

### **ENVIRONMENT AND FORESTS DEPARTMENT**

**POLICY NOTE** 

**DEMAND NO: 54** 

**FORESTS** 

2013-2014

K.T. PATCHAIMAL MINISTER FOR FORESTS

GOVERNMENT OF TAMIL NADU 2013

#### **DEMAND No.54**

#### **POLICY NOTE 2013-2014**

#### FOREST DEPARTMENT

#### 1. Introduction

Forests play a significant role in the development of the State. They provide key ecosystem services enabling water and soil conservation, maintenance of carbon dioxide balance, fresh air generation and biodiversity conservation. Forests are critical to sustainable development. For people living in the villages in their periphery, forests constitute a major source of livelihood. Forests help in recharging both the surface and ground water resources in a sustainable manner.

#### 2. Forests in Tamil Nadu

The area covered by forests in Tamil Nadu is 22,877 sq. kms. Of the 16 major categories of

forests, 9 are present in Tamil Nadu. The State has 36 forest sub types, the highest number among all the Southern States. Several endangered and threatened flora and fauna are found in the Western Ghats, which is identified as one of the 25 global biodiversity hotspots in the world, being the site of some of the unique and most endangered plants and animals in the country.

#### 3. Forest and Tree Cover

As per the assessment of the Forest Survey of India (State of Forest Report 2011), the forest cover of the State is 23,625 sq.kms., constituting 18.16% of its geographical area. The forest and tree cover is 28,343 sq. kms., which constitutes 21.79% of the total geographical area of the State as against 33% envisaged in National Forest Policy, 1988.

### 4. Forests and Climate Change

Rapid urbanization, industrial revolution and increasing transportation needs have resulted in depletion of non-renewable natural resources like petroleum all over the world. coal and Unsustainable patterns of industrial development have led to considerable loss of biodiversity and have contributed to global warming and climate change, with consequent significant negative impacts. These include slowing down/decline of agricultural yields, greater frequency of occurrence of natural disasters and greater volatility in weather patterns, precipitation and so on. Greater forest and tree cover play important can an preventive/mitigating role in this regard.

#### 5. Vision 2023 Tamil Nadu

Preserving and improving the quality of environment in the State is identified as one among the 10 major themes under 'Vision 2023 Tamil Nadu'. The crucial strategies that have been

adopted to maintain the ecological balance across the entire State to accomplish the 'Vision 2023' include increasing the forest cover, wetlands conservation, water conservation by recharging groundwater level, protection of coastal zones and fragile ecosystems, biodiversity conservation, protection of soil and other natural formations.

# 5.1. Making Tamil Nadu Green and Ecologically Secure

Forests play an important role in the ecological security of the State as a whole and contribute significantly to the economic well-being of the people living in the forest fringe villages. Sustainable development of forest eco-system requires ecological security. To ensure ecological security, earnest efforts have been made to bring 1/3rd of geographical area under forest/tree cover as envisaged in National Forest Policy, 1988 by undertaking tree planting activities in private lands, Government institutions, private institutions and roadsides and also by conserving biodiversity.

# 5.2. Hydrology: Making Tamil Nadu a Water Surplus State

Water is the lifeline for survival of all kinds of living beings. Forests provide water security and contribute to food security. Thirukkural propounds that "the world cannot sustain itself without water".

Tamil Nadu is a lower riparian state and thus disadvantaged in access to water from perennial riverine sources. Water-intensive crops account for a significant proportion of net sown area and gross cropped area in the state. The state is dependent upon monsoons to meet its basic needs of water. It is a water-deficient state. Water conservation is therefore crucial. As part of the strategy to conserve and enhance the water resources of the state. catchment areas have been treated with appropriate afforestation and soil and moisture conservation measures to help recharge both the surface and ground water resources.

### 5.3. Afforestation and Poverty Reduction

Villages in the periphery of forests are often not easily accessible and lack basic infrastructure in terms of road and rail connectivity and communication, health and educational facilities. Afforestation schemes seek to address these issues and improve the socio-economic conditions of people in villages covered by the schemes, contributing in the process to reduction in poverty and unemployment. Provision of alternate sources of productive employment and income help combat over exploitation of forest resources.

# 5.4. State Economy: Contribution of Forests

As per the revised estimates for 2012-13, forests contributed Rs.82.77 Crores of revenue to the State exchequer during 2012-13 through the sale of sandalwood, teak and other timber species, babul, eucalyptus hybrid, MFP, etc. However, it must be noted that the economic contribution of forests is not fully reflected in the standard system of national/social accounts. Not all forest produce

enters the market. Moreover, neither market mechanisms nor systems of social and national accounts provide a firm basis for evaluating the ecosystem contributions of forests as well as some of the other contributions. Forests meet domestic fuelwood needs of local people and fodder needs of cattle population. Non-timber forest produce (NTFP) also play a key role in tribal and rural economy. Forestry is a major source of income for forest dwellers and those on the periphery of forests. Efforts are on to evaluate the eco-system services in the State.

## 6. Forest Policy

The management of forests rests primarily with the State Government. The National Forest Policy, 1988 has laid down guidelines for preventing harm to forests from encroachment, fires and grazing, for augmentation of forests' water resources and on issues related to shifting cultivation, forest extension, education, research,

personnel management, etc. The principal aim of forest policy is maintenance of environmental stability and restoration of ecological balance through conservation, upgradation and increase in the tree cover. The Tribal Forests Rights Act (TFRA) is the basis for evolving forest policies pertaining to the needs of the forest-dependent communities in consonance with the need for sustainable forestry.

### 7. Legal framework

Over the years, many legislations have been enacted in the state of Tamil Nadu for protection of forest and wildlife, and appropriate rules framed under these Acts. The Madras Forest Act, 1882, which is now called Tamil Nadu Forest Act, 1882 was enacted by the then Madras Presidency for conservation and protection of forests way back in 1882. Important acts like Wildlife Protection Act, 1972 and Forest Conservation Act, 1980 were enacted by Government of India for protection of wild biodiversity conservation and to regulate

diversion of forestlands for non-forestry purposes and being implemented in Tamil Nadu. For regulating the felling of trees in hill areas and private forests, Tamil Nadu Hill Areas (Preservation of Trees) Act, 1955 and Tamil Nadu Preservation of Private Forests Act, 1949 were enacted.

Besides the above, the following acts and rules pertaining to the protection and management of forests are in force in the State:

- Tamil Nadu Sandalwood Transit Rules, 1967.
- Tamil Nadu Timber Transit Rules, 1968.
- Gudalur Janmam Estates (Abolition and conversion into Ryotwari) Act, 1969.
- Tamil Nadu Sandalwood Possession Rules, 1970.
- Tamil Nadu Rosewood Trees (Conservation)
   Act, 1994.
- Biological diversity Act, 2002

 The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006

### 8. Objectives

Protection and development of forests are critical to sustainable development. Such protection and development are best promoted by participatory processes and mechanisms involving the stakeholder communities.

Based on this perspective, the forests of Tamil Nadu are being managed with the following broad objectives:

- Biodiversity and genetic resource conservation by protection of forests and wildlife.
- Conservation and protection of wetlands.
- Augmentation of water resources in forest areas.

- Rehabilitation and restoration of degraded forests for improvement of forest cover.
- Enhancing tree cover outside forests for livelihood security and climate change mitigation.
- Welfare of tribal and forest fringe communities to ensure economic prosperity and ecological stability.
- To ensure the overall development of forest resources and wildlife of the State, new avenues for people's participation should be identified.

# 9. Strategies

To ensure the overall development of forest resources and wildlife of the State, new avenues for people's participation should be identified.

# 9.1. Biodiversity and genetic resource conservation

The State has a spectrum of forest vegetation types ranging from wet evergreen forests to moist deciduous, dry deciduous, sholas, grass lands and scrub forests. The Western Ghats, the longest hill range in the State is one of the 25 global hotspots of bio-diversity and one of the three mega centres of endemism in India. Out of the 17,672 flowering plants recorded in India, Tamil Nadu accounts for 5,640 species, which gives it the pre-eminent position in angiosperm diversity. Many of these are endemic and red-listed species. Tamil Nadu has recorded 165 species of fresh water fishes, 76 species of amphibians, 177 species of reptiles, 454 species of birds and 187 species of mammals. Invaluable trees like Sandal, Teak and Rosewood and wildlife such as tiger, elephant, macaque, grizzled lion-tailed giant squirrel, Nilgiri Tahr and numerous rare species of fauna and innumerable species of flora including important

medicinal plants are found in the forests of the State.

Sanctuaries and National Parks have been established for conservation of flora and fauna under the Wildlife Protection Act. 1972. Protected areas are repositories of biological resources to be preserved for posterity. Forest areas, which support viable population of flagship species, need to be brought gradually under protected area management to ensure better conservation status for the rare and endangered wildlife. In Tamil Nadu, 5,468 sq. kms. of land area (23.9% of forest area) has been brought under Protected Areas Network so far. There are 4 Tiger Reserves which support sizable population of tigers, 10 Wildlife sanctuaries, 14 Birds sanctuaries, 5 National Parks, one Conservation reserve and four Elephant Reserves. The Gulf of Mannar Biosphere Reserve is the only one of its kind in country. Habitat improvement and other developmental works are carried out in these National Parks, Wildlife Sanctuaries and Biosphere reserves under State forestry and centrally sponsored schemes. The Japan International Co-operation Agency (JICA) assisted Tamil Nadu Biodiversity Conservation and Greening Project (TBGP) is an important initiative in biodiversity conservation.

# 9.2. Catchment Area Protection and watershed Management

Tamil Nadu is endowed with both perennial and non-perennial river systems. The main rivers of Tamil Nadu originate in the Western Ghats and flow eastward. Forests constitute the major catchments for most of the principal river systems in the State. They contribute to 85% of the catchments for all the 32 river systems, 11 major reservoirs and 61 major irrigation structures of the State. The state receives on an average only about 920 mm of rainfall which is 21.4% less than the national average (1170 mm) and droughts are very common.

In order to improve the water availability of the State to agriculture, industry and public supply, prudent management of the catchment areas within the State, which mainly fall in the forest regions, is important. Soil and water conservation activities will form an integral part of all plans at macro as well as micro level. This would help in arresting soil erosion besides recharging ground water in the catchment areas. Such steps would ensure prevention of floods and droughts in the adjacent plains besides benefiting vegetation and wildlife in forest areas. Tamil Nadu is among the first few states to have taken pioneering steps, as early as four decades back, to arrest topsoil loss and siltation of reservoirs by forming separate divisions for catchment area treatment in Mettur and Vaigai catchments. .

Construction of major water harvesting structures in the downstream area like check dams, and percolation ponds have been taken up to impound the flooding rain water. These structures not only act as storage containers but also as

catalysts for recharging the ground water resource and for reactivation of natural springs. The major afforestation schemes like the Tamil Nadu Afforestation Project (TAP), National Afforestation Programme (NAP), Western Ghats Development Programme (WGDP), Hill Area Development Programme (HADP) are all pursuing this approach.

It is estimated that through water harvesting structures like 28,526 checkdams and 4029 percolation ponds approximately 1764.87 million cubic feet of water is conserved in situ. It improves sub-soil moisture and enriches biodiversity. Additionally it helps in raising yields in the nearby agricultural lands.

# 9.3. Enhancing Climate Resilience in Moderately dense and Open Forests

Carbon storage capacity of forests and their role in climate change mitigation are receiving increasing attention in today's context of climate change. Protection of primary forests and

restoration of degraded forest ecosystems make a vital contribution to both reducing anthropogenic pressure and dealing with unavoidable climate change. Primary forests are generally more resilient (stable, resistant, and adaptive) than modified natural forests or plantations. It has been recognized that certain degraded forests, especially those with invasive alien species, may be stable and look resilient but can in fact pose serious management challenges, if attempts are not made to re-establish the natural ecosystem. Hence, management intervention is needed to restore the local biodiversity in these forest areas to assist the forest resilience.

To enhance climate resilience, in situ soil and moisture conservation works like gully plugging, contour trenches, vegetative barriers, catch water pits etc. to check erosion and increase the percolation, removal of exotic weeds to eradicate invasive alien species, and gap planting to assist natural regeneration have been carried out, mainly

under TAP and NAP and, to some extent, under WGDP and HADP.

The Green India Mission has also been launched in the State on landscape basis to enhance climate resilience of identified forests. Two more landscapes are proposed during the year for approval by the Government of India.

#### 9.4. Forest Protection

The forest wealth of the State is often vulnerable to damage and destruction due to illicit felling of trees, ganja cultivation, fire, encroachment and poaching of wildlife. To deal effectively with the smuggling and pilferage of forest wealth and to prosecute the offenders, detective flying squads have been engaged. Forest Protection Squads have been engaged to curb the smuggling of valuable forest produce like sandalwood, rosewood, teak, etc. In order to control the offences, there are at present 13 Forest Protection Squads under the Protection and Vigilance wing functioning as two

groups all over the State viz. Northern Group (7 FP Squads) and Southern Group (6 FP 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. Efforts are being taken to strengthen the infrastructure for forest protection and to equip the protection staff with facilities like firearms, vehicles, wireless equipments, etc.

Encroachment of forest lands by estate owners and adjoining patta holders is a serious problem. Action is being taken by Forest department to evict such encroachments in co-operation with revenue and police officials. Efforts are also being taken to strengthen the infrastructure enabling the department to curtail fresh encroachments. With a view to implementing innovative combat and patrol strategies and offence methodologies, the forest personnel have been imparted special training.

The protection works include consolidation of forest boundaries by erecting cairns, fire prevention through fire line maintenance and cutting new fire lines, involving local people in firefighting through the creation of Joint Fire Management Committees, employing fire watchers on a regular basis during the dry season, constructing fire watch towers and employing anti-poaching watchers.

In order to bring about a qualitative change in overall protection status of forests in Tamil Nadu, provision of facilities like two wheelers for Forest Guards, Forest Watchers, cell phones, internet facilities, Secret Service Fund, etc. need to be ensured. This will enable better mobilisation, effective communication, gathering and transmission of intelligence inputs.

# 9.5. Increasing Tree Cover Outside Forests

The National Forest Policy, 1988 mandates bringing in one-third of the geographical area of the country under tree cover for ecological amelioration.

As the scope for increasing the forest area was not feasible, enhancing tree cover outside the forests was given more importance. To accomplish this mission, tree cultivation outside forests has been taken up in private farm lands, fallow lands, in other common lands like the tank foreshores, other poromboke lands, roadsides, railway margins and canal banks. The criteria for the choice of species recommended for the farmers for their lands are that they would be profitable and drought resistant.

The main focus will be to create tree resources outside forest areas for meeting the needs for tree products, besides providing 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% tree cover, major schemes like JICA assisted Tamil Nadu Biodiversity Conservation and Greening Project (TBGP), tree planting on a large scale on the birthday of the Hon'ble Chief Minister, teak

planting on padugai lands, planting in tank foreshores, etc. were undertaken. These programmes are expected over time to help bridge the gap between supply of and demand for fuel wood and timber in the State.

# 9.6. Socio-economic Development of Forest Fringe Villages

People in forest fringe villages have to rely primarily on farms and forests for their livelihood degradation security. The of forests accentuated poverty among the forest fringe communities. as it has virtually deprived them of livelihood options. Community-based forestry can be an effective strategy to address this issue. Efforts have been made by the Forest Department to build trust and respect among the people for the role of the department as not just a regulator, but also an agent of development in remote forest fringe villages. To help forest communities move out of poverty, community-oriented forestry activities need to be better integrated with rural livelihood and development programmes.

Tamil Nadu Afforestation Project (TAP) has made path-breaking efforts in creation of alternative employment opportunities for sustainable livelihood. Coordination, under TAP, with the Government agencies has resulted in generating more resources and opportunities for development for the communities residing in the forest or on its fringes. The current approach of the department 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 communities and their participation forest conservation and development. The approach will be based on two premises. By interventions that enhance individual and household incomes, goodwill and social capital can be built up. In parallel, activities promoting natural resource base creation will be undertaken, thus augmenting natural capital. Traditional skills and native wisdom will be utilized for strengthening conservation.

### 9.7. Tribal Development

Tribals have evolved a way of life, which on one hand is woven around forest ecology and forest resources and on the other, ensure that forest is protected against depredation by man and nature. The tribal communities have a symbiotic relationship with forests and the existence of both is mutually beneficial. Government policies also encourage the design and implementation of special programmes in tribal areas to improve their quality of life. The department of forests takes its responsibilities in this regard seriously.

The Department is involved in providing tribal education, employment generation and many basic civic amenities for the social upliftment of tribals. Efforts to provide primary education to tribals in Jawadis were started by the Forest Department as early as 1951 at Jamanamuthur and later extended

to other villages. The Forest Department in Tamil Nadu is running 20 schools in tribal areas in Tiruvannamalai, Vellore and Coimbatore districts. Over 4500 students are enrolled in these schools.

The government of Tamil Nadu has issued orders providing for free collection and use of MFP by tribals. The services of tribals have been utilized in all the major afforestation and development activities of the forest department The department is committed to the promotion of the welfare of tribals in the forest areas of the state.

#### 9.8. Eco-Tourism

Annually, Tamil Nadu receives more than 1300 lakh tourist arrivals including a large proportion of domestic tourists. Tourists are attracted by places of historical interest, serene climate, spectacular scenes of hills and forests and picturesque landscapes and the excitement of viewing wildlife. The forests including some of the highest peaks in South India such as Dodabetta

and coastal plains, sanctuaries, national parks, such Muthupet mangrove areas as Pitchavaram and coastal sand dunes offer immense scope for developing eco-tourism ventures. Eco-tourism has huge potential for creating substantial livelihoods for local people, even while conserving the natural sites. Eco-tourism is considered as а nature-based, ecologically sustainable, and socially acceptable tourism activity environmental improves conservation. that promotes local economic development and provides recreational experience. For successful measures like improvement of eco-tourism, infrastructure facilities for the visitors, capacity building and training programmes for forest personnel, formation of tourist-friendly reception centres, vehicles for visitors, observation / watch tower/ telescope in birds / wildlife sanctuaries, providing eco-guides for tourists and wide publicity of the enormous attractions that the forests of Tamil Nadu possess will be taken up.

#### 9.9. Infrastructure Development

More than 10,000 officers and staff are working in the Department, of whom more than 50% are front line staff. As most of the staff of Forest Department are working in remote areas, buildings both residential and non-residential, protection-linked structures like check posts, anti-poaching sheds cum watchtowers will be provided as per requirement. The work of carrying out maintenance of existing departmental buildings will also be attended to..

Totally, a length of 3,350 km of roads, consisting of 1,631.5 km of cement roads, black topped roads and WBM roads, 1,718.5 km of earthen 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 markets. This is also necessary to enable the senior

officers and protection staff to carry out inspection of interior forest areas and to check illicit felling and illicit movement of valuable timber, etc.

To strengthen communication facilities, provision of vehicles to field officials who are engaged in protection, provision of communication equipments like GPS, cell phones, etc. for field staff will be ensured.

# 9.10. Research, Transfer of Technology and Extension

The main focus and thrust of forest research in Tamil Nadu is on bio-diversity conservation and bio-productivity enhancement. Research provides support for restoration of degraded areas, management of eco-systems, promotion of agro-forestry, and increase and improvement of green cover. 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, improvement of medicinal plants, bio-fertilizer production and post-harvest technology. New areas of research would include valuation of ecosystem services, environmental research and bioremediation. Emphasis will be laid on collaborative research programmes and supply of quality planting material by establishing/maintaining seed production areas. Important research findings and advances made in various areas of forestry will be transferred to the field.

Expansion of our tree resources outside the natural forest area is imperative to meet the ever-increasing demand for forest produce. Thirty forest extension centres were formed to help in this regard. 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. The department recommends suitable tree species for various soil and agro climatic conditions, provides technical know-how on tree growing, marketing information and tie-up arrangements with the buyers of trees and non-timber forest produce (NTFP).

# 9.11. Application and Development of GIS, MIS and E-Governance

The use of Information Technology has come to play a vital role in planning, management and monitoring in forestry sector. 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 (DFA) were prepared for all the districts of Tamil Nadu by using satellite Remote Sensing and Geographical Information System. Forest fire mapping using satellite imagery was completed for entire Western Ghats and Eastern Ghats of Tamil Nadu. This is helpful in managing forest fire in the divisions.

The management information system (MIS) is a very important tool for systematic and effective management of activities and helps in progress monitoring and timely and effective decision making. In order to help the management of information in the department, the use of information technology in the administration is imperative. Web-based user friendly MIS software is under development in this regard.

TNSWAN has been identified as part of the core e-Governance back bone infrastructure by National e-Governance Action Plan (NeGP) and

Department of Information Technology (DIT), GOI. Capitalizing on the recent developments in information technology, a full-fledged MIS facility has been established with Wide Area Network (WAN) and centralized video conferencing would be set up, and appropriate skills of the FD staff will be upgraded by providing training.

# 9.12. Human Resource Management

Human resources play a vital role in the field of forestry and have become one of the most important assets of the forest department. The department 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 (TNFTC), Vaigai Dam for

imparting training to departmental personnel including senior, middle and lower level officers. In TNFA, training is imparted to Rangers (18 months) and Foresters (6 months) while in TNFTC, training is imparted to Forest guards (6 months) and Forest Watchers (1 month). Training is being imparted to the forest staff to develop the needed skill in use and possession of weapons and to understand all the rules and regulations.

Due to technological and managerial changes and to changes in the work pattern in the forest department, forestry personnel face new challenges. As a result, the role of the employees has been transformed with a consequent need for a wider range of skills. Periodic refresher programmes will be conducted to train and update officers, subordinates, ministerial staff, VFC members, NGOs, etc. Great emphasis has been given for technical studies and social studies. Training will be imparted on advanced plant production techniques, wildlife management, legal

aspects, biodiversity conservation, usage of weapons, fire control, hand-held GPS, civil works, wood technology, etc.

#### 10. HIGHLIGHTS OF 2012-13

Notable achievements have been made during 2012-13 are as follows:

- Thiru.P. Thangavel (Plot Watcher), Palakode range, Dharmapuri division was awarded 'Anna Medal' for gallantry by Hon'ble Chief Minister on Republic Day this year for his selfless act of bravery.
- To increase green cover of the State, 64 lakh seedlings were planted in 32 districts at a cost of Rs.29.44 crores under Massive Tree Planting Programme in commemoration with Hon'ble Chief Minister's 64<sup>th</sup> Birthday.
- Based on the recommendation of the Empowered Committee, a sum of Rs.8.50 lakhs has been sanctioned for planting Avenue trees

- in Kottivakkam Beach road vide G.O.(D) No.298, E&F (FR-6) dept. dt. 14.08.2012 under Tamil Nadu Forest Development Fund.
- Vulnerable areas of 127.95 ha. of Ryan Tea Division of Tamil Nadu Tea Plantation Corporation Limited were handed over back to Forest Department for maintenance of Anamalai Tiger Reserve vide G.O.(Ms.)No.107, E&F (FR-8) dt. 04.04.2012.
- Orders have been issued in G.O.(D) No.322, E&F (FR-3) dept. dt. 03.09.2012 for constitution of a High Level Committee to examine the issues arising under Tamil Nadu Preservation of Private Forests Act, 1949.
- Necessary orders were issued vide G.O.Ms.No.269, E&F (FR-11) dept. dt. 27.11.2012 for purchase of 100 Jeeps as addition of fleet for the use of Forest Range Officers and Assistant Conservators of Forests for better implementation and monitoring of Social Forestry and Extension Schemes.

- In order to strengthen the Protection and Vigilance wing in the Forest Department, an amount of Rs.1.44 crores has been sanctioned for provision of 13 jeeps to the Forest Range Officers, 26 two wheelers to Foresters, 143 field kits and communication equipments, etc. vide G.O.Ms.No.275, E&F (FR-11) dept. 13.12.2012.
- Government have sanctioned Rs.0.59 crores for supply of rain coat, shoes, torch light to the frontline staff vide G.O.Ms.No.6, E&F (FR-2) dept. 29.01.2013.
- Necessary orders were issued vide G.O.Ms. No.205, E&F (FR-2) dept. dt. 13.08.2012 for allocation of 30% of the total vacancies to direct recruitment in the post of Forest Watcher equally to Scheduled Tribe Youths and Scheduled Tribes who are already engaged as Anti-Poaching Watchers.
- For establishment of Advanced Institute for Wildlife Conservation (Research, Training and Education) at Arignar Anna Zoological Park an

amount of Rs.27.13 crores has been sanctioned vide G.O.(D) No.32, E&F (FR-5) dept. dt. 29.01.2013.

- During 2012-13, a sum of Rs.15.97 crores was earned as revenue by sale of social forestry plantations upto 28.02.2013.
- During the year 2012-13, an extent of 7025.96
  ha. has been notified as Reserved Forest and
  an extent of 3579.53 ha. has been notified as
  Reserved Land.
- An extent of 140840.541 hectares of Sathyamangalam Wildlife Sanctuary in Erode district has been declared as Tiger Reserve vide G.O.Ms.No.41, E&F (FR-V) dept. dt. 15.03.2013.

#### 11. FOREST REVENUE AND EXPENDITURE

#### **Forest Revenue**

The revenue receipts during 2012-2013 (Revised Estimate) through sale of sandalwood,

supply of raw materials to industries, Non-wood Forest Produce, Timber, Fuel, Bamboo, Cashew, Casuarina, Softwood, Farm Forestry Plantations and other sources is Rs.82.77 crores.

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		2012-	2013-
SI. No.	Source of revenue	2013	2014
<u></u>	Source of Teveride	(Revised	(Budget
0)		Estimate)	Estimate)
a)	Sandalwood	2000.00	3600.00
b)	Timber	520.00	520.00
c)	Supply of raw materials to	87.40	87.40
	industries	00	01110
d)	Other Minor Forest Produce	27.81	27.81
e)	Farm Forestry plantations	1900.00	1900.00
f)	Sale of Bamboo, Cashew and Softwood plantations	37.41	37.41
g)	•	2704.40	3705.21
3/	Other receipts	3704.40	3705.21
	Total	8277.02	9877.83

## **Expenditure**

Details of expenditure during 2012-2013 and 2013-2014 under various schemes are given below:

(Rs. in lakhs)

Name of the Scheme(s)	Revised Estimate 2012-13	Budget Estimate 2013- 2014
Non-Plan schemes	25574.51	28320.14
State Plan schemes	27801.71	33853.00
Centrally Sponsored Schemes (100%)	1789.63	1934.99
Schemes shared between State and Centre	994.67	1049.25
Total	56160.52	65157.38

#### 12. MAJOR ONGOING SCHEMES - 2013-14

The department has been effectively implementing all development programmes including afforestation, biodiversity conservation, soil conservation, habitat improvement works in various sanctuaries, protection of forest wealth, forest research, infrastructure development, creation of awareness among the rural people.

# 12.1. Tamil Nadu Biodiversity Conservation and Greening Project (TBGP)

An externally aided 'Tamil Nadu Biodiversity Conservation and Greening Project' at an outlay of Rs.686 crores is under implementation from 2011-12, which will continue till 2018-19. This project focuses on biodiversity conservation through forest protection and socio-economic development of forest fringe and tribal communities. It will also help the State's efforts in increasing tree cover by taking up tree cultivation in private lands outside forests. During 2012-13, the project has been implemented at an outlay of Rs.68.40 crores by planting 1.00 crore seedlings in private lands covering 1000 villages.

During 2013-14, third year activities will be carried out at an outlay of Rs.53.31 crores. To strengthen the Biodiversity Conservation and to extend area under tree cover, 2 crores seedlings will be planted free of cost in private lands in 1000 revenue villages.

# 12.2. Tamil Nadu Afforestation Project (TAP) Phase-II - Utilization Plan

In order to uplift the quality of life of the forest dependents and poorer sections of the society and to restore the degraded forests through their participation, a massive Joint Forest Management based Tamil Nadu Afforestation Project-II has been implemented at a cost of Rs.567.42 crore with funding from Japan International Cooperation Agency (JICA) since 2005-06. During 2012-13, it has been implemented at an outlay of Rs. 78.05 crores by carrying out maintenance works over 47,500 hectares and buffer zone activities in 230 villages with assistance from Japan International Cooperation Agency, besides. maintenance works over 31.050 hectares and buffer zone activities in 150 villages have been carried out from State Government Funds.

In order to ensure sustainability of the project activities, a two year utilization plan for 2013-14 and

2014-15 has been prepared at a cost of Rs.107.96 crores by utilizing the balance loan amount available under Japan International Cooperation Agency (JICA) aided Tamil Nadu Afforestation Project Phase-II.

During 2013-14, it is proposed to implement the utilization plan at a cost of Rs.66.20 crores including village development activities in 150 TAP villages and soil and moisture conservation works, which will be carried out under State Funds.

### 12.3. Massive Tree Planting Programme

In order to increase green cover in the State, a massive tree planting programme has been implemented at an outlay of Rs.29.44 crores by planting 64 lakh seedlings in 32 districts in commemoration with Hon'ble Chief Minister's 64<sup>th</sup> Birthday during the year 2011-12. This scheme is being continued by sanctioning an amount of Rs.43.55 crores for planting 65 lakh seedlings in 32

districts for a period of three years from 2012-13 to 2014-15.

### 12.4. Raising teak plantations on padugai lands

The objective of the scheme is to create timber resources, to increase tree cover outside the Reserve Forests and to prevent soil erosion. A comprehensive scheme to raise teak plantations padugai lands covering an area of 20,700 ha. in Dindigul, Madurai, Sivaganga, Thanjavur, Tiruvarur, Villupuram Trichy, and districts is under implementation at a cost of Rs.35.31 crores for a period of six years from 2008-2009 to 2013-14. So far, teak plantations have been raised in 19,986 ha. During 2012-13, it has been implemented at an outlay of Rs.9.06 crores by raising of teak plantations in padugai lands over an area of 6475 ha. and carrying out maintenance works.

During 2013-14, it is proposed to carry out maintenance works at an outlay of Rs.3.06 crores for the plantations raised earlier.

### 12.5. Western Ghats Development Programme

This scheme is being implemented in Coimbatore, Erode, Dindigul, Kanniyakumari, Tiruppur Madurai, Theni, Tirunelveli. Virudhunagar districts to avoid the degradation of forest eco-system and to improve the existing status of forests in the Western Ghats and to provide life support to the people. Activities like gap planting, prevention works, soil and moisture conservation works and anti-poaching measures have been carried out. During 2012-13, it has been implemented in identified watersheds with an outlay of Rs.4.14 crores, including establishment cost.

It is proposed to implement this scheme during 2013-2014 with an outlay of Rs.3.69 crores.

## 12.6. Hill Area Development Programme

The objective of the scheme is to enlarge the permanent green cover and to regulate biotic interference in the forests so as to preserve, protect

and develop the ecological condition through afforestation and soil conservation and other developmental activities. This will reduce the pressure on the ecosystem and help to improve the already diminishing shola and other forest cover in the Nilgiris. During 2012-13, it has been implemented at an outlay of Rs.6.22 crores.

During 2013-2014, it is proposed to implement this scheme at an outlay of Rs.5.36 crores.

# 12.7. Replanting in Thane cyclone affected areas

Thane cyclone that hit the coastal districts of Cuddalore and Villupuram on 30.12.2011 caused a number of trees to be uprooted. The areas which have suffered loss of trees have to be restored with 37.25 lakh seedlings of tree species like teak, casuarina, eucalyptus etc., over a period of four years commencing from 2012-13 at a cost of Rs.14.96 crores. During 2012-13, an amount of

Rs. 7.48 crores has been sanctioned for implementation of this scheme.

During 2013-14, it is proposed to implement the scheme at an outlay of Rs.5.63 crores.

### 12.8. National Afforestation Programme

Forest restoration requires establishment of strong and lasting linkages between rural people and the Forest Department for ultimate success. Realising this, the Government of India is assisting States under the "National Afforestation Programme". This is a 100% Government of India funded scheme and is being implemented through 33 Forest Development Agencies from 2002-03 on Joint Forest Management basis. For the past 10 years, afforestation works were carried out over an area of 67,815 ha. and village development works at a cost of Rs.110.43 crores. During 2012-13, GOI has sanctioned an outlay of Rs.5.98 crores for planting and maintenance activities.

#### 12.9. Green India Mission

The National Mission for a Green India was announced by the Honourable Prime Minister as one of the eight Missions under the National Action Plan on Climate Change (NAPCC). It recognizes that climate change phenomenon will seriously affect and alter the distribution, type and quality of natural biological resources of the country. During 2011-12, the Government of India has sanctioned the Bridge Plan under Green India Mission for implementation in Kolli hills landscape at a cost of Rs.0.72 crores.

# 12.10. Maintenance of Forests - Grants-in-Aid recommended by 13th Finance Commission

The 13th Finance Commission has recommended a sum of Rs.142.48 crore under Grants-in-Aid for maintenance of forests for the years 2010-11 to 2014-15 for Tamil Nadu. The objective is to provide fiscal resources, in support of State's commitment in forest and bio-diversity

conservation. During the year 2012-13, this scheme is implemented at an outlay of Rs.39.22 crores.

It is proposed to implement the scheme at a cost of Rs.35.62 crores during 2013-14.

# 12.11. Eco-restoration and conservation of Pallikaranai wetlands

Pallikaranai marsh land is the home of 112 species of birds, 21 species of reptiles, 9 species of amphibians, 46 species of fishes and 7 species of butterflies. In order to take up and ecological restoration conservation Pallikaranai wetlands at a cost of Rs.15.75 crores over a period of five years from 2011-12 to 2015-16, this scheme has been sanctioned. During 2012-13, habitat improvement, protection, works like research and monitoring, publicity awareness etc. been carried out at an outlay of Rs.5.00 crores.

It is proposed to implement the scheme at an outlay of Rs.5.00 crores during 2013-2014.

#### 12.12. Forest Research

Credible and reliable forest management packages and practices can be established only through strong research support. After recognizing the impact of forests, more emphasis has been laid on scientific forestry research for ecological security, energy and employment. Increasing productivity of wood and other forest produce by application of modern scientific and technological methods is the main thrust area of the research development. Forest research has provided new impetus to latest dimensions of forest activities, to support tree cultivation in private lands, seed biology, medicinal plant conservation, Minor Forest Produce and post-harvest technology. Experiments are conducted to find out the best species and most suitable regeneration techniques for different climatic and soil conditions. During 2012-13, an amount of Rs. 3.85 crores has been provided for undertaking Research activities.

It is proposed to continue this scheme at an outlay of Rs.4.10 crores during 2013-14 also.

# 12.13. Water conservation and canopy improvement in degraded forest lands

comprehensive scheme implemented to undertake extensive water harvesting works with funding assistance from NABARD. The objective of this scheme is to improve the soil moisture regime, to recharge ground water aquifer and to increase the availability of water for cultivation activities. It will be implemented in 10 districts of Tamil Nadu viz. Coimbatore, Dharmapuri, Dindigul, Kanyakumari, Madurai, Namakkal, Salem, Tiruvallur, Vellore and Villupuram. Under this scheme, establishment of permanent water storage structures like percolation ponds and check dams and formation of insitu water harvesting structures like catch water pits within and around the forest areas covering 50,000 ha. will be taken up at an outlay of Rs.50.00 crores during 2013-14.

#### 12.14. Project Tiger

The Forest Department has taken various measures to conserve tigers and their habitats. The main objective of Project Tiger is to ensure a viable tiger population in India for scientific, economic, aesthetic, cultural and ecological reasons and to preserve this for all time. The importance of tiger conservation lies in the fact that the presence of this predator is an indicator of the health of an ecosystem. Presently, Government of India provides 100% assistance for key activities in Project Tiger areas like tiger habitat conservation, ecological development, protection, forest fire, control moisture conservation. measures. eco-tourism, human-wild conflict resolution and infrastructure development. The implementation outlay for 2012-13 is Rs.6.33 crores.

During 2013-2014, it is proposed to implement this scheme at an outlay of Rs.6.56 crores.

### 12.15. Project Elephant

Tamil Nadu has the unique distinction of two major species - specific conservation programmes the Project Tiger and Project Elephant that are being implemented with great success. Project Elephant scheme is implemented in four elephant reserves i.e. Nilgiris, Coimbatore, Anamalai and Periyar. With considerable population of elephants, Tamil Nadu is a leading State in elephants and their habitat management. Out of 24,000 elephants estimated in India, this State has a population of 4015 elephants. 100% Central assistance received every year from Government of India for this scheme. The scheme is being implemented to protect the elephants and improve their habitats. Activities like fire protection measures, water facilities to elephants, payment of compensation to the damages caused to crops and loss of human lives caused by elephant etc., erection of solar fence to control the Man-animal conflict have been carried out at an outlay of Rs.2.61 crores during 2012-2013.

During 2013-2014, it is proposed to implement this scheme at an outlay of Rs.2.87 crores.

## 12.16. Butterfly Park and Nakshatra Vanam

During 2012-13, the scheme of Establishment of Butterfly Park and Nakshatra Vanam near Upper Anaicut Reserve Forest of Tiruchirapalli Forest Division over an extent of 10 ha. was sanctioned at a cost of Rs.7.35 Crores. This scheme is sanctioned to attract the pilgrims and tourist and also to conserve butterfly species. This scheme will be continued during the year 2013-14 also.

# 12.17. Intensification of Forest Management Scheme

The erstwhile Integrated Forest Protection Scheme has been implemented as a Centrally sponsored scheme. The components of the scheme are protection of forest resources by strengthening protection measures for controlling forest fires, survey and demarcation of the forest boundaries to prevent encroachment by constructing the cairns, improvement of roads, provision of better communication facilities, preparation of working plans for scientific management of forest divisions etc.

With a view to make the Integrated Forest Protection Scheme broad based, Government of India renamed this scheme as "Intensification of Forest Management". In addition to the above components, four more new components viz., Protection and conservation of Sacred Groves, Conservation and restoration of unique vegetation and ecosystems, Control and eradication of forest invasive species and Preparedness for meeting challenges of Bamboo flowering and Improving management of Bamboo forests have been added. During 2012-13, this scheme is being implemented at a cost of Rs.3.81 crores.

During 2013-14, it is proposed to implement this scheme at an outlay of Rs.4.19 crores.

#### 12.18. Part-II Schemes

The following 7 Part-II Schemes with an outlay of Rs.2.50 crores for construction and improvement of buildings, strengthening extension, free supply of seedlings, medicinal plants development, water harvesting, etc. are proposed for implementation during 2013-2014.

SI. No.	Name of the Scheme	Amount (Rs. in lakhs)
1.	Raising 5.00 lakh seedlings for free	47.50
2.	supply to public Construction of residential quarters for District Forest Officer, Dindigul	75.00
3.	and Madurai divisions Strengthening of Forestry Extension centres – Water supply	25.00
4.	Improvement to Panagal Maaligai	30.00
5.	Rock face afforestation in Kottamalai Hillock in Vellore division	25.00

SI. No.	Name of the Scheme	Amount (Rs. in lakhs)
6.	Development of Medicinal Plants Area at Doddabetta of Nilgiris North division	11.50
7.	Water harvesting in Eastern Ghats areas	36.00
	TOTAL	250.00

#### 13. COMPENSATORY AFFORESTATION

Compensatory Afforestation is one of the most important conditions stipulated by Government of India for diversion of forestland for non-forestry purposes. The user agency has to identify suitable non-forest land twice in extent of forest land to be diverted for purpose of carrying out Compensatory Afforestation and furnish an undertaking for transfer of non-forest land and also undertake to pay the amount required for raising compensatory afforestation and maintenance cost for 5 years. Ever since Forest Conservation Act, 1980 came into force, 4416.3142 ha. has been diverted to non-

forestry purposes mostly for electric transmission irrigation lines. projects, roads. tele-communications, water supply, etc. In order to avoid depletion of area under Reserve Forests, strict control on this aspect is being exercised. User agencies have deposited Rs.14.88 crores for compensatory afforestation against as Rs.15.61 crores and compensatory afforestation works worth Rs.5.62 crores have been undertaken till 31.12.2012.

#### 14. RESOLVING MAN-ANIMAL CONFLICTS

The Government has been paying due attention towards man-animal conflict. In order to control man-animal conflict, emphasis has been given to habitat improvement by undertaking water and fodder augmentation measures, solar power fence erection in addition to digging of elephant proof trenches along the forest boundary. However, whenever the wild animals stray out of their habitat, measures are undertaken to either drive them back

inside their habitat or to trap and leave back in their habitat.

To prevent wild animals from moving out of the Reserve Forests into agricultural fields and human habitats, Elephant Proof Trenches to a length of 434 kms. have been dug up at an outlay of Rs.10.62 crore during 2012-13 under various schemes. Mitigation measures have been undertaken at an outlay of Rs.10.56 crores under the scheme 'Asian elephant depredation and its mitigation measures' during 2012-13. Necessary activities have been undertaken to create fodder resources and to improve wildlife habitats inside the forest areas at an outlay of Rs.5.04 crores during 2012-13.

During the year 2012-13, a sum of Rs.2.75 crores was sanctioned for establishment of two monkey capturing units at Velachery and Vandalur and also Establishment of a Nodal Centre at Zoo Veterinary Hospital at Arignar Anna Zoological Park, Vandalur and ten Cluster Rehabilitation

centres at Ooty, Coimbatore, Salem, Erode, Vellore, Tiruchirappalli, Madurai, Tirunelveli, Ramanathapuram and Kanyakumari for curbing monkey menace in Tamil Nadu. Till 31.12.2012, 4505 monkeys have been captured in Chennai and surrounding areas.

Despite the best efforts taken to contain the animal inside the forest areas, some animals stray out of the forests in search of fodder and water and as a part of their migration. These chance visits sometimes cause attacks by wild animals resulting in injuries and human deaths and/or damage to crops and properties. During the year 2012-13, an amount of Rs.2.89 crores has been allocated for payment of compensation under various schemes. A sum of Rs.0.66 crores has been paid as compensation to the legal heirs of 22 deceased persons in 29 instances of man-animal conflict.

In order to avoid delay in payment of compensation to the victims, the Government have constituted a 'Revolving Fund' for Rs.2.50 crores.

#### 15. CORPORATIONS

# 15.1. Tamil Nadu Forest Plantation Corporation Limited (TAFCORN), Tiruchirappalli

Tamilnadu Forest Plantation Corporation Limited was established on 13.06.1974 with headquarters at Tiruchirappalli under Indian Companies Act, 1956. This Corporation has an authorized share capital of Rs.10.00 crores and a paid up share capital of Rs.5.64 crores. The entire share capital of the Corporation is held by the Government of Tamil Nadu. About 75,000 ha. of Reserved Forests and Protected Forests were taken on lease from the Tamil Nadu Forest Department. As per the Government Orders, 30% of the Annual turnover is being paid as lease rent to the Department. 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 fuelwood needs of the public.

#### 15.1.1. Achievements

The details of the plantations raised and expenditure involved during 2011-12 and 2012-13 are as follows:

SI.		Physical ( ha.)		Financial (Rs. in lakhs)	
No.	Species	2011-12	2012-13 (Upto Jan.13)	2011-12 (Actuals)	2012-13 (Upto Jan.13)
1.	Eucalyptus	3104	3950	675.00	882.84
2.	Cashew	760	800	188.80	203.10

# 15.1.2. Pulpwood

The pulpwood quantities supplied to paper mills during 2011-12 and 2012-13 are as follows:

Year	Quantity supplied	Revenue
	(M.T)	(Rs. in lakhs)
2011-12	1,87,102.496	4864.28
2012-13 (Upto Jan'13)	1,70,177.123	4850.00

#### 15.1.3. Cashew

Cashew is the second major revenue earner in TAFCORN. The details of revenue realized are as follows:

Year	Revenue
	(Rs. in lakhs)
2011-12	634.62
2012-13	243.24
(Upto Jan'13)	
2013-14	600.00
(Budget Estimate)	

# 15.1.4. Sandalwood Factory

Sandalwood Products Factory at Thekkupattu was also leased out to this Corporation by the Tamil Nadu Forest Department, and its operation was stopped from July 2007 and the Sandalwood Factory will be handed over to the Forest Department.

#### 15.1.5. Revenue and Expenditure

The revenue and expenditure details of the corporation for 2011-2012, 2012-2013 and 2013-2014 are as follows:

(Rs. in lakhs)

Year	Revenue	Expenditure	Profit (+) Loss (-)
2011-2012 (Actuals)	7099.71	4827.78	(+) 2271.93
2012-2013 (Revised Estimate)	8585.06	5748.12	(+) 2836.94
2013-2014 (Budgetted)	7532.42	5279.92	(+) 2252.50

## 15.1.6. Proposals for 2013-14

The details of fresh plantations to be raised and expenditure involved during 2013-14 are as follows:

Plantations	Physical (ha.)	Financial (Rs. in lakhs)
Eucalyptus	3625	887.94
Cashew	800	211.61

# 15.2. Tamil Nadu Tea Plantation Corporation Limited, Coonoor

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 tea project was registered as a Company under the 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.10.00 crore and the paid-up share capital is Rs.9.96 crore. The main objectives are to establish tea plantations and to employ and rehabilitate the Srilankan repatriates in the plantation schemes.

The Corporation is maintaining plantations over an area of 4302.78 ha. on the lands leased out by Government of Tamil Nadu in four phases as follows:

		Planted area (in Ha.)		
Phase	Year	Nilgiris	Anamalais	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	568.00	956.36	1524.36
TC	TAL	3346.42 956.36		4302.78

# 15.2.1. Green tea leaves and made-tea production

The actual physical achievement of green tea leaves and made-tea for the year 2011-2012 and 2012-2013 are furnished below:

(in lakh kgs.)

Details	2011- 2012 (Actuals)	2012- 2013 (for 6 months)
Harvest of Green Tea Leaves	374.74	162.72
Made-Tea production	89.57	40.33

## 15.2.2. Revenue and Expenditure details

(Rs. in lakhs)

(11011111011110)					
Year	Revenue by sale of tea and other items	Expenditure	Profit (+) Loss (-)		
2011-12 (Actuals)	6063.45	6941.89	(-) 878.44		
2012-13 (Actuals) (For 6 months)	3345.36	3260.49	(+) 84.87		

# 15.2.3. Major initiatives taken during 2012-13

- As per the announcement of the Hon'ble Chief Minister, the Government have sanctioned Rs.40 lakhs under the HADP scheme for providing amenities to the workers of TANTEA and to improve their living conditions.
- To raise the paid up share capital of TANTEA to undertake capital works, the Government had sanctioned Rs.4.00 crores.

- To increase the production and productivity of TANTEA, Government has increased the plucking incentive rates. As a result, several workers were benefitted as their income increased by Rs.1,000/- to Rs.3,000/- per month or more, according to their level of productivity.
- District Wholesale Dealers have been appointed to improve the retail marketing of TANTEA. Opening Regional stocking facility at Madurai, Trichy, Coimbatore and Chennai to facilitate faster movement of packed tea varieties is also under examination.
- Intensive efforts have been undertaken for productivity improvement, manufacture of premium quality 'white' tea and 'dip' tea and for development of Eco-Tourism centres. It

also plans to start 'green' tea manufacture in the near future in consonance with the latest market trends.

# 15.3. Arasu Rubber Corporation Limited(ARC), Nagercoil

Arasu Rubber Corporation Limited has Rubber Plantations over an area of 4187.68 ha of forest lands taken on lease from the Forest Department in Kanniyakumari District, where the soil, climate and topography are conducive for the growth of rubber trees. The Corporation was registered on 20.08.1984 under the Companies Act, 1956 and has been functioning with effect from 01.10.1984. authorized capital of the 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 1504 permanent workers including 311 Sri Lankan repatriates.

15.3.1. Production and financial Achievement

	Particulars	2011-12 (Actuals)	2012-13 Revised Estimate	2013-14 Budget Estimate
a)	Production of Rubber (in M.T)	1736	1300	1800
b)	Revenue and expenditure (Rs. in crores)			
	a) Revenue	48.38	32.40	53.96
	b) Expenditure	34.23	28.70	31.69
c)	Profit (+) or Loss (-) (Rs. in crores)	(+) 14.15	(+) 3.70	(+) 22.27

# 15.3.2. Future proposals

Older low yielding plantation are being felled and replanted with high yielding clones as approved by the Rubber Board in a phased manner. An area of 426.20 ha. was proposed for felling of matured rubber trees during 2012-13. But proposals could be sent only for felling in an area of 200.60 ha. for which fair price had been announced by the Committee. As regards the balance area of 226.00 ha., fair price fixation is in

process. After completion of felling process, this area will be replanted with rubber of high yielding clones during 2013-14. An area of 215.75 ha. was proposed for replanting during 2012-13. Since there was monsoon failure, replanting could not be completed. Replanting could be done only in an area of 157.85 ha. During the year 2013-14, all the areas where felling has been completed, the replanting will be done.

# K.T. PATCHAIMAL MINISTER FOR FORESTS