83 crore. The remaining works will be continued during 2015-16.

10.13. Gulf of Mannar Biosphere Reserve Trust (GOMBRT)

The Government of Tamil Nadu has taken over the functioning of the Gulf of Mannar Biosphere Reserve Trust by sanctioning Rs.10 crore @ Rs.2.50 crore per year for a period of four years from 2013-14 to 2016-17. During 2014-15, research activities, awareness creation, training programmes and eco-development activities were undertaken at an outlay of Rs.2.50 crore. The activities will be continued during 2015-16 also.

10.14. Arignar Anna Zoological Park, (AAZP) Vandalur

10.14.1. Arignar Anna Zoological Park, spread over an extent of 602 Ha. of forest area, is located at Vandalur near Chennai. The park exhibits 1672 animals, which includes 49 species of mammals, 80 species of birds 33 species of reptiles in all numbering 162 species of wildlife.

10.14.2. Over the past 25 years since its establishment, this zoological park has emerged as a successful ex-situ conservation complex and a captive breeding centre for many endangered animal species like White Tiger, Lion Tailed Macaque, etc. This zoological park attracts more than 23 lakhs visitors annually.

10.14.3. An amount of Rs.0.58 crore was allotted by Government of India (Central Zoo Authority) under the scheme for Rescue Centre and Rs.0.27 crore as State Government Fund for the improvement of AAZP during 2014-15. Works like redesigning of hand rearing facility in Zoo Veterinary Hospital, Redesigning the existing animal house in Nilgiri Langur enclosure, Replacement of rusted Iron gates and grills with new ones and redesigning of animal house in striped hyena enclosure and construction of under water viewing gallery for gharal are being undertaken. The works for establishment of Butterfly Park are under progress at a cost of Rs.4.77 crore. The animal adoption programme by

sponsors in the Arignar Anna Zoological Park is emerging as a significant initiative for awareness and compassion for wildlife among the public. A contribution of Rs.0.55 crore has been received from 219 sponsors so far.

10.15. Rejuvenation Camp for Temple and Departmental Elephants

10.15.1. A Special Health and Rejuvenation camp for the 30 elephants belonging to temples and Mutts was conducted through facilitation by Forest Department for 48 days from 11.12.2014 to 27.01.2015 at Thekkampatti in Coimbatore district.

10.15.2. In addition, 54 elephants of Forest Department participated in the similar Special Health camps at Theppakadu (Mudumalai), Anamalai, Vandalur Zoo and Salem Kurumbapatti Zoo during the year 2014-15 and an amount of Rs.82.00 lakhs was spent for this purpose.

10.15.3. Regarding temple and mutt elephants, before starting the camp, health checkup for

elephants and elephant men was done. During rejuvenation camp, regular medical checkup were also provided besides regular supply of nutritious food. The rejuvenation camp creates socialization, joyful experience which result into psychological improvement of the elephants. Similar rejuvenation camp will be conducted for the captive elephants during the year 2015-16 also.

CENTRALLY SPONSORED SCHEMES

These schemes are 100% funded by Government of India except Project Tiger. 39 such schemes were sanctioned for a sum of Rs.21.84 crore during the year 2014-15. With this funding, various habitat improvement activities have been undertaken in National Parks, Wildlife Sanctuaries, Bird Sanctuaries and Conservation Reserve and other areas under the control of Forest Department.

10.16. Project Tiger

10.16.1. The Forest Department has undertaken various measures to conserve Tigers and their

habitats in Tamil Nadu. There are four Tiger Reserves in Tamil Nadu viz., Kalakad Mundanthurai Tiger Reserve in Tirunelveli district, Anamalai Tiger Reserve in Coimbatore and Tiruppur districts, Mudumalai Tiger Reserve in Nilgiris district and Sathyamangalam Tiger Reserve in Erode district. Tiger being the top carnivore is an indicator of the healthy eco-system.

10.16.2. Government of India provides 100% financial assistance for works of non-recurring nature and 50% for works of recurring nature under this scheme. The remaining 50% of the recurring works are to be borne by the State Government. Activities like habitat conservation, eco-development, wildlife protection, fire prevention, water source improvement, tourism development, controlling of man-animal conflict and improvement of infrastructure facilities have been carried out under this scheme with a sanctioned amount of Rs.17.19 crore during 2014-15. It is proposed to continue this scheme during 2015-16.

10.17. Project Elephant

10.17.1. Project Elephant scheme is implemented in four elephant reserves viz. Nilgiris Eastern Elephant Reserve, Coimbatore Elephant Reserve, Anamalai Elephant Reserve and Periyar Elephant Reserve. These reserves have no separate legal status. These four Elephant reserves, which include the existing Reserve Forests and sanctuaries, are grouped for management convenience. Tamil Nadu is one of the leading States in elephant population and their habitat management. This scheme is being implemented to protect the elephants and to further improve their habitats.

10.17.2. Various activities like fire prevention measures, providing water facilities to elephants etc., compensation for the crop damages and loss of human lives caused by elephants and planting fodder species to improve the habitats of elephants were undertaken with a sanctioned amount of Rs.3.17 crore during 2013-14. During 2014-15,

this scheme was implemented at a cost of Rs.2.95 crore.

10.18. Gulf of Mannar Biosphere Reserve

10.18.1. The Gulf of Mannar Biosphere Reserve is known for its rich bio-diversity and endemism. It includes 21 coral rich islands along the coast line from Rameswaram to Tuticorin. There are about 4,223 species of marine organisms found in this area, which includes 11 species of mangroves, 15 species of sea grass, 117 species of corals, 290 species of birds, 5 species of sea turtles, 6 species of whales, 5 species of dolphins, 1 species of sea cow, 1145 species of fishes, 77 species of porifera, 79 species of crustaceans, 153 species of echinoderms, 857 species of molluscs and others.

10.18.2. The Government have sanctioned funds under three schemes viz. Gulf of Mannar Biosphere Reserve, Gulf of Mannar Marine National Park and Conservation and Management of coral reefs in

Gulf of Mannar to carry out the developmental activities. To reduce the biotic pressure on the marine eco-system, creation of alternate livelihood options for the local people who are directly dependent on the marine resources, eco-development works, protection and conservation of natural resources, education and awareness programme, etc. were undertaken from the sanctioned amount of Rs.89 lakh during 2014-15. During 2015-16, it is proposed to implement this scheme with an outlay of Rs.2.68 crore.

10.19. Agasthyarmalai Landscape site in Tamil Nadu

The part of Agasthyarmalai Landscape in Tamil Nadu comprising of 2707.49 Ha. falls in the area of Megamalai Wildlife Sanctuary and Theni Forest Division in Theni District, Grizzled Squirrel Wildlife Sanctuary in Virudhunagar District, Kalakad, Mundanthurai and Tirunelveli Forest Division in Tirunelveli District and Kanniyakumari

Wildlife Sanctuary in Kanniyakumari District of Tamil Nadu. The Landscape with the richness of mammalian species diversity accommodate the increasing tiger population and maintain the genetic viability of wild species found in the whole area. With a view to conserve the entire spectrum of biodiversity, genetic diversity of species, research and monitoring, education and training and economic well-being of the local people this scheme is being implemented. During 2014-15, the Government of India have sanctioned Rs.4.53 crore were released Rs.1.584 crore as 1st installment for the year 2014-15 towards implementation of the scheme. The scheme will be continued during the year 2015-16.

10.20. Wetland conservation and development

This scheme is implemented at Point Calimere, Kazhuveli and Pallikaranai wetlands to check floods, prevent coastal erosion, mitigate the effects of natural disasters like cyclones and tidal waves, store rainwater, recharge ground water

aquifers, provide nesting ground for many wading birds and water fowls, provide food and shelter for mammals and to remove wide range of pollutants. Major activities like habitat improvement, wildlife protection, eco-development activities around wetlands, bio-upgradation, awareness creation, research and monitoring and nature education were undertaken from the sanctioned amount of Rs.1.11 crore during 2014-15. It is proposed to implement this scheme with an outlay of Rs.4.05 crore during 2015-16.

10.21. National Afforestation Programme

The National Afforestation Programme (NAP) is being implemented in Tamil Nadu from 2002-03 through Forest Development Agencies and Joint Forest Management Committees (JFMCs) with 100% central assistance. From 2002-03 to 2013-14, an area of 70,484 ha. was afforested at a cost of Rs.112.34 crore. During 2014-15, sanction was accorded for carrying out works in 2,258 ha. under "*creation component*"

and in 750 ha. under "*advance work*" and for maintenance works at a cost of Rs.8.50 crore. Works were undertaken from the first instalment release amount of Rs.4.25 crore by Government of India.

10.22. Conservation, development and sustainable management of medicinal plants

The scheme conservation, development and sustainable management of medicinal plants is a 100% centrally sponsored scheme. Proposals were sent to Ministry of Health and Family Welfare, Department of AYUSH, National Medicinal Plants Board, New Delhi. The National Medicinal Plants Board, New Delhi has approved the projects for 5 divisions at an outlay of Rs.336.77 lakhs for a period ranging from 3 years to 5 years, since 2013-14. The total amount of release of 1st instalment is Rs.136.71 lakh. For the second instalment release, proposals for Rs.95.03 lakh has been sent to Government of India.

11. CORPORATIONS

11.1. Tamil Nadu Forest Plantation Corporation Limited (TAFORN)

11.1.1. TAFORN was established on 13.06.1974 with headquarters at Tiruchirappalli under Indian Companies Act, 1956. This Corporation has an authorized share capital of Rs.10 crore and a paid up share capital of Rs.5.64 crore. The entire share capital of the Corporation is held by the Government of Tamil Nadu. 74,984.05 ha. of Reserved Forests have been taken on lease from Tamil Nadu Forest Department. As per the Government orders, 30% of the annual turnover is being paid as lease rent to the department.

11.1.2. Objectives

The main objectives are to raise, maintain and harvest pulpwood and cashew to meet the needs of industries, to increase the productivity of forests, to provide rural employment, to conserve

soil and moisture and to supply firewood to meet the needs of the rural public.

11.1.3. Achievements

The details of the plantations raised and expenditure involved during 2013-14 and 2014-15 are given in Annexure-3.

11.1.4. Pulpwood

The pulpwood supplied to paper mills during 2013-14 and 2014-15 are given in Annexure-3.

11.1.5. Cashew

Cashew is the second major revenue earner in the Corporation. The details of revenue realized are given in Annexure-3.

11.1.6. Revenue and expenditure

The revenue and expenditure details of the corporation for 2013-14 and 2014-15 are given in Annexure-4.

11.1.7. Proposals for 2015-16

The details of fresh plantations to be raised and expenditure involved during 2015-16 are given in Annexure-4.

11.2. Tamil Nadu Tea Plantation Corporation Limited (TANTEA)

A Government Tea Project was started by the Government of Tamil Nadu for raising tea plantations in 1968, through the Forest Department with the socio-economic objective of rehabilitating the repatriates from Sri Lanka under the Shastri-Srimavo Pact. Later, the said tea project was registered as a company under the Indian Companies Act, 1956 viz., "Tamil Nadu Tea Plantation Corporation Limited" and is popularly known as "TANTEA". The authorized share capital of this Corporation is Rs.25 crore and the paid-up share capital is Rs.14.96 crore. The corporation is maintaining plantations over an area of 4311.04 ha. on the lands leased out by

Tamil Nadu Forest Department in four phases. Details are in Annexure-5.

11.2.1. Objectives

The main objectives are to establish tea plantations and to employ and rehabilitate the Sri Lankan repatriates in the plantation schemes.

11.2.2. Green tea leaves and made-tea production

The actual physical achievement of green tea leaves and made-tea for the year 2013-14 and 2014-15 are furnished in Annexure-5.

11.2.3. Revenue and Expenditure details

Revenue and expenditure details are furnished in Annexure-5.

11.3. Arasu Rubber Corporation Limited (ARC)

ARC with headquarters at Nagercoil has rubber plantations over an area of 4160.78 ha. of lands taken on lease from Tamil Nadu Forest Department in Kanniyakumari district, where the

soil, climate and topography are conducive for the growth of rubber trees. The Corporation was registered on 01.08.1984 under the Indian Companies Act, 1956 and has been functioning with effect from 01.10.1984. The authorized capital of the Corporation is Rs.10 crore and the paid up share capital is Rs.8.45 crore. The Government of Tamil Nadu holds the entire share capital of the Corporation. There are 1268 permanent workers including 280 Sri Lankan repatriates.

11.3.1. Production and financial achievement

Production and financial achievements are furnished in Annexure-6.

12. CONCLUSION

The need to sustain and accelerate development in a dynamic rational and equitable manner in harmony with environment has brought into sharp focus the integrative aspects of our planning process and strategies. The growth of

social and technological complexity is being taken into consideration for the planning process to ensure rational resources management. Intensification of eco-development programmes needs a priority approach for restoration of eco-systems and to provide for sustainable development of forest produce to one and all.

This Government will continue to discharge its full efforts to achieve the National goal of increasing the extent of Forest cover to 1/3 of the land area by conserving, developing the natural resources with a wide genetic base and bio-diversity in a sustainable manner.

M.S.M. ANANDAN
MINISTER FOR FORESTS

ANNEXURE-1

Forest revenue

Sl. No.	Source of revenue	2015-16 Budget Estimate (Rs. in lakhs)
a)	Sandalwood	7,500.00
b)	Timber	1450.00
c)	Supply of raw materials to industries	400.05
d)	Other Minor Forest Produce	77.50
e)	Farm Forestry plantations excluding refund	2,200.00
f)	Sale of bamboo, cashew, softwood plantations, etc.	16.00
g)	Other receipts	3,168.75
	Sub total	14,812.30
	Deduct recoveries (-)	510.00
	Total	14,302.30

ANNEXURE-2

Expenditure

Name of the Scheme(s)	2015-16 Budget Estimate (Rs. in lakh)
Non-Plan schemes	42,744.43
State Plan schemes	19,293.43
Centrally Sponsored Schemes (100%)	3,070.95
Schemes shared between State and Centre (50:50)	1,610.85
Total	66,719.66

ANNEXURE-3

Tamil Nadu Forest Plantation Corporation Limited

Achievements

Sl. No.	Raising Plantation Species	Physical (ha.)		Financial (Rs. in crore)	
		2013-14	2014-15	2013-14 (Actuals)	2014-15
1.	Eucalyptus	4054	4223	11.64	10.78
2.	Cashew	910	893	2.73	2.37

Pulpwood supply

Year	Quantity supplied (M.T)	Revenue (Rs. in crore)
2013-14	2,27,699.950	69.11
2014-15	1,18,901.098	40.41
2015-16 (Budget Estimate)	1,77,500.000	59.55

Cashew

Year	Revenue (Rs. in crore)
2013-14	2.88
2014-15	1.15
2015-16 (Budget Estimate)	7.30

ANNEXURE-4

Tamil Nadu Forest Plantation Corporation Limited

Revenue and Expenditure

(Rs.in crore)

<i>Year</i>	Revenue	Expenditure	Profit (+) Loss (-)
2013-14 (Actuals)	91.64	68.42	(+)23.22
2014-15 (Revised Estimate)	81.54	59.99	(+)21.55
2015-16 (Budget Estimate)	81.92	64.09	(+)17.83

Proposals for 2015-16

Plantations	Physical (ha.)	Financial (Rs. in crore)
Eucalyptus	4,600	14.18
Cashew	850	2.79

ANNEXURE-5

Tamil Nadu Tea Plantation Corporation Limited

Area leased out to TANTEA

Phase	Year	Planted area (in Ha.)		
		Nilgiris	Anamalai	Total
Phase I	1969-1979	1850.74	..	1850.74
Phase II	1979-1981	591.10	..	591.10
Phase III	1982-1984	336.58	..	336.58
Phase IV	1990-1995	576.26	956.36	1532.62
TOTAL		3354.68	956.36	4311.04

Green tea leaves and made-tea production

(in lakh kgs.)

Details	2013-14	2014-15
Harvest of green tea leaves	375.43	390.00
Made-Tea production	94.80	93.60

Revenue and expenditure details

(Rs. in crore)

Year	Revenue by sale of ta and other items	Expenditure	Profit (+) Loss (-)
2013-14	81.77	84.08	(-) 2.31
2014-15	68.77	84.44	(-)15.67

ANNEXURE-6

Arasu Rubber Corporation Limited

Production and financial achievement

(Rs. in crore)

Sl. No	Particulars	2013-14 (Actuals)	2014-15 Revised Estimate	2015-16 Budget Estimate
a)	Production of Rubber (in M.T)	1930	1838	1800
b)	Revenue and expenditure			
	a) Income	38.81	27.60	35.76
	b) Expenditure	34.60	38.79	37.45
c)	Profit (+) or Loss (-)	(+) 4.21	(-) 11.19	(-) 1.69