



# **ENVIRONMENT, CLIMATE CHANGE AND FORESTS DEPARTMENT**

## **FORESTS**

**POLICY NOTE  
2023 - 2024**

**DEMAND No. 54**

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Minister for Forests



**Government of Tamil Nadu  
2023**

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## **POLICY NOTE 2023-2024**

### **FORESTS DEPARTMENT**

மணிநீரும் மண்ணும் மலையும் அணிநிழற்  
காடும் உடைய தரண்.

One of the couplets by Saint Thiruvalluvar (Thirukural No 742) has emphasized the importance of having crystal clear water, open space, mountains and shade of forests in a place which is the ideal condition for the well-being of human race. This ideal condition with all the four elements can be ensured with sustainable management of ecosystem which is possible only by keeping one third of land under tree cover.

#### **Vision**

Making Tamil Nadu, the leading State in India in scientific and socially responsible forest and wildlife management to provide economic,



social, environmental and cultural benefits sustainably to the present and future generations.

## **Mission**

The Forest and Wildlife Management in Tamil Nadu shall be done with the objectives of creating healthy and resilient forests through innovations, community partnership, collaboration and scientific management.

The Department will strive to empower forest officers with necessary knowledge and tools for better management of the forest wealth of Tamil Nadu and its wildlife.

Transparency and objectivity shall be at the core of our policies and programmes with the sole objective of sustaining our forests for the present and future generation.

## **1. Introduction**

Forests are increasingly considered as a natural resource, from which communities derive ecological services rather than economic returns. The Health of the Nation relies on the wealth of the Forests. Forests play an important role in the conservation of natural resources and Forest ecosystems are a critical component of the world's biodiversity as forests are more biodiverse than other ecosystems.

Forests are probably the most well-known nature-based solutions for climate change, but there are many more - including mangroves, wetlands, coral reefs, peat lands and other landscapes. Forests contribute significantly towards environmental upkeep, climatic balance and are mainly instrumental for the rainfall pattern.

Tamil Nadu is the southern-most State of the country and covers an area of 1,30,060sq km which is 3.96 % of the geographical area of the country. Physiographically, the State can be divided into four major regions, namely, Coastal Plains, Eastern Ghats, Central Plateau and Western Ghats.

The Forest Department is taking appropriate steps and making ceaseless efforts in formulating schemes to achieve the objectives mentioned under National Forest Policy 1988, State Forest Policy 2018 and Sustainable Development Goals (SDGs). It will be the commitment of the Department to increase the forest cover by protection, restoration, afforestation and reforestation.

The scope of increasing forest and tree cover lies in bringing more areas outside forests under tree cover. Realizing the current

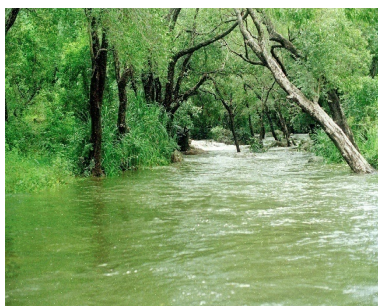
situation, the Forest Department is making all efforts in this direction. At the same time, focus is also given to improve the quality of forests by restoration of degraded forest areas, soil and moisture conservation works, habitat improvement, empowerment of local communities and public at large by creating awareness and infusing encouragement by way of participation in workshops and their capacity enhancement. The Department will continue to promote Eco-tourism by identifying appropriate destinations.

Establishment of Three Rescue and Rehabilitation Centres, Pallikaranai Conservation Centre, Kazhuveli Conservation Centre, Biodiversity Museum and Conservation Centre, Remodeling of Guindy Children's Park, Botanical Garden near Chennai, Longwood Shola Conservation Centre and Modernization of

Theppakadu Elephant Camp are some of the important Projects initiated by the department for conservation of wildlife and biodiversity in the State.

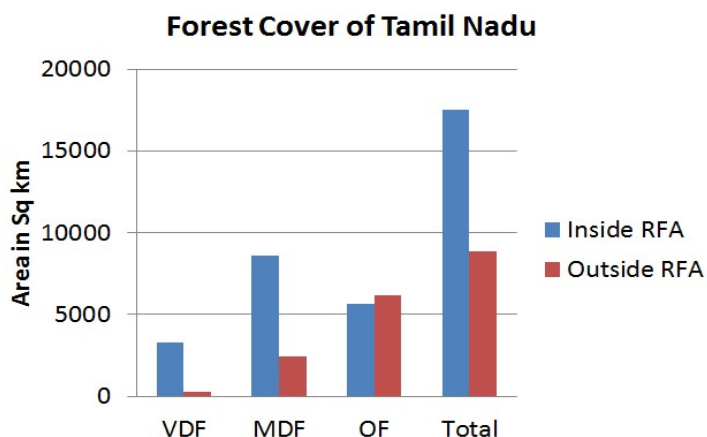
## **2.Forest Wealth of Tamil Nadu**

As per the latest India's State of Forest Report, 2021(Biennial), based on the interpretation of Indian Remote Sensing (IRS) Satellite data, the forest cover in the State is 26,419.23 sq km which is 20.31% of the State's Geographical area.



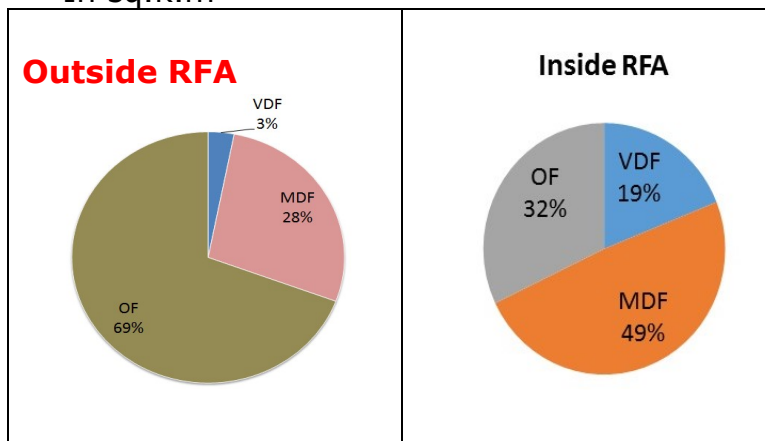
**Kalakkad Mundanthurai Tiger Reserve (KMTR),  
Tirunelveli**

In terms of forest canopy density classes, the State has 3,593.01 sq.km of very dense forest (VDF) (2.76 % of geographical area), 11,034.03 sq.km of moderately dense forest (MDF) (8.48% of geographical area) and 11,792.19 sq.km of open forest (9.07 % of geographical area). Forest cover inside the Reserved Forest Area (RFA) is 17531 sq km and the Forest cover outside the RFA is 8888 sq km.



## Forest Cover inside and Outside Recorded Forest Area (RFA)

In sq.k.m



Tamil Nadu has shown an increase in forest cover of 55.21 sq km as per the India State of Forest Report 2021 as compared to India State of Forest Report 2019. The Tree cover in Tamil Nadu has been estimated at 4424 sq.km assessed through sampling-based methodology. The total Forest and Tree Cover in the State is 30843.23 sq.km which is 23.71% of the State's geographical area.

The forests in Tamil Nadu can be classified into nine forest type groups which are further divided into 39 forest types. The major forest type groups are as below.

(1) Tropical wet evergreen, (2) Tropical semi evergreen, (3) Tropical moist deciduous, (4) Littoral and swamp, (5) Tropical dry deciduous, (6) Tropical thorn, (7) Tropical dry evergreen, (8) Sub-Tropical Broad-leaved hill, (9) Montane wet temperate.

Western Ghats is one of the 36 global biodiversity hotspots with distinctive biogeographic region. The region has significant levels of biodiversity. It is one of the 3 mega centres of endemism in India. The State is also endowed with a unique coastline home to mangroves, coral reefs enclosed with rich biodiversity. Eastern Ghats of Tamil Nadu



contribute to the vast richness of the biodiversity in the State. Protection and conservation of rare and endangered species, restoration and improvement in the quality of the forests are aimed at enriching biodiversity of Tamil Nadu's forests as envisaged in the National Wildlife Action Plan 2017-2031.

## **2.1 Floral diversity**

The Angiosperm diversity of India includes 17,672 species. With 5640 species, Tamil Nadu ranks 1<sup>st</sup> among all the States in the Country. This includes 533 endemic species, 230 red-listed species, 1559 species of medicinal plants and 260 species of wild relatives of cultivated plants. The Gymnosperm diversity of the country is 64 species, of which Tamil Nadu has 4 species of indigenous Gymnosperms and about 60 introduced species. The Pteridophytes

diversity of India includes 1022 species of which Tamil Nadu has about 184 species. Tamil Nadu's wild plant diversity also includes vast number of Bryophytes, Lichens, Fungi, Algae and Bacteria.



## **2.2 Faunal diversity**

The faunal diversity of Tamil Nadu includes 165 species of freshwater Pisces, 76 species of Amphibians, 177 species of reptiles, 454 species of birds and 187 species of mammals. According

to the Conservation Assessment and Management Plan (CAMP) reports, the red-listed species include 126 species of Pisces, 56 species of Amphibians, 77 species of reptiles, 32 species of birds and 40 species of mammals. The endemic fauna includes 36 species of Amphibians, 63 species of reptiles, 17 species of birds and 24 species of mammals.

Tamil Nadu has been a pioneer in conservation of forests and wildlife and in setting up Protected Areas (PA) that comprise National Parks, Wildlife Sanctuaries, Conservation Reserves and Community Reserves. 5 Tiger Reserves have been constituted especially for protecting tiger as an umbrella species giving thrust for conserving forests and wildlife. It is a matter of pride that Tamil Nadu has 36.13% (8378.528 sq. km) of forest area as Protected

Area, as against the mandate of 25 % envisaged in the National Wildlife Action Plan 1988.



**Nilgri Thar, Anamalai**



**Flamingos in Pulicat**



**Smooth – Coated  
Otters,  
Krishnagiri Dist.**



**Sambar Deer -  
Sathyamangalam Tiger  
Reserve, Erode Dist.**

## **2.3 National Parks**

National Parks are notified under Sec 35 of the Wildlife (Protection) Act, 1972 as an area

which needs to be protected by reason of its ecological, faunal, floral, geomorphological, or zoological significance. The Government has notified the following 5 National Parks in the State, known for their ecological, geomorphological and natural significance.

<b>Sl. No</b>	<b>Name of the National Park</b>	<b>Extent (in ha)</b>	<b>District (s)</b>	<b>Year of notification</b>
1	Gulf of Mannar Marine Park	52,602.00	Ramanathapuram & Tuticorin, Tirunelveli and Kanyakumari	1986
2	Indira Gandhi National Park	11,710.00	Coimbatore	1989
3	Guindy National Park	270.57	Chennai	1978
4	Mukurthi National Park	7,846.00	Nilgiris	2001
5	Mudumalai National Park	10,323.00	Nilgiris	2005

## **2.4 Wildlife Sanctuaries**

Wildlife sanctuaries are areas notified under Sec 18 and 26A of Wildlife (Protection) Act 1972 owing to their ecological, faunal, floral,

geomorphological, natural or zoological significance. These areas are notified for the purpose of protecting, propagating or developing wildlife or its environment. Details of wildlife sanctuaries in Tamil Nadu are as follows.

<b>Sl. No</b>	<b>Name of Wildlife Sanctuary</b>	<b>Extent (in ha)</b>	<b>Districts</b>	<b>Year of Notification</b>
1	Mudumalai Wildlife Sanctuary	21,776.00	Nilgiris	1940
2	Mundanthurai Wildlife Sanctuary	58,207.58	Tirunelveli and Tenkasi	1962
3	Point Calimere Wildlife Sanctuary	1,728.81	Nagapattinam	1967
4	Indira Gandhi Wildlife Sanctuary	84,149.00	Coimbatore, Tiruppur	1976
5	Kalakad Wildlife Sanctuary	22,358.00	Tirunelveli and Tenkasi	1976
6	Vallanadu Black Buck Sanctuary	1641.00	Tuticorin	1987
7	Grizzled Giant Squirrel Wildlife Sanctuary	48,520.00	Virudhunagar	1988
8	Kanyakumari Wildlife Sanctuary	40,239.55	Kanyakumari	2007

<b>Sl. No</b>	<b>Name of Wildlife Sanctuary</b>	<b>Extent (in ha)</b>	<b>Districts</b>	<b>Year of Notification</b>
9	Sathyamangalam Wildlife Sanctuary	141,160.94	Erode	2008
10	Megamalai Wildlife Sanctuary	26,910.81	Theni and Madurai	2009
11	Point Calimere Wildlife Sanctuary, Block A&B	12,407.27	Thanjavur, TiruvarurNagapattinam	2013
12	Kodaikanal Wildlife Sanctuary	60,895.482	Dindigul and Theni	2013
13	Gangaikondan Spotted Deer Sanctuary	288.40	Tirunelveli	2013
14	Cauvery North Wildlife Sanctuary	50,433.48	Krishnagiri	2014
15	Nellai Wildlife Sanctuary	35,673.33	Tenkasi	2015
16	Kadavur Slender Loris Sanctuary	11806.56	Karur and Dindigul	2022
17	Cauvery South Wildlife Sanctuary	68640.613	Krishnagiri&Dharmapuri	2022



### **Cauvery South Wildlife Sanctuary**



### **Kadavur Slender Loris Sanctuary**



## 2.5 Bird Sanctuaries

The State of Tamil Nadu is well known globally for attracting large number of migratory birds. Every year migratory birds from different parts of the world, flock to various tanks, ponds and lakes in Tamil Nadu as they find the best ecological conditions and habitats for feeding, breeding and raising their young ones. Tamil Nadu State notified Vedanthangal Bird Sanctuary way back in 1936, which is the first Bird Sanctuary in India. Tamil Nadu Government has notified 17 Bird Sanctuaries as below:-

Sl. No	Name of Bird Sanctuary	Extent (in ha)	Districts	Year of Notification
1	Vettangudi Bird Sanctuary	38.40	Sivaganga	1977
2	Pulicat Lake Bird Sanctuary	15,367	Tiruvallur	1980
3	Karikili Bird Sanctuary	61.21	Kancheepuram	1989
4	Kanjirankulam Bird Sanctuary	104.00	Ramanathapuram	1989
5	Chitrangudi Bird Sanctuary	47.63	Ramanathapuram	1989
6	Koonthankulam-Kadankulam Bird Sanctuary	129.00	Tirunelveli	1994
7	Vellode Bird Sanctuary	77.18	Erode	1997

8	Vedanthangal Bird Sanctuary	30.00	Kancheepuram	1936
9	Udayamarthandapuram Bird Sanctuary	45.28	Tiruvavarur	1998
10	Melaselvanur-Kilaselmanur Bird Sanctuary	593.08	Ramanathapuram	1998
11	Vaduvuor Bird Sanctuary	128.10	Tiruvavarur	1999
12	Karaivetti Birds Sanctuary	453.71	Ariyalur	2000
13	Theerthangal Bird Sanctuary	29.29	Ramanathapuram	2010
14	Sakkarakottai Tank Bird Sanctuary	230.49	Ramanathapuram	2012
15	Oussudu Lake Bird Sanctuary	331.785	Villupuram	2015
16	Kazhuveli Bird Sanctuary	5151.60	Villupuram	2021
17	Nanjarayan Tank Birds Sanctuary	125.865	Tiruppur	2022



**Kazhuveli Bird Sanctuary, Villupuram**



**Vaduvur bird sanctuary, Thiruvavarur**



**Pulicat Bird Sanctuary**



**Karikili Bird Sanctuary**



**Nanjarayan Tank Birds Sanctuary**

## **2.6 Conservation Reserves**

Conservation Reserves are legally Protected Areas for conservation of floral and

faunal species. These areas are declared as Conservation Reserve in consultation with local communities. The State Government notified the following two Conservation Reserves under Sec 36A of the Wildlife Protection Act, 1972.

<b>Name of Conservation Reserve</b>	<b>Extent (in ha)</b>	<b>District</b>	<b>Year of Notification</b>
Thiruppudaimaruthur Birds Conservation Reserve	2.84	Tirunelveli	2005
Suchindrum-Theroor –Managudi Conservation Reserve	484.77	Kanniyakumari	2015
Dugong Conservation Reserve in Palk Bay	44834.00	Thanjavur	2022



**Suchindram, Theroor – Managudi  
Conservation Reserve**



**Dugong Conservation Reserve in Palk Bay**

## 2.7 Tiger Reserves

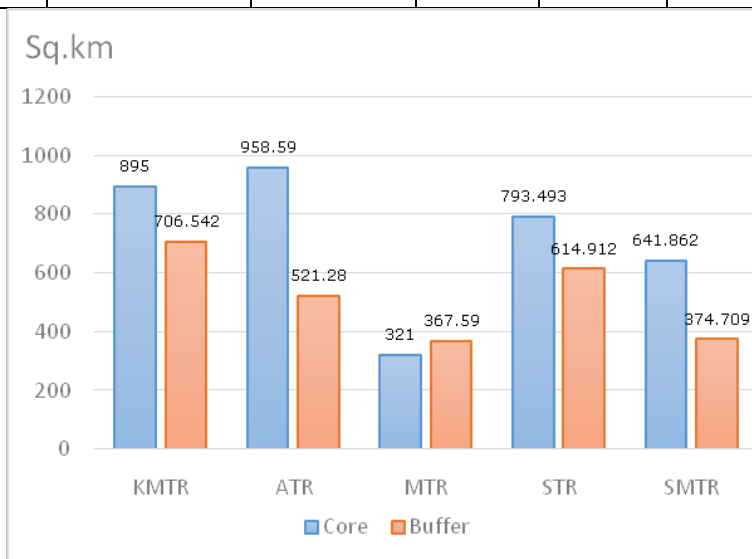
The "Project Tiger" was launched in April, 1973 with the objective to ensure maintenance of a viable population of Tigers in India for scientific, economic, aesthetic, cultural and ecological values, and to preserve for all times, areas of biological importance as a national heritage for the benefit, education and enjoyment of the people.

The State of Tamil Nadu has been a Pioneer in declaring a Tiger Sanctuary at Mundanthurai way back in 1962, eleven years before the launch of 'Project Tiger' in the country. Tamil Nadu has notified the following five Tiger Reserves in the State

### Area in sq.km

Sl. No	Name of Reserve	District(s)	Core area	Buffer area	Total area
1	Kalakad-Mundanthurai Tiger Reserve	Tirunelveli and Tenkasi	895.00	706.542	1,601.542

Sl. No	Name of Reserve	District(s)	Core area	Buffer area	Total area
2	Anamalai Tiger Reserve	Coimbatore and Tiruppur Districts	958.59	521.280	1,479.870
3	Mudumalai Tiger Reserve	The Nilgiris	321.000	367.590	688.590
4	Sathyamangalam Tiger Reserve	Erode	793.493	614.912	1,408.405
5	Srivilliputhur-Megamalai Tiger Reserve	Virudhunagar, Theni and Madurai	641.862	374.709	1,016.571



## Core and Buffer areas of Tiger Reserves



**Anamalai Tiger Reserve**



**Mudumalai Tiger Reserve**



**Srivilliputtur Megamalai  
Tiger Reserve**



**Kalakkad Mundanthurai  
Tiger Reserve**





**Sathyamangalam Tiger Reserve**

## **2.8 Elephant Reserves**

Project Elephant was launched by Government of India in 1992 with the objective to protect elephants and their habitat. The key objective of the Project Elephant is to protect elephant corridors and elephant habitat for the survival of elephant population in the wild. For the purpose of habitat and corridor management and based on spatial distribution of elephant movements, Elephant Reserves are notified encompassing two or more Districts and States. An area of 1,19,748.26 ha in KMTR and

Kanyakumari Wildlife Sanctuary was notified as Agasthyamalai Elephant Reserve in 2022- 23 .There are 5 Elephant Reserves in Tamil Nadu.

<b>Sl. No</b>	<b>Name of Reserve</b>	<b>District(s)</b>	<b>Area in ha</b>
1	Nilgiris – Eastern Ghat (Nilgiri Elephant Reserve)	Nilgiris, Erode, Dharmapuri Krishnagiri	4,66,245
2	Nilambur Silent Valley - Coimbatore Elephant Reserve (Nilambur Elephant Reserve)	Coimbatore, Nilgiris	56,557
3	Periyar Elephant Reserve (Srivilliputhur Elephant Reserve)	Theni, Virudhunagar, Tenkasi	1,24,910
4	Anamalai – Parambikulam Elephant Reserve (Anamalai Elephant Reserve)	Coimbatore, Dindigul	1,45,723
5	Agasthyamalai Elephant Reserve	Tirunelveli and Kanyakumari	119748.26



**Anamalai Elephant Reserve**



**Nilgiris Elephant Reserve**



**Agasthyamalai Elephant Reserve**

## 2.9 Biosphere Reserves

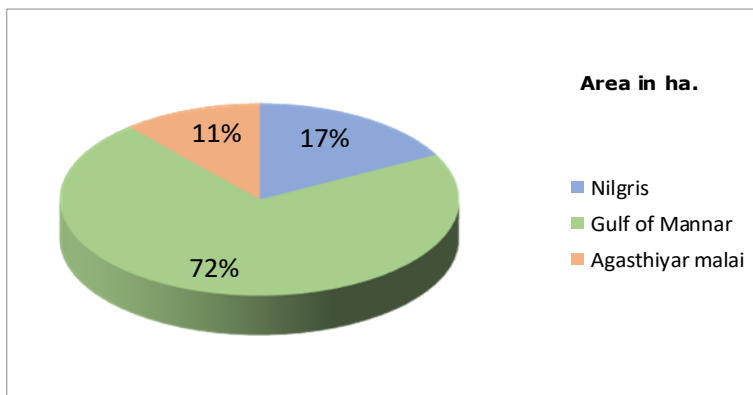
Biosphere Reserves are sites established by countries and recognized under UNESCO's Man and the Biosphere (MAB) Programme to promote sustainable development based on local community efforts and sound science. The programme of Biosphere Reserve was initiated by UNESCO in 1971. The purpose of the formation of Biosphere Reserves is to conserve "*in situ*" all forms of life, along with its support system, in its totality, so that it could serve as a referral system for monitoring and evaluating changes in natural ecosystems.

Tamil Nadu has three Biosphere Reserves as detailed below,

<b>S. No</b>	<b>Name of Reserve</b>	<b>District(s)</b>	<b>Area in ha</b>
1	Nilgiris Biosphere Reserve	The Nilgiris	2,53,800

2	Gulf of Mannar Biosphere Reserve	Ramanathapuram, Thoothukudi, Tirunelveli and Kanniyakumari Districts	10,50,000
3	Agasthiyarmalai Biosphere Reserve	Kanniyakumari, Tenkasi and Tirunelveli Districts	1,67,236

### **Biosphere Reserve Areas**



### **3. Recent initiatives by the Tamil Nadu Forest Department to tackle Human Wildlife Conflict**

- The Chief Minister of Tamil Nadu has launched India's first ever Elephant Death

Audit Framework to conduct a detailed analysis of death of elephants in the wild for understanding issues relating to unnatural and preventable deaths and prescribe suitable management interventions.

- State level advisory committee has been constituted to create a framework for wildlife friendly infrastructure in future for the first time in India.
- The measures taken to prevent electrocution of elephants are: Joint inspection of power lines with TANGEDCO officials, creation of spikes in the existing poles, provision of barbed wire fencing in

Distribution Transformers, Heightening the poles, frequent tree clearance, rectification of low sagging overhead lines.

- Conventional measures like Creation of Elephant Proof Trenches, Solar Powered Fence, Stone wall fences, steel wire rope fences, hanging solar fences along with creation of fodder resources, percolation ponds, check-dams, water holes, water troughs inside forest areas, Deployment of Anti-depredation squads, Regular patrolling by Anti-poaching watchers have been carried out to avoid the straying of Wildlife into human habitations.

- The Forest Department has taken proactive measures like Early Warning system, Radio collaring of wild elephants and other conflict animals for real time monitoring, Artificial Intelligence based Elephant Alert system, Trip wire Alarm System, Geo-referenced elephant monitoring system to augment the conventional measures.
- Along with the above, the strayed wild animals are being driven back to the Forests by using the rapid response teams and Anti-poaching watchers with the help of the above mentioned systems.



- 35 No. of all terrain multi-purpose vehicles have been procured by the Forest Department for rescue of Wildlife and firefighting activities.
- Some of the frequently straying wild animals are being identified and captured using Kumki elephants and tranquilizers under the supervision of the expert veterinarians under Section 11(1) of the Wildlife (Protection) Act, 1972.
- Awareness on the Human wildlife conflict is being created among the public and frequent meetings with the District Administration are being conducted for effective management of the conflict.

- Compensation is being provided to the affected persons and farmers for human fatality, human injury, crop and property damages.

### **3.1. Wildlife Management Outside Protected areas:**

Following Sea turtle conservation activities are being carried out by the Tamil Nadu Forest Department with the help of Non Governmental Organizations

1. Monitoring the status of Sea turtles at important nesting and foraging Sites along the coastal line of Tamil Nadu and excavation and relocation of nests in 35 hatcheries of Forest Department and

releasing of nearly one lakh turtle hatchlings after the emergence every year.

2. Increasing awareness on the biology and characteristics of sea turtles and impact of poaching adults.
3. Undertaking a participatory approach by involving the fishing community members as turtle guards, in sea turtle monitoring and to check poaching.

### **3.2 Invasive Species**

#### **Introduction:**

Invasive species are considered one of the most significant threats to conservation of

Biodiversity due to their impact on native species in Ecosystems around the world.

**Efforts taken:**

In order to protect the native species, a pilot project was sanctioned by the Government for removal of 4 major invasive species such as *Prosopis juliflora*, *Lantana camara*, *Senna Spectabilis* and *Wattle* to an extent of 700 Ha. at a cost of Rs. 535.21 Lakhs for the year 2022-23.

Further, the invasive species are also being removed under various schemes such as NABARD, TN CAMPA, SADP, Project Tiger and Project Elephant etc. during 2022-23.

**Total Extent of invasives removed in  
Tamil Nadu:**

As per the efforts taken, during 2022-2023 (up to 28.02.2023), the invasive species were removed over a total extent of 2969.29 Ha and further removal is in progress.

<b>S. No.</b>	<b>Name of the species</b>	<b>Invasive cleared (in Ha.)</b>
1.	<i>Lantana Camara</i>	1449.09
2.	<i>Prosopis juliflora</i>	803.20
3.	<i>Senna Spectabilis</i>	306.00
4.	<i>Wattle</i>	395.00
5.	<i>Eupatorium</i>	14.00
6.	<i>Parthenium hysterophorus</i>	2.00
	<b>Total</b>	<b>2969.29</b>

## **Tamil Nadu Policy on Invasive Plants and Ecological Restoration (TN PIPER):**

As per the announcement of the Hon'ble Minister for Forests on the floor of Legislative Assembly on 03.09.2021, "Tamil Nadu Policy on Invasive Plants and Ecological Restoration (TN PIPER)" has been framed which is one of the first policy on invasives in India.

The Policy aims at identification, prevention of spread, developing appropriate control and eradication of all invasive alien plant species in terrestrial and wetland ecosystems of Tamil Nadu.

## **Senna Spectabilis allotment to TNPL:**

As per the directions of Hon'ble High Court of Madras, orders have been issued for removal of *Senna Spectabilis* to the Tamil Nadu Newsprint and Papers limited (TNPL) spread over the Nilgirs Biosphere Reserve areas at a conservation charge of Rs. 350/- per ton. which is to be utilized for eco restoration of the habitats.

Based on the above orders, 645 Ha. of *Senna Spectabilis* from Sathyamangalam Tiger reserve and 60 Ha. from Mudumalai Tiger Reserve have been allotted to the Tamil Nadu

Newsprint and Papers limited (TNPL) for removal.



### **Removal of invasive species**

## **4. Important Schemes**

In order to achieve the policy initiatives, SDGs and Key Result Areas, the following programmes are aligned accordingly and are being implemented in the Department:

### **4.1. Major State Schemes**



#### **4.1.1. Tamil Nadu Biodiversity Conservation and Greening Project for Climate Change Response (TBGPCCR)**

The Government of India has sanctioned a new Japan International Cooperation Agency (JICA) funded project titled "Tamil Nadu Biodiversity Conservation and Greening Project for Climate Change Response (TBGPCCR)" with an outlay of Rs.920.52 crores for implementation over 8 years period from 2022-23 to 2029-30. The Minutes of Discussions (MoD) and the Loan Agreement (LA) were signed on 05.01.2022 and 31.03.2022 respectively. The loan agreement has become effective from 28.07.2022.

The project aims to mitigate and adapt to climate change and improve ecosystem through five major components viz. (i) Ecosystem based climate change measures, (ii) Human wildlife

conflict measures, (iii) Promoting supply chain development, (iv) Livelihood improvement activities, and (v) Management capacity development, thereby contributing to sustainable socio-economic development in Tamil Nadu.

The expected major outcomes from the project by year 2032 include increase in Carbon storage by 4 lakh MT, restoration of 3.6 ha. of Coral reef area, restoration of 600 ha. of sea grass and 300 ha. of sea weed, increase of mangrove cover over an area of 1050 ha., 60,000 ha. increase in Tree Outside Forest (TOF) cover and capacity building for 5400 departmental staff.

During 2023-24, the approved activities namely raising and planting of 68.40 lakh seedlings in urban and peri-urban areas, digging

of elephant proof trenches over 25 kms., establishment of Hi-tech Central Nurseries in 8 Forestry Extension Centers, Eco-tourism and eco-development activities, improvement of infrastructure and mobility, etc. with an outlay of Rs. 177.29 Crores will be implemented.

#### **4.1.2. Restoration of Degraded Forests Landscape in Tamil Nadu**

The United Nations General Assembly has proclaimed this decade (2021 to 2030) as “Decade on Ecosystem Restoration” with the aim to halt the degradation of ecosystems and restore them to achieve global goals.

Only with healthy ecosystems we can enhance people’s livelihoods, counteract climate change, and stop the collapse of biodiversity.

Forest land degradation affects rural economy and our ability to combat climate change. It is

also adversely impacting India's targets to reduce green house gas emissions according to the Nationally Determined Contributions (NDC) under the United Nations Framework on Convention on Climate Change (UNFCCC).

Agricultural productivity is heavily dependent on soil fertility and availability of water. An important ecosystem service provided by the forest is to prevent soil erosion and regulate water supply. The health of our forest ecosystems has an impact on other sectors such as agriculture, energy, tourism and health. Various schemes and programmes of the Department are aimed at restoring the degraded forests.

A comprehensive scheme for Restoration of degraded forest landscape in Tamil Nadu with community participation is under implementation with the financial assistance from NABARD at a

cost of Rs.481.148 crore from 2021-22 to 2025-26. Under this project an area of 33290 ha of degraded forest has been proposed to be planted with 33,50,000 numbers of seedlings.



**Nurseries raised under NABARD Scheme**



### **Soil and Moisture Conservation Works.**

Under RDF, as part of fire prevention and management, State fire control center in Chennai and District Fire control centers in 33 districts are being setup for real time fire alerts and monitoring. These fire control centres will act as command centers and coordinate the fire control activities during the fire season, which will help in reducing the response time. Firefighting equipment's have been procured to prevent, control and put off fires in Forest areas.

## **4.2 Ongoing Schemes**

### **4.2.1 Teak Plantations**

The scheme of Raising Teak plantations, over an area of 6,000 ha, was approved for a period of 8 years from 2017-18 at a total financial outlay of Rs.52.64 Crore. An extent of 5565.55 ha was planted till 2021-22 at a total cost of Rs.24.05 Crores.

### **4.2.2 Sandal Plantations**

In Tamilnadu Jawadhi Hills, Shervaroyan hills, Kolli Hills, Pachamalai hills and Chitheri hills are the traditional sandalwood bearing areas. The scheme of Raising of Sandal Plantations in Reserve Forests for a period of 10 years from 2015-16 to 2024-25 with a financial outlay of Rs.100 crores was sanctioned in order to enhance the growing stock of sandal in traditional sandalwood areas. Approximately

7.10 lakh seedlings were planted at a cost of Rs.8.94 Crore.

#### **4.2.3 Elephant Conservation Scheme**

As a result of increasing human wildlife conflict, various mitigation measures are taken up by adopting a multi-pronged strategy involving habitat improvement and augmenting water sources, improving fodder resources for wildlife inside the forest area, formation of physical barriers along the forest boundary, as well as awareness creation amongst the local people. During 2022-23, an amount of Rs.241.190 lakh was sanctioned for implementation of the scheme.

#### **4.2.4. Payment for Compensation for the damages caused by wild animals**

Human-wildlife conflict refers to a negative interaction between human and wild animals,



with undesirable consequences for both people and their resources and wildlife and their habitats (IUCN,2020) This not only impacts the person but has very adverse impacts on the whole family. Development of barriers such as trenches and fences along the forest boundaries, monitoring of movement of wildlife, augmenting fodder and water resources are the major activities carried out to prevent conflicts. The Department is paying compensation to legal heirs of deceased families, farmers who lose their crop and properties in these conflicts. During 2022-23, an amount of Rs.10.00 crores was sanctioned by the State Government. A dedicated bank account for speedy settlement of compensation was opened in all Forest Divisions. This scheme will be continued during 2023-24.

#### **4.2.5. Construction of Concrete Wall and bio-fencing to protect RF in and around Chennai from encroachment/ garbage dumping**

"Providing Concrete and live fencing for protection of Reserve Forests around Chennai city" has been sanctioned and being implemented to prevent encroachments and to prevent the forest area from pollution due to the activities of rapid urbanisation, at a cost of Rs.25.00 crore. As on 31.3.2022, an amount of Rs. 20.40 crore was incurred for Construction of compound and bio-fencing. During 2022-23, an amount of Rs.439.51 lakh was sanctioned for the implementation of the scheme.

#### **4.3 Centrally Sponsored schemes**

The following schemes are jointly funded by the Central and the State Government in a ratio

of 60:40 and are categorised as the Centrally Sponsored Schemes.

#### **4.3.1. Integrated Development of Wildlife Habitats**

Integrated Development of Wildlife habitats has following components:-

- Support to Protected Areas (National Parks, Wildlife sanctuaries, Conservation Reserves and Community Reserves)
- Protection of wildlife outside protected areas.
- Recovery programmes for saving critically endangered species and habitats.

The Government of India has sanctioned funds for 29 schemes for the developmental activities in National Parks, Wildlife Sanctuaries and Conservation reserves. During 2022-23, an amount of Rs.11.04 Crore has been sanctioned

and this scheme will be continued during 2023-24.

#### **4.3.2. Project Tiger**

Tiger being a flagship species and at the top of food chain, its presence is an indicator of the overall health of ecosystem. Various measures to conserve Tigers and their habitats have been taken up by the Forest Department in five Tiger Reserves viz., Kalakad-Mundanthurai Tiger Reserve in Tirunelveli district, Anamalai Tiger Reserve in Coimbatore and Tiruppur districts, Mudumalai Tiger Reserve in Nilgiris district, Sathyamangalam Tiger Reserve in Erode district and Srivilliputtur – Megamalai Tiger Reserve in Theni and Virudhunagar Districts. The scheme provides assistance for works relating to habitat conservation and protection including fire prevention, eco-development, improvement of

water sources, ecotourism, mitigating human wildlife conflicts and improvement of infrastructure facilities in the Tiger Reserves. To reduce the anthropogenic disturbances in Critical Tiger Habitats in Tiger Reserves, 435 families have been relocated from core area of Mudumalai Tiger Reserve. Further with respect to recurring works the funds are sanctioned in the ratio of 50:50 by the Central and State Governments. During 2022-23, an amount of Rs.40.817crore has been sanctioned and this scheme will be continued during 2023-24.

#### **4.3.3. Project Elephant**

Tamil Nadu is one among the leading States implementing Project Elephant, pursuing scientific management and habitat conservation. The elephant population in Tamil Nadu has been estimated to be about 2761 as per the last

synchronized census conducted in May 2017. The Project Elephant scheme is implemented in large contiguous elephant landscapes categorized for management as Elephant Reserves and these Reserves have no separate legal status. The scheme in Tamil Nadu is being implemented in the five elephant Reserves to protect the elephants and improve their habitats. The scheme also includes Elephant Rescue and Rehabilitation Centre, Tribal sub plan for benefit of the tribes living in the elephant reserve, payment of compensation to farmers for the crop damages and loss of human lives caused by human wildlife conflict and further to take necessary steps to minimize such conflicts. During 2022-23an amount of Rs.7.74crore has been sanctioned and this scheme will be continued during 2023-24.

#### **4.3.4. Forest Fire prevention and Management**

Forest Fire Prevention and Management Scheme is implemented with focus on fire prevention, detection and management. The scheme provides support for procurement of fire-fighting equipment, controlled burning, fire line tracing, maintenance of fire lines, creation of new fire lines, soil and moisture conservation works, awareness creation, capacity building of local communities, research, monitoring etc. State level workshop on forest fire management chaired by Chief Secretary was conducted in February 2023 in which DFOs and other line departments participated. Sensitization on forest fire alert mechanism, fire response and management were provided. Dashboard and a mobile application for real time monitoring for

forest fire management was released during the workshop.



### **Firefighting equipment**

#### **5.1. Arignar Anna Zoological Park, (AAZP) Vandalur**

Arignar Anna Zoological Park is the oldest zoo in the country which was established in the year 1855 in Chennai and later shifted to its present location in Vandalur reserve forest in the year 1985. Spread over an area of 602 Ha of land, it is one of the largest zoos in Southeast Asia, that houses the animals in naturalistic enclosures simulating their natural habitat.



A modern and scientifically managed zoo and an institutional member of WAZA (World Association for Zoos and Aquariums), it exhibits 2368 wild animals, which includes 44 species of mammals, 89 species of birds and 39 species of reptiles in all numbering 172 species. During 2022 – 23, animals were brought to AAZP from Pilikula Biological Park, Mangaluru and Lucknow Zoos under animal exchange programme.

The vision of AAZP is to have environmentally sensitive people who care for the wild flora and fauna and conserve it for long term welfare of mankind.

- Conservation of the fauna of Eastern and Western Ghats with special reference to Lion- tailed macaque, Nilgiri langur, Gaur and small mammals.

- To provide all the animals housed in the zoo highest standards of housing, upkeep and health care.
- To provide the zoo visitors opportunities for getting an uninterrupted view of wild animals to develop an empathy towards them.
- To carry out research on different aspects of biology, behavior and genetic makeup of endangered species of wild animals and facilitate their breeding.
- To provide requisite housing, upkeep and health care to the distressed animals rescued from various sources.

It has emerged as a successful ex-situ conservation and captive breeding center of excellence for many endangered species, in recognition of which, the Central Zoo Authority has designated the zoo as Conservation

Breeding Centre for Lion-tailed macaque and Nilgiri langur and participating zoo for Bengal Tigers, Indian Gaur, Indian giant squirrel and wild dogs. In the field of conservation breeding, AAZP is determined to take a leap by stepping into assisted breeding techniques.

For the easy access of the online users, 'Vandalur Zoo' mobile application, BOT system – Chat support in zoo website, Unique online tickets with QR code and Dashboard help-desk are created for the benefit of online visitors. Animal adoption scheme was revamped online. Maintenance of enclosures are being done for animal welfare and upkeep of animals.

The 24 X 7 animal live-streaming activities of 16 zoo animal species received an overwhelming response from people. The Zoo has strengthened its protection by means of

installing about 255 CCTV cameras which is called Zoo e-eye surveillance.

AAZP Zoo school runs various educational programmes such as Zoo Outreach and orientation for visiting schools, Zoo Ambassador programme, special themed workshops, Zoo in-house training, Zoo club for volunteering activities, celebration of important forest and wildlife days with the goal of spreading conservation education and sensitizing people regarding the importance of co-existence of human beings and wildlife as well as protecting the environment.

Zoo School has initiated a species ambassador programme for adults and youngsters. It is the first of its kind programme for the conservation of individual species initiated by an Indian zoo. Species-specific

ambassador programme focused on slender loris and Nilgiri langur was conducted. A virtual zoo ambassador programme, webinars on wildlife conservation issues, contests and events on important wildlife days are being conducted through online.

Through Corporate Social Responsibility, physical restraint device and water pond for elephants, Construction of toilets and rainwater channel for Otteri Lake, modification of gasifier incinerator, upgradation of veterinary hospital with an advanced small-animal anaesthesia machine, patient multi-parameter monitor and latest high-end version ultrasonography machine have been provided. Further, 2 nos. of 14-seater Battery Operated Vehicle was obtained through CSR funds.

The dedicated in-house zoo veterinary team is involved in providing healthcare to the animals housed in the zoo. The scientific health management is being practiced in coordination with TANUVAS state animal husbandry department, teams and also by seeking required inputs from the experienced veterinarians all over the state whenever situations warranted.

MoU with TANUVAS was executed successfully to ensure the proper veterinary care of wild animals in captivity at the AAZP with a regular regime of care and monitoring of their health. Draft for collaborating MoU with University of Georgia is in pipeline to engage in cooperative educational service and research activities for the mutual benefit of both institutions.

Arignar Anna Zoological Park was declared as Number one Zoo in Management Effectiveness Evaluation of Central Zoo Authority by securing 82 % under large zoo category among the 147 large zoos present in the country.

## **5.2 Advanced Institute for Wildlife Conservation (AIWC)**

The State of Tamil Nadu has established the Advanced Institute for Wildlife Conservation (Research, Training & Education) with the objective to infuse scientific knowledge in wildlife protection and law enforcement and thereby bolster conservation efforts in the State. The Institute has established three functional Centres namely Centre for Wildlife Forensics, Centre for Animal care sciences and Centre for Conservation Education with an initial outlay of Rs.14.13crore. An International Hostel has been constructed at the Institute campus to

strengthen on campus facilities for wildlife related studies at a cost of Rs.7.65 Crore.

The Institute has commenced basic wildlife forensic research and diagnostic operations in Morphometry, DNA and Scat DNA laboratories under the Centre for Wildlife Forensic Sciences (CWFS). A genetic reference database of important animal species of Tamil Nadu has been created for 53 species by AIWC, including 35 mammals, 10 reptiles, 8 bird species and a Fish/Ray/ Shark. Morphometry laboratory is engaged in developing reference repository of wildlife articles ranging from skulls, long bones, horns, antlers, ivory, hair samples, feathers, hide and skin samples for morphological comparison study and to establish standards that aid in species identification.



DNA sequencing facility at the Centre for Wildlife Forensic science has been established. Histopathology unit has been established under the Centre for Animal Care Science to create State of art facilities in the Institute to cater to the emerging challenges in the field of Wildlife conservation. The Institute will be restructured to provide appropriate functional autonomy in line with the other advanced scientific Centre so for excellence in the country with their renewed focus on scientific capacity building of various stake holder switch its education and outreach programmes.

The institute has proposed to get recognition from the University of Madras to encourage researchers and field staffs to enroll in Ph.D., programs. Laboratory accreditation is a procedure by which an authoritative body gives formal recognition of technical competence for

specific tests/ measurements based on third party assessment and following international standards. The institute has initiated steps to get National Accreditation Board for testing and calibration Laboratories (NABL) accreditation for its forensic labs. This institute has also recently added the advanced DNA Sanger Sequencer instrument for in house DNA sequencing. It has established additional facilities like the Histopathology unit which will deal with wild animal health (Wild and Captive) by identifying different pathogens and organisms.

### **5.3 Gulf of Mannar Biosphere Reserve Trust (GOMBRT):**

Gulf of Mannar located in the south eastern coast of India, is a unique marine environment and rich in biodiversity. The Gulf of Mannar Biosphere Reserve Trust (GOMBRT) is a unique and pioneering initiative of the

Government of Tamil Nadu to bring desired focus on coordinated approach among all concerned to link biodiversity conservation and sustainable utilization of marine resources with the livelihood security of coastal people of the area. In 2022-23, an amount of Rs.1.50 Crores was sanctioned. The comprehensive Action Plan for the period of 5 years (2022-23 to 2026-27) at an outlay of Rs.47.41crores is submitted to Government.

## **6. MISSIONS**

### **6.1 Green Tamil Nadu Mission**

Green Tamil Nadu Mission was launched with the objective to increase forest and tree cover in the State from 23.7% to 33% of its geographical area by the year 2030 – 2031. This will support the State's plan to create additional carbon sink of 50 – 60 million tons in

its forest and tree cover by the year 2030 – 2031, by forest land restoration and increasing tree cover outside forests. Under the Mission, native trees of economic and ecological significance shall be planted on suitable public lands such as urban areas, farm lands, educational institutions, temple lands, sacred groves, industrial areas, tank foreshore, padugai lands etc.





### **Launch of Green Tamil Nadu Mission**

One of the directives for implementation of Green Tamil Nadu Mission is to ensure that the Mission becomes a people's movement by soliciting their engagement and by actively involving multiple agencies, organizations (Government / Non - Government), individuals, farmers, local bodies, private institutions / agencies, academia, business houses, school and college students, youth organizations etc.

During 2021 – 2023, 350 nurseries have been raised and 2.8 Crore saplings have been planted across the 34 districts in the State over an area of 25829 ha, out of which 1.10 crore seedlings have been raised by the Tamil Nadu Forest Department and other by various Government Departments, NGOs, Trusts, Public etc., The expenditure incurred on the raising of nurseries and plantation of activities are as follows :-

EXPENDITURE			REQUIREMENT		
S.NO	Works	Amount (Rs. In Crores)	S.NO	Works	Amount (Rs. In Crores)
1	Nursery amount released 2021-2023	25.31	1	Advance nursery for 2023-24	96.5
2	Planting amount released 2021 – 2023	24.06	2	Maintenance for 2022-23 planted seedlings	4.17
3	Advance nursery amount released 2023-2024	0.70	3	Watering for the seedling planted during Jan 2023-Mar 2023	4.88
4	Admin cost	2.6			
	Total	52.67		Total	105.57

In Dindigul District alone, which has become a model for public participation in the

Green Tamil Nadu Mission, six lakh saplings were planted in one day and 89,000 seedlings have been planted along the roadside stretch of 604 km and planting of 1,03,400 seedlings were undertaken in wattle removed area in Kodaikanal under the Green Tamil Nadu Mission as a successful ecological restoration of the degraded forest landscape.

A dedicated web portal (**[www.greentnmission.com](http://www.greentnmission.com)**) has been created for maintaining the robust data for nurseries, plantations, people's participations, financial transactions for ensuring fairness and transparency in the implementation of the Green Tamil Nadu Mission. The web-portal shall inspire the people to be part of the Mission and procure the seedlings online through mode. Other Government Departments, 91 Trusts, 86 Non – Government Organizations and 2502

registered volunteers have been enrolled on the Green Tamil Nadu Mission web- portal, and the Green Tamil Nadu Mission is progressing well to become a people's movement.

In order to ensure that the Green Tamil Nadu Mission becomes popular in the State of Tamil Nadu, a toll-free tree helpline number 1800-599-7634 shall be launched for attending to the request of saplings and tree related complaints by public, NGOs, Trusts, etc. Under the Green Tamil Nadu Mission the planted saplings are being geotagged, and the internal monitoring of the nurseries and planting activities are being undertaken by the Conservator of Forests and details of georeferencing, land parcels are being uploaded in Green Tamil Nadu Mission portal. The Third-party verification and evaluation of the nurseries and the plantation activities shall also be carried



out under the Green Tamil Nadu Mission for ensuring accuracy and transparency of raised plantations all over the State.

The Mission shall adopt bottom-up approach in planning and finalization of targets and raising of nurseries & planting activities shall be specific to the Agro-climatic zones. The District Annual Action Plans have been submitted by the District Green Committees under the chairpersonship of the District Collectors for the year 2023-24. The District Annual Action Plans have been received from the District Collectors for raising and planting 7.5 crore seedlings wherein 2.6 crore seedlings shall be raised by the Forest Department and remaining seedlings shall be raised by other Government departments like DRDA, Agriculture, Horticulture and NGOs etc. The handholding of farmers (tree growers) shall be done under the Mission

enabling timber market linkage and for generating the carbon credits to the farmers and other stakeholders through the State Government to generate revenue for the Government as well as for improving the income of the farming communities.

#### **6.1.1 Restoration of Mangrove forests:**

The Mangrove is the littoral forest ecosystem in the intertidal region. They are salt tolerant plants and rich in biodiversity besides being a store house for blue carbon in its unique sediments is an integral component of the Tamil Nadu Climate Change Mission. The Climate Change is the biggest threat at the global level and the State of Tamil Nadu being the coastal State is most vulnerable to the adverse impact of the Climate Change. The mangroves being nature based solution have the ability to capture

and store carbon making these ecosystem extremely valuable in fighting the Climate Change. For the restoration of coastal habitats, Rs.25 crores have been released from the Tamil Nadu Climate Change Mission to the Green Tamil Nadu Mission for the creation of bioshields, including the mangrove plantation for Climate Change mitigation and adaptation as well as for improving the livelihood opportunities for the local communities. The Mangrove restoration works shall be undertaken based upon the micro-plans approved by the District Green Committees.

#### **6.1.2. Implementation of Green Tamil Nadu Mission by mobilizing Public fund/Donations**

In order to achieve the desired objective, the Green Tamil Nadu Mission is open to receive funds by way of donations from public, corporate

organizations. people welfare associations, Individuals etc. vide G.O.(Ms).No.13, Environment, Climate Change and Forests (FR.6) Department, dated. 11.01.2023 the Government has formulated the following guidelines:-

**i. Public Participation (Donation)**

- a) The minimum public contribution shall be for cost of one seedling.
- b) There will be no upper limit for public contribution and they can contribute for any number of seedlings.
- c) The intending individuals/ industries/ organizations etc. shall donate the amount to the Green Tamil Nadu Mission through online in its portal [www.greentnmission.com](http://www.greentnmission.com) offline by means of Demand Draft in favour of the APCCF & Mission Director Green

Tamil Nadu Mission. The contributions made by any entity under Corporate Social Responsibility (CSR) may also be accepted as public contribution subject to the instructions contained in the Letter (Ms) No.310, Finance (BPE)/2020 dated 31.07.2020.

- d) The funds received shall be deposited in the bank account maintained for implementation of Green Tamil Nadu Mission at head quarters. Receipt should be given to all contributions received.
- e) All the seedlings raised by utilising the funds received through donations shall be located to a nursery / plantation site with geo-tagging and shall be uploaded on the web-portal of the Green Tamil Nadu Mission. The donors shall be

given access to the data where the seedlings are raised and the present status of the implementation.

## **6.2. Tamil Nadu Wetlands Mission**

The Government of Tamil Nadu is committed to protect its wetlands through a comprehensive conservation and management plan. Accordingly, Government of Tamil Nadu have issued Government orders vide G.O. (Ms) No.59, Environment, Climate Change & Forests (FR.9) Department, Dated 25.03.2022 for implementation of the "Tamil Nadu Wetlands Mission", for a period of five years from 2021-2022 to 2025-2026 for an amount of Rs.115.15 crores for ecological restoration of 100 wetlands in a period of five years with focus on livelihood.

**6.2.1.** The wetlands are among the most productive life supporting system of the world

with immense socio economic, ecological and bio-aesthetic importance. Wetlands provides diverse tangible and intangible benefits to humankind on a sustainable basis and directly supports livelihoods of millions of people and provide enormous ecosystem goods and services like water purification, ground water recharge, biodiversity conservation, climate change mitigation and adaptation, etc. Wetlands area diversely being affected by climate crisis like sea level rise is expected to adversely affect the coastal wetlands; some of them might disappear; several others would experience changes to their morphology, water balance, salinity levels and biodiversity. The mudflats and coral reefs could be considerably affected by sea level rise. The high-altitude wetlands would suffer due to problems associated with the reduction in the thickness and area of glaciers.

The variation in precipitation pattern would have its impact on wetland ecosystems and their wise use. Therefore, there is a need to plan for the future considering the climate change and its impact on wetlands. Accordingly, the following activities shall be undertaken based on the G.O. (Ms.) No.59 Environment, Climate Change & Forests (FR.9) Department, Dated 25.03.2022 under the Tamil Nadu Wetlands Mission: -

- i. Identify and map 100 wetlands in the State of Tamil Nadu in 5 years.
- ii. Prepare Integrated Management Plans as per the Wetlands (Conservation and Management) Rules, 2017.
- iii. Ecosystem based eco-restoration of wetlands in accordance with evidence-based methodologies.



- iv. Awareness generation on wetland conservation through public awareness campaign.
- v. Promoting research, inventory and monitoring of wetland resources for effective management.
- vi. Promoting and support sustainable livelihood options in order to ensure productivity while protecting wetland resource.
- vii. Promoting stakeholders' participation for effective management of wetlands.
- viii. Conserving wetlands biodiversity through community-based approaches.

### **6.2.2 Identification, Mapping and Digital Inventories of 100 wetlands based or notification under Wetlands (Conservation and Management) Rules 2017.**

Identification of 100 wetlands have been done under “Tamil Nadu Wetlands Mission” and mapping of 100 Wetlands shall be done with the help of Drone LIDAR & RGB technology through “Tamil Nadu Unmanned Aerial Vehicles Corporation” in order to ensure that the wetlands characterization is undertaken for each wetland and the wetlands boundaries are duly marked on the ground with the help of DGPS. More accurate features pertaining to the wetlands shall be instrumental in preventing the wetlands degradation in future, which is one of the key deliverables of the “Tamil Nadu Wetlands Mission”. The Drone LIDAR & RGB based technology for mapping of the wetlands

shall have an added advantage over the orbital satellite images in producing the high spatial resolution imagery with error < 5 centimetre for delineating even the smaller wetlands with great precision for prevention of wetlands degradation from the anthropogenic pressures.

### **6.2.3. Ecological restoration of wetlands as per Wetlands (Conservation and Management) Rules, 2017**

Ecological restoration of 100 wetlands as per Wetlands (Conservation and Management) Rules, 2017, with focus on livelihood option shall be another prime objective of the "Tamil Nadu Wetlands Mission". The ecological restoration of the identified wetlands shall be carried out scrupulously following the Wetlands (Conservation and Management) Rules, 2017, focusing on the activities like selective dredging, bathymetric survey, strengthening of the bunds,

removal of invasive species, inflow and outflow desilting approved by the District Level Wetland Management Committee.

Recognizing that Ennore creek had a potential for fishing activities in the part which has drastically reduced in past two decade due to rapid industrialization of the area and due to invasive species adversely impacting the livelihood of the local fisher folk. The ecological restoration works of the part of the Ennore creek shall be undertaken in consultation with the Water Resources Department (WRD), with focus on livelihood of local fisherfolk under the "Tamil Nadu Wetlands Mission" for the welfare of nearly 9000 fisherfolk families. After the preparation of bathymetric survey and Detailed Project Report (DPR) by the Water Resources Department the ecological restoration of 162500 Sq.m shall be under taken by the Water Resources Department

under the “Tamil Nadu Wetlands Mission” to improve the livelihood of 9000 fisherfolk by way of selective dredging of part of the Ennore creek.

#### **6.2.4. Integrated Management Plan for 12 Ramsar sites in the State of Tamil Nadu**

Under the Tamil Nadu Wetlands Mission 13 Wetlands of international significance have been declared as Ramsar sites after a period of 20 years making Tamil Nadu a leading State in the Country with highest number of 14 Ramsar sites out of total 75 Ramsar sites in the Country. The details of 14 Ramsar sites are as follows:-

<b>Sl.No.</b>	<b>Name of Ramsar site</b>	<b>Name of District</b>	<b>Area (In ha.)</b>
1	Pallikaranai Marsh Reserve Forest	Chennai	1247.54
2	Karikili Bird Sanctuary	Chengalpattu	58.44
3	Vedanthangal Bird Sanctuary	Chengalpattu	40.35
4	Pichavaram Mangrove	Cuddalore	1478.64
5	Vellode Bird Sanctuary	Erode	77.185

Sl.No.	Name of Ramsar site	Name of District	Area (In ha.)
6	SuchindramTheroor Wetland Complex	Kanyakumari	94.23
7	Vembanur Wetland Complex	Kanyakumari	19.75
8	Chitrangudi Bird Sanctuary	Ramanathapuram	260.47
9	Gulf of Mannar Marine Biosphere Reserve	Ramanathapuram	52671.88
10	Kanjirankulam Bird Sanctuary	Ramanathapuram	96.89
11	Koonthankulam Bird Sanctuary	Tirunelveli	72.04
12	Udhayamarthandapuram Bird Sanctuary	Thiruvarur	43.77
13	Vaduvur Bird Sanctuary	Thiruvarur	112.64
14	Point Calimere Wildlife and Bird Sanctuary	Nagapattinam and Thiruvarur	38500.0
<b>Total Area</b>			<b>94773.825</b>

Out of 14 Ramsar sites, the Integrated Management Plan for 12 Ramsar sites in the State of Tamil Nadu shall be prepared by Salim Ali Centre for Ornithology and Natural History (SACON), Coimbatore for an amount of Rs.71.28 lakh, since the newly designated Ramsar sites have to be ecologically restored after taking into

consideration of ecological, hydrological, edaphic and biodiversity conservation status of the sites in order to improve the ecosystem services and livelihood options of the local communities.

**6.2.5. Preparation of 25 wetlands ecosystem health cards & brief documents for estimation of detailed ecological, edaphic & hydrological characters along with sediment analysis for estimation of carbon, methane, N<sub>2</sub>O profile, etc.**

25 wetlands ecosystem health cards (brief documents) for estimation of detailed ecological, edaphic & hydrological characters along with sediment analysis for estimation of carbon, methane, N<sub>2</sub>O profile, etc., shall be prepared by the Centre for Environment Studies, Anna University, Chennai for an amount of Rs.25.00 lakh. Similarly, the wetland ecosystem health

cards and brief documents shall be prepared for remaining 75 wetlands for its ecological restoration in future.

**6.2.6 Restoration of degraded coastal wetlands focusing on seagrass meadows in Gulf of Mannar, Tamil Nadu for strengthening the climate adaptation and climate resilience for the livelihood sustainability of the local communities**

Seagrasses are one of the important coastal wetlands and these are highly productive ecosystems and provide shelter and food for near-shore fisheries, marine reptiles and mammals. Sea grasses sequester blue carbon and act as important carbon sinks. Sea grass captures carbon up to 35 times faster than tropical rainforests. Even though it covers as 0.2% of the seafloor, it absorbs 10% of the ocean's carbon each year, making it an



incredible tool in the fight against climate change. A recent study quantified the blue carbon stock of sea grass meadows in the Gulf of Mannar to be 0.001782 Tg C (for 5170.66 ha of seagrass at 344,720 gC ha<sup>-1</sup>), and that of Palk Bay to be 0.043996 Tg C (for 13,323 ha of seagrass at 3,885,615 gC ha<sup>-1</sup>). The estimated value of blue carbon stored in seagrass meadows of Gulf of Mannar was valued at USD 17,820 and that of Palk Bay at USD 43,99,682 (at a fixed price of USD 10 for blue carbon, Kaladharan et al., 2020). Restoration of degraded coastal wetlands focusing on seagrass meadows in Gulf of Mannar, Tamil Nadu shall be undertaken by Suganthi Devadason Marine Research Institute (SDMRI) for an amount of Rs.95.54 lakh for improving the climate change mitigation options by way of sequestration of

blue carbon in the marine ecosystem as well as for the adaptation of the local communities.

#### ***6.2.7 Ecological restoration of Otteri Lake***

The Otteri lake, Aringar Anna Zoological Park, Vandalur being the only water body inside the Zoo premises which caters the drinking water requirements for the housed animals and for the adjoining local communities the ecological restoration of the Otterilake shall be undertaken to improve the ground water capacity of the lake for the benefit of local biodiversity, improvement of the habitat for facilitating the birds perch in the entire season, improved water quality through silt / sediment free water storage good quality water for use by the surrounding local communities. An amount of Rs.1.50 crore has been transferred to the zoological Authority of Tamil Nadu (ZAT) for

ecological restoration of the Otteri Lake, Arignar Anna Zoological Park(AAZP).

#### **6.2.8 Wetland Mitras (Iranilangalin Nanbargal) in wetlands of India portal.**

The “Tamil Nadu Wetlands Mission” envisages to make the wetlands conservation and management a people’s movement. Accordingly, wetland mitras (Iranilangalin Nanbargal) shall be rolled in each district, so that the local communities own the wetlands and facilitate the efforts of the Government in protecting these unique productive ecosystems for the future generations. So far 166 wetland mitras have been registered in Wetlands of India Portal and more than 250 wetland mitras shall be enrolled in the future to facilitate the people’s participation in wetlands protection and conservation in the State.

## **7. Action Plan for 2023-24.**

### **7.1. Tamil Nadu Coastal Restoration Mission**

Due to increasing vagaries of climate change and pressure caused by the burgeoning population, the coastal ecosystem and the livelihood of coastal population are likely to be severely affected in the near future. The Government will implement the "Tamil Nadu Coastal Restoration Mission" with the objective of preventing sea erosion, reducing marine pollution and conserving marine biodiversity. During the Budget Speech for the year 2023-24, the Government has announced that the Mission will be implemented with world bank assistance at an estimated cost of Rs.2,000 crore in the next 5 years.

## **7.2 Thanthai Periyar Wildlife Sanctuary**

A contiguous stretch of protected forests is essential to protect endangered wildlife. During the Budget Speech for the year 2023-24, the Government has announced to notify a new wildlife sanctuary "Thanthai Periyar Wildlife Sanctuary" with an extent of 80,567 hectares in the forest areas of Anthiyur and Gopichettipalayam Taluk in Erode district to link the Nilgiris Biosphere with Cauvery South Wildlife Sanctuary. This will be the 18th wildlife Sanctuary in the State.

## **7.3. International Bird Centre at Marakkanam**

Tamil Nadu is located in the Central Asian Flyway and hosts a large number of migratory birds every year. In order to promote conservation of birds, encourage research in the

field of ornithology and create awareness about the role of birds in nature, during the Budget Speech for the year 2023-24, Government has announced to set up an "International Bird Centre" at Marakkanam at an estimated cost of Rs. 25.00 crore.

## **8. Forest Policy and Legal Framework**

Tamil Nadu has a well laid down policy and legal framework for management of forests and wildlife. The Policy framework has been designed to ensure proper implementation of schemes and programmes in the field.

As per the Indian Constitution, the directive principles assign duties to the State and all citizens through Article 48 A and Article 51A (g). Article 48A states –

"State shall endeavor to protect and improve the environment and to safeguard the forests and wildlife in the

country" and Article 51A (g) states -"to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures".

The policies and measures enshrined in the National Forest Policy, 1988, Wildlife (Protection) Act, 1972, State Forest Policy, 2018, Eco-tourism Policy, 2017, State Action Plan on Climate Change (SAPCC) and Sustainable Development Goals (SDGs) have all been kept in view while evolving the schemes and strategies for sustainable management of forests. The State envisages revising and upscaling the State Forest Policy 2018 and Eco-tourism Policy 2017, in tune with the current practices and changing global and national environmental scenario.

## **8.1 National Forest Policy, 1988**

The National Forest Policy, 1988 principally aims to ensure environmental stability and maintenance of ecological balance that is vital for sustenance of all life forms and to achieve this aim by bringing at least one third of land area under forest and tree cover. It also aims to maintain two-third of the area in hills and mountainous regions under such cover in order to prevent erosion and land degradation and to ensure the stability of the fragile eco-system.

## **8.2 State Forest Policy, 2018**

The State Forest Policy 2018 aims for strict enforcement of forest laws, restoration of degraded forests, improving water harvesting potential of all forest catchment areas, strengthening of Protected Areas, acquisition of wildlife corridors and extension of wildlife habitats.



It also provides for voluntary relocation of forest dwellers and for keeping the wildlife habitats inviolate. Protection of wetlands, mitigating / adapting to climate change through enhancing green cover, building strong forestry extension service and utilising rich traditional knowledge of the tribal communities which are also important components of the Forest Policy.

### **8.3 Acts and Rules**

Important Acts and Rules for protection and management of forests in Tamil Nadu are listed as below:

#### **Acts**

- Tamil Nadu Forest Act, 1882
- Tamil Nadu (Preservation of Private Forest) Act, 1949
- Tamil Nadu Hill Areas (Preservation of Trees) Act, 1955

- Wildlife (Protection) Act, 1972
- Forest (Conservation) Act, 1980
- Tamil Nadu Rosewood Trees (Conservation) Act, 1994
- The Biological Diversity Act 2002

## **Rules**

- Tamil Nadu Sandalwood Transit Rules, 1967
- Tamil Nadu Timber Transit Rules, 1968
- Tamil Nadu Sandalwood Possession Rules, 1970
- Tamil Nadu Maintenance of Accounts in respect of Scheduled Timber for Industrial or Commercial Purposes Rules, 1988
- Tamil Nadu Patta Sandalwood Rules, 2008
- Tamil Nadu Regulation of Wood Based Industries Rules, 2010

- Wetlands (Conservation and Management) Rules, 2017
- Tamil Nadu Forest and Wildlife Areas (Regulation of Trekking) Rules, 2018
- Forest (Conservation) Rules -2022.

#### **8.4 Sustainable Development Goals (SDGs)**

The Sustainable Development Goals (SDGs) are set goals for global prosperity, agreed by member nations of the United Nations in order to tackle economic, political and environmental challenges faced by the planet. A total of 17 SDGs were announced at the UN Conference on Sustainable Development in 2012 which are further defined into 169 targets and 232 indicators. The Governments worldwide are accountable to achieve the agreed goals by 2030. Each goal offers specific and actionable targets. SDG goals 14 and 15 are directly linked

with the Department. During the Budget Speech for the year 2023-24, the Government has announced 27 indicators have been defined for priority implementation by the Ministry of Environment, Forests and Climate Change (MoEF & CC) department.

#### **8.4.1 Departments work for SDGs**

Two SDG units (i.e.) State Level / District Level have been formed in the Forest Department, the Units continuously monitor and updates data in the SDG Dashboard in close co-ordination with the SDG cell under the Planning and Development Department the working Groups 7 (Goals 13,14, and 15) and 6 (Goal-12).



### **Goals linked to the Department**

Goal No.14 (Life below water) and Goal No.15 (Life on Land) have targets that connect directly to the forests and wildlife, Goal 6 (Clean water), GoalNo.12 (Responsible Consumption and Production) and Goal13 (Climate Action) have domain that overlap with the forest and wildlife sectors.

Goal-14 focuses on preventing marine pollution, ending illegal and destructive fishing practices, and sustainably managing and protecting marine and coastal ecosystems while increasing scientific knowledge, research and transfer of marine technology to improve marine health and Conservation of endangers species.

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

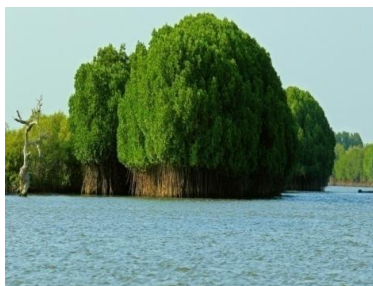
As per the SDG India Index (2.0), Tamil Nadu ranked 2nd out of the nine coastal States implementing the SDG 14.

SDG 15 aims to integrate ecosystem and biodiversity into national and local planning, development processes, poverty reduction

strategies and national accounts. It also seeks to promote fair and equitable sharing of benefits arising from the utilization of genetic resources, appropriate access to such resources, prevent poaching and trafficking of protected species of flora and fauna.

Removal of invasive alien species and Conservation of genetic diversity are the major schemes towards achieving this goal.





**Pichavaram mangroves**



**Mangrove afforestation at Muthupet,  
Thiruvarur**

### **(a) Indicator performance in the SDG reports received**

As per the NITI Aayog SDG India Index, Tamil Nadu is ranked 2<sup>nd</sup> among the States. In



respect of Goal 15, Tamil Nadu has improved its Rank from 12<sup>th</sup> in 2018, 8<sup>th</sup> in 2019 to 4<sup>th</sup> in 2021 which is a remarkable progress.

### **(b) Indicators at the State Level (State Indicator Framework)**

13 Targets and 27 Number of indicators in respect of Forest Department find place in the State Indicator Framework. The above indicators fall under the SDG 14 and 15 which are being constantly monitored at the State level.

#### **8.4.2. Programmatic interventions focusing on improving the SDG indicators.**

The SDGs have become Centre stage of the development plans and aspirations of the national and State Governments. The Department has pioneered in achieving the SDG

goals through its programmes with due focus on achieving the SDG targets.

Department initiatives on SDG 14 (Life below water)-The Department is implementing focused schemes for managing mangrove forests, wetlands and the Marine National Park. As per the latest Indian Survey of Forest Report (ISFR), 2021, mangrove cover of Tamil Nadu is 44.94 sq.km. Habitat improvement measures such as mangrove restoration, maintenance of older plantation, removal of invasive species, protection; eco development activities, awareness creation; monitoring and evaluation etc. are the major activities.

Coastal shelterbelt plantations are being raised to reduce the velocity of winds to minimize wind erosion and to act as a protective

shield against natural calamities like Tsunami, cyclones, tidal surges and floods.

The management of Gulf of Mannar Biosphere Reserve and Gulf of Mannar Marine National Park are implementing projects/schemes related to biodiversity conservation, sustainable coastal zone management and livelihood development. With the objective of conserving the endangered marine mammal Dugong and its habitat, the Government of Tamil Nadu on 03.09.2021 had announced and notified "Dugong (Sea cow) Conservation Reserve" in the Gulf of Mannar, Palk Bay" to protect the endangered sea cow and its marine habitats in Tamil Nadu.



**Sea Turtle Hatchlings**

**Sea Grass Gulf of Mannar & Palk Bay**



**Dugong Conservation Reserve in Palk Bay**

Department initiatives on SDG 15 (Life on Land)-The Forest Department has been taking

up various initiatives to increase the Forest area as a proportion to total land area and also the percentage of forest and tree cover. The State of Tamil Nadu is emphasising on sustainable forest management leading to conservation of biodiversity, soil and moisture conservation, habitat protection and enrichment, mitigation of human-wildlife conflict and empowerment of people residing in and around forest areas.

With thrust on achieving the SDGs and overall development, the present Government of Tamil Nadu has announced two important missions i.e Green Tamil Nadu Mission and Wetland Mission.

#### **8.4.3. Localization of district level indicator frame work for monitoring indicators and reducing district level inequities.**

Localization of SDGs has been strongly advocated by the Central Government as part of SDG implementation Strategy. It is essential to take the agenda of localization of SDGs to the district level indicator framework as Districts are the key players in State level performance. The State Government completed framing the indicator framework exercise at the District Level which will be a boost in the journey towards attainment of SDG goals.

#### **8.4.4 SDG specific best practices**

The Forest Department is fully committed to the global SDG target of 2030. The Department has embarked on several ambitious programmes in orientation with the achievement

of SDG targets and indicators. Several initiatives require convergence of multiple stakeholders and integrated strategies. Such are the Green Tamil Nadu Mission and Tamil Nadu Wetlands Mission announced by the present Government.

The Green Tamil Nadu Mission is mooted with the aim of increasing the forest and tree cover of Tamil Nadu to 33% of geographical area of the State by the year 2030-31 from the existing 23.8%. As 50% of the target planting area are non- forest lands it requires stronger collaboration with the landscape stakeholders including line Departments (Agriculture, Rural Development and Panchayat Raj, Industries, Horticulture etc.) and private and owners. Similarly, the Tamil Nadu Wetlands Mission launched with the aim of restoring the wetlands of the State needs concerted efforts and coordinated action plan involving multiple

Departments mainly the land-owning Departments. It is conceived as a five- year mission to identify and map 100 wetlands and restore the ecological balance with focus on livelihood options.

### **8.5 National Working Plan Code**

Working Plan is a management document of a Forest division which largely deals with the present stage of forests, outcomes of the past management practices and proposal for future management on a sustainable basis. It is generally written for a period of 10 years. Working Plan is a tool for scientific management of forests, and it is extremely useful in evaluating the status of forest resources. All forests are to be sustainably managed under the prescriptions of the Working Plan. The National Forest Policy, 1988 clearly states, "*No forest*



*should be permitted to be worked without an approved Working Plan by the Competent Authority”.*

Ministry of Environment, Forests, Climate Change, Government of India is the Competent Authority for approving Working Plans. Continuous efforts are made to ensure that all the forest and Wildlife divisions in Tamil Nadu are managed scientifically through the prescriptions of Working Plans, Management Plans.

## **9. Statutory Bodies for Forest and Wildlife Management**

### **9.1 Tamil Nadu State Biodiversity Board**

Biodiversity refers to variability among living organisms which includes from the smallest of creatures such as microbes and insects to the largest of them such as trees and

mammals. Biodiversity also provides abundance of resources that ensures food security and are utilized for livelihood generation of local communities. However, biodiversity faces all-round threats due to anthropogenic pressure, climate change, and unbalanced exploitation. The Convention on Biological Diversity (CBD) addressed this issue globally at the UNCED conference at Rio in 1992, and evolved the triple objectives- conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the utilization of genetic resources. India became a party to the Convention in 1994 and enacted the Biological Diversity Act (BDA), 2002 and the rules in 2004, which provide a legal framework for institutionalizing community- led, sustainable biodiversity conservation.

The Biodiversity Management Committees (BMCs), as the grass-root level BDA 2002 implementing institutions are constituted in every local body under the Section 41 of the BDA, 2002. BMCs are expected to facilitate community driven biodiversity conservation and management. In Tamil Nadu, so far 13608 BMCs have been constituted and are continuously assessed for identifying the impacts made through in the implementation of BDA 2002. Based on the findings, strategic actions have been planned by the Tamil Nadu Biodiversity Board to provide handholding support in coordination with multiple stakeholders and experts, particularly for training and capacity building programs of the BMCs. Training of 119 BMCs including online training have been conducted at district, block and village panchayat levels in Districts. The Global

Environment Facility (GEF) supported project, "Strengthening Institutional Capacities for Securing Biodiversity Conservation Commitments" in collaboration with Tamil Nadu Biodiversity Board is upcoming in the Sathyamangalam area where the primary objective of the project is to mainstream biodiversity conservation and its sustainable use and management into village level self-governance, institutional planning and budgeting systems. The project is currently being developed with incorporation of inputs from various other sources and is set to be implemented from mid-2023.

As per the Rule 20(6) of the Biological Diversity Rules, 2004, 13604 peoples' biodiversity registers (PBRs) have been prepared and some of them are being updated and ground validated. TNBB is engaging local domain

experts to assist the BMCs for improving bio-resource conservation, sustainable use, cultivation of medicinal plants, and other income generating crops. Market linkages are being streamlined. TNBB has prepared a comprehensive project, "Tamil Nadu Biodiversity Board: Strengthening and Restructuring Project 2022-25" over an outlay of Rs 8.8 crores for three years and has been submitted to the government for funding. In addition, projects worth Rs 35.8 lakhs have been submitted to National Biodiversity Authority and some funding secured. The Board also received from NBA an amount of Rs. 72 lakhs as start-up funds for 90 Model Block Level BMCs and an amount of Rs 25 lakhs under preparation of Peoples Biodiversity Registers (PBRs) in Tamil Nadu under Special Component plan for SC.

Arittapatti BHS was notified under section 37(1) of the BDA 2002 as the first Biodiversity Heritage Site by the Government of Tamil Nadu on 21<sup>st</sup> November, 2022. TNBB is preparing notification proposals for about 30 more sites, one by one, after discrete field evaluation exercises. Tamil Nadu Biodiversity Board has also drafted new Rules for Conservation and Management of Biodiversity Heritage Sites in Tamil Nadu and submitted to the Government on 12<sup>th</sup> July, 2022.

TNBB has also realized amounts of Rs 1,78,43,617 as the amount for Access and Benefit sharing under sections 3,4,6,7, and 24 of the BDA2002. Out of this amount, Rs 53,04,104 has been disbursed to the beneficiaries thus far.

The Government and the Board are firmly committed to steer the State towards achieving

the objectives of BDA 2002 and to overcome the present challenges in its implementation by focusing on improving capacities in all areas and necessitate effective implementation of the mandate. Accordingly, the in-house project titled 'Tamil Nadu Biodiversity Board: Strengthening and Restructuring Project 2022-25' will be implemented soon.

## **9.2 State Board for Wildlife**

Tamil Nadu State Wildlife Board has been constituted under Sec 6 of the Wildlife (Protection) Act, 1972. The Board is headed by Honourable Chief Minister of Tamil Nadu. The Board comprises 3 members from Legislative Assembly, 14 official members and 13 non-official members. The Board advises the State Government in formulation of policies and guidelines for protection and conservation of the

wildlife and specified plants. It also advises the Government on various measures for protection and conservation of wildlife.

### **9.3 Zoo Authority of Tamil Nadu**

Zoo Authority of Tamil Nadu was constituted by the Government of Tamil Nadu in 2005. It functions under the Chairmanship of the Hon'ble Chief Minister to facilitate the development of zoos, with direct access to the funds and grants from the Central Zoo Authority, Central Government, State Government and other agencies.

### **9.4. Tamil Nadu State Wetland Authority (TNSWA)**

The Tamil Nadu State Wetlands Authority is the nodal authority for the Conservation, Protection and Ecological restoration of all wetlands in State of Tamil Nadu. The State of



Tamil Nadu was one of the pioneer States in constituting the State Wetlands Authority in the year 2016 which was subsequently re-constituted in the year 2019 after the wetlands (Conservation and Management) Rules 2017 came into force with effect from 26.09.2017. Similarly, the District Level Wetlands Management Committee was constituted in the year 2016 and re-constituted in the year 2019 to assist and support the State Wetlands Authority on the matters relating to Conservation, Management, Protection and implementation of Wetlands (Conservation and Management) Rules 2017 and to ensure inter-sectoral linkages for successful management of the Wetlands at the District Level.

The Tamil Nadu State Wetlands Authority has been constituted under the Chairpersonship of the Hon'ble Minister for Forests. The Chief

Secretary to the Government is the Vice Chairperson of the said Authority. The District level Wetlands Management Committees are functioning in all the Districts under the chairpersonship of the District Collector for the protection, conservation and management of the wetlands.

#### **9.5. Conservation Authority of Pallikaranai marshland**

The Conservation Authority of Pallikaranai marshland was constituted for the effective management and utilization of funds/ financial assistance released by State / Central Governments. The Authority has been formed for coordinated approach with various departments like, Finance Department, Environment, Tourism, Chennai Metropolitan Water Supply and Sewerage Board and Public Works Department. It functions as an apex

technical advisory body for the marshland and wetland in Chennai, Kancheepuram and Tiruvallur Revenue Districts.

### **9.6. Compensatory Afforestation Fund Management and Planning Authority (CAMPA)**

Tamil Nadu Compensatory Afforestation Fund Management and Planning Authority (TN CAMPA) is a statutory Authority framed under the Compensatory Afforestation Fund Act, 2016, and the Compensatory Afforestation Rules, 2018.

TN CAMPA provides an integrated framework for the promotion of compensatory afforestation, using the Net present value of the diverted forest land, for the compensation of the forest land diverted for non-forestry purposes. Its primary mission is to regenerate forests and strengthen institutions, including capacity

building for forest officials at all levels, with a focus on training at the range level.

The authority is meant for implementing and monitoring various activities funded by the TN CAMPA. The Governing Body of the Authority is chaired by the Hon'ble Chief minister. This Authority serves as an institutional body to mitigate the impact of diverting forest land for non-forest purposes as well as to ensure that funds are released and used in a timely, efficient, and transparent manner.

## **10. Management of Forests**

Protection and development of forests are necessary for the long-term survival of human civilization. Tamil Nadu Forest Department ensures effective protection and management of forests to yield desired outcomes through the whole-hearted participation of local

communities. To meet the social, protection and production demand, forests of Tamil Nadu are being managed with the following broad objectives :-

1. Biodiversity and genetic resource conservation by protection of forests and wildlife.
2. Conservation and augmentation of water resources in forest areas.
3. Rehabilitation and restoration of degraded forests for improvement of forest cover
4. Welfare of tribal and forest fringe communities to ensure their economic prosperity along with ecological stability

## **10.1 Forest Protection**

Forest Wealth of the State is under threat due to illicit felling of trees, fire occurrence, encroachment of forest lands, illicit removal of sand and resources, and poaching of wild animals etc., To ensure protection of forest resources and enhance biodiversity, Tamil Nadu Forest Department envisages the following strategies: -

1. Strengthen Forest Protection through recruiting frontline staff and providing specialized training to enhance highly specialized knowledge and capacity.
2. Strengthen infrastructure by equipping the staff with modern arms and ammunitions, communication and transport facilities.

3. Improve intelligence gathering and coordination with other enforcement agencies.
4. Consolidate the forest lands by survey and demarcation of forest boundaries using advanced technologies like Differential Global Positioning Systems (DGPS) Survey, Remote sensing and Geographical Information System (GIS) technologies.
5. Develop surveillance system with advanced technologies.
6. Strengthen marine ecosystem protection.

The Forest fires are the biggest challenges for the forest management in the State. As most of the forests in Tamil Nadu are deciduous in nature, the frequency and occurrence of forest fires are more and far reaching. The State's

forests are also prone to frequent forest fires due to various anthropogenic factors.

As on date territorial and wildlife Divisions are supported by 13 Forest Protection Squads, 17 Forest Stations and 11 Roving check posts, functioning at important and vulnerable areas throughout the State. There are 112 Forest check posts with surveillance facilities.

Protection Vigilance Forest Wildlife Crime Bureau (PVFWCB) came into force vide G.O.(Ms) No.117, Environment & Forests (FR.SPL.A) Department, dated.27.09.2017 the erstwhile post of Additional Principal Chief Conservator of Forests (Protection & Vigilance) was re-designated as the post of Additional Principal Chief Conservator of Forests, Protection, Vigilance and Forests, Wildlife Crime Bureau (PVFWCB). Under the administrative control of



the PVFWCB, the Forest Elite Force has been created to meet exigencies in Disaster Management, Fire Prevention & mitigation and other Emergency situations. The PVFWCB wing co-ordinates with other law enforcement agencies such as the Wildlife Crime Control Bureau (WCCB), Customs, Police & other Departments to protect the Forestry resources. Collects intelligence inputs from its own information network and shares them with other law enforcement agencies and sets in motion covert and regular crime control operations through Forest Stations, Forest Protection Squads and other Personnel. In the year 2022-23 the covert operations of PVFWCB in various instances have resulted in several high-profile seizures & arrests wherein illegal contraband in the form of Elephant Tusks, Ambergris, Red Sanders have been confiscated in large

quantities and the delinquents have been handed over to the territorial Ranges concerned to pursue appropriate judicial action.

#### **10.1.1. Establishment & Functioning of Tamil Nadu Wildlife Crime Control Bureau**

G.O.Ms.No.97. Environment, Climate change and Forest (FR.5) Department, dated 02.11.2021 was issued for setting up of Tamil Nadu Forest and Wildlife Crime Control Bureau (TNFWCCB) with four Zonal offices at Chennai, Coimbatore, Madurai and Ramanathapuram with Bureau headquarters Chennai to detect and prevent organized forest and wildlife crimes at State level.

G.O.Ms.No.158, Environment, Climate change and Forest (FR.5) Department, dated 14.09.2022 has provided for redeployment of posts for the Zonal Heads and Subordinate

officers. Accordingly, concerned officers have joined at their new posts and the four zonal offices of their respective circle offices and have been brought under the control of the four zonal offices.

The Duties and responsibilities of the Zonal Offices of Tamil Nadu Forest and Wildlife Crime Control Bureau (TNFWCCB)

- i) Combat forest and wildlife crime through a well-designed institutional network of trained forest personnel
- ii) Gather information related to wildlife crime and illegal trade including Tran's boundary trade.
- iii) Coordinate with various organizations to access information and intelligence with the view to

reduce and control forest and wildlife crime

- iv) Contribute to creation of a state level forest and wildlife Crime Data Bank to assist investigation agencies.
- v) Assist in developing and implementing various standard operating protocols relating to forest and wildlife crime.
- vi) Facilitate the creation of a cadre of well-trained officials from among the Government departments over the years for effective monitoring of illegal trade.
- vii) Improve investigation quality for better appreciation of evidence contributing to better investigation and control of illegal wildlife trade.

- viii) Build informant networks among local communities that live in close proximity to forest and wildlife habitats.
- ix) Map poaching and illegal trade hotspots in the State for better action.

### **10.1.2. Forest Elite Force**

The “Forest Elite Force” Alpha & Delta in two locations viz., Vaigai Dam, Theni and TNFA, Coimbatore were formed on 20.08.2018. The objective of the Forest Elite Force is to respond effectively to any emergency situation in Forest areas. Forest Elite Force will promptly respond to Forest Fire, Rescue and search operations, Extreme case of Human – Wildlife conflicts, Cyclone and flood damage clearing operation and any other disaster situation. Forest Elite

Force will not be utilised for regular Forest and Wildlife protection duties.

The Forest Elite Force was given extensive training in all aspects of emergency needs. The Capacity building process involved the following major components:

- a) Institutional training @ AAZP, Vandalur on Swimming fundamentals, Animal behavior Studies, Zoo management & Rescue techniques.
- b) Institutional training @ AIWC, Kolapakkam on Forensic science for wildlife crimes & Sample collection methods.
- c) TRAINING @ SPECIAL TASK FORCE on Physical strengthening, Weapon handling and holding techniques, technical information of weapons,

Theory of small arms, Weapon Firing practice, Map reading, GPS Handling, Obstacle crossing, Camouflage and concealment.

d) INSTITUTIONAL TRAINING @ ATTAKATTI – ATR on Eco tourism management, Trekking, Man animal conflict, Physical endurance, Biodiversity management.

e) INSTITUTIONAL TRAINING @ MTR on Fire line management, Nutrition pattern, Elephant camp maintenance, Dog squad, GPS practical's.

Further, a dog squad consisting of 4 dogs is attached to the Forest Elite Force. All the four dogs comprising the dog squad are reared from Indigenous Breeds in Tamil Nadu. The Forest Elite Force has been successful in Training the

Indigenous Breeds to assist the Department in various activities.



### **Sniffer Dog Squad Unit**

The Extensive training on various emergency situations including fire imparted to the Forest Elite Force was extended to all the Forest Circles in Tamil Nadu by utilizing the services of Forest Elite Force to train the other Forest Personnel under the banner "Forest Fire Management Awareness Programme"



### **10.1.3. Marine Elite Force**

For strategic protection of the coastal and marine biodiversity, prevention of wildlife poaching and illegal trade in coastal regions, Government has issued orders for Establishment of Marine Elite Force with two units in Gulf of Munnar Biosphere Reserve including Gulf of Munnar Marine National Park and Palk Bay areas. It is the first Marine Elite Force in the country.



**Marine Elite Force**

#### **10.1.4. Modernization of Forest Force**

The science of Forestry and Wildlife Management has evolved significantly over the last few years with advent of new technologies. Modern day forestry requires appropriate and well-planned strategies for conservation of forest wealth and its biodiversity. Modern forest practices should be focused on sustainable forestry practices to support forests which are invaluable resources providing life sustaining oxygen, water, habitats for flora and fauna and livelihood opportunities for millions of people who depend on them. The department needs to be well equipped with latest technologies and equipment for better response to challenges in forestry sector. Hence, the Government has sanctioned a sum of Rs.52.83 crore for implementation of "Modernization of Tamil Nadu Forest Force" scheme during the period 2022 -

2023 to 2024 - 2025. The financial allocation for 2022 - 2023 is 22.11 crore and this scheme will be continued during 2023-2024.

## **10.2. Forest Conservation**

### **10.2.1. Conservation of Forest biodiversity and genetic resources**

In Tamil Nadu, an extent of 8378.528 sq.km. is under Protected Area management to strengthen wildlife protection and biodiversity conservation which is 36.13% of forest area. Under the network of Protected Areas, there are 5 National Parks, 17 Wildlife Sanctuaries, 17 Bird Sanctuaries and 3 Conservation Reserves besides 5 Tiger Reserves. A genepool garden has also been established in the state. The Western Ghats is one of the 36 global biodiversity hotspots and one of the 3 mega centers of endemism in India. Five Elephant Reserves are located at present

within the landscape of Tamil Nadu. The state is also endowed with a long coastline which is endowed with rich mangroves and associated forest types. The state has the largest combination of the Western Ghats and the Eastern Ghats which too contributes to the richness of the biodiversity of the state. Protection and conservation of rare and endangered species, restoration and improvement in the quality of the forests are aimed to enrich biodiversity of the state forests as envisaged in the National Wildlife Action Plan.

Keeping in mind ecological requirements and landscape specific intervention measures, a special focus on Biodiversity Conservation at landscape level is being provided. Special efforts are being taken to remove alien (exotic) species to encourage regeneration of native species preferred by wildlife. The removal of invasive

species has a great impact on restoration of ecosystem such as, increasing the area with native floral vegetation, regeneration and growth of indigenous plants, increase in fodder area availability for wildlife, rich biodiversity of both protected (wildlife) and other forest areas, improvement in wildlife habitat by restoring original vegetation and reduction in human wildlife conflict due to higher availability of fodder species.

Recognizing the seriousness of human-wildlife conflicts on the forest fringe areas, multi-pronged strategies have been devised to manage the problem of human-wildlife conflicts. Both traditional methods like foot patrolling and modern tools like Geographical Information System (GIS), Geographical Positioning System (GPS), Drones, etc., are used for tackling this problem. The Forest Department has taken

several measures that benefit both the wildlife and local human communities, enabling mutually beneficial co-existence. Nonetheless, there have been some instances of conflicts which are being attended to by the forest department through its frontline staff on day-to-day basis. Following major initiatives are being taken to address human-wildlife conflicts.

1. Monitoring of wildlife habitats for availability of water and fodder resources.
2. Continuous monitoring of movement of wildlife in conflict zones.
3. Early warning system for alerting the people in conflict zones.
4. Sensitizing the local inhabitants.

5. Instant payments of compensation amount to victims for the damage by wildlife.
6. Standardized protocols for the rescue and rehabilitation of wildlife straying out of forest areas.
7. Strengthening veterinary services for wildlife through Rapid Response Team and Mobile Veterinary Units.

Wildlife health is the ability of species to cope with biological, social and environmental changes. Infectious diseases are a concern for the conservation of wildlife species. Veterinarians being an integral part of the team attending to wildlife emergencies, have key responsibilities in alleviating stress and improving welfare aspects of the displaced wildlife.

### **10.2.2. Conservation and Management of Coastal Ecosystems**

Tamil Nadu is having a long coastline of 1,076 Km covering 14 coastal districts. Special attention being accorded for the management of the fragile ecosystem of coastal areas with a thrust on mangrove forests, wetlands, and the corals in Gulf of Mannar Marine National Park. Considering their vital role in the coastal ecosystem the degraded mangrove area is being restored consistently.

Mangrove forests provide a range of ecosystem services, play a key role in stabilizing land and erosion control in the face of changing sea level by trapping sediments, cycling nutrients, processing pollutants, supporting nursery habitats for marine organisms and providing fuel wood, timber and fisheries resources. Mangroves are also highly valued by



coastal communities, which use them for shelter, securing food and fuel wood, medicinal plants and even as sites for agricultural production, especially rice production. Mangroves provide several important functions to animals such as breeding and nesting grounds, nurseries, shelter areas, as well as a feeding habitat. Mangroves may also enhance the resilience of corals by providing a natural refuge from climate change induced thermal stress and ocean acidification.

In addition to the above functions, protection against coastal disasters such as cyclones, tsunamis and tropical storms is identified as an important ecosystem service of mangrove ecosystems. Mangroves also play an important role in global climate change mitigation as they are a significant global carbon store and sink, with the largest average carbon stocks per unit area of any terrestrial or marine

ecosystems. As per the ISFR, 2021, mangrove cover of Tamil Nadu is 45sq km (based on 2019 assessment) spread over 8 districts.

Coastal shelterbelt plantations are being raised to reduce the velocity of winds to minimize wind erosion and to act as a protective shield for the coastal areas against the vagaries of nature including natural calamities like Tsunami, cyclones, tidal surges and floods.

The Gulf of Mannar Biosphere reserve supports the conservation of marine biodiversity through integration of activities of relevant Departments and through community participation and adoption of scientific management principles and programmes and shall continue to provide environmental benefits to the present as well as future generations.

The coastal area along the Gulf of Mannar has more than 225 fishing villages with a population of about 2 lakh. In order to strengthen the participatory approach, 252 Village Marine Councils (VMC) & Eco Development Committees (EDC) have been constituted comprising of coastal villagers as members in Ramanathapuram and Tuticorin districts. Micro credit funds were provided to the villages for alternate income generation activities. Group enterprise activities have also been promoted through Self Help Groups (SHG) and enterprise groups. The fund support has been given on repayable loan basis. About 2543 SHGs are in existence through this revolving fund support and 80 different alternate income generation activities / group enterprises are being undertaken through the SHGs.

## **Trekking Rules**

The Government of Tamil Nadu issued orders for regulating the Trekking in Reserved Forests and Wildlife Areas in Tamil Nadu under Regulation of Trekking Rules 2018 in G.O (D) No.296, Environment and Forests (FR.14) Department dated 12.10.2018. As per this rule, no person shall undertake trekking without obtaining permission from the competent authority. Every group intending to undertake trekking shall apply for permission to the competent authority to trek on a linear route. The competent authority if satisfied that the requirements of these rules are fulfilled, shall grant permission for trekking and require the group leader to pay the fees prescribed.

### **10.2.3. Climate change Mitigation and Adaptation**

India is a signatory to different international agreements for reducing the greenhouse emissions. Carbon sequestration by growing forests has been considered a relatively inexpensive means of addressing climate change. Implementation of Tamil Nadu Green Mission would go a long way towards climate change mitigation and adaptations.

The total Carbon stock of forests in the State including the Trees outside of Forests (patches which are more than 1 ha. in size) is 214.61 million ton (786.90 million ton of CO<sup>2</sup> equivalent) which is 2.98 % of total forest carbon of the country. (Source: ISFR, 2021)

#### **10.2.4. Forest Hydrology and integrated watershed management**

Forest Hydrology and integrated watershed management refers to the conservation, regeneration and the judicious use of all natural resources like land, water, biodiversity within the watershed area. Watershed Management tries to bring about the best possible balance in the environment between natural resources on one side and man and animals on the other.

All forestry activities under different schemes implemented in Tamil Nadu are undertaken with the twin objectives of soil and water conservation and enhancing the livelihoods of rural poor.

Different types of treatment activities are carried out under the concept of Integrated Watershed management. They include soil and

moisture conservation measures (contour bund, loose boulder check dams, minor check dams, major check dams, percolation ponds) and afforestation measures. These watershed-based activities not only protect and conserve the forest and environment, but also contribute to livelihood security of forest dependants.

#### **10.2.5. Welfare of Tribal and other forest fringe communities**

Tamil Nadu has 7.21 lakh tribal population as per 2011 census which constitutes 1.10% of the total population. The socio-cultural life of tribal community is centred around nature. In order to bring harmony, Forest Department has been taking several initiatives as below,

- providing basic infrastructure support to tribal settlements including approach roads, drinking water, housing and

electricity through non-conventional methods.

- Under Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, individual and community rights are being granted.
- During the year 2022-23, 10 cashew units over an area of 379.88 ha were allotted to Irular Tribal Society at sale amount of Rs. 80.55 lakhs.



**Hon'ble Chief Minister issuing orders for  
Collection of cashew to Irular Tribals**



- 78 Tribal Anti-Poaching Watchers have been appointed as Forest Watchers during 2022-23.
- Providing skill development training for tribal people for alternative livelihoods.
- facilitating employment opportunities for tribal youth in collaboration with private companies.

### **10.2.6 Ecotourism**

Tourism is one sector that has the potential to drive socio economic change and economic prosperity if done responsibly. Tamil Nadu has great untapped potential which can be explored. Responsible ecotourism activities shall be promoted that not only helps to preserve the natural heritage but also helps to create jobs and promote the local culture and heritage. The

Ecotourism policy framework shall mandate use of sustainable and appropriate tourism Guidelines with sharing of resources with the local community.

### **10.2.7 Forest Research**

Forest Research in Tamil Nadu was commenced by the State Forest Department in the year 1918 and its centenary was celebrated in 2018. Over the years, various research activities focused on thrust areas identified from time to time based on emerging field requirements, have been undertaken. At present, there are five Research Divisions headquartered at Chennai, Dharmapuri, Coimbatore, Trichy and Madurai and 52 Research Centre spread across the 7 agro-climatic zones of the State.

Tamil Nadu Forest Department has made notable achievements in the areas of applied forestry research, 167 Seedling Seed Orchards (SSO), 64 Clonal Seed Orchards (CSO), 75 Seed Production Area (SPA) and Seed Stand (SS) have been established and are being maintained. More than 1220 Candidate Plus Trees (CPT) have been identified and quality seeds are being collected from them.

The main objectives are collection of good quality seeds from selected CPTs, refrigeration, storage and distribution, raising of quality seedlings and selection of tree species suitable for agroforestry, selection of fast-growing wood species for industrial needs, production of quality vermicast, VAM and distribution, value addition of wood-based utility products and maintenance of Germplasm of endangered flora.

Seed Storage Ranges are also having a Seed Testing Laboratories to analyses the Quality of the Seeds. Apart from the regular Sample tests the center has standardized Seed Protocols for 110 species and released the results as Seed Directory. Seed is one of the most important component which plays a vital role in any Tree Improvement or Afforestation Programme. Hence Seed Calendar for collection of seeds from about 200 species were prepared.

The thrust of current forestry research activities is on reducing pressure on natural resources by increasing productivity through genetic and silvicultural improvement, making technical know-how for agroforestry, wasteland development, eco-restoration and conservation of forest ecosystem. With a view to increase availability of high-quality planting material of economically important tree species for

afforestation and reforestation of degraded forests and take up large scale tree cultivation in private lands, the Research Wing has established seed production areas, clonal seed orchards, seedling seed orchards and hedge stool in various research centres in Tamil Nadu. Micro and macro propagation for economically important and fast- growing species like Teak, Sandalwood, Silver oak, *Meliadubia*, *Ailanthus excelsa*, *Eucalyptus*, *Casuarina* has been standardized.

The Road map to strengthen research proposes to inventorize CPTs, SS, SPA to strengthen the genetic source of various commercially important timber and medicinal flora, protect and strengthen the available infrastructure with the Research centres, establish advanced laboratory facilities to carry out bio technological studies, strengthen the

genetic base of required plant resources, carry out microbiological researches, enhance productivity, produce fast growing varieties of commercially important timber and medicinal plants on a large scale for farmers and to promote certification of the quality of commercial timber and medicinal products.

## **11. Information Technology**

### **11.1. Establishment of Forest Archive and the Forest Data Centre**

Tamil Nadu Forest Department has an extremely rich history and biodiversity heritage. Set up in the year 1856, the Department has grown tremendously over 160 years of its existence. The Department is in possession of several historical documents, research articles, books and reference materials reflecting the rich heritage of forests, their management systems and conservation efforts. The Department can

take pride in the fact that it is one of the oldest Forest Departments in India with impressive work in the field of Forest protection, Biodiversity Conservation and Wildlife Management. While there is an impressive collection of forest related material, there is no forest repository to enable easy access to information & data. Creating a digital repository of forest information will be extremely useful for future forestry initiatives and shall help to preserve the information for posterity.

An announcement was made by the Government on the floor of the Tamil Nadu Assembly on 3rd September 2021 that a Forest Archive and Data Centre shall be set up. In accordance with the announcement, the Tamil Nadu Forest Archives and Data Centre (TNFADC) shall be set up at Chennai as an invaluable repository of information about Tamil Nadu's

flora and fauna and its rich conservation history. The TNFADC shall contribute to a greater understanding of the Tamil Nadu Forest initiatives. The Data Centre will strive to digitize the entire resource into an e-library to provide access to information quickly and meaningfully. The TNFADC shall be a “Treasure Trove” of the rich archival material related to forest protection and conservation.

The Tamil Nadu Forest Archives and Data Centre shall be a repository of the following: -

- i. Forest Research Reports
- ii. Scientific Publications and Documents
- iii. Government Orders and Gazette Notifications
- iv. Old Manuscripts and Historical References
- v. Forest Maps



- vi. Books / Handbooks of Forest Flora and Fauna, Herbaria
- vii. Rare Photographs
- viii. Forest Working Plans, Management Plans and Annual Report
- ix. Research Publications
- x. Forest related Books and Periodicals, Newsletters
- xi. Forest Manuals and Standard Operating Procedures (SOPs)
- xii. Unique Resources covering the Conservation Movement
- xiii. Forest related resources from around the world
- xiv. Rare Photographs, Slides, Negatives and Plates documenting the history of Tamil Nadu Forest Department 's evolution
- xv. Collection of Historical References relating to Forest Service including copies of articles, correspondence, pamphlets and photos etc.

- xvi. Photos and details of awards, fellowships etc.
- xvii. Central and State Government approved action plans and vision documents towards conservation and protection of Forests and Environment.

The TNFADC shall be extremely useful in research, publication and educational outreach. The TNFADC will be valuable to anyone interested in the history of Forests, Natural resources and Management techniques. Apart from research fellows and students from Schools and Colleges, it shall also be extremely useful for students, journalists, editors and people interested in Forests and Environment not only from India but from around the world.

Tamil Nadu Archive and Data Centre will go a long way in permanent preservation of fragile, historic and scientific records, TNFADC

will successfully document, and preserve and show case the heritage of the Tamil Nadu Forest Department to the outside world. This repository will definitely inspire the present and future generations of foresters and enthusiasts and public as well. The Detailed Project Report and Proposal has been prepared for implementation of this initiative.

### **11.2. DGPS survey of Forest Blocks to prepare necessary Geo-database with boundary details**

Boundary demarcation/consolidation is the basic requirement for any hassle free land-based resource management. The National Map Policy 2005 also emphasizes the need for the high quality spatial data for land based resource management. With the increased demand for housing, agriculture, pasture, etc., there is always a pressure on forests. Absence of proper

demarcation in the field leads to encroachment, land dispute and legal issues. In the final judgment pronounced by Hon'ble Supreme Court of India on 6<sup>th</sup> July 2011 in IA No 1868 of 2007 filed by M/s Lafarge Umiam Mining Pvt Ltd in WP (Civil) No 202 of 1995 in the matter of T N Godavarman Thirumalpad versus Union of India and others, the Hon'ble Supreme Court of India issued guidelines on long term and short term measures to be taken by Central Government, State Government and various authorities under Forest Conservation Act, 1980 and Environmental Protection Act, 1986 to prevent recurrence of fait accompli situations.

1. Identification and defining of precise forest resource jurisdiction to facilitate protection and conservation of forest resources.

2. Forest cover, Forest boundary identification and demarcation of forest boundary to identify the encroachments and to protect the forest area.
3. To provide a complete GIS platform of all forest assets for economic benefit and forest conservation.
4. Carbon Stock estimation to calculate the amount of carbon stored in forests for carbon trading under the UN framework.
5. Calculation of forest metrics such as Canopy Bulk Density and Canopy Base Height for Forest Certification & Modelling
6. River basin rejuvenation and catchment area studies which can

help in increasing the forest cover and additionally provide identification of water hole areas for wild animals to ensure adequate water in every 5 km radius area

7. Study and Management of Forest Fire

8. Conservation and Management of wildlife corridors between neighboring forest reserves.

The overall objective is to conduct the boundary survey of entire forest area of Tamil Nadu Forest which will facilitate highly accurate and complete mapping of the forest boundaries as soon as possible for using forest boundaries in various applications. Further, action has been initiated to take up Aerial LiDAR survey of Longwood Reserved Forests in the Nilgiris District and Kanjamalai Reserved Forest in

Salem District over 19.2629 Sq.Km (1926.29 Ha) of Reserve Forest area on pilot basis.

## **12. Forest Revenue and Expenditure Details**

### **12.1 Forest Revenue**

Revenue from sale of social forestry plantations and sale of timber are major source of revenue apart from fines and forfeitures. Mature teak trees grown on canal banks plantations are being harvested every year. Paper and Plywood Industries requiring pulpwood, softwood and bark are met from matured plantations of eucalyptus and wattle.

#### **Forest Revenue (Rs. in lakh)**

<b>Sl. No</b>	<b>Source of Revenue</b>	<b>Budget Estimate 2023-24</b>
i	Sandalwood	190.00

<b>Sl. No</b>	<b>Source of Revenue</b>	<b>Budget Estimate 2023-24</b>
ii	Timber	1421.00
iii	Supply of raw materials to industries	239.74
iv	Other Minor Forest Produce	37.20
v	Farm Forestry plantations excluding refund	945.00
vi	Sale of bamboo, cashew, softwood plantations, etc.,	91.46
vii	Other receipts	5837.11
	<b>Sub total</b>	8761.69
	<b>Deduct recoveries (-)</b>	(-)30.41
	<b>Total</b>	<b>8731.29</b>

## 12.2 Expenditure

All the protection and conservation programmes including habitat improvement, Forest extension activities, Forest Research and Education programmes will be continued in an



effective manner. The necessary provisions for schemes made in the budget are given below :-

**Forest Expenditure (Rs in lakh)**

<b>Name of the Scheme(s)</b>	<b>Budget Estimate 2023-24</b>
State Expenditure	77916.58
Externally Aided Project	17756.50
Centrally Sponsored Schemes	235.47
Schemes shared between State and Centre	12811.26
ADD Recoveries	2353.08
Loan	0.01
<b>Total</b>	<b>111072.90</b>

### **13. Forest Corporations**

#### **13.1. Tamil Nadu Forest Plantation Corporation Limited (TAFCON)**

TAFCON Established in the year 1974, having mandate to raise, maintain and harvest Eucalyptus clonal pulpwood and cashew clonal plantations to meet the needs of paper industries, to increase the productivity, potential of forests, to provide rural employment, to conserve soil and moisture and to supply firewood to fulfill the needs of the rural people.

TAFCON has an authorized share capital of Rs.10.00 crore and a paid up share capital of Rs.5.64 crore held by the Government of Tamil Nadu. Tamil Nadu Forest Department has leased 71,540.50 ha, of Reserved Forests to TAFCON. As per Government orders, TAFCON pays 30% of the annual turnover as lease rent to the Forest Department.

By adopting modern Silvicultural techniques such as high yielding clones, mechanization of planting activity, irrigation facilities etc., TAFORN has been successful in increasing productivity per hec. The details of the plantations raised and expenditure involved during 2021-22 and 2022-23 are given below:-

Sl. No.	Raising plantation species	Physical (Ha.)		Financial (Rs.in lakh)	
		2021-22	2022-23 (31.03.23)	2021-22	2022-23 (31.03.23)
1.	Eucalyptus	1004	1669	488.34	604.92
2.	Cashew	252	639	154.70	220.65

The Government suggested to take up field study/ experiments for planting suitable alternative commercial pulpwood species in

place of Eucalyptus pulpwood in view of interim injunction passed for ban on Eucalyptus planting by the Hon'ble Madras High Court of Madurai Bench, Accordingly clonal Casuarina plantation has been raised in 97.00 hec. In Aranthangi, Karaikudi and Pudukkottai Regions on a trial basis during the year 2022-23.

As per section 135 of Company Act 2013, TAF CORN is taking up Corporate Social Responsibility (CSR) activities every year. CSR amount is calculated as 2% on the average Net Profit of last three financial years comes to Rs.90 Lakhs for CSR activities during the year 2022-23 including unspent amount of previous years.

The Eucalyptus pulpwood supplied to paper mills during 2021-22 and 2022-23 are given below :-

<b>Year</b>	<b>Quantity of Pulpwood supplied (M.T.)</b>	<b>Revenue (Rs.in lakh)</b>
2021-22	224398.785	9985.75
2022-23 (31.03.2023)	331397.761	14747.20
2023-24 (Budget estimate)	200000.000	8900.00

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

<b>Year</b>	<b>Revenue (Rs. in lakh)</b>
2021-22	1697.34
2022-23 (31.03.2023)	1571.011
2023-24 (Budget estimate)	1928.00

The revenue and expenditure details of the Corporation for 2021-22 and 2022-23 and the Revised Budget Estimate for 2022-23 are given below:-

Year	Revenue	Expenditure	Profit (+) / Loss (-)	
			As per Budget	Actuals
2021-22	13052.56	10175.05	--	2877.51
2022-23 (Revised Budget Estimate)	17746.97	12965.00	--	4781.97
2023-24 (Budget estimate)	12383.33	10335.33	2048.00	--

The details of fresh Eucalyptus and cashew plantations to be raised and cost involved during 2023-24 are given below.

Plantations	Physical (Ha.)	Financial (Rs.in lakh)
Eucalyptus	1300	533.25
Cashew	663	304.22

The profit for the Financial year 2022-23 of TAFCORN is Rs.4781.97 lakh, which is highest in any Financial year so far in TAFCORN.

### **13.2 Tamil Nadu Tea Plantation Corporation Limited (TANTEA)**

The Government of Tamil Nadu established the "Government Tea Project" in the Nilgiris in 1968 through the Forest Department with the socio-economic objective of rehabilitating the repatriates from Sri Lanka under the Shastri-Srimavo Pact. To rehabilitate the Sri Lanka Repatriates. The Project was, brought under corporate management during 1976 in the name of "The 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 Government of Tamil Nadu holds the entire share capital of the Corporation.

**OBJECTIVES:**

The main objectives of the Corporation are:

- To employ and resettle the repatriates from Sri Lanka in the Plantation Schemes.
- To maintain tea plantations on land on lease from the Government of Tamil Nadu, for Rehabilitation of the above said repatriates in the Forest areas of Nilgiris District and other suitable areas in the State of Tamil Nadu.

**TEA PLANTED AREA:**

This Corporation is maintaining plantations over an area of 4053.758 ha. on the lands



leased out by Government of Tamil Nadu, as follows:

Phase	Year	Planted area in ha.		
		Nilgiris	Anamalai	Total
Phase I	1969-1979	1747.32	..	1747.32
Phase II & III	1979-1984	795.87	..	795.87
Phase IV	1990-1995	554.21	956.358	1510.568
<b>TOTAL</b>		<b>3097.40</b>	<b>956.358</b>	<b>4053.758</b>

## **FINANCIAL ASSISTANCE RECEIVED FROM THE GOVERNMENT**

(a) In G.O.(Ms) No.107 (Environment and Forests (FR.8) Department, dated 31.07.2018 and G.O.(1D) 266 (Environment and Forests (FR.8) Department dated 20.09.2018 Government has sanctioned the proposal of

Revival plan of TANTEA and released a sum of Rs.39.95 crores, as follows;

(Rs. in Crore)

i	Bank loan	12.00
ii	Gratuity, Terminal leave salary to the Employees	13.09
iii	Supplier payment	2.30
iv	Fertilizer application	2.15
v	Working capital requirement	6.00
vi	Construction of workers shed and maintenance	4.41
	<b>Total</b>	<b>39.95</b>

(b) The Government in its G.O. No.157 (Environment, Climate Change and Forests (FR.8) Department, dated 14.09.2022 has sanctioned an amount of Rs.2938.75 lakh towards the payment of pending dues such as gratuity to the retired employees, terminal leave salary, sickness benefit, leave with wages and field supervisors arrears wages to the

workers/employees of this Corporation and the amount has been paid to them.

(c) Based on the Hon'ble Chief Minister's Announcement, Rs. 13.46 crores was sanctioned as beneficiaries contribution towards allotment of residential houses constructed by Tamil Nadu Urban Habitat Development Board, in Nilgiris District to 573 workers who retired from Tamil Nadu Tea Plantation Corporation Limited.

### **ACTION TAKEN TO INCREASE THE SALE OF TEA**

Action is being taken to appoint more wholesale / retail dealers. At present TANTEA has 103 Retail Dealers, 13 Wholesale District Dealers and 2 Regional Marketing Agency. Besides this, TANTEA is participating in Government fairs and other Tourism festivals

etc., to advertise TANTEA products to reach a larger sphere of customers.

TANTEA have obtained orders from M/s. Civil Supplies Corporation to sell TANTEA Tea through Public Distribution System shops and supplied 335.500 MT of tea during the recent 5 years. MOU has been made between TANTEA and Civil Supplies Department of Chattisgarh. Action is being taken to get orders for the supply of tea through Public Distribution System in the State of, Karnataka.

TANTEA products are being supplied to Neyveli Lignite Corporation, SAIL, Tamil Nadu State Transport Corporation, Military Canteens, Police Canteen, Post Office, Prison Department and TANGEDCO etc.

## **PRODUCTION OF ORGANIC TEA:**

TANTEA has got organic productivity certificate from IMO Control Private Limited, Bangalore for an area of 7.5 hectare in Coonoor Tea Division and being renewed every year.

### **Marketing**

Tea produced in TANTEA is sold through auction centers and agents. Appropriate actions are being taken to manufacture Tea in this corporation to obtain higher price in the market to export and to modernize the factories of this corporation. Through these activities, there are opportunities to increase the profit of the company.

## Performance of Board

(Kilogram in lakhs)

Details	2021-2022		2022-2023		2023-2024
	Target	Actual	Target	Actual 31.12.2022	Budget
A) Performance					
Green Tea Harvesting	357.00	305.78	390	185.04	325
Manufacture of Tea	89.25	81.26	89.70	47.74	81.25
B) Budget	(Rs. in lakhs)				
Income	10781.43	8033.60	11806.14	4650.00	8940.27
Expenditure	10364.63	11890.66	11342.90	7022.00	8790.00
Profit Loss	(+)	(-)	(+)	(-)	(+)
Profit (+) Loss (-)	416.80	3857.06	463.15	2372.00	150.27

### 13.3. Arasu Rubber Corporation Limited (ARC)

To rehabilitate the Sri Lankan repatriates who were conversant with rubber cultivation and considering the agro-climatic suitability of Kanyakumari district for this venture, Government Rubber Plantation was established by Forest Department in 1961 and since 1961 gradually an area of 4785.70 ha. has been covered till 1979. In 1984, Arasu Rubber

Corporation Limited was formed to take over this work as a corporate entity from the erstwhile Government Rubber Plantation. The corporation was registered on 01.08.1984 under Companies Act. Presently the Corporation has an authorized capital of Rs.13.07 crore and the paid-up share capital of Rs.13.07 crore. The entire share capital of the corporation is held by Government of Tamil Nadu. After handing over some unsuitable areas back to Forest department, the present area of operation is 3708.715 Ha. Unlike other large enterprises, this corporation is a highly climate friendly enterprise and provides employment to about 1500 persons.

**I) The objectives of the Arasu Rubber Corporation are:**

- i) To safe guard the future of the rubber plantation Industry.

- ii) To protect the interests of workers and increase employment potentialities particularly for surplus rubber plantation labourers, and rehabilitation of Sri Lankan repatriates.
- iii) To avoid possible speculative trends in acquisition and management of rubber and other plantation estates.
- iv) To avoid concentration of ownership of rubber plantations among a few persons.

## II) Production and Financial Achievement of Arasu Rubber Corporation

(Rs.in Lakh)

Sl. No	Particulars	2021-22 (Actual)	2022-23 (Revised Estimate)	2023-24 (Budget Estimate)
a)	Production of Rubber (in M.T)	1622	1400	1450
b)	Income and expenditure (Rs.in lakh)	(Audited)	(Subject to revision)	(Subject to revision)
	Income	5196.00	3781.19	3665.48
	Expenditure	4126.71	4131.72	4099.98
c)	Profit (+) or Loss (-) Rs in lakh	(+)1069.29	(-)350.53	(-)434.50



### **III) Future proposals**

Rubber Plantations were raised gradually between the years 1961 and 1979 over a total area of 4785.70 Ha. A rubber tree becomes tappable at the age of 7 years and its yield becomes very less and uneconomical after the age of 35 years and hence such area should be felled and replaced with fresh rubber plants so as to obtain economic yield of rubber. Therefore, the rubber trees originally planted should have been felled between 1995 to 2014 according to their respective years of plantation. However due to various reasons the felling of originally planted trees could not be completed as per the above-mentioned schedule, and the work of felling and replanting in the felled area, are still going on. Therefore, in order to get better production and productivity the old areas are being felled in phased manner and planting of

high yielding clones of rubber plants are being undertaken.

It is expected that the financial status of the Corporation will become very sound by the time all the works of replantation are completed and majority of the replanted area attains the age of above 7 years and brought under tapping and contributing to the revenue generation.

#### **IV) Staff strength of Corporation**

The total sanctioned staff strength of Arasu Rubber Corporation Limited is 200. However, the present strength is 81. Out of this 12 (7 officers and 5 staff) are from Forest department and 69 (4 officers and 65 staffs) are corporation employees.

**V) Total Number of permanent workers in Arasu Rubber Corporation**

There are 480 Tappers, 138 Field workers, 38 Factory workers and 17 Supervisors working as permanent workers. Apart from this, the employment is also provided to about 300 people on casual basis depending upon the need. The workers have the benefit of production incentive (only for those exceeding the standard output), rainy day allowance, EPF contribution, annual bonus, and other statutory benefits. The workers are provided with facilities like rent free housing, uniforms, ambulance and medical facilities. Also, the workers are given bed sheet and an umbrella every year as per the provision in Plantation Labour Act and Factories Act.

## **VI) Annual Total Expenditure for staff and workers for 2023-24 (Approximate)**

- i Approximate Expenditure - Rs.832.72 lakh  
(staff) (per Annum)
- ii Approximate Expenditure - Rs.2108.46 lakh  
(workers) (per Annum)

## **14. HIGHLIGHTS OF THE YEAR 2022-23**

### **Botanical Garden at Kadambur in Chengalpattu District**

During 2022-23, Government has issued administrative sanction for a sum of Rs.300.00 crores for setting up a Botanical Garden at Kadambur Village, Chengalpattu district in collaboration with Royal Botanical Gardens, Kew, England over an area of 137.65.0 hectare. The 137.65.0 ha of land has been transferred from Revenue Department to Forest Department for Establishing the Botanical Garden .DGPS survey of the area has been

completed and steps have been initiated for DPR preparation.

### **Green Tamil Nadu Mission**

Hon'ble Chief Minister of Tamil Nadu has launched the Green Tamil Nadu Mission to initiate massive tree plantation programme in the State and to increase the forest and tree cover to 33% of Geographical area. Till date 2.8 crore saplings have been planted across Tamil Nadu over an area of 25829 ha.

### **Marine Elite Force**

In order to strengthen protection in the ecological sensitive coastal marine area, Marine Elite Force with two units in Gulf of Munnar Biosphere Reserve including Gulf of Munnar Marine National Park and Palk Bay areas has been established. It is the first Marine Elite

Force in the country. Each unit is provided with a boat and five watchers.

### **Ramsar Sites**

Ramsar Secretariat has designated 13 new Ramsar sites in the State of Tamil Nadu which has made Tamil Nadu the state with the highest number of Ramsar Sites in India i.e. 14 Ramsar sites.

### **Establishment of Agasthyamalai Elephant Reserve.**

To protect elephant corridors and elephant habitats, the Government has notified Agasthyamalai Elephant Reserve comprising an area of 1,19,748.26 ha in Kalakkadu Mundanthurai Tiger Reserve and Kanniyakumari Wildlife Sanctuary as the fifth Elephant Reserve in Tamil Nadu. The new Elephant reserve was set up to ensure ecological restoration of natural

elephant habitats, re-establish elephant migratory path in Agasthyamalai landscape, reduce human-elephant conflict and to carry out scientific research and documentation.

### **New Bird Sanctuary at Nanjarayan Tank at Tiruppur.**

An extent of 125.86 ha in Uthukuli and Tirupur North taluks in Tirupur district was notified as the 17th Bird sanctuary of Tamil Nadu.

### **Dugong Conservation Reserve**

To protect the endangered sea cow species and its marine habitats in Tamil Nadu, Sea Dugong Conservation reserve was notified. It is the first Dugong Conservation Reserve in India. Baseline studies have been completed and Detailed Project Report (DPR) has been prepared.

## **Slender Loris Sanctuary**

To protect the endangered Slender loris, an area of 11806.56 ha in 7 blocks in Karur and Dindigul districts has been notified as Kadavur Slender Loris Sanctuary. It is the first sanctuary for Slender Loris in the country, which will strengthen the immediate conservation of the species by habitat improvement and mitigation of threats.

## **Cauvery South Wildlife Sanctuary.**

The Government has notified the Cauvery South Wildlife Sanctuary comprising an area of 68640.613 ha or 686.406 Sq.km in RF areas in Krishnagiri and Dharmapuri Districts. This is an important elephant habitat in Southern India and is critical for a large number of riverine species dependent on River Cauvery and is a large, contiguous network of protected areas



along both banks of River Cauvery for a stretch of over 5 Kms. This landscape maintains continuity with Nilgiri Biosphere Reserve, Sathyamangalam Tiger Reserve and Erode forest division.

### **Queen's Commonwealth Canopy(QCC) Accreditation to Longwood Shola**

The Longwood Shola in Kotagiri, Nilgiri has been granted Queen's Commonwealth Canopy (QCC) accreditation, a forest conservation initiative that began in 2015 to facilitate knowledge exchange, share best practices and create new collaborative initiatives for forest conservation.

### **Setting up of Tamil Nadu Forest and Wildlife Crime Control Bureau**

Considering the necessity to conserve the rich biodiversity of Tamil Nadu and prevent

illegal forest and wildlife trade at State level, “Tamil Nadu Forest and Wildlife Crime Control Bureau” has been set up with four Zonal offices at Chennai, Coimbatore, Madurai and Ramanathapuram

### **Biodiversity Heritage Site**

Arattapatti BHS was notified under section 37(1) of the BDA 2002 as the first Biodiversity Heritage Site by the Government of Tamil Nadu on 21<sup>st</sup> November, 2022.

### **Nilgiri Tahr**

Project Nilgiri Tahr was sanctioned at a cost of 25.13 crores over a period of 5 years to protect the endangered Nilgiri Tahr, to develop better understanding of Nilgiri Tahr population, distribution of species to understand their movement patterns and habitat use through

radio telemetry study to reintroduce Nilgiri Tahr to their historic habitats.

### **Turtle Conservation Centre at Guindy National Park, Chennai**

A Turtle Conservation and Rehabilitation centre will be set up at Chennai at a cost of Rs.6.30 crores to boost turtle conservation efforts. This centre will have State-of-the Art facility for promoting conservation efforts.

### **Compensation from Chief Minister's Public Relief Fund (CMPRF)**

Government has issued orders for compensation for paying an amount of Rs.25.00 lakh as ex-gratia to the kin of the Forest Department employees (Anti-poaching watchers / Forest Watcher/Forest Guards / Foresters / Forest Range Officers who are deceased while controlling forest fire under Chief Minister's Public Relief Fund (CMPRF).

## **Biodiversity Museum and Conservation Centre**

Government has issued orders for establishment of Bio- diversity Museum and Conservation Centre with Eco Park at Kakachi, Ambasamudram Range, Singampatti RF of Kalakkadu Mundanthurai Tiger Reserve at a cost of Rs.7.00 crore.

## **Longwood Shola Conservation Centre**

Considering the importance of protecting longwood shola, an important fragile shola patch near Kothagiri town of Nilgiri's District. Longwood Shola conservation center will be set up at a cost of Rs. 4.60 crores with focus on developing coordination and conducting awareness programs for children and youth through life size models, Interactive and augmented reality etc.

## **State Forest Commission**

Government has issued orders for constitution of State Forest Commission to recommend policy changes needed in Forest Conservation, expansion of green cover, participation of Tribals in Forest Management, prevention of man animal conflict etc., in the Forest Department.

## **Remodelling of Guindy Children's Park**

Guindy Children's Park will be remodelled as Guindy Nature's Park at a cost of Rs.20 crores.

## **Village Green parks**

100 Village Green Parks called Maragadha Poonjolai will be established at a cost Rs. 25 crores in 100 villages across Tamil Nadu.

## **Ecotourism**

Ecotourism circuits will be developed at a cost of Rs.14 crores under TBGPCCR. Sethumadai, Manavanur, Thadiyankudisai and Yelagiri will be developed as Ecotourism sites in Public - Private Partnership mode.

## **Urban and Peri Urban Forestry**

Urban and Peri Urban Forestry will be promoted on the banks of rivers including Adyar and Buckingham Canal at a cost of Rs.237 crores.

## **Blue Carbon Initiatives.**

Mangroves and coral reefs will be conserved at a cost of Rs. 7.74 crores as part of Blue Carbon Initiatives under TBGPCCR.

## **15. AWARDS**

- Malasar tribesmen of Anamalai hills got the first 'GajGaurav Award' from the Project Elephant Division, Ministry of Environment, Forests & Climate Change, Government of India.
- MTR Frontline Staff received rewards for rescue & live capturing of MDT23 Tiger on Global Tiger Day 2022.
- Sathyamangalam Tiger Reserve received the International TX2 award for doubling the tiger population.
- The Elephant Whisperers, a documentary film based on the rearing of orphaned Elephant calves at Theppakkadu Elephant Camp won Oscar award under Documentary short film category. Through this documentary, work of Tamil Nadu Forest Department for conservation and

captive management of elephants got global attention.

- The Hon'ble Chief Minister had felicitated Thiru. Bomman and Tmt. Belli featured in Oscar Winning film "The Elephant Whisperers" by presenting them a shield of appreciation and a cheque of Rs. 1.00 Lakh each. The Hon'ble Chief Minister announced a grant of Rs.1.00 lakh each to all 91 Mahouts and Cavadis from the Chief Minister's Public Relief Fund.
- The Government had announced that Eco-friendly and culturally compatible houses will be constructed for all 91 elephant care takers of Anamalai Tiger Reserve and Mudumalai Tiger Reserve at a cost of Rs.9.10 Crore.



- The Government had also announced that Kozhikamuthi Elephant Camp at Anaimalai Tiger Reserve will be rejuvenated at cost of Rs.5.00 Crore and a new elephant camp at Sadivayal in Coimbatore District with all necessary facilities for maintenance of elephants will be setup at a cost of Rs.8.00 crore.
- The Hon'ble Chief Minister has honoured Ms. Kartiki Gonsalves , Academy Award (Oscars) winner under the best documentary short film category for the film "**The Elephant Whisperers**" by granting her a cash incentive of **Rs.1.00 crore** as a special case in recognition of her achievement.



**Hon'ble Chief Minister felicitating Bomman and Belli**

## **16. CONCLUSION**

Forests are of primordial importance as they provide an array of ecosystem services for communities as well as playing a role in regulating global climate. Due to increasing demand for forest resources and forest area due to urbanization, forest conservation and management has become increasingly imperative.

With ever increasing public awareness on sustainable use of natural resources, forest conservation paradigms have moved from basic exploitation to biodiversity conservation, carbon sequestration, natural resource management and recreational and leisure development (eco-tourism). In this context, the Government initiatives directed towards conservation, climate change mitigation by curtailing carbon emissions by enhancing carbon sinks will promote healthy and resilient forests for a better future.

**Dr. M. MATHIVENTHAN**  
**MINISTER FOR FORESTS**



Hon'ble Chief Minister Thiru. M.K. Stalin visiting the digital wall with details of tree plantations during the inauguration of Green Tamil Nadu Mission held on 24.09.2022 at Vandalur.



**Honourable Chief Minister of Tamil Nadu felicitating Selvi. Kartiki Gonsalves, Director of 'Elephant Whisperers' for winning the Oscar Award for the 'Best Documentary short film'. Chief Minister presented Rs.100 Crore cash incentive cheque to her during the felicitation held on 21.03.2023 at Secretariat, Chennai.**



At the inauguration ceremony of Green Tamil Nadu Mission held (24.09.2022) at Vandalur, Chengalpet District. Women Auto Drivers Association contributed cheque for a sum of Rs.15,000/- to Hon'ble Chief Minister Thiru.M.K.Stalin



Honourable Chief Minister Thiru. M.K. Stalin chairing State Wildlife Board meeting at Secretariat on 16.11.2022. In this occasion, Honourable Minister for Forests, Tmt. Supriya Sahu, I.A.S., Additional Chief Secretary, Environment, Climate Change and Forests Department, State Wildlife Board members and officials participated





Honourable Minister for Youth Welfare and Sports Development, Thiru. Udayanidhi Stalin inaugurating the world record breaking tree plantation initiative at Edaiyakottai Village, Dindigul District. 640 lakh seedlings were planted in four hours.





Asian World Record Academy Representative presenting World record certificate to Honourable Minister for Youth Welfare and Sports Development Thiru. Udayanidhi Stalin for the plantation drive undertaken in Edaiyakkottai Village, Dindigul District



Honourable Minister for Forests Dr. M. Mathiventhan inspecting Kurumbapatty Zoo, Salem on 27.12.2022



Honourable Minister for Forests Dr. M. Mathiventhan visiting the exhibition of life size elephant models made of *lantana camara*. The exhibition was arranged in Besant Nagar beach in connection with Pongal festival.





Honourable Minister for Forests Dr. M. Mathiventhan felicitated mahouts and cavadies of Tamil Nadu Forest Department who have completed special training at Thailand during a function held at Vandalur Zoo on 13.02.2023



As per the order of Honourable Chief Minister Thiru. M.K. Stalin, Honourable Minister for Forests Dr. M. Mathiventhan distributed Rs. 1.00 lakh cheque to 91 Cavadies to appreciate their services in management of camp elephants.



Honourable Minister for Forest Dr.M.Mathiventhan inaugurated International Forest day 2023 awareness rally held on 24.03.2023 at Chennai Besent Nagar Beach. In this occasion Tmt. Supriya Sahu I. A. S., Additional Chief Secretary, Environment, Climate Change and Forest Department and Senior Officials were present.





**Honourable Minister for Forests Dr. M. Mathiventhan inspected Forest Department stall at Chennai Island Grounds Trade Fair Exhibition on 05.02.2023**



Malasar tribe of Anaimalai Hill area have obtained the Union Government's 'Gaja Gowrav Award' presented by the Project Elephant Division of the Ministry of Environment, Forests and Climate Change





An extent of 686.406 Km Reserved Forests areas in Krishnagiri and Dharmapuri Districts, was declared as "Cauvery South Wildlife Sanctuary"



India's first Slender Loris Wildlife Sanctuary has been declared in Tamil Nadu including the Forests areas of Dindigul and Karur Districts.



Elephant care takers of Theppakkadu Elephant Camp Thiru. Bomman & Tmt.Belli with 'Ragu' and 'Ammu', the orphaned elephant calves raised by them

