ENVIRONMENT, CLIMATE CHANGE AND FORESTS DEPARTMENT

FORESTS

POLICY NOTE
2025 - 2026

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Dr. K. PONMUDY
Minister for Forests & Khadi

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FORESTS DEPARTMENT
POLICY NOTE 2025-2026

"காடுகவின் எதிரக் கனைபெயல் பொழிதலின்
பொறிவரி இனவண்டு ஆர்ப்ப, பலவுடன்
நறுவீ முல்லையோடு தோன்றி தோன்ற
வெறி ஏன்றன்றே வீகமழ் காணம்"

(அகம் 164: 1–7)

என்ற அகநானூற்றுப் பாடல் மழையால் இயற்கை எழில் கூடி மிகுந்த அழகினைப் பெற்று, பூக்களோடும் வண்டுகளோடும் மணம் வீசும் காடாக செழிப்பான தோற்றத்தை அந்த சூழல் பெற்றிருந்ததை பதிவு செய்துள்ளது. இப்பாடல் தமிழ்நாட்டின் இயற்கை வளம் குன்றா வளமாக நிலைத்துச் செழித்திருந்ததை உறுதி செய்கிறது.

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 partnerships, collaboration and scientific management. The Department will strive to empower forest officers with the 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 generations.

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. Forest 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.

Forest are probably the most well known nature based solutions for climate change apart from mangroves, wetlands, coral reefs and peatlands etc. Forests contribute significantly towards environment & climatic balance and are instrumental for adequate rainfall pattern.

Tamil Nadu is the southern-most State of the country and covers an area of 1,30,058 sq. km, which is 3.96% of the geographical area of the country. Physiographically, the State can be divided into 4 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 the National Forest Policy 1988, State Forest Policy 2018 and Sustainable Development Goals (SDGs). Department is committed to increase the forest cover by protection, restoration, afforestation and reforestation.

The State Government is in the process to bring out with the State Forest Policy, 2025. In order to increase the forest and tree cover, this department is implementing Green Tamil Nadu Mission and Wetland Mission. At the same time, focus is also given to improve the quality of forests by restoration of degraded forest area, soil and moisture conservation works, habitat improvement, empowerment of local communities and public by creating awareness through workshops and capacity enhancement. “Tamil Nadu Coastal Restoration Mission” is being implemented to prevent sea erosion, reduce

marine pollution and conserve marine biodiversity.

Establishment of Wildlife Rescue and Rehabilitation Centre at Pethikuttai, Coimbatore, Pallikaranai Conservation Centre, Mahout Villages in Anamalai and Mudumalai Tiger Reserves. Remodelled Guindy Nature Park, Sadivayal Elephant Camp, Slender Loris Conservation Centre, Dugong Conservation Centre, Botanical Garden near Chennai, Modernisation 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

Tamil Nadu, the southernmost State of the Indian peninsula is endowed with rich biodiversity, right from marine coastal systems in the Gulf of Mannar to terrestrial evergreen forests in the Western Ghats. The Western Ghats, the longest

Hill Range in the state is one of the 36 Global Hot Spots of Biodiversity and one of the three mega centres of endemism in India (*Source: Conservation International-2005*). In Tamil Nadu, forest vegetation is divided into three major groups based on temperature zone namely Tropical Forests, Montane Subtropical Forests and Montane Temperate Forests which are subdivided into nine forest types according to moisture and physiognomic variation. As per India State of Forest Report, 2023, Tamil Nadu has 26,450.22 km^2 area under forest cover which is 20.34% of state's geographical area. The forest and tree cover area is 31820.94 Km^2 which is 24.47% of geographical area of the state *(Source: Forest Survey of India-2023).*

2.1 Faunal Diversity

Tamil Nadu has been a pioneer in conservation of forests and wildlife and in setting up Protected Areas that comprise National Parks,

Wildlife Sanctuaries, Conservation Reserves and Community Reserves. There are 5 Tiger Reserves, 5 Elephant Reserves, 3 Conservation Reserves, 5 National Parks, 18 Sanctuaries for various endangered animals, 17 Bird Sanctuaries for Protecting various Wetland Habitats supporting bird life and 20 Ramsar Sites. It is a matter of pride that Tamil Nadu has 39.59% (9179.676 Km^2) of forest area as Protected Area.

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.

2.2 Floral Diversity

Tamil Nadu's forest floral diversity is incredibly rich and diverse, owing to the state's varied geography, climatic conditions and ecosystems. The state's forests encompass a wide range of vegetation types, from lush tropical rainforests to dry deciduous forests and thorny scrublands.

The Angiosperm diversity of India includes 17,672 species. With 5,640 species, Tamil Nadu ranks 1st among all the States in the Country. This includes 533 endemic species, 230 red-listed species, 1,559 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 1,022 species of which Tamil Nadu has about 184 species. Tamil Nadu's wild plant diversity also includes a vast number of Bryophytes, Lichens, Fungi, Algae and Bacteria. Tamil Nadu's forest floral diversity is a testament to the state's ecological richness and botanical heritage.

3. Forest Management

3.1 Forest Protection

Forest protection in Tamil Nadu is a priority for the state government to conserve its rich biodiversity, maintain ecological balance and sustainably manage forest resources.

The Forest Wealth of the State faces threats like illicit felling of trees, forest fire, encroachment, 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: -

- Strengthen Forest Protection by recruiting frontline staff and providing specialized training to enhance highly specialized knowledge and capacity.

- Strengthen infrastructure by equipping the staff with modern arms and ammunition, communication and transport facilities.

- Improve intelligence gathering and coordination with other enforcement agencies.

- 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, develop surveillance systems with advanced technologies and strengthen marine ecosystem protection.

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 132 Forest check posts with surveillance facilities. State Forest Fire Control Centre with 34 District centres is established for quick and coordinated fire response. Tamil Nadu Forest Fire Management System helps in early fire detection and sending alerts to field units.

Under the administrative control of Additional Principal Chief Conservator of Forests (Protection, Vigilance and Forest), Tamil Nadu Forest and Wildlife Crime Control Bureau (TNFWCCB) and Forest Elite Force have been

created to meet exigencies in Disaster Management, Fire Prevention & mitigation, wild life crime investigations and other emergencies. The TNFWCCB wing coordinates 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 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 2024-25, the covert operations of protection wing in various instances have resulted in several high-profile seizures & arrests wherein illegal contraband in the form of Elephant Tusks, Ambergris and 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.

By implementing these measures and engaging stakeholders at various levels, Tamil Nadu endeavours to ensure the effective protection and sustainable management of its forest ecosystems for the benefit of present and future generations.

3.2 Climate change Mitigation and Adaptation

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

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 217.560 million tonnes which is 2.99 % of total

forest carbon of the country. (Source: ISFR, 2023)

3.3 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 the 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.

By integrating forest hydrology principles into watershed management strategies and promoting sustainable land use practices, Forest Department can enhance water security, biodiversity conservation and ecosystem resilience, while addressing the challenges of climate change and water scarcity.

3.4 Welfare of Tribal and other forest fringe communities

The welfare of tribal and other forest fringe communities in Tamil Nadu is a priority for the government. Various key efforts to promote the welfare of these communities are as follows:

Recognition of Tribal Rights: Ensuring recognition and protection of the land and forest rights of tribal communities under the Forest

Rights Act (FRA) is crucial for securing their livelihoods and cultural identity. Efforts are made to facilitate the process of community forest rights (CFR) and individual forest rights (IFR) recognition, enabling tribal communities to access and manage forest resources sustainably.

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 centered 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 the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, individual and community rights are being granted.

- During the year 2023-24,15 cashew units were allotted to Irular Tribal Society excluding those units from open auction.
- 36 Tribal Anti-Poaching Watchers have been appointed as Forest Watchers during 2023-24.
- Providing skill development training for tribal people for alternative livelihoods.
- Facilitating employment opportunities for tribal youth in collaboration with private companies.

By addressing the socio-economic, cultural, and legal needs of tribal and forest fringe communities through holistic and inclusive development approaches, Tamil Nadu can promote their welfare, enhance their resilience, and foster sustainable forest management practices that benefit both communities and ecosystems. In the year 2024-2025 a sum of

Rs.25.48 Lakh was sanctioned for providing drinking water and other allied facilities to the Tribal settlements living in the district of Salem, Vellore, Dharmapuri and Villupuram.

3.5 Ecotourism

Ecotourism in Tamil Nadu offers visitors the opportunity to explore the state's rich natural and cultural heritage while promoting conservation, community development, and sustainable tourism practices. Tamil Nadu is one of the most sought-after ecotourism destinations in the country and state endeavors to promote ecotourism with the objective to plough the benefits to the communities for their livelihood support and upliftment.

Tamil Nadu has great untapped eco-tourism potential which can be explored. Responsible ecotourism activities shall be promoted not only to preserve the natural heritage but also to create jobs and promote the

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

3.6 Sustainable Development Goals (SDGs)

Tamil Nadu aligns its development objectives with the United Nations Sustainable Development Goals (SDGs). The SDGs provide a comprehensive framework for addressing global challenges and promoting sustainable development in various sectors, including social, economic and environmental dimensions. While the SDGs are universal, each state or region may interpret and prioritize them based on their specific context and development needs.

Two SDG units (i.e.) State Level / District Level have been formed in the Forest Department, for continuous monitoring and updation of data in the SDG Dashboard. The SDG units are functioning in close coordination with the

SDG cell under the Planning and Development Department. The goals linked to the Forest Department fall under the working Groups 7 (Goals 13, 14, and 15) and 6 (Goal 12). 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), Goal No12 (Responsible Consumption and Production) and Goal 13 (Climate Action) have domains that overlap with the forest and wildlife sectors indirectly.

Various schemes are being implemented for the vulnerable sections in the State. Farmers are benefitted from schemes like supply of free seedlings. The tribal welfare schemes are operated to benefit tribal people. Joint Forest Management related schemes benefit local people living adjacent to forest areas. Further, free of cost assistive devices are being provided to differently abled persons, along with barrier-free

environments in all public buildings including educational institutions. All these schemes help in achieving the Sustainable Development Goals.

3.7 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 and proposed plan of future management on a sustainable basis. 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.

All the Forest and Wildlife divisions in Tamil Nadu are managed scientifically through prescriptions of Working Plans and Management Plans which are finalised as per the National Working Plan Code-2023. Presently out of 32 Forest Divisions 28 forest divisions have approved working plan and working plans for 4 forest divisions are under formulation and approval. Rs.1.91crores have been sanctioned by state government to write working plan of six forest divisions in the state as per Working Plan Code, 2023.

3.8 Conservation of Forest biodiversity and genetic resources

In Tamil Nadu, an extent of 9179.676 sq.km. is under Protected Area management to strengthen wildlife protection and biodiversity conservation which is 39.59% of forest area. Under the network of Protected

Areas, there are 5 National Parks, 18 Wildlife Sanctuaries, 17 Bird Sanctuaries and 3 Conservation Reserves besides 5 Tiger Reserves. A gene pool 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 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.

i. Monitoring of wildlife habitats for availability of water and fodder resources.

ii. Continuous monitoring of movement of wildlife in conflict zones.

iii. Early warning system for alerting the people in conflict zones.

iv. Sensitizing the local inhabitants.

v. Instant payments of compensation amount to victims for the damage by wildlife.

vi. Standardized protocols for the rescue and rehabilitation of wildlife straying out of forest areas.

vii. 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.

3.9 Forest Fire prevention and Management

Forest fire is one of the major 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.

Tamil Nadu is implementing various Forest fire prevention and management initiatives as follows.

1. Fire Lines and Firebreaks: Creating and maintaining fire lines and firebreaks in forest areas to prevent the spread of wildfires. These are cleared areas where vegetation is removed to create barriers that can help to contain fires and prevent them from spreading to adjacent areas.

2. Early Warning Systems: Implementing early warning systems to detect and respond to forest fires promptly. This may involve the use of watchtowers, remote sensing technology and community-based surveillance to detect smoke or signs of fire activity.

3. Capacity Building: Training forest department staff, frontline workers and local communities in fire prevention, firefighting techniques and emergency response protocols. Capacity building programs aim to enhance skills, knowledge and preparedness to deal with forest fires.

4. Public Awareness and Education: Conducting awareness campaigns, workshops, and training programs to educate forest dependent communities, stakeholders and the general public about the causes of forest fires, fire safety measures and the importance of preventing wildfires. Public outreach activities aim to foster a culture of fire prevention and responsible forest management practices.

i. Community Participation: Engaging local communities in forest fire prevention and management efforts through participatory approaches such as community-based fire management committees, fire

volunteer groups, and collaborative fire management initiatives. Community participation enhances the effectiveness of fire prevention and response activities and promotes shared responsibility for forest protection.

ii. Research and Monitoring: Conducting research, monitoring and assessment of fire risk factors, fire behaviour and ecological impacts of wildfires. Research findings in form of evidence-based decision making and adaptive management strategies for forest fire prevention and management.

iii. Policy Support: Formulating and implementing policies, guidelines and regulations related to forest fire prevention, management and response. Policy support includes provisions for fire bans, restrictions on fire prone activities, and incentives for sustainable land management practices that reduce fire risk.

The funds for this scheme is sanctioned in the ratio of 60:40 by the Central and State Governments. During 2024-2025 an amount of Rs.365.20 lakh (Central Share Rs.219.12 lakh & State Share Rs.146.08 lakh) has been sanctioned and this scheme will be continued during 2025-2026.

By implementing these forest fire prevention and management schemes, Tamil Nadu aims to reduce the incidence and severity of wildfires, protect valuable forest resources and safeguard biodiversity, ecosystem services and livelihoods dependent on forests.

3.10 Invasive Species Management

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. Invasive species are known to spread at a rate faster than the

native vegetation threatening their survival and leading to unhealthy natural forests.

The Government of Tamil Nadu has initiated various activities to curtail the spread of Invasive species and promote native vegetation which includes, systematic removal of invasive vegetation, restoration of the treated area with planting native species, constant monitoring of the treated areas, soil moisture conservation works to augment and boost the growth of native vegetation etc., Besides the Government of Tamil Nadu for first time in the country has brought in a separate policy towards addressing the invasives.

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

As announced by 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 policies 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.

a) Invasive Species Management: The Tamil Nadu Forest department, in collaboration with other relevant agencies, implements strategies to control and manage invasive plant species. This includes surveys to identify invasive species, monitoring their spread, and implementing control measures such as manual removal, herbicide application, and biological control using natural enemies.

b) Legislation and Regulations: There are legislation and regulations in place to prevent the introduction and spread of invasive species. These include quarantine measures, restrictions on the import and sale of

invasive plant species and penalties for non-compliance.

c) Awareness and Education: Public awareness campaigns and educational programs is conducted to inform communities, stakeholders and the general public about the threats posed by invasive species and the importance of preventing their spread. These initiatives include workshops, seminars, posters, and outreach activities.

d) Ecological Restoration: The Tamil Nadu Government have policies and programs focused on ecological restoration, including efforts to rehabilitate degraded ecosystems, restore native vegetation, and enhance biodiversity. Restoration activities include reforestation, afforestation, soil conservation, wetland restoration, and habitat enhancement projects.

e) Research and Monitoring: There are efforts to conduct research and monitoring to assess

the impact of invasive species on ecosystems, evaluate the effectiveness of management strategies and identify priority areas for restoration and conservation. Research findings can inform evidence-based decision-making and adaptive management approaches.

f) Partnerships and Collaborations: Collaboration with research institutions, non-governmental organizations (NGOs), community groups and other stakeholders is likely key to the success of invasive species management and ecological restoration initiatives. Partnerships can leverage expertise, resources and community engagement to achieve shared conservation goals.

g) Integration with Sustainable Development Goals: Efforts to address invasive species and promote ecological restoration are integrated with broader sustainable development goals (SDGs), including biodiversity conservation,

climate change mitigation and adaptation, poverty alleviation and sustainable livelihoods.

3.10.2 Interventions towards containing spread of invasive species:

Tamil Nadu's approach to addressing invasive plants and promoting ecological restoration so far has been as follows,

i. In order to protect the native species, Government has sanctioned an amount of Rs.45.41 crore for removal of invasive species Lantana camara for the year 2024-25.

ii. During the year 2024-2025 (up to 31.01.2025), the invasive species were removed over a total extent of 16131.61 Ha. and further removal is in progress.

iii. Removal of Lantana camara is being carried out in all forest divisions at the extent of

50 Ha. every month from September 2024. Further, 75 Ha. has been removed from January 2025 in those divisions having infested areas in the protected areas.

iv. Removal of Prosopis juliflora in protected areas has been taken in all forest divisions at the extent of 50 Ha. in every month.

v. Removal of Prosopis juliflora in respect to outside forest areas, removal operations are being carried out by the Revenue / Rural Development / Water Resources Department.

vi. Senna Spectabilis an invasive species is being removed and sent to TNPL for pulpwood. A total of 379 Ha was allotted to the Tamil Nadu Newsprint and Papers limited (TNPL) and 557.68 Ha was allocated for sale to the Seshasayee Paper & Boards Limited (SPB) for removal of Senna

spectabilis. By this sale a revenue of Rs.18 crore has been earned.

4. Wildlife Management

Tamil Nadu has a Legacy of Wildlife Conservation by bringing out separate act for elephant conservation in 1873 itself in the name of Tamil Nadu Wild Elephants Preservation Act. Tamil Nadu had notified the first Bird Sanctuary (Vedanthangal Bird Sanctuary) of the country in 1936. Tamil Nadu is a pioneer in Wildlife Management initiatives.

Preserving and protecting Tamil Nadu's forest fauna diversity is crucial for maintaining ecological balance, biodiversity conservation, and ecosystem services. Conservation efforts, including habitat protection, wildlife corridors, anti-poaching measures and community-based conservation initiatives, are essential for safeguarding the state's rich wildlife heritage for future generations.

4.1 National Parks

National Parks are notified under Sec 35 of the Wildlife (Protection) Act, 1972 as an area which needs to be protected for 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.

Sl. No	Name of the National Park	Extent (in ha)	District(s)	Year of notification
1	Gulf of Mannar Marine National Park	56000.00	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

4.2 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.

Sl. No	Name of Wildlife Sanctuary	Extent (in ha)	Districts	Year of Notification
1	Mudumalai Wildlife Sanctuary	21,776.000	Nilgiris	1940
2	Mundanthurai Wildlife Sanctuary	58,207.580	Tirunelveli and Tenkasi	1962
3	Point Calimere Wildlife Sanctuary	1,728.810	Nagapattinam	1967
4	Indira Gandhi Wildlife Sanctuary	84,149.000	Coimbatore and Tiruppur	1976
5	Kalakad Wildlife Sanctuary	22,358.000	Tirunelveli and Tenkasi	1976
6	Vallanadu Black Buck Sanctuary	1641.000	Tuticorin	1987
7	Srivilliputtur Grizzled Squirrel Wildlife Sanctuary	48,520.000	Virudhunagar	1988
8	Kanyakumari Wildlife Sanctuary	40,239.550	Kanyakumari	2007
9	Sathyamangalam Wildlife Sanctuary	141,160.940	Erode	2008 & 2011
10	Megamalai Wildlife Sanctuary	26,910.810	Theni and Madurai	2009

Sl. No	Name of Wildlife Sanctuary	Extent (in ha)	Districts	Year of Notification
11	Point Calimere Wildlife Sanctuary, Block A & B	12,407.270	Thanjavur, Tiruvarur and Nagapattinam	2013
12	Kodaikanal Wildlife Sanctuary	60,895.482	Dindigul and Theni	2013
13	Gangaikondan Spotted Deer Sanctuary	288.400	Tirunelveli	2013
14	Cauvery North Wildlife Sanctuary	50,433.480	Krishnagiri & Dharmapuri	2014
15	Nellai Wildlife Sanctuary	35,673.330	Tenkasi	2015
16	Kadavur Slender Loris Sanctuary	11806.560	Karur and Dindigul	2022
17	Cauvery South Wildlife Sanctuary	68640.613	Krishnagiri & Dharmapuri	2022
18	Thanthai Periyar Wildlife Sanctuary	80114.800	Erode	2024

4.3 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 has declared 17 Bird Sanctuaries, latest being Nanjarayan Tank Bird Sanctuary notified in 2022. There by Tamil Nadu Stands First

in the Country for having the highest number of Bird Sanctuaries. The List of 17 Bird Sanctuaries is as follows: -

Sl. No	Name of Bird Sanctuary	Extent (in ha)	Districts	Year of Notification
1	Vedanthangal Bird Sanctuary	30.00	Kancheepuram	1936
2	Vettangudi Bird Sanctuary	38.40	Sivaganga	1977
3	Pulicat Lake Bird Sanctuary	15,367.00	Tiruvallur	1980
4	Karikili Bird Sanctuary	61.21	Kancheepuram	1989
5	Kanjirankulam Bird Sanctuary	104.00	Ramanathapuram	1989
6	Chitrangudi Bird Sanctuary	47.63	Ramanathapuram	1989
7	Koonthankulam-Kadankulam Bird Sanctuary	129.00	Tirunelveli	1994
8	Udayamarthandpuram Bird Sanctuary	45.28	Tiruvarur	1998
9	Vaduvoor Bird Sanctuary	128.10	Tiruvarur	1999
10	Karaivetti Bird Sanctuary	453.71	Ariyalur	1999
11	Vellode Bird Sanctuary	77.18	Erode	2000
12	Melaselvanur-Kilaselvanur Bird Sanctuary	593.08	Ramanathapuram	2010
13	Therthangal Bird Sanctury	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 Bird Sanctuary	125.865	Tiruppur	2022

Recently the Government has announced its intention to notify the first Flamingo bird sanctuary in Dhanushkodi near Ramanathapuram.

4.4 Ramsar Sites

Tamil Nadu is a leader in the country by declaring 20 Ramsar Sites. Recently in 2024, Two new Ramsar sites i.e., Sakkarakottai and Therthangal Bird Sanctuaries, Ramanathapuram District have been added to the list of Wetlands of international significance.

Ramsar sites in State of Tamil Nadu

Sl. No.	Name of Ramsar site	Name of District	Year of declaration	Area (In ha.)
1	Point Calimere Wildlife and Bird Sanctuary	Nagapattinam and Thiruvarur	2002	38500.0
2	Pallikaranai Marsh Reserve Forest	Chennai	2022	1247.54
3	Karikili Bird Sanctuary	Chengalpattu	2022	58.44
4	Vedanthangal Bird Sanctuary	Chengalpattu	2022	40.35
5	Pichavaram Mangrove	Cuddalore	2022	1478.64
6	Vellode Bird Sanctuary	Erode	2022	77.185
7	Suchindram Theroor Wetland Complex	Kanyakumari	2022	94.23
8	Vembanur Wetland Complex	Kanyakumari	2022	19.75

9	Chitrangudi Bird Sanctuary	Ramanathapuram	2022	260.47
10	Gulf of Mannar Marine Biosphere Reserve	Ramanathapuram	2022	52671.88
11	Kanjirankulam Bird Sanctuary	Ramanathapuram	2022	96.89
12	Koonthankulam Bird Sanctuary	Tirunelveli	2022	72.04
13	Udhayamarthandapuram Bird Sanctuary	Thiruvarur	2022	43.77
14	Vaduvur Bird Sanctuary	Thiruvarur	2022	112.64
15.	Karaivetti Bird Sanctuary	Ariyalur	2024	453.70
16.	Longwood Shola Reserve Forest	The Nilgris	2024	116.007
17.	Nanjarayan Bird Sanctuary	Tiruppur	2024	125.865
18.	Kazhuveli Bird Sanctuary	Villupuram	2024	5151.60
19.	Sakkarakottai Bird Sanctuary	Ramanathapuram	2025	230.49
20.	Therthangal Bird Sanctuary	Ramanathapuram	2025	29.295
			Total Area	1,00,880.787

4.5 Conservation Reserves

Conservation Reserves are legally Protected Areas for conservation of floral and faunal species notified under Sec 36A of the Wildlife Protection

Act, 1972. These areas are declared as Conservation Reserve in consultation with local communities.

The State Government has notified the following 3 Conservation Reserves:-

Sl.No	Name of Conservation Reserve	Extent (in ha)	District	Year of Notification
1.	Thiruppudaimaruthur Birds Conservation Reserve	2.84	Tirunelveli	2005
2.	Suchindrum-Theroor –Managudi Conservation Reserve	483.92	Kanniyakumari	2015
3.	Dugong Conservation Reserve in Palk Bay	44834.00	Thanjavur	2022

4.6 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, Tenkasi and Kanniyakumari	895.00	706.542	1,601.542
2	Anamalai Tiger Reserve	Coimbatore and Tiruppur Districts	958.59	521.280	1,479.870
3	Mudumalai Tiger Reserve	The Nilgiris	321.00	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

Mudumalai Tiger Reserve and Anamalai Tiger Reserve have been rated as "Excellent in Management, Effectiveness and Evaluation of Tiger Reserves" by National Tiger Conservation Authority.

4.7 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 as the 5th Elephant reserve of the State. 5 Elephant Reserves in Tamil Nadu are as Follows.

Sl. No	Name of Reserve	District(s)	Area in ha
1	Nilgiris – Eastern Ghat (Nilgiri Elephant Reserve)	Nilgiris, Erode, Dharmapuri and Krishnagiri	4,66,245
2	Nilambur Silent Valley - Coimbatore Elephant Reserve (Nilambur Elephant Reserve)	Coimbatore and Nilgiris	56,557

Sl. No	Name of Reserve	District(s)	Area in ha
3	Periyar Elephant Reserve (Srivilliputhur Elephant Reserve)	Theni, Virudhunagar and Tenkasi	1,24,910
4	Anamalai – Parambikulam Elephant Reserve (Anamalai Elephant Reserve)	Coimbatore and Dindigul	1,45,723
5	Agasthyamalai Elephant Reserve	Tirunelveli and Kaniyakumari	119748.26

4.8 Biosphere Reserves

Biosphere Reserves are sites established by countries and recognized under UNESCO's Man and the Biosphere (MAB) Programme initiated in 1971 to promote sustainable development based on local community efforts and sound science. The purpose 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: -

S. No	Name of Reserve	District(s)	Area in ha
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

4.9 Wildlife Management Outside Protected areas:

Tamil Nadu Forest Department implements various wildlife management strategies outside protected areas to mitigate human-wildlife conflicts, conserve biodiversity and promote coexistence between wildlife and local communities. These efforts primarily focus on areas where wildlife habitats overlap with human settlements, agricultural lands and other human-dominated landscapes. Here are some key wildlife management initiatives undertaken outside protected areas in Tamil Nadu:

i. Corridor Conservation: Efforts have been initiated to identify and conserve wildlife corridors that connect fragmented habitats, allowing for the movement of animals between protected areas. These corridors are vital for maintaining genetic diversity, facilitating seasonal migrations and reducing genetic isolation among wildlife populations. These corridors are required to reduce man animal conflict in critical areas of connectivity between different wildlife habitats.

ii. Community-Based Conservation: Engaging local communities in wildlife conservation efforts through participatory approaches such as Community Reserves, Community Forest Management (CFM) and Joint Forest Management (JFM) is critical. These initiatives empower communities to take ownership of natural resources, protect

wildlife habitats, and benefit from sustainable resource use practices.

iii. Human-Wildlife Conflict Mitigation: Implementing measures to minimize conflicts between human and wildlife outside protected areas, particularly in agricultural landscapes. This includes deployment of deterrents to prevent crop raiding by elephants, wild boars, and other animals.

iv. Wildlife Rescue and Rehabilitation: Establishing wildlife rescue and rehabilitation centers to provide medical care and shelter to injured, orphaned, or displaced wildlife outside protected areas. These centers also play a crucial role in rescuing and relocating conflict-prone animals, mitigating human-wildlife conflicts and raising awareness about wildlife conservation.

v. Awareness and Education: Conducting awareness programs, workshops and training sessions to educate local communities, farmers and stakeholders about wildlife conservation, sustainable land management practices and the importance of coexisting with wildlife. Public outreach activities aim to foster a sense of stewardship towards wildlife and promote positive attitudes towards conservation.

vi. Livelihood Enhancement: Supporting alternative livelihood options for communities living in wildlife-affected areas to reduce dependency on natural resources and alleviate poverty. This may include promoting eco-tourism, agroforestry, sustainable agriculture and other income-generating activities that are compatible with wildlife conservation objectives.

vii. Research and Monitoring: Conducting scientific research, wildlife surveys and

monitoring programs to assess wildlife populations, habitat status and human-wildlife interactions outside protected areas. Data obtained from research studies inform evidence-based conservation strategies and management decisions aimed at safeguarding biodiversity and ecological integrity.

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 53 hatcheries of Forest Department and releasing of nearly two lakh turtle hatchlings after emergence every year.

These wildlife management initiatives outside protected areas in Tamil Nadu demonstrate a holistic approach to wildlife conservation that integrates ecological, social and economic considerations. By engaging local communities, implementing

sustainable practices and fostering coexistence with wildlife, the Tamil Nadu Forest Department strives to ensure the long-term viability of wildlife populations and habitats across the state.

4.10 Human Wildlife Conflict Mitigation

The state of Tamil Nadu is no exception to the growing human wildlife conflicts. It has a become a huge challenge for the department to address the conflict issues on day-to-day basis.

Following major initiatives are taken to address human-wildlife conflicts.

- Creation of Elephant Proof Trenches, Solar Powered Fence, Stone wall 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.

- Monitoring of wildlife habitats for availability of water and fodder resources.
- Continuous monitoring of movement of wildlife in conflict zones.
- Early warning system for alerting the people in conflict zone & sensitizing the local inhabitants.
- Instant payments of compensation amount to victims for the damage by wildlife.
- Standardized protocols for the rescue and rehabilitation of wildlife straying out of forest areas.
- Strengthening veterinary services for wildlife through Rapid Response Team and Mobile Veterinary Units.
- 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.

- Some of the frequently straying wild animals are being identified and captured using kumki elephants under the supervision of the expert veterinarians.
- 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.

In addition to the above, the Government of Tamil Nadu has taken various special initiatives to contain the problem of human wildlife interactions which is summarized below,

- State level advisory committee has been constituted to create a framework for wildlife friendly infrastructure in future for the first time in India.
- To prevent unnatural death of wild animals especially elephants by the country-made explosives District Level Committees have been constituted. The committee convenes periodical meetings and interacts with various stakeholders involved and ensures that illegal supply of explosives and illegal electric lines are removed. Frequent joint inspections are also being carried out.
- Tamil Nadu Power Fences (Registration and Regulation) Rules, 2023 regulating the erection of power fences in Tamil Nadu has been notified to streamline the erection of fences along the forest boundaries as well as to control illegal fencing in private lands which are harmful to wild animals.

- Artificial Intelligence based surveillance system – Action is being taken to avail latest technology to watch the elephant movement and to alert the loco pilots as well as other concerned persons regarding the movement of elephants along the railway tracks. Accordingly, the Government had accorded a sanction to install Artificial intelligence based Surveillance system to monitor the movements of elephants, even in night hours to restore the above conflict situation completely at Madukarai, Coimbatore was established at a cost of Rs.7.24 crore and the project was inaugurated on 09.02.2024.
- Tamil Nadu Government has setup the Command Control Centre under Modernization of Forest Force Scheme, at a cost of Rs.5.12 crore, to monitor the wild animals entering human habitats from the forest areas, artificial intelligence-equipped

censor equipment has been installed at about 90 places and the information obtained from them is sent from the command control room to the public and concerned officials to take prompt action.

- The Government has sanctioned Rs.10.00 crore towards setting up Real time Monitoring System to monitor movement of Elephant herds by strengthening alert mechanisms and address human-elephant conflict under TANII Scheme including pilot project on laying of aerial bundled cables from Thorappalli to Theppakkadu in core area of Mudumalai Tiger Reserve at a cost of Rs.5.00 crore.
- The Government of Tamil Nadu has constituted two committees for submission of consolidated Elephant Corridor Reports in Tamil Nadu.
- Farmers-Wildlife Conflict Resolution Committee: A special committee of

representatives from Agricultural and Forest Department, Revenue Department, Horticulture department, scientific experts, volunteers and wildlife enthusiasts has been constituted to study the impact of wild animals such as elephants and wild pigs on agricultural crop raiding in Tamil Nadu and to find a solution and recommend it to the Government. Based on the Committee's report the Government has issued orders specifying the guidelines to be followed by forest officials in tackling the wild pigs when it enters the human habitats.

- Newly designed innovative barriers like Steel Wire Rope fences for addressing crop damages caused due to elephants is being erected in Hosur and Coimbatore Forest Divisions.
- 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.

5. Forest Policy and Legal Framework

Forest policy and the legal framework are crucial for the management, conservation and sustainable use of forest resources ensuring the well-being of forest-dependent communities and protecting biodiversity and ecosystem services for future generation

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

Forest Policy: Forest policy outlines the government's objectives, principles, and strategies for managing forests and forest

resources sustainably. It typically addresses issues such as conservation, biodiversity, ecosystem services, community rights, forest-based industries and land use planning. Forest policies may be guided by principles of sustainable forest management, conservation of biodiversity, equitable benefit-sharing and community participation. They often involve collaboration among multiple stakeholders, including government agencies, indigenous and local communities, non-governmental organizations (NGOs) and the private sector.

Forest Laws: Forest laws are legal instruments enacted by governments to regulate and govern the use, protection, and management of forests and forest resources. These laws establish the legal framework for forest management, conservation and utilization. Forest laws may cover a wide range of issues, including forest tenure, land rights, forest governance,

timber harvesting, wildlife conservation, protected areas, environmental impact assessment and forest-related crimes such as illegal logging and poaching.

Key Components of Forest Laws:

a) Forest Conservation and Protection: Laws aimed at forest conservation and protection establish measures to prevent deforestation, degradation and loss of forest biodiversity. They may include provisions for establishing protected areas, regulating land use change and controlling activities that pose threats to forest ecosystems.

b) Forest Management and Utilization: Laws related to forest management and utilization govern activities such as timber harvesting, non-timber forest products (NTFPs) extraction, forest restoration and agroforestry. They may establish rules and regulations for sustainable forest

management practices, forest certification and forest-based industries.

c) Community Participation and Rights: Forest laws increasingly recognize the rights of indigenous and local communities to participate in decision-making processes and benefit from forest resources. They may include provisions for community-based forest management, participatory forest management and revenue-sharing arrangements.

d) Enforcement and Compliance: Forest laws also address enforcement mechanisms, penalties and legal remedies for violations of forest regulations. They establish institutions responsible for enforcing forest laws, investigating forest-related crimes and prosecuting offenders.

e) International Agreements and Conventions: Many countries are

signatories to international agreements and conventions related to forests and biodiversity, such as the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD) and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). These agreements influence national forest policies and legal frameworks and promote international cooperation on forest conservation and sustainable management.

5.1. National Forest Policy, 1988

The National Forest Policy of 1988 is a policy framework established by the Government of India to guide the management, conservation and sustainable development of forests across the country. While the National Forest Policy is a central policy, its principles and objectives are implemented by state governments. Here's how

the National Forest Policy of 1988 is relevant to forest management in Tamil Nadu:

i. Conservation and Ecological Stability: The National Forest Policy emphasizes the conservation of forests for maintaining ecological balance, protecting biodiversity and mitigating environmental degradation. In Tamil Nadu, forest conservation efforts align with these objectives, aiming to preserve the state's diverse forest ecosystems and ensure their long-term ecological stability.

ii. Meeting Socio-Economic Needs: The policy recognizes the socio-economic significance of forests for rural communities, including livelihood support, fuel wood, fodder, and non-timber forest products. In Tamil Nadu, efforts are made to balance conservation goals with meeting the socio-economic needs of forest-dependent communities through sustainable forest

management practices and community participation.

iii. Afforestation and Reforestation: The National Forest Policy emphasizes the importance of afforestation and reforestation to increase forest cover and restore degraded lands. In Tamil Nadu, afforestation and reforestation programs are implemented to enhance forest cover, improve watershed management and combat desertification and soil erosion.

iv. Joint Forest Management: The policy promotes the involvement of local communities and stakeholders in forest management through Joint Forest Management (JFM) and participatory approaches. In Tamil Nadu, initiatives such as Community Forest Management (CFM) and Joint Forest Management Committees (JFMCs) engage local communities in forest

protection, afforestation and sustainable resource management.

v. Biodiversity Conservation: The National Forest Policy recognizes the importance of conserving biodiversity and protecting wildlife habitats within forest areas. In Tamil Nadu, efforts are made to establish and manage protected areas, such as wildlife sanctuaries and national parks, to conserve biodiversity and provide habitat for endangered species.

vi. Research and Training: The policy emphasizes the need for research, training and capacity-building in forestry science and technology. In Tamil Nadu, research institutions, forest departments and academic organizations collaborate to conduct research, training programs and knowledge dissemination activities to improve forest management practices and build the capacity of forest personnel.

While the National Forest Policy of 1988 provides a broad framework for forest management, each State develops its specific policies, programs, and initiatives tailored to its unique ecological, socio-economic and cultural context. These state-level efforts complement the objectives of the national policy and contribute to the overall conservation and sustainable management of forests in India.

5.2. State Forest Policy, 2018

Tamil Nadu has its own State Forest Policy, which outlines the principles, objectives, and strategies for the management, conservation, and sustainable use of forest resources within the state. Tamil Nadu's State Forest Policy is guided by principles of sustainable development, biodiversity conservation, social equity and participatory governance, in line with National forest policies and international commitments.

The State Forest Policy would address,

1. Conservation and Biodiversity
2. Sustainable Forest Management
3. Community Participation
4. Livelihood Support
5. Forest Protection and Law Enforcement
6.Research and Capacity Building
7. Climate Change Mitigation and Adaptation
8. Collaboration and Partnerships

Since the conservation policies and strategies are getting updated very frequently at Global level, Government felt the need to revise the forest policy to incorporate latest developments in the conservation scenario and hence a committee has been constituted to formulate new Forest Policy for the state.

5.3. Acts and Rules

Tamil Nadu has several laws and regulations governing the management, conservation and utilization of forests and forest resources. These laws are aimed at protecting forest ecosystems, biodiversity and wildlife, as well as regulating

activities such as timber harvesting, non-timber forest products collection, and land use change within forest areas. Here are some key forest acts and rules applicable in Tamil Nadu:

1. Tamil Nadu Forest Act, 1882: This is one of the primary legislations governing forests in Tamil Nadu. It provides for the regulation of forest lands, the management of forests, the protection of forests from illegal activities and the prevention of forest fires. The act empowers forest authorities to enforce regulations related to forest conservation and management.
2. Tamil Nadu Hill Stations (Preservation of Trees) Act, 1955: This Act aims to preserve trees in hill stations and prevent their indiscriminate felling for commercial purposes. It regulates the cutting and transportation of trees and requires permits for tree-felling activities in designated areas.

3. Wildlife Protection Act, 1972: This Act provides for the protection of wildlife and their habitats, the establishment of wildlife sanctuaries and national parks and the regulation of hunting and trade in wildlife species. It prohibits activities that are harmful to wildlife, such as hunting, poaching, and trafficking of protected species.
4. Forest Conservation Act, 1980: This central legislation aims to conserve forests by regulating the diversion of forest land for non-forest purposes. It requires prior approval from the Central Government for any proposal to use forest land for activities such as mining, industry, or infrastructure development.
5. Tamil Nadu Forest Rules: These rules are framed under the Tamil Nadu Forest Act, 1882 and provide detailed regulations and procedures for the implementation of the act. They cover various aspects of forest management, including timber extraction,

grazing, protection of forests, prevention of forest fires and conservation of wildlife.

6. Tamil Nadu Minor Forest Produce (Regulation of Trade) Act, 1982: This Act regulates the trade and collection of minor forest produce such as bamboo, tendu leaves, gums and resins. It aims to ensure fair prices for forest produce and prevent unsustainable exploitation of forest resources.
7. Tamil Nadu Biodiversity Rules, 2017: These rules are framed under the Biological Diversity Act, 2002 and govern the conservation, sustainable use, and equitable sharing of benefits arising from the use of biological resources in Tamil Nadu. They provide for the establishment of biodiversity management committees and biodiversity registers at the local level.

These are some of the key forest Acts and rules applicable in Tamil Nadu. They form the legal framework for forest management,

conservation, and utilization in the state, and are enforced by the Tamil Nadu Forest Department and other relevant authorities. It's essential for stakeholders, including forest officials, local communities and businesses, to comply with these laws to ensure the sustainable management of forest resources and the protection of forest ecosystems.

6. Ongoing Schemes

6.1 Centrally Sponsored Schemes

The following schemes are jointly funded by the Central and the State Government in the ratio of 60:40 and are categorised as the Centrally Sponsored Schemes.

6.1.1 Integrated Development of Wildlife Habitats

Integrated Development of Wildlife habitats have 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 38 schemes for the developmental activities in National Parks, Wildlife Sanctuaries and Conservation reserves. During 2024-25, an amount of Rs.44.12 crore has been sanctioned and this scheme will be continued during 2025-2026.

6.1.2 Project Tiger

Tiger being a flagship species and placed 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 and for non-recurring is 60:40 by the Central and State Governments. During 2024-25, an amount of Rs.51.23 crore has been sanctioned and this scheme will be continued during 2025-26.

6.1.3 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 2961 as per the last synchronized census conducted in 2022. 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 2024-25 an amount of Rs.4.54 crore has been sanctioned and this scheme will be continued during 2025-26.

6.1.4 Forest Fire prevention and Management Scheme

The Forest fire prevention and management scheme covers various activities related to fire prevention, control and management. The major activities are,

- Fire Lines and Firebreaks
- Early Warning Systems
- Capacity Building

- Public Awareness and Education
- Community Participation
- Research and Monitoring

During 2024-2025 an amount of Rs.365.20 lakh (Central Share Rs.219.12 lakh & State Share Rs.146.08 lakh) has been sanctioned and this scheme will be continued during 2025-2026.

6.2 State Schemes:

The State Government is implementing around 49 schemes towards forest and wildlife management. Out of which the major schemes are detailed below

6.2.1 Modernization of Forest Force

The science of Forestry and Wildlife Management has evolved significantly over the last few years with the advent of new technologies. Modern day forestry requires appropriate and well-planned strategies for conservation of forest wealth and its biodiversity.

Modern forest management 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 the latest technologies and equipment for better response to challenges in the 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. By prioritizing these modernization efforts, the Forest Force in Tamil Nadu can enhance its effectiveness, efficiency and resilience in managing forest resources, conserving biodiversity and addressing emerging challenges in forest management.

6.2.2 Elephant Conservation Scheme

Government of Tamil Nadu has Sanctioned a sum of Rs.2.42 crore in 2022-23 vide G.O.(D).No.255 ECC&F Department Dated 08.11.2022 to address the Human Elephant Conflict areas more efficiently. This scheme could support various mitigation measures which are taken up by adopting a multi-pronged strategy involving habitat improvement and augmenting water sources, formation of physical barriers along the forest boundary, as well as awareness creation amongst the local people.

6.2.3 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 5,565.55 ha was planted till 2021-22 at a total cost of Rs.24.05 crore.

6.2.4 Upgradation of Kurumbapatti Zoological Park, Salem as Medium Zoo

The Government has released sum of Rs.1.29 crore for the upgradation of Kurumbapatti Zoological Park, Salem as Medium Zoo by providing essential facilities like shelters, medical facilities, food storage room, interpretation centre and walking trails during 2023-2024.

6.2.5 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.

6.2.6 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 loss their crop and properties in these conflicts.

A dedicated account for the purpose has been opened with all the District Forest Officers for the very first time to ensure the prompt and timely payment of compensation.

Further Government has streamlined the process of financial allocation and a corpus fund of Rs. 10 crores have been created in 2024 for speedy allocation of funds. As a result, the time taken for disbursing compensation has been considerably reduced from month to few days.

In G.O.(MS).No.141, Environment and Forests (FR.5), dated 25.11.2016, compensation is being provided for human injury and crops damage and property and livestock damage.

In G.O.(D).No.160, Environment, Climate Change and Forests (F.R.5), dated 03.11.2021, the relief amount for death and permanent disability has been increased from Rs.4 lakh to Rs.5 lakh and is being provided from 03.11.2021.

In G.O.(D).No.33, Environment, Climate Change and Forests (FR.5) Department, dated 21.02.2024, the relief amount for death and permanent disability has been increased from Rs.5 lakh to Rs.10 lakh and is being provided from 13.01.2024.

The following relief amount has been provided by the Government from the year 2021-22 to 2024-25.

Sl. No	Details of Human – Wildlife Conflict	Relief by State Government		Relief by Central Government		Total	
1.	Human death	266	1531.076	22	134.175	288	1665.251
2.	Human Injury	689	287.339	74	25.798	763	313.137
3.	Crop damages	23224	2503.477	2458	212.837	25682	2716.314
4.	Live stock damages	1305	242.666	191	37.295	1496	279.961
5.	Property damages	657	41.806	97	5.738	754	47.544
Total		26141	4606.364	2842	415.843	28983	5022.207

The other State funded schemes for wildlife conservation are listed below.

Sl. No.	Scheme
1	Payment of Wildlife Compensation
2	Formation of Trichy Zoo at M.R. Palayam Reserve Forest, Trichy
3	Augmenting drinking water supply to wildlife through motors energized by solar power

4	Design, Supply, Installation and Commissioning of AI based system for preventing elephant deaths on Railway tracks in Madukkarai Forest Range of Coimbatore
5	Erection of steel wire rope fence as a measure to mitigate Human- Elephant conflict
6	Maintanence of Elephant Proof Trenches and Solar Fence
7	Tamil Nadu Elephant Conservation Scheme
8	Creation of Fodder Resources and Improvement of Wildlife Habitats
9	Formation of Forest Ponds in Reserve Forest area in Tamil Nadu
10	Advanced Wildlife Management Training centres at Anamalai Tiger Reserve and Mudumalai Tiger Reserve
11	Establishment of forest sniffer dog squads in Tamil Nadu Forest department for detection of forest and wildlife offences
12	Setting up Rescue and Rehabilitation Centre at Coimbatore (Pethikuttai)
13	Marine Elite Force
14	Butterfly Park and Nakchatravanam in Trichy Forest Division
15	Establishment of Biodiversity Museum and Conservation Centre with Eco- Park in Kanniyakumari Division

16	Creation of a modern Elephant Conservation Centre at Theppakadu by modifying the existing camp
17	Modernization of Crocodile Parks in Hogenakkal/Amaravathi/Sathanur
18	Sea Turtle conservation and Rehabilitation center at Chennai & Nagapattinam
19	Establishment of Wetland Conservation Centre at Pallikaranai, Chennai
20	Setting up an “International Bird Centre, Marakkanam
21	Setting up real time monitoring system to monitor the movement of Elephant herds to strengthen alert mechanism and address Human- Elephant Conflict
22	Setting up of “Slender Loris Conservation Centre” at Ayyalur in Dindigul division
23	Setting up of a “‘International Dugong Conservation Centre’ at Manora in Thanjavur Forest Division
24	Integrated development of Pulicat Birds Sanctuary
25	Integrated development of Karaivetti Birds Sanctuary at Ariyalur Division
26	Maintenance of Elephant Rehabilitation and Rescue Centre at M.R.Palayam, Trichy
27	Integrated development of Koonthankulam Birds Sanctuary

28	Maintenance and upkeep of Forest Veterinary Unit
29	Maintenance and upkeep of Rapid Response Team
30	Erection of steel wire rope fence along the Boundary of Cauvery North Wildlife Sanctuary to mitigate human – Elephant conflict in Hosur Forest Division
31	Celebration of Wildlife Week
32	Integrated Development of Vedanthangal Bird Sanctuary
33	Project proposal on Environmental Education with Focus on Conservation of Birds and Wetlands for Selected Schools in Nagapattinam District
34	Improvement of Kozhikamuthi elephant Camp at ATR, Coimbatore
35	Setting up of a new Elephant Camp at Sadivayal, Coimbatore
36	Construction of Eco-friendly and culturally compatible houses for 91 elephant care takers in Anamalai Tiger Reserve / Mudumalai Tiger Reserve
37	Formation of Rapid Response Team in Dharmapuri district
38	Community Based Ecotourism in Rameswaram Island

39	Enhancing the coastal community's adaptive capacity to climate change impacts by means of protecting and restoring Kariyachalli island and the surrounding coral and seagrass habitats in Gulf of Mannar
40	Community based widescale restoration of degraded seagrass beds and exploration of blue carbon potential in Gulf of Mannar
41	Sea Turtles in coastal areas of Tamil Nadu will be protected by engaging Turtle Guardians
42	Orchidariums at Gudalur and Anamalai Tiger Reserve will be upgraded
43	Crocodile Conservation Centre at anailkkarai in Kumbakonam Range Thanjavur District
44	A project to desilt water bodies will be started to make water available for wildlife in Hosur Division
45	Creation of special barricade by way of erecting Hanging solar fence to avoid Man Elephant Conflict along the boundary of Marandahalli Reserved Forest (4Kms) and Thirumalvadi Reserved Land (6Kms) in Palacode Range of Dharmapuri Forest Division
46	Upkeep of Department Animals – Feeding and dietary charges

47	Nature camps for Government School Students at Srivilliputhur Megamalai Tiger Reserve, Madurai
48	Proposal for Implementation of the Elephant Intrusion Detection System (IDS) in Madukkarai Range
49	Endangered Species Conservation Fund

7. Special Projects / Mission

7.1 Tamil Nadu Biodiversity Conservation and Greening Project for Climate Change Response (TBGPCCR)

The Tamil Nadu Biodiversity Conservation and Greening Project for Climate Change Response is being implemented, with the financial assistance of Japan International Co-operation Agency at a total outlay of Rs.920.52 crore over a period of 8 years from 2022-23 to 2029-30. The project is being implemented with the overall objective to mitigate climate change by undertaking biodiversity conservation measures, human wildlife negative interaction resolution, promoting timber supply chain, livelihood

improvement activities for the tribal communities in Eastern Ghats through Eco Tourism & Eco Development and Management Capacity Development of the Tamil Nadu Forest Department through Infrastructure, mobility and Information Technology. This in turn is expected to contribute to the sustainable socioeconomic development and ecological security to the State of Tamil Nadu

7.1.1 Eco System Based Climate Change Measures

A. Marine Ecosystems

A Survey, Assessment of Coral distribution and quality has been completed and till date survey found 1,292 ha. of degraded Corals out of 11,000 ha. Coral restoration activities for over 1.2 ha. have been done during the year 2024-25 in Kasuvar Island, Gulf of Mannar. The Detailed Project Report for establishment of Corallarium in Gulf of Mannar has been created to support research and conservation efforts. During

2024-25, 44 Hatcheries have been established in 8 coastal districts of Tamil Nadu and till date 7663 hatchling have been released under this scheme. 108 awareness programs have been conducted to build local capacity for conservation in which 10,154 Eco Development Committee members and Students have participated. Inter departmental workshops have also been conducted for providing holistic conservation of Olive Ridely Turtle. Regular patrolling in breeding area is also undertaken. Monitoring of Dugong is being undertaken in Gulf of Mannar and Palk Bay under this project and incentives have been provided to fishermen for safely releasing of endangered Olive Ridely Turtle and Dugong, for improving the habitat of Dugong, Seagrass conservation is undertaken in this project. Currently, Sea grass restoration is under progress over 100 ha. in Vannchippattinam, Pudukkottai district and Thanjavur District.

B. Land Ecosystems

Efforts under this category include species recovery plans, Mangrove restoration, Removal of Invasive Alien Species and promoting Trees Outside Forests.

C. Mangrove restoration

Till date, restoration of mangroves over an area of 700 ha. have been completed in Muthupet, Thiruvarur district and another 350 ha. of Mangroves is under progress. Maintenance for restored Mangroves in previous year are also taking part of this Project. Eco tourism has been undertaken in the Muthupet Mangrove area by providing the two boats, creation of boat walks and interpretation center.

D. Removal of Invasive Alien Species:

Till date under the project, 1200 ha. of Invasive Alien Species consists of Lantana camera and Prosopis has been removed in 17 Forest

divisions covering 5 Tiger Reserves and 3 other Wildlife habitats to restore the native biodiversity and support wildlife habitat. Maintenance for Invasive Alien Species removed areas are also underway.

E. Tree cultivation in areas outside Forests

Since 2022-23, 1.37 Crore seedlings of tree species have been raised and planted in 61,050 acres of farm lands benefiting 18,897 farmers, 21 City Municipal Corporations, 138 Municipalities and 490 Town Panchayats in 38 districts to promote Agro forestry and create urban green spaces and measures to mitigate Climate Change effects. During 2024-25, 68 lakh seedlings have been planted as part of the programme. For promoting Agro Forestry & Urban Planning, multiple awareness programme, Farmer training programme, publishing of manuals and booklets, training to 443 Forest Department staff has been under taken.

7.1.2. Human Wildlife Conflict Measures

Since 2022-23, the project is undertaking measures to mitigate human-wildlife negative interaction. 873 ha. of grassland has been restored comprising of 64 grass species, supporting fodder availability to Wildlife. Elephant Proof Trenches over 50 Kms have been created around tribal settlements till date. 38 solar powered bore wells have been created to provide drinking water access to Wildlife during lean season. 95 Anti Depredation Committees have been created consisting of stakeholders in prioritized high conflict villages for securing collaboration and co-existence of communities. As part of this programme, community information network created in all the villages for dynamic, quick information on movement of Elephant outside forest area, the SMS alert messages, early warning system using sensor and

provision of facilities to communities to abate conflict are also undertaken.

7.1.3. Species recovery plan

25 endangered, endemic and RET plant species have been prioritized for conservation through development of species recovery program. Population assessment, distribution, natural vegetative methods for propagation and ex-situ conservation activities are undertaken to conserve this 25 RET species.

7.1.4 Livelihood Improvement Activities

Livelihood Improvement Activities are undertaken in Eastern Ghats to provide Socio economic status of tribal communities and secured participation in protecting and managing forest and Wildlife Biodiversity. As part of this, till date works amounting to Rs.9.11 crore has been carried out in 4 circuits. The works such as Eco huts, Trekking Sheds, Children's Park, Interpretation Centre, etc., have been carried out.

Till date, 5 lakh visitors have visited these Eco tourism sites and the tribal peoples have been provided direct and in-direct facilities and the revenue obtained through Eco tourism activities is utilized for conservation of Forest and Wildlife and improvement of socio-economic condition of Tribal people. Outside Eastern Ghats landscape, Eco Tourism has been created in Nadugani, Gene pool garden in Gudalur which provides facilities such as Zip line, Eco huts, interpretation centre, etc., Further Eco Development Committees have been formed in 155 villages in Eastern Ghats benefiting about 45,000 people of 11 hill ranges covering 5 indigenous groups. Skill development training has been undertaken. Till date, land reclamation activities have been implemented in 40 villages, promoting soil and moisture conservation measures to improve crop productivity and to reduce the risk of ecological disaster. Training on Tailoring, Millet growing training, Aari work, Agro-forestry, Farm business development, etc have

been provided to tribal people through Entrepreneurship Development and Innovation Institute.

7.1.5 Management Capacity Development

A. Infrastructure & Mobility

For the first time in the state, in order to ease the field perambulation, forest offence monitoring and swift mobility of the staff, 256 e-bikes have been procured till date under this project and provided to field staffs.

In addition, 68 field four-wheel vehicles have been provided and 46 residential quarters have been constructed.

B. Information and Communication Technology

To enhance technological expertise, 6 Work stations, 3 Differential GPS, 123 Desktops, 78 Laptops and 304 Multi-Functional Printers have been procured till date. It will be helpful

in Digitilization of Forest boundaries and strengthening of GIS wing.

The project will be continued with the broad objectives as listed above, by implementing these activities during the year 2025-26 at an outlay of Rs.126.87 crore.

7.2 Restoration of Degraded Forest Landscape In Tamil Nadu (RIDF – NABARD)

Restoration of Degraded Forest Landscape in Tamil Nadu – Phase I project is being implemented over a period of 5 years from 2021-22 to 2025-26 at a total financial outlay of Rs.48114.75 lakh with the financial assistance of Rs.45698.296 lakh (95%) from NABARD as loan under RIDF XXVII and the State fund of Rs.2416.456 lakh (5%). The project has been implemented with the objective to revive and enliven the watersheds/catchments of small, medium and large water bodies in the forests, arrest surface run-off loss of rain water and soil

erosion, harvest and store maximum rainwater in the forest areas and enhance ground water levels in the downstream, adjoining villages, facilitate natural regeneration and provide drinking water to wild animals within Forest areas and providing sustained supply of water for crops and drinking water to people and elicit judicious use of water. The project aims to contribute to ecological restoration of Degraded Forests, create new red sander plantation resource, restore endangered wild sandalwood species, increase afforestation of Mangrove Ecosystems, improve fire protection and prevention measures, restore habitats affected by Invasive Species among other objectives.

The project which commenced in 2022-23, is now in its third year of implementation with an outlay of Rs.149.30 crore in the financial year 2024-25.

7.2.1 Restoration of Degraded Forest Landscape

Reforestation works are being carried out over 31,060 Ha of Degraded Forests in 33 Districts for restoration and recover of Forest Ecosystems. Over 31,06,000 seedlings have been planted and maintained under this initiative in an effort to increase the Forest Cover in this state.

7.2.2 Development of Red Sander Plantation and Conservation of Mangrove & Sandalwood Ecosystem

Red Sander plantations have been created and maintained across 600 Ha to augment the Red Sander reserves of the State and restore degraded forest areas in Karur, Vellore, Dharmapuri, Krishnagiri, Tiruvallur & Chengalpattu districts during 2023-24 Plantation maintenance activities are under progress.

In the Eastern Ghats, in-situ protection and cultural operations to augment the growth of natural sandalwood population have been carried

out to an extent of 304 Ha in Villupuram, Erode, Tiruppur, Vellore, Tirupattur, Dharmapuri, Krishnagiri, Salem & Namakkal districts to support its recovery.

Restoration of Mangrove works have been carried out over 806 Ha in Nagapattinam, Thoothukudi, Thanjavur, Tiruvarur & Cuddalore districts during 2022-23 with plantation maintenance activities are under progress to restore native mangrove ecosystems.

7.2.3 Soil & Moisture Conservation Activities

668 Check Dams & 327 Percolation Ponds have been maintained while 210 Check Dams and 195 Percolation ponds have been newly constructed in the Reserved Forest Areas to improve Soil and Moisture Conservation during 2022-23.

7.2.4 Formation and Maintenance of Tissue Culture Lab

To promote the conservation of endangered species, facilitate large-scale production of genetically superior seedlings of commercially important trees in Agroforestry and support various afforestation programs, the tissue culture lab at the State Forest Research Institute, Kolapakkam has been maintained and two new tissue culture labs are being established in Madurai and Coimbatore during 2024-25.

7.2.5 Forest Fire Protection and Disaster Management Activities

2,470 Kms of Fireline have been created and 3,797 Kms of Fireline have been maintained so far. As part of infrastructure development to combat Fire events, 45 Fire Watch Towers, 45 Anti-Poaching Centres and 45 Field Staff Dormitories have been established.

30 water tankers and 30 vehicles for transporting of staff & material have been procured till date to mitigate Forest Fire.

A State Forest Fire Control Centre at the Headquarters and 34 District Forest Fire Control Centres have been set up to ensure swift information flow and effective coordination for Forest Fire management for intense patrolling. Restoration activities have been undertaken over 1,325 Ha in the invasive alien species removed areas.

7.3 Green Tamil Nadu Mission

The Government of Tamil Nadu launched the Green Tamil Nadu Mission vide in its order G.O.Ms.No.126, Environment, Climate Change and Forests (FR-6) Department, dated 09.12.2021 with the objective of increasing the tree and forest cover from 23.71 % of the total geographical area of the state to 33 % in 10 years.

The mission focuses mainly on improving biodiversity, forest productivity, trees on farmlands, urban and peri-urban landscapes, empowering local communities through green jobs besides augmenting the income of farmers.

The uniqueness of the Green Tamil Nadu Mission lies in the geo referencing / geo tagging of the planted land parcels for uploading of such land parcels on the web portal of the Green Tamil Nadu Mission for the purpose of accountability and transparency.

A dedicated web-portal www.greentnmission.com has been created for encouraging the multi-stakeholder's participation in the greening activities under the Mission and so far 7000 volunteers, 175 Trusts, 170 Non - Government Organizations, 28,381 public users have been enrolled through the web-portal to join hands with the Mission, to make the Mission a people's movement.

A toll-free tree helpline number 1800-599-7634 has also been installed to address the requests and grievances of the public.

The “TN Forest e – nursery web portal” is launched to enable the public to get the information on availability of seedlings in the nurseries across the state.

The “dial a tree” facility was launched for online purchase of seedlings and door delivery through delivery partners. This facility is available within Chennai city as of now. The scope is being expanded in other cities in phased manner.

Quality seedlings are being raised in 1205 nurseries in all 38 districts. A total of 10.86 crore seedlings have been planted in last three years covering an extent of about 1.73 lakh ha with active engagement of multiple agencies, organizations Government / Non-Government, individuals, farmers, local bodies, Joint Forest

Management Committees, Women Self Help Groups, private institutions / agencies, academia, business houses, school and college students, youth organizations and media house. The said activity generated green jobs to an extent of 9.26 lakh man days.

Convergence of activities of Green Tamil Nadu mission through Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

The Green Tamil Nadu Mission being a flagship scheme of the Government of Tamil Nadu aims to become a people's Mission. Accordingly, the Government of Tamil Nadu has brought the convergence of Green Tamil Nadu Mission with MGNREGA through G.O.Ms.No.153, Rural Development and Panchayat Raj Department, dated 03.10.2024.

Under this initiative, raising, planting and maintenance of seedlings will be carried out through Mahatma Gandhi National Rural

Employment Guarantee Act (MGNREGA) by involving local communities. This would ensure the seamless implementation of the Green Tamil Nadu Mission at the panchayat level on the sustainable basis thereby expanding its reach to rural areas.

The converged approach will not only promote environmental sustainability by increasing the green cover but will also create significant green employment opportunities for rural communities, thereby enhancing their livelihoods.

During the year 2024-25, 33.23 lakh seedlings are being raised in 310 nurseries owned by Forest and Rural Development and Panachayat Raj department in 36 districts through MGNREGA.

Rastriya Krishi Vikasa Yojana (RKVY)

14.5 lakh seedling are raised during the year 2024-25 under Rastriya Krishi Vikasa Yojana

as part of Submission of Agro Forestry Scheme. These seedlings are handed over to Department of Agriculture, Farmers Welfare Department for subsequent planting in farm lands.

Creation of Maragatha Pooncholai

The scheme of “Creation of Maragatha Pooncholai (Village woodlots) in 100 Villages” was announced by the Honourable Forest Minister during 2022-23 in the Legislative Assembly at a total outlay of Rs.25 crore vide G.O.(Ms).No.146, Environment, Climate Change and Forest (FR-6) Department Dated 24.08.2022 with the objectives of reducing the dependency of the local community on forest by meeting the local requirement of timber, fuel wood and fodder etc. through village woodlots.

The State Government sanctioned 45 Maragatha Pooncholai under Phase-1 and 38 Maragatha Pooncholai under Phase–2,

respectively. As of now, 75 Maragatha Pooncholai have been inaugurated by the Honourable Chief Minister of Tamil Nadu on 14.08.2024 across 29 districts of Tamil Nadu. Further, works are nearing completion in 8 Maragatha Pooncholai. Funds have been allocated for creation of another 13 Maragatha Pooncholai.

Each Maragatha Pooncholai has been created over an area of 1 hectare with facilities such as fencing, gate with entrance arch, semi-permanent visitors shed, walking pathways, borewell, park benches and other basic amenities. A total of 51,875 native seedlings of timber, fuel wood, fruiting and fodder species have been planted in 83 Maragatha Pooncholai. Further, the State Government has sanctioned 17 balance Maragatha Pooncholai on 6.3.2025. The works are under progress.

Rehabilitation of Coastal habitat through formation of bio shield

As a coastal state with a 1,076 km coastline, Tamil Nadu faces significant vulnerabilities to cyclonic storms and climate change. To address these challenges, the Government has implemented the Rehabilitation of Coastal Habitats and Bio-Shield Formation project with an outlay of Rs.25 crore for 3 years (2023-24 to 2025-26). This initiative focuses on enhancing coastal security and biodiversity through community participation.

Achievements (2023-24 to 2024-25):

i. 650 ha degraded mangrove area is restored and 310 ha of new mangrove plantation established in 12 coastal districts by planting 8.3 lakh mangrove and its associates saplings.

ii. The bio shield to an extent of 288 hectares is also formed by planting of casuarina, cashew and palmyra species.

Planting using the fund provided by National High way Authority of India (NHAI)

4.29 lakh taller seedlings are planted during 2024-25 on the right of ways along the National Highways using the fund from National Highway Authorities of India.

Establishment of Hi -tech Nurseries

To further enhance green initiatives, the Government is establishing five hi-tech nurseries under the Modernization of Forest Force scheme with an investment of Rs.7.5 crore over two years. The Nurseries are being developed in Chennai, Perambalur, Krishnagiri, Cuddolore and Theni districts. These nurseries will focus on producing high-quality planting materials to support afforestation and biodiversity projects across the State.

7.4 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 and 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. In the year 2024, the Government have accorded administrative sanction for an amount of Rs.26.60 crore for a period from 2024 - 2025 to 2026 – 2027.

The mission intends to take up the following interventions / activities,

i. Identify and map 100 wetlands in the State of Tamil Nadu.

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.

7.4.1. Drone based LIDAR and bathymetric survey of Ramsar sites

The Drone based LIDAR and bathymetric survey of the Pallikaranai Marshland was carried out by the Tamil Nadu Unmanned Aerial Vehicles Corporation (TNUAV) at a cost of Rs.44.17 lakh. The said study has provided the internal characterization of the marshland and has indicated the presence of 74,168 m^3 of sludge at five locations of the Pallikaranai Marshland. Further, for 60 points the National Centre for Sustainable Coastal Management (NCSCM), Chennai is undertaking the bathymetric survey in order to estimate the total volume of sludge for its removal by the Water Resources Department (WRD) as a flood mitigation measure.

7.4.2. Ramsar sites in the State of Tamil Nadu

The total number of Ramsar sites in the State of Tamil Nadu has gone upto 20 with the addition of Sakkarakottai and Therthangal Bird

Sanctuaries, Ramanathapuram District to the list of Wetlands of international significance. With addition of these 2 new Ramsar sites making the State of Tamil Nadu, a leading State in the country in terms of the number of Ramsar Sites.

Out of 20 Ramsar Sites, Integrated Management Plan for 13 Ramsar sites and Pulicat Lake Bird Sanctuary have been prepared by the Salim Ali Centre for Ornithology and Natural History (SACON), Coimbatore. The Integrated Management Planning shall guide the ecological restoration of Ramsar sites and other wetlands with focus on livelihood by ensuring ecological, hydrological, edaphic and biodiversity conservation to improve the ecosystem services and livelihood options of the local communities.

7.4.3 Integrated Development of Wetlands

The Hon'ble Minister for Forest made announcements during the budget session for the financial year 2023-2024 for Integrated

Development of the following Ramsar sites and wetland at the costs of Rs.20.00 crore.

An amount of Rs.4.54 crore has been transferred to concerned District Forest Officer for the Integrated Development of 3 Ramsar sites and one Bird sanctuary in the current financial year and the balance amount of Rs.15.46 crore shall be provided in the financial year 2025 – 2026.

7.4.4 Creation of Mangrove Conservation Centre at Pichavaram, Cuddalore District.

The Pichavaram mangrove forest is a rare biological site and is one of the largest mangrove forests in the Country. The wetland has been designated as Ramsar site in the year 2022 by the Ramsar Secretariat, Geneva, Switzerland. In order to sensitize the people towards the conservation and protection of mangroves, the Detailed Project Report (DPR) for creation of “State of Art Mangrove Conservation Centre” at

Pichavaram, Cuddalore District at a cost of Rs.24.44 lakh has been finalized. The Detailed Project Report for Mangrove Conservation Centre at Pichavaram, Cuddalore District has been prepared for an estimated amount of Rs.50.00 crore for undertaking the works under the world bank aided TN-SHORE project.

7.4.5 Preparation of wetlands ecosystem health cards

For the first time full-fledged condition assessment of the 65 wetlands comprising of hydrological, biological, ecological, GHG profile has been undertaken by the Centre for Environmental Studies, Anna University, Chennai at a cost of Rs.44.09 lakh. This report shall be a baseline report for assessing the future changes in the hydrological, edaphic and ecological parameters of the wetlands.

7.4.6 Restoration of degraded coastal wetlands focusing on seagrass meadows in Gulf of Mannar, Tamil Nadu

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. Seagrasses sequester blue carbon and act as important carbon sinks. Seagrass 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.

The Tamil Nadu Wetland Mission, in collaboration with the Suganthi Devadason Marine Research Institute (SDMRI) in Tuticorin, has successfully restored one acre of degraded seagrass meadows (with 50% transplantation) in

the Gulf of Mannar Marine Biosphere Reserve, near Koswari Island at the cost of Rs.95.54 Lakh.

7.4.7. Ground truthing of the wetlands

Based on data provided by Water Resources Department, Rural Development and Panchayat Raj Department, Town Panchayat and Directorate of Survey and Settlement, TNGIS and others, the ground truthing has been completed for 23097 wetlands based on the shapefiles mentioned in National Wetlands Inventory Assessment Report, 2011 & 2021, of the Ministry of Environment, Forest and Climate Change, Government of India.

7.4.8 Community based ecological restoration through wetland Mitras

Duly recognizing the role of the local communities in the protection conservation and management of wetlands ecological restoration by way of clearing of solid waste and invasive species in and around wetlands through people's participation has been initiated under the Tamil Nadu Wetlands Mission.

About 6949 Wetland Mitras have registered in the web portal of the Tamil Nadu State Wetland Authority and provision for downloading the certificate of appreciation has also been made in the web portal of Tamil Nadu State Wetland Authority (tnswa.org). The provision for uploading the cleanup activities undertaken by Wetland Mitras has been created in the said portal and restoration activities undertaken in 79 wetlands has been uploaded in the web portal.

The voluntary participation of the Wetland Mithras (Iranila Nanbargal) shall be extremely vital for preventing the degradation of existing wetlands for improving the water quality and quantity in the water bodies / wetlands.

7.4.9 Awareness generation activities and involvement of local communities

On the occasion of Word Wetlands Day i.e., on 2nd February 2025, various activities such as cultural programmes, exhibitions, painting competition, slogan contest, essay writing

competition, awareness rallies & nature walks, cleanup drive in wetlands involving students from schools and colleges, public, and Wetland Mithras (Iranila Nanbargal) were conducted for creating widespread awareness on the importance of wetlands and its role in water and climate security.

7.5 Tamil Nadu Coastal Restoration Mission - Tamil Nadu Sustainably Harnessing Ocean Resources and Blue Economy

The "Tamil Nadu Sustainably Harnessing Ocean Resources and Blue Economy (TN-SHORE)" project aims to enhance the resilience and sustainable utilization of coastal resources through a multi-pronged approach.

It envisions a holistic integration of various sectors to drive a resilient and circular blue economy, enhance local livelihoods, and capacities for a greener future. This project is developed to balance ecological, socio-economic, and infrastructural needs, ensuring that the

benefits of coastal development are sustained while mitigating risks from natural and human-induced hazards.

The TN SHORE Project's strategic vision encompasses the dual goals of enhancing community resilience and promoting sustainable economic growth along Tamil Nadu's extensive coastline.

The estimated cost of the project is Rs.1675 crore (World Bank assistance - Rs.1172.5 crore (+) Tamil Nadu State Component Rs.502.5 crore) including the State share with activities spread over Financial Years 2024-2029.

To achieve the objectives of the mission, the activities of the mission are categorized under 5 important components with specialized activities as follows: -

(i) Enhance Coastal Biodiversity

This component focuses on strengthening institutional capabilities for comprehensive

Conservation of Coastal and Marine Biodiversity. Key activities include; -

- Biodiversity Conservation Park at Kadambur, Chengalpattu District
- Sea Turtle Conservation Centre at Chennai and Nagapattinam
- International Dugong Conservation Centre at Manora, Thanjavur District
- International Bird Centre at Marakkanm, Villupuram District.
- Pallikaranai Wetland Conservation Centre at Pallikaranai, Chennai
- Coastal Wetlands: Conservation and Restoration

(ii) Coastal Protection

This component focuses on establishing a comprehensive coastal protection strategy, with a strong emphasis on the pivotal role of adopting an Ecosystem-based Approach (EbA) and promoting the development of green infrastructure (living shorelines).

The strategic implementation of initiatives within this framework encompasses mangrove

and sea grass plantation and restoration, coral reef restoration, all directed to effectively mitigate erosion concerns along the entire coastline.

This initiative will not only enhance ecosystem services but will also create a framework for trading of carbon credits. Key activities under this component will include: -

i. Enhancing Coastal Resilience: Mangroves, Sea grass, and Blue Carbon solutions
ii. Erosion control and Coral Restoration at Kariyachalli Islands, Gulf of Mannar Ramanathapuram.
iii. Wide-scale restoration of degraded sea grass beds and assessment of Blue Carbon potential in Gulf of Mannar, Tamil Nadu.
iv. Strengthening Coastal Management through Integrated Coastal Zonal Management (ICZM), Coastal Management Plan (CMP) for Critically

Vulnerable Coastal Areas (CVCA), Integrated Management Plan (IMP) and Valuing Ecosystem Services with Capacity Building and Outreach Initiatives.

(iii) Improving livelihoods

This component centers around enhancing livelihoods by endorsing initiatives that promote alternative and sustainable means of living for coastal communities. These initiatives encompass strategic investments in the establishment of blue flag beaches, eco-tourism centers, preservation of heritage sites and creation of mangrove boardwalk etc. Key activities within this component involve:

1. Blue Flag Beaches
2. Sustainable Tourism
3. Diversified livelihoods alternatives to the coastal communities for a thriving Blue Economy

(iv) Pollution Abatement

This component is meant for Pollution Abatement, with a primary focus on the management and reduction of plastic waste in coastal and marine environment. The approach emphasizes the promotion of plastic circularity through an ecosystem-centered strategy. Key activities within this component involve:

1. Identification of plastic waste hotspots including identifying and installing plastics capture booms in areas characterized by high levels of plastic waste pollution along the river and coastal ecosystems. Implementation of awareness and incentive programs for communities, to effectively manage discarded plastic and Abandoned, Lost and Discarded Fishing Gears (ALDFG).

2. River System Investments: Undertaking strategic initiatives to prevent and combat marine pollution by investing in river systems. This encompasses the enhancement and establishment

of Material Collection Facilities (MCF) and Material Recycling Facilities (MRF) to facilitate proper segregation and storage of plastic waste.

3. Digital Waste Exchange Platform: Development of a digital waste exchange platform aimed at connecting collection facilities. This platform will promote the up cycling and reuse of collected materials while exploring alternative solutions for effective plastic waste management.

4. Climate Smart Resilient Villages: Facilitating development of climate- smart coastal villages involve implementing a comprehensive strategy that integrates sustainable practices to mitigate the impact of climate change.

5. The integration of renewable energy sources, such as solar and wind, further positions these coastal villages as model for environmentally conscious living. Key activities include:

i. Advancing Meendum Manjappai- Strengthening Plastic Circularity

ii. Climate Smart Coastal Villages

iii. Ennore Creek Restoration

(v) Project Management

This segment will address the operational needs of the project. This involves engagement of consultancy technical and management services, analytical studies, and administrative matters. This system aims to track ecosystem health effectively. A third-party evaluation will be conducted to ensure accountability and transparency. The project execution and management cost are 5% of the total project cost.

8. Forest Research

Forest Research & Forest Education wing is over 100-year-old Institution with a rich history and several achievements to the credit of many officers and staff who have served therein in various capacities.

8.1 Forest Research Wing

Forestry Research in Tamil Nadu Started way back in 1918 when Government of Madras in their order Mis. No. 2503, Revenue dated 2nd July 1918, sanctioned a post of the State Silviculturist, Madras and Mr. D. T. Barry who was appointed to the post of Conservator of Forests on 16.08.1919. The first Annual Research Report was published in 1919-1920. Subsequently, the Research Circle at Chennai was constituted before India's independence in 1947. Research Wing celebrated 100th Year of Forest Research on 16.08.2018.

Forest research in Tamil Nadu encompasses a wide range of studies and investigations aimed at understanding forest ecosystems, biodiversity, conservation, management practices, and socioeconomic aspects related to forests. 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 headquarters at Chennai, Dharmapuri, Coimbatore, Trichy and Madurai and 52 Research centres 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 Areas (SPA) and Seed Stands (SS) have been established and are being maintained. More than 1,000 Candidate Plus Trees (CPT) have been identified and quality seeds are being collected from them.

Compendium of research activities was published with useful results on three important topics viz. (i) Research on Problem soils and pollution (ii) Research on bambo and (iii) Forest Utilization. This was also a result of special drive for Analysis of older long pending research works taken up through the various research divisions

and expected to be useful for forest officials as well as others from the general public.

The main objectives of research wing are collection of good quality seeds from selected CPTs as well as Seed Orchards, 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 vermicasting, VAM and distribution, value addition of wood-based utility products and maintenance of Germplasm of endangered flora.

Seed is one of the most important components that plays a vital role in any Tree Improvement or Afforestation Programme. Seed Storage ranges have Seed Testing Laboratories to analyse the quality of the seeds. Apart from the regular Sample tests, the center has standardized Seed Protocols for over 100 species. Seed

Calendar for the collection of seeds for 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. To increase availability of high-quality planting material of economically important tree species for afforestation and reforestation of degraded forests and taking 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. Propagation for economically important and fast-growing species like Teak, Sandalwood, Silver oak, *Melia dubia,*

Ailanthus excelsa, Eucalyptus, Casuarina etc. has been standardized.

In 2022-23 many new fields of research were undertaken based on requirement. By generating scientific knowledge, evidence-based recommendations, and innovative solutions, forest research in Tamil Nadu contributes to informed decision-making, policy formulation, and sustainable management of forest resources for the benefit of present and future generations.

The research work during 2023-24 continued to focus on biodiversity conservation specifically those in threatened category with assemblages established for grass species, pteridophytes, etc., carbon sequestration, improved live fence model to counter negative human-wildlife interactions, environmental amelioration, agro-forestry and so on. Studies on carbon sequestration were started by Research

wing of Tamil Nadu Forest Department for the first time in March 2023.

8.2 Forest Education Wing

Tamil Nadu Forest Academy (TNFA) was started by the then Government of Madras Presidency as the Madras Forest College in the year 1912. F. A. Lodge, Conservator of Forests in Coimbatore, was responsible for the establishment of this college at Coimbatore. The year 2012 marks the Centenary of the TNFA. The academy has a grand history and fame for having trained more than 8,000 Forest Range Officers from various States and Countries.

The Tamil Nadu Forestry Training College, Vaigai Dam is under the control of TNFA and it was started during 1961 as an Integrated Forestry Training School to train Foresters and Forest Guards. It was upgraded in 1987 as Tamil Nadu Forestry College and was renamed in 2005 as Tamil Nadu Forestry Training College.

9. Forest Institutions

9.1 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 with a top score in India's First Management Effectiveness Evaluations for the zoo conducted during the year 2022. The Park presently exhibits 1653 wild animals, which include 43 species of mammals, 61 species of birds and 34 species of reptiles in all numbering 138 species. It has emerged as a successful ex-situ conservation and captive breeding centre 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 a participating zoo for Bengal Tigers, Indian Gaur, Indian giant squirrel and wild dogs.

In 2024-2025, the park established a 180 KW solar power plant, which enhances the sustainability practices in the zoo by reducing its carbon footprint. The park has also inaugurated a state-of-the-art 7D theatre built with cutting-edge technology, featuring a seating capacity of 32. This will provide an engaging and interactive experience for visitors. The zoo has developed infrastructure to ensure the free and comfortable movement of differently-abled individuals, including the creation of ramps, pathways, accessible facilities at drinking points, toilets, and cloakrooms.

The 24x7 animal live-streaming of 15 zoo animal species received an overwhelming

response from people. The Zoo has strengthened its protection through installing 306 CCTV cameras all around the park.

AAZP Zoo school runs various educational programmes such as Zoo Outreach for distant schools & colleges, zoo orientation, zoo explorer programme for visiting schools, Zoo Ambassador programme, Species ambassador, 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.

In 2024-2025, the Zoo School launched a training program for zoo staff in partnership with international zoos. The first program was held in collaboration with Mandai Wildlife Group, Singapore. The National Capacity Building Workshop for Zoo veterinarian was hosted at

AAZP under the theme “Advanced Diagnostics, Critical care and clinical procedures in wildlife medicine” 30 veterinarians from 30 zoos participated in the workshop.

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

9.2 Advanced Institute for Wildlife Conservation (AIWC)

The Advanced Institute for Wildlife Conservation (AIWC), a unique establishment by the Tamil Nadu Government, is committed to infusing scientific knowledge into wildlife conservation and law enforcement. With an initial outlay of Rs.14.13 crore, this initiative aimed to

bolster wildlife conservation efforts in the state. The institute houses four functional Centres, namely the Centre for Wildlife Forensic Sciences (CWFS), Centre for Animal Care Sciences (CACS), Centre for Conservation Education (CCE), and 'Centre for Conservation Ecology' An International-standard Hostel facility has been added at the institute campus, costing Rs.7.65 crore. AIWC has become the first institution from southern India to be officially recognised as a 'Government scientific expert' under the Bharatiya Nagarik Suraksha Sanhita (BNSS). The Government approved AIWC (R,T&E) as a 'Society of AIWC' to be registered under the Tamil Nadu Societies Registration Act, 1975.

Basic wildlife forensic analysis and research are conducted in two labs of CWFS: i) the Morphometry Lab and ii) DNA and Scat DNA laboratories.

The institute conducts works on

i. DNA sequencing

ii. identification of the sex of animal samples

iii. Creating a genetic reference database for animal species of Tamil Nadu

iv. Developing the reference repository of wildlife articles to aid species identification

v. The Centre for Animal Care Sciences conducts clinical pathology analysis.

vi. The microbiology lab is involved in detecting pathogens in animal tissue samples.

The Centre for Conservation Education (CCE) has conducted internship programmes and trained college students of varied disciplines, imparted training programmes to forest officials, biologists, Veterinary Assistant Surgeons, Field Biologists, Foresters, Sub-Inspectors of Police, Deputy Superintendent of Police, Fisheries Inspectors and Forensic Department officials,

The institute conducts certificate course for Forest Range Officers and other field staff.

24 research projects funded under APO, TANII and TBGPCCR schemes were completed in 2023-24. The 4th 'Annual Research Conference' was organized by AIWC on 13th and 14th February 2024.

Under the capacity building programme, 25 in-house research personnel participated in various workshops, training programmes and online courses such as molecular techniques, bioinformatics, laboratory animal handling and management, taxidermy workshop and field ornithology & bird migration studies.

A 25 KWP solar power plant has been installed on the top roof of the building. The solar power plant fulfils nearly 23% of the institute's total electricity needs. The institute has also installed an automatic weather station. It provides continuous data on 8 weather parameters.

9.3 Tamil Nadu Forest and Wildlife Crime Control Bureau (TNFWCCB)

Based on the Announcement made by Hon'ble Minister for Forest in 2021 the Tamil Nadu Forest and Wildlife Crime Control Bureau was established to detect and prevent organized crimes. Accordingly, the Government accorded administrative approval for the establishment of the Tamil Nadu Forest and Wildlife Crime Control Bureau with Headquarters at Chennai and four zonal offices at Chennai, Coimbatore, Madurai and Ramanathapuram.

Subsequently, the Tamil Nadu Forest and Wildlife Crime Control Bureau was launched by Hon'ble Chief Minister of Tamil Nadu on 08.08.2023. The Bureau is headed by a Director with four Zones and nine Forest Stations with a strength of 100 staff.

The Bureau has made tremendous efforts in curbing Forest and Wildlife Offences throughout the State by effectively implementing the Wildlife

Protection Act 1972 (Amended 2022) and various acts related to protection and conservation of Forests and Wildlife. 474 cases have been booked up to December 2024 by the Bureau in various districts of the State which include Illegal trading of Tiger body parts, Elephant tusk & ivory articles, Marine Shells, Pangolin scales, Sea cucumber, Alexandrine Parakeets, Mongoose brushes etc.

9.4 Gulf of Mannar Biosphere Reserve Trust (GOMBRT):

The Gulf of Mannar is located on the south eastern coast of India, which is a unique marine entity 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 the 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. During 2024-25, Rs.2.67 crore was released.

10. Statutory Bodies

10.1 Tamil Nadu 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 with 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 in 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 Section 41 of the BDA, 2002 as amended by the Biological Diversity (Amendment) Act, 2023. BMCs are expected to facilitate community-driven biodiversity conservation and management. In Tamil Nadu, 13,614 BMCs have been constituted and are continuously assessed for identifying the impacts made by them in the implementation of BDA 2002.

As per the Rule 21(1) of the Tamil Nadu Biological Diversity Rules, 2017, 13614 Peoples' Biodiversity Registers (PBRs) have been prepared and some of them are being updated and

revalidated. TNBB is engaging local domain experts to assist the Biodiversity Management Committees for improving bio-resource conservation, sustainable use, cultivation of medicinal plants, and other income generating crops. Market linkages are being streamlined. The Tamil Nadu Biodiversity Board now digitizing the existing People's Biodiversity Register (PBR) into electronic PBR (e-PBR) in the e-PBR application (BIOMIS) portal. Efforts are underway to create a proper connect of the PBRs with the BMCs/communities and the industries so as to create market linkage and reap benefits out of sustainable utilization of biological resources. Out of 13,614 BMCs, General Details of 13,243 BMCs, Member details of 9,750 BMCs and Local Biodiversity Fund (BMC account details) details of 6 districts has been uploaded in the BIOMIS portal so far.

Tamil Nadu Biodiversity Board has prepared a project entitled, "Tamil Nadu Biodiversity Board

Strengthening and Restructuring Project 2022-25" over an outlay of Rs.8.8 crore for three years and has been prepared. The Board also received a grant from NBA an amount of Rs.72 lakh as start-up funds for 90 Model Block Level BMCs and an amount of Rs.25 lakh under preparation of People's Biodiversity Registers (PBRs) in Tamil Nadu under the Special Component plan for Scheduled Caste.

In exercise of the powers conferred under Section 37(1) of the Biological Diversity Act, 2002, the State Government in consultation with the local bodies may notify areas of biodiversity importance (wild or cultivated/domesticated) as "Biodiversity Heritage Sites" under this Act.

In this regard to strengthen biodiversity conservation and to protect the Arittapatti village from rapid loss of biodiversity the Tamil Nadu Government on the recommendation of Tamil Nadu Biodiversity Board declared the Arittapatti Biodiversity Heritage Site. It is the first

BHS notified by the Government in Tamil Nadu State. The Board under Section 37 of the Biodiversity Act, 2002, together with Tamil Nadu Biological Diversity Rules, 2017 is considering sacred groves which are noteworthy for their significance, distinctiveness and biodiversity to be notified as Biodiversity Heritage Sites.

Tamil Nadu Biodiversity Board has also realized amounts of Rs.2.01 crore as the amount for Access and Benefit sharing under sections 3,4,6,7 and 24 of the BDA 2002. Out of this amount, Rs.53.42 lakh has been disbursed to the beneficiaries.

10.2 Zoo Authority of Tamil Nadu

The 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.

i. Regulation and Licensing: ZAT is responsible for regulating and licensing zoos operating within Tamil Nadu. It ensures that zoos comply with statutory requirements, standards, and guidelines established by the Central Zoo Authority for housing, care, and management of animals in captivity.

ii. Inspections and Monitoring: The authority conducts regular inspections and monitoring of zoos to assess their compliance with animal welfare standards, safety regulations, and hygiene protocols. It evaluates the conditions of zoo facilities, enclosures, veterinary care, and visitor amenities to ensure the well-being of animals and the safety of visitors.

iii. Development and Modernization: ZAT promotes the development and modernization of zoos in Tamil Nadu to enhance their infrastructure, facilities, and visitor experience. It provides financial assistance, technical guidance, and capacity-building support to zoos for infrastructure upgrades, exhibit redesign, and adoption of best practices in animal management.

iv. Animal Exchange and Breeding Programs: The authority facilitates the exchange of animals between zoos for breeding and conservation purposes, in coordination with national and international breeding programs. It may approve animal transfers, loan agreements, and cooperative breeding initiatives to maintain genetically viable populations and prevent inbreeding in captive populations.

v. Conservation Education and Awareness: ZAT promotes conservation education and public awareness about wildlife, biodiversity conservation, and the role of zoos in wildlife conservation efforts. It encourages zoos to develop educational programs, interpretive displays, and outreach activities to engage visitors and foster appreciation for wildlife conservation.

vi. Emergency Response and Disaster Management: The authority coordinates emergency response and disaster management efforts in zoos during natural disasters, disease outbreaks, or other emergencies. It provides technical support, resources, and guidance to zoos for emergency preparedness, evacuation procedures, and crisis management.

vii. Legal Compliance and Enforcement: ZAT ensures that zoos comply with relevant

laws, rules, and regulations governing wildlife protection, animal welfare, and zoo management. It takes enforcement actions, issue penalties, or revoke licenses of zoos found to be violating statutory requirements or operating standards.

viii. Research and Conservation Projects: The authority supports research initiatives and conservation projects conducted by zoos in collaboration with scientific institutions, conservation organizations, and government agencies. It encourages zoos to participate in ex-situ conservation programs, species recovery projects, and conservation breeding efforts for threatened species.

The Zoo Authority of Tamil Nadu plays a crucial role in promoting the welfare of captive animals, conservation education, and the sustainable management of zoos in the state. Through its regulatory functions, capacity-building

initiatives, and conservation partnerships, ZAT contributes to the advancement of wildlife conservation and public awareness in Tamil Nadu.

10.3 Compensatory Afforestation Fund Management and Planning Authority (TN CAMPA)

The 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.

The 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. The 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.

10.4 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. The standing committee of the state board of wildlife has been formed in the year 2024.

10.5. Tamil Nadu State Wetland Authority

As per the Wetlands (Conservation & Management) Rules 2017, the Government of Tamil Nadu has constituted the “Tamil Nadu State Wetland Authority (TNSWA)” vide G.O.(Ms).No.148, Environment and Forests Department, dated 26.11.2018.

With Hon’ble Minister (Forests) acting as chairperson and Chief Secretary to Government as vice-Chairperson, the authority comprises Principal Chief Conservator of Forests and Chief Wildlife Warden, Additional Chief secretaries / Principal Secretary / Secretary to Government of various departments such as Environment and Forests Department, Rural Development and

Panchayat Raj Department, Public Works Department, Animal Husbandry, Dairying and Fisheries Department, Revenue and Disaster Management Department & etc., as ex-officio members.

Further, to aid the Tamil Nadu State Wetland Authorities on matters relating to conservation, management, protection and implementation of Wetland (Conservation and Management) Rules 2017 and to ensure collaboration and cooperation of various Departments for the successful management of the Wetlands at the District level, the District Level Wetland Management Committee was reconstituted vide G.O.(Ms).No.132, Environment and Forests Department, dated 13.11.2019.

The functions of the authority include the following -

i. Prepare a comprehensive list of wetlands in the State.

ii. Prepare a list of wetlands to be notified under Wetland (Conservation and Management) Rules, 2017.

iii. Recommend identified wetlands for regulation based on their brief documents

iv. Prepare digital inventory of all wetlands and uploading them.

v. Develop comprehensive list of activities to be regulated and permitted within notified wetlands

vi. Recommend additions to the list of prohibited activities

vii. Define strategies for conservation and wise use of wetlands

viii. Review integrated management plan for each of the notified wetlands

ix. In cases where lands within boundary of notified wetlands or wetlands complex have private tenancy rights, recommend mechanisms for maintenance of

ecological character through promotional activities.

x. Identify mechanisms for convergence of implementation of the management plan

xi. Ensure enforcement of Wetland (Conservation & Management) Rules 2017.

xii. Coordinate the implementation of integrated management plans

xiii. Function as nodal authority for all wetland specific authorities within the State

xiv. Issue necessary directions for conservation and sustainable management of wetlands to the respective implementing agencies

xv. Create awareness among local community about the importance of wetlands.

xvi. Advise on any other matter suo-motu, or as referred by the State Government.

10.6 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.

11. FOREST CORPORATIONS

11.1 Tamil Nadu Forest Plantation Corporation Limited

Tamil Nadu Forest Plantation Corporation Limited (TAFCORN) was established on 13th June 1974 with headquarters at Trichy. The authorized

share capital of the Company is Rs.10 crore and paid-up capital is Rs.5.64 crore as on date.

Objectives:

1. To raise, maintain and harvest Eucalyptus plantations on sustained yield basis for the production of pulpwood and firewood.

2. To raise and maintain Cashew plantations for production of Cashew nuts.

3. To undertake any other activities as approved in the Articles of Association.

Area of operation:

Reserved Forest Area of 71,539.55 hectare leased out to TAFCORN spreads across Trichy, Pudukottai, Ariyalur, Karur, Sivagangai, Cuddalore, Villupuram, Kallakurichy and Thiruvannamalai Districts of Tamil Nadu.

Activities

1. Eucalyptus:

Eucalyptus is one of the species which yields quality pulpwood for paper and Newsprint. Eucalyptus has been planted over an area of 52,524.28 hectare. Clonal varieties of Eucalyptus are planted extensively depending upon the soil and rainfall. During 2024-25, 20% of anticipated pulpwood quantity was sold through e-tender cum e-auction and remaining was allotted to M/s. Tamil Nadu Newsprint and Papers Limited and M/s. Seshasayee Paper and Boards Limited in the ratio of 70:30. The Corporation supplies about 1,50,000 MT of pulpwood to the above companies.

2. Cashew

TAFCORN has 15,056.27 ha of area under Cashew cultivation. Senile plantations are being replaced with high yielding VRI-III variety.

3) Consultancy:

M/s Ernst & Young LLP limited, Chennai had undertaken Business Analytical study for improving the business and financial performance of Tamil Nadu Forest Plantation Corporation (TAFCORN) on long term sustainable basis and submitted a report.

Action is being taken to implement the recommendations of M/s Ernst & Young LLP limited, as per the action plan submitted to the Government.

4) Initiative for Tribal Development:

TAFCORN is playing an important role in empowering and improving the livelihoods and economic status of the Tribal communities by allotting cashew units to Irular Tribal Societies for the first time in the history of TAFCORN. During 2021-22, one cashew unit was allotted to the Irular Tribal Society of Kuvagam Village at fair price fixed. The Irular Tribal Society had earned a

revenue of Rs.9.02 lakh with a net profit of Rs.3.50 lakh.

During 2022-23, 10 units were allotted to the Irular Tribal Society at fair price of Rs.80.55 lakh. During 2023-24, 15 Cashew units were allotted for Rs.79.08 lakh to the Irular Tribal Society. For the year 2024-25, 15 Cashew units were allotted to Irular Tribal Society.

As a result of this initiative, 80 Number of Tribal families have benefitted and their livelihood and economic status has been improved.

5) Corporate Social Responsibility:

As per the Companies Act 2013, Tamil Nadu Forest Plantation Corporation spends 2 % of the company's average net profit for the preceding three financial years on Corporate Social Responsibility (CSR) activities in each financial year.

In the last two years, the following amount has been spent on Corporate Social Responsibility.

2022-23 - Rs.90.00 lakh

2023-24 - Rs.86.29 lakh

6. Revenue and Expenditure of TAFCORN:-

The revenue and expenditure details of the Corporation for the year 2023-24, Revised Budget Estimate for 2024-25 are as below: -

Year	Revenue (in lakhs of Rs)	Expenditure (in lakhs of Rs)	Profit (in lakhs of Rs)
2023-24	19586.15	13086.42	6496.72
2024-25	17480.25	13584.53	3895.72

11.2 Tamil Nadu Tea Plantation Corporation Limited (TANTEA)

The Government of Tamil Nadu established the “Government Tea Project” in the Nilgiris in 1968 to rehabilitate Sri Lankan repatriates under the Shastri-Srimavo Pact.

TANTEA Corporation was created in 1975. It was registered as a Company under the

Companies Act, 1956 on 22.8.1975 with an authorized share capital of Rs.25 crore and paid-up share capital of Rs.14.96 crore. The Government of Tamil Nadu holds the entire share capital of the Corporation.

Out of the total planted area of 3376.828 ha, harvesting is being carried out over an operational area of 2848.73 ha. There are 8 divisions in TANTEA, viz, Coonoor, Kothagiri, Pandiar, Cherambady, Cherangode, Nelliyalam, Naduvattam & Lawson. The TANTEA operates 6 tea factories in Cherangode, Pandiar, Nelliyalam, Ryan, Tiger Hill and Quinshola.

A. Allotment of houses to the retired workers of Tamil Nadu Tea Plantation Corporation Limited, Coonoor.

Houses have been allotted to 72 retired workers in the Gudalur area by the district administration in the first phase through the Rehabilitation scheme 573 houses are being constructed in Allanchi, Naduhatti and

Cherangodu areas in the Nilgiris for allotment to retired workers. The Government has allocated Rs.1,346 lakh towards beneficiary contribution. So far, consent has been obtained from 76 retired workers for allotment of houses and a beneficiary contribution of Rs.1.67 crore has been provided to the Tamil Nadu Urban Habitat Development Board, Coimbatore.

B. Measures taken to improve quality of made tea

In order to improve quality of made tea, the Government had sanctioned Rs.16.72 crore for modernization of factories which is expected to be completed by March 2025.

A major factor affecting quality of Green Tea Leaves (GTL) and consequent quality of the made tea is delayed plucking rounds due to worker's shortage. Further, as nearly 80% of the pluckers in TANTEA are above 50 years in age, pluckers efficiency is often below the desired optimum level. In order to address this problem, TANTEA

has embarked a major drive towards mechanization of field operations. After conducting field study and market research, TANTEA has procured 1000 battery-operated one-man machine harvesters. The machine harvester handled by workers, is harvesting at a daily plucking average of 70 kg to 150 kg per day, depending on season and field productivity.

M/s Ernst & Young LLP Ltd, Chennai have conducted study on 'Long-term sustainability of TANTEA' The various field, factory and marketing activities are being carried out as per the recommendations suggested in the final report of the above said study.

C. Measures taken to increase the sale of made tea:

Made tea produced by TANTEA is sold through public auction conducted by the Tea Board and by appointing wholesale/retail dealers.

At present TANTEA has 94 Retail Dealers, 12 Wholesale District Dealers.

TANTEA has received an indent for supply of 35 tons of made tea from Tamil Nadu Civil Supplies Corporation for supply of tea packets through Public Distribution System. Action is being pursued to get orders for supply of tea in the State of Karnataka.

It is expected that with the implementation of modernization schemes and improved field management initiatives, TANTEA will register better returns in the coming days.

11.3 Arasu Rubber Corporation

To provide rehabilitation to the Sri Lankan repatriates who are well conversant with rubber cultivation, the Government of Tamil Nadu has started the Government Rubber Plantation in Kanyakumari in the year 1961. In 1984, Arasu Rubber Corporation Limited (ARC) was formed. Presently the Corporation has an authorized

capital of Rs.13.07 crore and the paid-up share capital of Rs.13.07 crore. The present area of operation is 3573.025 ha. The Corporation employs around 1000 workers.

1. Production and Revenue Generated

Sl. No	Particulars	2023-24	2024-25 (Revised Estimate)	2025-26 (Budget Estimate)
a)	Production of Rubber (in M.T)	1481	1331	1250
b)	Income and expenditure (Rs.in lakh)			
	Income	4045.65	2978.81	3794.82
	Expenditure	3723.87	3412.37	3533.55
	Exceptional income	0	3794.04	0
c)	Profit (Rs in lakh)	321.78	3360.48	261.27

2. Future proposals

A rubber tree becomes tappable only after 7 years of plantation and yield gradually reduces after the period age of 35 years. Thereafter, they are felled and sold. To enhance productivity, high-yielding clones such as RRII 430, RRI 105 are being replanted.

3. Total staff strength of Corporation

The total sanctioned strength of officers & staff of ARC is 86. However, the present strength is 70.

4. Total Number of permanent workers in Arasu Rubber Corporation

There are 394 Tappers, 102 Field workers, 37 Factory workers and 17 Supervisors working as permanent workers. Apart from this, employment is also provided to around 300 people on casual basis depending upon the need.

11.4 Tamil Nadu Wilderness Experiences Corporation

Tamil Nadu Wilderness Experiences Corporation (TNWEC) is a State Government enterprise incorporated under the Companies Act, 2013 in the year 2021 for undertaking promotion and development of ecotourism projects across Tamil Nadu.

The Company aims at Multi Stakeholder partnership to develop Ecotourism infrastructure and products tying up with local community and private enterprises to provide a niche experience to the ecotourists.

The State of Tamil Nadu is promoted as ‘Enchanting Tamil Nadu’ owing to its salubrious climate, luxuriant flora and fauna and wide geographic spectrum of coastal to plateau to high mountain ranges.

The thrust lies on imparting Conservation Awareness, enhancing Livelihood opportunities and strengthening conservation of natural and cultural heritage.

The Wilderness Corporation has launched TN-Trek, an innovative initiative to conduct trekking to wilderness areas in identified 40 trekking routes in an organised and systematic manner with provisions for online booking and payments.

12. Special Initiatives and Achievements

12.1 State Bird Authority

Government of Tamil Nadu is a pioneer in conservation of bird species in the country. The State has 17 Bird Sanctuaries out of which 14 are also Ramsar Sites. In order to strengthen the conservation efforts further, Government of Tamil Nadu has constituted a State Bird Authority for conservation of birds vide G.O.(D).No.116, Environment, Climate Change and Forests (FR5) department, dated. 21.06.2023, with the following members:

1	Additional Chief Secretary to Government, ECC&F department	Chairperson
2	Representative of Additional Chief Secretary / Commissioner of Revenue Administration, Disaster Management and Mitigation Department	Member

3	Representative of Principal Secretary / Commissioner of Rural Development and Panchayat Raj (Training) department	Member
4	Principal Chief Conservator of Forests (Head of Forest Force)	Member
5	Engineer in Chief (Water Resources Organization) and Chief Engineer (General), Public Works Department	Member
6	Director, Tamil Nadu Tourism Department Corporation	Member
7	Additional Principal Chief Conservator of Forests (Project Tiger)	Member
8	Additional Principal Chief Conservator of Forests (Wildlife)	Member
9	Principal Chief Conservator of Forests and Chief Wildlife Warden	Member Secretary

The above mentioned Authority is constituted to undertake the following items of work.

1. Undertake preparation of an Integrated Management Plan for all bird sanctuaries with the purpose to improve conditions for nesting of birds and other conservation measures.

2. Map various geographical locations in Tamil Nadu visited by native and migratory birds so as to prepare a plan of action to create new protected areas for birds.

3. Review and undertake restoration of bird sanctuaries with regard to the current habitat and take measures to remove invasives and support plantation of trees for bird nesting.

4. Undertake an assessment of visitors facilities available at each of the bird sanctuaries and review them for their

improvement including bird watching, bird walks, provision of handbooks reading materials and display of information about birds of that area.

5. The Authority shall also look at eco-tourism development with the local communities by training them as guides and building their capacities to act as conservation champions.

The Government of Tamil Nadu is making numerous efforts to protect the state's bird biodiversity. Efforts are being made to identify potential bird visiting areas and important bird areas in Tamil Nadu as bird sanctuaries or Conservation / Community reserves.

12.2 Vulture Conservation

Vultures play an extremely important role as nature's scavengers thereby keeping out environment clean. Their social and ecological significance cannot be underestimated. In order

to conserve vultures a comprehensive action is needed encompassing the need for periodic monitoring of the vulture population, controlling use of several veterinary drugs which are toxic to vultures

Considering its importance, the Government of Tamil Nadu has constituted a State Level Committee for vulture conservation vide G.O.(D).No.237, Environment, Climate Change and Forests (FR.5) Department, Dated. 19.10.2022 with Chief Wildlife Warden as the Chairman, 9 Members and Member Secretary. Accordingly, the 1st and 2nd State Level Committee meeting was held on 25.01.2023 and 27.02.2023 and 3rd State Level Committee meeting held on 02.11.2023.

As part of the conservation, synchronized vulture population estimation is being conducted from 2023 onwards covering the entire vulture landscape extending to adjoining states of Kerala and Karnataka.

Population estimation in protected areas carried during December, 2023 is given below,

Sl. No	Name of the Protected area	No.of vantage points	Number of individuals					
			Whiterumped Vulture	Long billed Vulture	Red headed Vulture	Egyptian Vulture	Himalayan Vulture	Total
1	Mudumalai Tiger Reserve	20	63	9	6	0	0	78
2	Sathyamangalam Tiger Reserve	16	35	25	10	0	0	70
3	Bandipur Tiger Reserve	42	57	3	5	0	0	65
4	BRT Tiger Reserve	18	5	7	2	0	0	14
5	Nagerhole Tiger Reserve	15	26	1	11	0	0	38
6	Wayanad Wildlife Sanctuary	18	31	2	16	0	2	51
7	Nellai Forest Division	10	0	0	0	4	0	4
	Total	139	217	47	50	4	2	320

Vulture population has significantly increased in Tamil Nadu considerably, from 100 to 152 numbers.

In G.O.Ms.No.11, Environment, Climate Change and Forests (FR.5), Department, Dated.

24.01.2024 the Government of Tamil Nadu has sanctioned Rs.19.50 crore to establish the Wildlife Rescue and Rehabilitation Centre in Pethikuttai, near Sirumugai in the Coimbatore district of Tamil Nadu. This facility is designed to provide specialized care for injured, orphaned, and sick wild animals, including elephants, leopards, tigers, ungulates, birds, and reptiles. It will feature modern operation theaters, diagnostic tools, and trained professionals to ensure effective rehabilitation and rewilding of the animals.

12.3 Slender Loris Conservation

The Slender Loris is a small nocturnal mammal listed under Schedule I of the Wildlife Protection Act, 1972. The animal is largely found in the Eastern Ghats of both Dindigul Forest Division in Dindigul District and Karur Division in Karur District. The average head-body length is 18-26 cm (7-10 inches) and weighing about 85-350 gms. and it feeds on insects, bird eggs and small lizards, sometimes on green leaves as

well. Being arboreal, they spend most of their life on the trees. Though their movements are slow, they can climb up fast to the tree top when threatened. Its lifespan is about 10 to 12 years in natural habitat. Grey Slender loris is found in the relatively drier regions of southern India. The vegetation type and altitude determine their occupancy and abundance. Major threats to their existence include habitat loss, hunting for the pet trade, road kills, impact of pesticides used by farmers in agricultural fields and kills made on superstitious belief. Habitat destruction is a serious threat to this species, and the survival of the species depends on the enforcement of strict protection and maintaining habitat health. Grey Slender Loris (*Loris lydekkerianus)* is endemic and unique to Dindigul and Karur Forest Division areas.

To protect this endangered species “Slender Loris Wildlife Sanctuary” is proposed to be formed

in Dindigul and Karur Forest Divisions to an extent of 11806.56 Ha.

12.4 Turtle Conservation

The coastline of Tamil Nadu extends from Pulicat Lake in the north to Cape Comorin in Kanyakumari district in the south. The coastline (1076 km) of the state spreads across 14 coastal districts along the Bay of Bengal, Indian Ocean and Arabian Sea.

Sea turtles play an important role as flagship species for diverse habitats such as coral reef ecosystems, sea grass meadows, open seas and sandy beaches. Sea turtles are key species in marine ecosystem function and help in sustaining biodiversity. The sea turtles help to maintain the equilibrium between rival species.

As part of the turtle conservation, the state has established 60 hatcheries and so far collected 2.74 lakh eggs in 2024-25. Turtle hatchling

numbering 34095 have been released into the ocean so far during the year.

The Tamil Nadu Forest Department, under the Tamil Nadu Sustainably Harnessing Ocean Resource and Blue Economy (TN-SHORE) Project and the Tamil Nadu Coastal Restoration Mission has sanctioned vide G.O.(Ms).No.11, Environment, Climate Change, and Forest (EC.4) Department, dated 10.01.2024, Rs. 60 crores for the establishment of Sea Turtle Conservation Centres in Nagapattinam and Chennai.

In order to prevent the mortality and poaching of turtles surveillance mechanism jointly by the Forest, Fisheries, Coast Guard and Coastal Security group of the Tamil Nadu Police has been instituted and strengthened.

To strengthen conservation measures, a state-level workshop was organized with the active participation of key stakeholders, including the Indian Coast Guard and the Fisheries Department.

To streamline the Turtle egg collection and turtle hatchlings release data of Tamil Nadu forest department, TN Turtle Guardian app is launched. Moreover, TN Turtle Guardian dashboard is launched for the registration of volunteers for the conservation of turtles.

Additionally, fishermen sensitization programs were conducted at 25 locations, such as Ennore, Besant Nagar, Kovalam, Kalpakkam, covering the districts of Chennai, Chengalpattu, and Tiruvallur. These programs engaged fishermen, Sagar Mitras, the Fisheries Department, NGOs, and other relevant stakeholders to reduce turtle mortality.

Joint patrolling, using Tamil Nadu Forest Department-hired boats, is conducted in collaboration with the Fisheries Department, Indian Coast Guard, and Coastal Security Group along the Chennai and Chengalpattu coasts, resulting in 73 charge sheets have been filed to date.

A Nodal Task Force, headed by the Principal Chief Conservator of Forests and Chief Wildlife Warden, has conducted several meetings to enhance coordination among government departments, fishermen's organizations, and NGOs.

To improve protection strategies, data on turtle nesting sites is shared with the Fisheries Department, Coastal Security Group, and Indian Coast Guard for better enforcement planning.

Additionally, the Indian Coast Guard has deployed high-resolution camera surveillance to monitor trawlers along the Chennai coast, with real-time updates shared in the Nodal Task Force WhatsApp group for swift action.

Furthermore, an orientation workshop was held on February 5th, 2025 at AIWC for veterinarians from the Department of Animal Husbandry, NGOs, Forest officials, and Vandalur Zoo personnel to enhance their capacity in

conducting post-mortems and necropsies of dead turtles.

These multi-pronged efforts highlight Tamil Nadu's commitment to sea turtle conservation through scientific research, enforcement, stakeholder engagement, and habitat protection, ensuring the long-term survival of these vital marine species.

12.5 Dugong Conservation

Sea Cow is an endangered marine mammal. It is found in the Gulf of Mannar and the Palk Bay. The species is facing extinction due to sea pollution and loss of seagrass beds in oceans.

In order to protect this endangered species "A Dugong Marine Conservation Reserve" has been established vide G.O.No.165, Environment, Climate Change and Forests (FR.5) Department, dated 21-09-2022., covering an extent of 448.34 sq.km in Palk bay.

Further the Government have sanctioned a sum of Rs.25.00 lakh vide G.O.(D).No.106, Environment, Climate Change and Forests (FR.5) Department, dated 18.05.2022 for Conducting Baseline survey at a cost of Rs.15.00 lakh and Preparation of DPR at a cost of Rs.10.00 lakh for construction of Dugong Conservation Centre.

The construction of Dugong Conservation Centre has been approved under the Annual Action Plan of TN-SHORE for the year 2024-25 for an estimated amount of Rs.40.94 crore vide G.O.(Ms).No.160 Environment, Climate Change and Forests Department, dated 19.09.2024.

12.6 Synchronized Bird Census

Birds are sensitive, indicator organisms which play a crucial part in a healthy ecosystem. Therefore, in order to protect and conserve the avi faunal diversity, the government of Tamil Nadu has in its first of its kind initiative in the country has organised a massive synchronised

bird census covering more than 2000 wetland and terrestrial locations across the state.

The purpose and importance of this long-term monitoring of birds of Tamil Nadu is aimed at not only recording presence of birds, but also observing other critical habitat variables including the threat factors for the better planning and designing strategies & interventions for long-term conservation of avian diversity and their habitats. It will provide valuable insights into the behaviour, distribution, and abundance of bird species, to help conservation efforts towards protecting bird populations.

In 2024, Wetland Birds Census was conducted in 894 locations and 388 bird species were found in the estimation. Terrestrial Birds Census was conducted in 1145 locations and 139 bird species were found.

In 2025, Wetland Birds Census has been conducted in 931 locations on 8th and 9th March 2025. Terrestrial Birds Census has been

conducted on 15th and 16th March 2025 in more than 1150 locations.

12.7 AI Surveillance System

Coimbatore Forest Division is a 693.48 square kilometre (268 square mile) forest in the Coimbatore district of Tamil Nadu, India. It is located in the Western Ghats Mountain range, which runs along the western coast of India. The Coimbatore Forest division has experienced a significant increase in the occurrence of Human-Elephant Conflict (HEC) in recent times. The main reasons contributing to Human-Elephant conflict in this division are changes in elephant behaviour, increasing elephant population, obstruction and encroachments in elephant passages, changes in agricultural methods, human impact, infrastructural improvements causing deep impact. Elephants, have adapted to crop raiding patterns, leading to increased conflict with humans.

In Coimbatore Forest Division, it is recorded that, 9028 times elephants had strayed out from reserve forest in the past three years from 2021 to 2023. One of the major conflict issues in the Coimbatore division was elephant crossing the railway track in Madukkarai range and train hit accidents was a concerning issue. There are two railway tracks passing through Solakarai beat and Bolampatti Block – I Reserved Forests in Madukkarai Range. Unfortunately, 11 elephants have died so far, due to collisions with trains since 2008, including young calves and juveniles. Although sincere efforts day and night involving railway track forest staff and watchers were done, also underpasses and other measures were jointly done by railways and forest, such incidents could not be drastically reduced.

In this regard, the Government had announced and sanctioned an amount of Rs.724.00 lakh for the installation of the artificial intelligence system. Accordingly, the work

commenced on 23.03.2023, in the vulnerable area of 7.0 Km track on Line A and Line B of the railway track connecting Tamil Nadu and Kerala.

The AI based surveillance system has 12 high towers fitted with both thermal and normal cameras, installed at strategic locations along the track in the Bolampatti Block – I Forests, 500 m apart from each other covering all the important elephant crossing areas, giving 150 m coverage on either side of the track for early detection of animal movement. The sensed data is automatically transferred to the control room that processes the data collected from the field on real time basis. The front-line staff of forest department along with technical team are available at the control room on shift basis to monitor the animal movement and inform the loco pilots of Railways through calls, SMS and alerts. In addition to that hooters and digital display alerts are also placed on the tracks for the loco pilots to see and act well in advance in the event

of any animal presence along the two tracks. The Forest department and the railway officials work in sync to prevent accidents based on information generated by Artificial Intelligence. This Artificial Intelligence generated data not only prevent accidents, it gives valuable data on the elephant movement, elephant behaviour, profiling of individual elephant and further morphological and behavioural studies for future decision making. After completion of above work, the details of elephant movement recorded in the area of Madukkarai Railway track from February 2024 to February 2025 has tabulated below.

Sl. No.	Month	No. of incidents
1	February	79
2	March	188
3	April	62
4	May	53
5	June	86
6	July	113
7	August	127

8	September	93
9	October	57
10	November	77
11	December	85
12	January 2025	66
13	February 2025	20
	Total	1106

Further, during the month of April 2024, the Railway department has constructed one underpass in the B-Railway track. Now totally 6 under passes are existing in the railway track for the movement of wild animals.

12.8 Modernization of Forest Force

The Government of Tamil Nadu has sanctioned a special scheme in the name of Modernization of Forest Force vide G.O.(Ms).No.223, Environment, Climate Change and Forests Department, dated 28.12.2022 to equip the forest department in all spheres to tackle the field challenges related to protection.

The various components include,

1. Human Resource Management Modernisation
2. Enhancing information and communication technology
3. Strengthening the forest protection through modern technologies
4. Improving forest management
5. Advancement in forest and wildlife research through collaborations

The Scheme has been sanctioned for an amount of Rs.52.83 crore for three years from 2022-2025.

12.9 Tamil Nadu Forest Wildlife Crime Control Bureau (TNFWCCB)

The Government of Tamil Nadu has established the Tamil Nadu Forest and Wildlife Crime Control Bureau as a unique effort in the country. The Bureau is established with the mandate to detect and prevent organized crimes with its Headquarters at Chennai and four zonal offices at Chennai, Coimbatore, Madurai and Ramanathapuram.

The Bureau is headed by the Director with four Zones and nine Forest Stations with a strength of 100 staff.

The Bureau has made tremendous efforts in curbing Forest and Wildlife Offences throughout the State by effectively implementing the Wildlife Protection Act, 1972 (Amended 2022) and various acts related to protection and conservation of Forests and Wildlife. 474 cases have been booked upto December 2024 by the Bureau in various districts of the State which include Illegal trading of Tiger body parts, Elephant tusk & ivory articles, Marine Shells, Pangolin scales, Sea cucumber, Alexandrine Parakeets, Mongoose brushes etc.

12.10 Marine Elite Force

The first Marine Elite Force of India was established in Tamil Nadu State. As Per the G.O.(D).No.36, Environment, Climate change - Forest (FR-14) Department, dated: 22.02.2022,

Tamil Nadu Forest Department has established the Marine Elite Force with two units for strategic protection of the Marine Biodiversity and prevention of wildlife poaching and illegal trade in coastal regions of Tamil Nadu with focus on Gulf of Mannar and the Palk Bay areas. It aims to strengthen the protection and sustainable management of the marine area, build capacity and collect and disseminate information. It will also protect threatened and vulnerable species that fall victim to illegal fishing practices.

One unit will function in Palk Bay and the other unit will function in Gulf of Mannar. These units are provided with advanced deep water boat along with wireless communication. Each unit is provided with advanced equipment for patrolling such as hand held GPS, scuba diving, snorkeling kit, kayaks, etc,.

Most importantly, 12 youth from local fishermen community were recruited as Marine Watchers. They are provided with intensive

training in field of Boat Driving, Engine technology, Lifeguard, diving, intelligence gathering and patrolling. They were attached with different security agencies in the region such as Indian Coast Guard, Marine Police, WCCB, etc.

The Marine Elite Force is headed by Assistant Conservator of Forest, two Range officers and 2 Foresters. The Marine Elite Force with deep water capacity will help in preventing the illegal wildlife trade in the region. The Field Guide is prepared regarding identification different protected species as per Wildlife Protection Act. By using these man power so far 48 Cases (Gulf of Mannar unit – 30 Nos. + Palk Bay unit – 18 Nos.) were detected till 16.03.2025.

12.11 Tamil Nadu State Forest Fire Control Centre

The Tamil Nadu State Forest Fire Control Centre (TNSFFCC) was established at a cost of

Rs.1 crore under the NABARD scheme during the year 2023-2024 and became operational in April 2024. As the state's central hub for forest fire monitoring and management, TNSFFCC integrates advanced fire detection systems, geospatial technology and real-time data analysis to enhance fire prevention, early warning and response mechanisms. Located in Chennai, it works in coordination with national agencies like the Forest Survey of India (FSI), State Disaster Management Authority (SDMA) and National Disaster Management Authority (NDMA) to ensure timely intervention and efficient fire mitigation strategies.

To further decentralize fire management efforts, a network of 34 District Forest Fire Control Centres have been established across Tamil Nadu during 2023-24 at a cost of Rs.20 lakh each and it was made operational from April 2024. These centres act as regional command units, monitoring forest fire activity,

analysing fire alerts and mobilizing local firefighting teams, volunteers and emergency response personnel. Equipped with modern firefighting tools and GIS-based monitoring systems, these centres ensure quick on-ground response to fire incidents, especially in high-risk districts such as Dindigul, Kanyakumari, Hosur and Theni. The district control centres also serve as coordination points between the TNSFFCC, local administrations and disaster management authorities, ensuring a streamlined approach to fire suppression and damage control.

The Tamil Nadu Forest Fire Management Information System (TNFFMIS) has been introduced as a centralized digital platform to track and report forest fire incidents. District Forest Officers (DFOs) use TNFFMIS to upload real-time fire alerts, monitor fire suppression efforts and analyse fire trends. The system serves as a paper-less fire reporting system which helps

in tracking and analysing fire related data effectively and seamlessly.

A multi-tiered response mechanism has been developed to handle forest fires efficiently. Upon receiving a fire alert, fire control centres mobilize trained personnel equipped with advanced firefighting gear, including mist blowers, fire rakes, retardant suits and GPS-enabled communication devices for hard-to-reach fire-prone areas, drone surveillance systems are deployed. In severe fire incidents, the Indian Air Force (IAF) is engaged for aerial firefighting operations, as seen in the Coonoor forest fire of 2024, where Bambi Bucket operations were conducted for fire suppression.

The GIS-powered geospatial dashboard system has transformed fire data analysis and monitoring in Tamil Nadu. This system categorizes fire data into Daily Alerting System, Large Forest Fire Monitoring, TNFFMIS Report Tracker and Historical Fire Trends, which helps to track fire

patterns, predict high-risk zones and implement preventive measures. The Large Forest Fire Monitoring Module (LFFMP) further assists in monitoring long-duration fires, ensuring they are tracked until they are completely extinguished.

In 2024, Tamil Nadu witnessed a sharp rise in forest fire incidents, with 1,274 fire cases recorded in February, compared to 1,096 in February 2023. The increase was attributed to rising temperatures and erratic rainfall patterns, making certain regions more prone to fires. Kanyakumari, Hosur and Theni districts reported the highest number of fire alerts, with multiple Large Forest Fires (LFFs) requiring extensive suppression efforts. These trends highlight the urgent need for continued advancements in fire detection, monitoring and coordinated response strategies.

With the establishment of TNSFFCC, TNFFMIS and the 34 district control centres, Tamil Nadu has successfully built a robust and

technology-driven forest fire management framework. Further, leveraging AI and Unmanned ground and Aerial surveillance are also being examined to enhance the forest fire management in the State. In addition, strengthening GIS-based monitoring, and inter-agency coordination, the State is working towards minimizing forest fire risks and safeguarding its rich biodiversity.

12.12 Forest Fire recognised as a disaster under SDRF

The Government of Tamil Nadu for first of its kind has considered Forest Fire as a Disaster and thereby has allocated an amount of 15.00 crore towards fire management to the Forest Department. This fund is provisioned for activities like,

1. Purchase of advanced firefighting equipment
2. Purchase of forest fire response vehicles
3. Strengthening wireless communication

4. Advanced technology for fire data management
5. Forest fire prediction AI Early warning system
6. Training and capacity building for forest staff
7. Community fire preparedness programmes

12.13 The Project Nilgiri Tahr

The Iconoic, Project Nilgiri Tahr was launched by the Honorable Chief Minister on 12.10.2023. The Nilgiri Tahr (Varaiyadu) is the State animal of Tamil Nadu and is an endangered, endemic ungulate. To conserve and protect this state animal, a dedicated scientific research team and the Project Director's office have been established in Coimbatore.

The project comprises nine components: administrative setup, biennial synchronized surveys, radio collaring of the Nilgiri Tahr, restoration of shola grasslands, disease

diagnostics, reintroduction, implementation of ecotourism, and conservation education through outreach activities.

To commemorate the birth anniversary of E.R.C. Davidar, who pioneered conservation efforts for the Nilgiri Tahr, his birth date, 7th October has been declared as “Nilgiri Tahr Day”.

After the launch of the Project Nilgiri Tahr, the following successful activities have been carried out.

1. The first synchronized survey has been conducted across 13 forest divisions, comprising of 140 survey blocks in the Southern Western Ghats. The estimated population of Nilgiri Tahr is 1031 in Tamil Nadu and including the estimate from Eravikulam National Park, the total population is together 1858.
2. The first radio collaring was conducted for a Saddle back male in the Mukurthi National

Park, followed by the radio collaring of a light brown male in Anamalai Tiger Reserve and a female in Mukurthi National Park.

3. Shola grassland restoration activities have been initiated in the Upper Bhavani area of Nilgiris Forest Division. Further, the identification of potential areas for restoration in other landscapes is in progress.
4. As part of the reintroduction component, AIWC, Vandalur is currently conducting a habitat suitability assessment to identify potential sites for reintroduction. Based on the findings of this study, the scientific committee will evaluate the sites, and further decisions will be made.
5. The first-time examination of lumps in the Nilgiri Tahr was revealed to be Coenurus cysts caused by the infection of carnivore tapeworm Taenia multiceps. A detailed study on “Health monitoring of Nilgiri Tahr”

has been approved along with the TANUVAS to monitor the health condition of the Nilgiri Tahr.

6. The complete mitochondrial genome of the Nilgiri Tahr has been sequenced for the first-time, and the entire mitochondrial genome has been deposited in the NCBI database by the Project Nilgiri Tahr and AIWC.
7. A total of 175 floral species has been identified. The Project Nilgiri Tahr has published a book titled “The Flora of Nilgiri Tahr Habitat - Anamalais Vol. 1.”
8. Outreach activities such as a pictorial postcard on Nilgiri Tahr, Nilgiri Tahr customized “My Stamp”, advertisement in the buses, education materials such as Nilgiri Tahr book, Coffee Table book, and posters have been published. The Nilgiri tahr newsletter “Varaiyaadu” is being published quarterly.

9. To create awareness among the public, the Nilgiri Tahr Conservation center at Gandhipuram (Central prison area) has been selected. The Conservation center will be established in 50 cents land.
10. The Government of Tamil Nadu has approved to receive CSR/CER funds and a separate bank account has been opened to receive funds from firms.
11. The Project Nilgiri Tahr team has been collaborating with the esteemed institutions such as, IUCN, WII, AIWC, TANUVAS, ZSI and BSI. A MOU has been signed with PSGR Krishnammal College for Women for molecular study of Shola grass species and TANUVAS for health monitoring of Nilgiri Tahr.
12. Awareness programs through “Message on Wheels” about the conservation of the Nilgiri Tahr were conducted. To date, more than 120 programs were conducted covering the

distribution ranges of the Nilgiri Tahr across Tirunelveli, Tenkasi, Virudhunagar, Theni, Coimbatore and Tirupur districts.

12.14 Elephant Conservation Measures.

Tamil Nadu is one of the important States harbouring a significant Asian Elephant population in the country. It has contiguous elephant territory with adjoining states of Kerala and Karnataka. Tamil Nadu has rich heritage of elephant conservation. Government of Tamil Nadu has initiated various measures to ensure better conservation of this mega mammal in the state. Some of the notable initiatives are as follows,

1. Upgradation of Elephant Camps:

The Government has sanctioned a sum of Rs.8.00 crore for setting up of a new elephant camp at Sadivayal in Coimbatore District. The Government has also accorded sanction to upgrade 2 old elephant camps in Kozhikamuthi and Theppakkadu.

2. Mahout and Cavadies Accommodation

A sum of Rs.10.465 crores has been sanctioned to provide better accommodation to 91 traditional Mahouts and Cavadies engaged in the camps by the Forest Department.

3. International exposure to Mahout and Cavadies

Training had been given to 13 Mahouts and Cavadies in Thai elephant conservation centre, Thailand in February 2023 to learn about the best practices used in captive elephant management.

4. Identification of Elephant corridors

The Government of Tamil Nadu constituted two committees for submissions of report on consolidated viable Elephant Corridors in Tamil Nadu to ensure free movement of elephants between different habitats.

5. Elephant Death Audit Framework (EDAF)

Elephant deaths happen due to number of reasons, mostly natural and at times due to unnatural or preventable reasons. Studies on

mortality pattern of elephants in Tamil Nadu over a 15-year period have revealed that young calves, juveniles and sub-adults may account for up to 45% of total elephant mortality, with the highest mortality of 23% observed in the 0-5 year age group. In case of young adults (age 16 to 25 years) the mortality may be up to 33%. From wildlife management point of view, death of adult elephants in the breeding age of 16 to 50 years is a matter of concern as it has a direct bearing on the elephant population. In order 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, the Government of Tamil Nadu has framed Elephant Death Audit Framework (EDAF) in the State. This is the first of its kind initiative in the country.

The broad objectives of Elephant Death Audit Framework (EDAF) are threefold, viz,

a. Prescribing a Systematic Standard Protocol (SSP) for conducting post-mortem to determine the reason(s) for death of an elephant.
b. To study and understand the circumstances in cases of preventable and unnatural deaths of elephants.
c. Formulate remedial measures for prevention of unnatural and preventive deaths by conducting periodical death audits.

6. Veterinary Doctors

Veterinary Doctors play a key role in ensuring scientific upkeep and monitoring of wild animals especially elephants. The forest department was finding difficulty in engaging Veterinary Doctors on deputation from Animal Husbandry Department. Considering the necessity, the Government of Tamil Nadu has

issued an order vide G.O.(Ms).No.49 Environment, Climate Change and Forests (FR.1) Department, Dated. 07.03.2025 by sanctioning 8 posts of Veterinary Assistant Surgeons, 6 posts of Livestock Inspectors and 9 posts of Animal Husbandry Assistants for taking proper medical care of the rescued wild animals, tackle Human-Wildlife conflicts issues, undertake rescue operations etc.

12.15 Power Fence Rules

Tamil Nadu Government has notified the Tamil Nadu Power fences (Regulations and Registrations) Rules, 2023 for erection of Solar and Power fences around the property of owner to protect the Agriculture product from the damages by Wildlife and the Government has issued G.O.(Ms).No.104, Environment, Climate Change and Forests Department, dated 03.07.2023. This is a first of its kind initiative in the country to bring in regulations in erecting

power fences to avoid illegal fences as well as wildlife casualties due to electrocution.

12.16 Standard Operating Procedures for Management of Captive Elephants and Orphaned Elephant Calf Management.

Elephant camps in the Tamil Nadu Forest Department date over a century back and the management system adopted has been acknowledged to be highly gentle and very thorough. The mahouts and cavadies of these camp elephants hail from tribe communities living in the Nilgiris and Anamalais of the Western Ghats in Tamil Nadu. The strong bond between the Tamil Nadu Forest camp elephants and their caretakers (mahouts and cavadies) is woven by love and affection and the management methods adopted here have been replicated in other parts of the country and world. Noting the need for documenting the management approach and for a ready-reference document on captive elephant management in the Elephant camps, have

resulted in this Handbook on Captive Elephant Management in Elephant Camps.

Elephant calves and juveniles are greatly dependent on their mother and other caring herd members for their survival and learning. Though a major challenge, there have been several instances where wild elephant calves which have been separated from their herds have been rescued and brought to the elephant camps managed by the Tamil Nadu Forest Department and successfully raised into adult elephants. Occurrences, where elephant calves are found isolated within the forests or are found to enter human habitations after having been separated from their herds, have increased in the recent past.

Noting this increase in incidence as well as the lack of a document on the approach towards the issue of the rescue of orphaned elephant calves from the wild or otherwise and the manner in which they need to be managed if taken in

captivity, as well as other special initiatives have resulted in this Standard Operating Procedure on Orphaned Elephant Calf Management.

12.17 Trek Tamil Nadu

Tamil Nadu has tremendous potential in the trekking and ecotourism sector owing to the stunning landscapes and unique biodiversity.

Trekking in Forests areas of the state are governed by the “Tamil Nadu Forest and Wildlife areas (Regulation of Trekking) Rules 2018” issued in G.O.(D).No.296, Environment and Forests (FR.14) Department dated 12.10.2018. The trekking routes have been categorized into three- Easy, Moderate and Tough with fees and conditions of trekking duly prescribed. The fees so collected are meant for development of forests and for ecotourism.

Permission has been accorded to the Tamil Nadu Wilderness Experiences Corporation Ltd., (TNWEC), a State Government undertaking

with the mandate of ecotourism development, to organize trekking and allied activities in Forest and Wildlife areas of Tamil Nadu.

Hon'ble Deputy Chief Minister of Tamil Nadu on 24.10.2024 has launched the Trekking Project 'Trek Tamil Nadu' featuring 40 pristine destinations of the State, alongside launch of the website www.trektamilnadu.com. Trek Tamil Nadu project is a joint venture of Tamil Nadu Forest Department (TNFD) and Tamil Nadu Wilderness Experiences Corporation (TNWEC) with the objective of organizing trekking activities in Forest and Wildlife areas of Tamil Nadu in a responsible and sustainable manner.

The Project 'Trek Tamil Nadu' is designed to create awareness on nature conservation, provide sustainable income to the local communities and support Forest and Wildlife conservation. This initiative is a leap towards strengthening ecotourism in Tamil Nadu, showcasing the State's commitment toward

sustainable and responsible tourism with low carbon foot print. Local community in and around the Forest areas are actively involved in the project.

For the seamless booking process and transparency, www.trektamilnadu.com serves as the dedicated online platform for bookings related to trekking activity in Forest and Wildlife areas of Tamil Nadu.

Local Community plays a vital role in any ecotourism initiative. The trekking guides have been identified from local community having traditional knowledge of the forest and imparted adequate professional training sessions on jungle etiquette, soft skills, first aid, basic hospitality and hygiene, local biodiversity, safety drills etc. Guides are engaged from 50 plus tribal / Forest fringe villages after the orientation training and assessment.

12.18 Wild Pig Menace – Guidelines

The Government of Tamil Nadu in order to contain the menace of wild pig and to address the grievances of the farmers to avoid crop damages, has brought out the Wild Pig Hunting Guidelines vide G.O.(D).No.07, Environment, Climate Change and Forest (FR.5) Department, dated 09.01.2025. As per the guidelines, the areas fringing the forests have been categorised into different zones to address the wild pig issues differently. Accordingly, the following zonation has been made,

ZONE - A	(Up to 1 km from the reserve forest) Hunting of wild pigs is not permitted in the area
ZONE – B	(Above 1 km to 3 km from the reserve forest) Hunting of wild pigs is not permitted in the area. Capture and safe release of wild pigs into dense forest should be ensured

ZONE –C	(Above 3 km from the reserve forest) Hunting of wild pigs is permitted in the area. Non forest area could also be considered as zone–C and action may be taken for hunting of problematic wild pigs

All District Forest Officers, Deputy Directors, Wildlife Wardens were instructed to constitute a committee consisting of Forester, Village Administrative Officer (VAO), Panchayat President/ Member based on the Government Order to take prevention measures against damages caused by wild pig menace.

The Committee would inspect the conflict area for assessing crop damages and recommend for either release of compensation to farmers / hunting recommendation to concerned Forest Range Officer and the jurisdictional Forest Range Officer would permit shooting of wild pig to control movement of wild pig in the area depending on zonation of conflict.

12.19 Elephant Conclave

The Government of Tamil Nadu has organised 'Elephant Conclave' a pioneering initiative in the country towards conservation of elephants. It was conducted on 11th and 12th August 2023 at Coimbatore. During the event, presentations were made by the senior officers / experts on "Special Initiatives for Elephant Management in Tamil Nadu, Challenges and Initiatives for Conservation of the Asian Elephant in South India, Translocation of wild elephants, Effective – Human Wildlife Management, Securing elephant corridors and migratory routes for conflict mitigation. Handbook on Management of Captive Elephants and Standard Operating Procedures (SOP) on Orphaned Elephant Calf Management were released during the conclave.

12.20 Tiger Conclave

Tamil Nadu Government initiated a path breaking sub-national Tiger Conclave at the state level which otherwise is not conducted by any of the Tiger bearing states in the country.

As part of wildlife celebrations, Tamil Nadu Tiger Conclave was conducted on 2nd October 2022 at Chennai. During the event, presentations were made by the senior officers / experts on “Project Tiger and its contribution to Tiger conservation, Invasives and its impact on future of Tiger, Tiger Conservation and Eco-tourism in Tiger Reserves”. Prizes were awarded to the school students who participated in the wildlife week celebrations.

12.21 New areas under Forest Notification

The Government of Tamil Nadu registered its intense commitment towards forest conservation by declaring a huge area of 7277.70.34 hectares, covering 49 forest blocks,

as Reserved Forests under Section 16 of the Tamil Nadu Forest Act, 1882 during last four and half years.

12.22 Introduction of section 16A in Tamil Nadu Forest Act 1882

As per the Government of Tamil Nadu Gazette No.201 dated 08.05.2019, a new section 16 A was inserted in Tamil Nadu Forest Act 1882 for notifying the Gudalur Janmam lands directly as Reserve Forest. As per the notification, a total extent of 676.89.50 hectares, covering 16 forest blocks have been notified as Reserved Forests under Section 16A of the Tamil Nadu Forest Act, 1882 during last 4 ½ years (2021-2025).

12.23 Recognition of Rights under Forest Rights Act, 2006

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 was enacted to recognize and vest ‘forest rights’ in forest land to forest dwelling Scheduled Tribes and other Traditional Forest Dwellers, who

have been residing in such forests for at least three generations but whose rights could not be recorded and to provide a frame work for recording the forest rights so vested and the nature of evidence required for such recognition and vesting.

Accordingly, till date, 15442 individual rights claims have been accepted and Titles have been issued to an extent of 8970.62 hectares of Forest land and 1066 claims for community rights have been accepted and rights for collection, use and sale of minor forest products to an extent of 24470.88 hectares have been granted under Section 3(1) of the Forest Rights Act, 2006.

Further, under Section 3(2) of the Forest Rights Act 2006, a total of 277.314 hectares of forest land has been allocated to various user agencies for the Community development works such as Village road works, School buildings, Drinking water facilities, Community hall, Ration shops and Electric transmission lines.

12.24 Forest Budget Allocation has Risen over years from 2021

When Compared to previous years, in the past 4 years, the Tamil Nadu Forest Department has seen a remarkable increase in the forest budget allocation to attain a total allotment of Rs.1169.78 crore in 2024-25. This fund support has helped the Department in strengthening its Infrastructure, Manpower and Technology.

12.25 Rationalization of Function of Eco- Development Committees (EDCs)

Eco Development Committees (EDCs) are community-based organizations that play a significant role in promoting sustainable development and conservation within protected areas, such as national parks, wildlife sanctuaries, or ecotourism sites. There are 878 Eco Development Committees functioning under forest department. These committees help local communities in the potential of eco-tourism by promoting the conservation values of the area,

developing eco-tourism infrastructure, and guiding visitors in ways that benefit both the community and the environment.

As part of rationalisation, the accounts of the EDCs have been got audited, user fees collection has been digitalised and steps are being taken to regulate the functioning of EDC through formation of State Forest Development Agency.

12.26 Tamil Nadu Policy on Invasive Plants and Ecological Restoration Policy (TNPIPER)

Tamil Nadu is the first State to bring out a separate policy to address invasive plant removal and restoration of habitat. The Policy insists on Invasive Species Management, Legislation and Regulations, Awareness and Education, Ecological Restoration, Research and Monitoring, Partnerships and Collaborations and Integration with Sustainable Development Goals.

12.27 Remodelling of Guindy Children Park

Guindy Children's Park has been remodeled as Guindy Nature's Park at a cost of Rs.20 crores and inaugurated by Hon'ble Chief Minister of Tamil Nadu on 03.08.2024. The Park has received 671594 number of Visitors after remodeling and earned Rs.2,66,53,460/- a revenue, which is a positive response from the public. It also helps in creating nature awareness to more individuals and getting their support towards Forest and Wildlife Conservation.

13. Forest Revenue and Expenditure Details

13.1 Forest Revenue

13.1.1 Major Forest Produce

Sandalwood trees and their sale in Tamil Nadu

In Tamil Nadu approximately 3 lakh Ha of forest area have been covered with naturally grown sandalwood tress in Western and Eastern Ghats area.

The stock of sandalwood is sold by the Government through tender cum auction sale/retail sale in following three sandalwood sale Depots.

- Tirupattur
- Salem
- Sathyamangalam

As per G.O.No.17. Environment and Forests (FR-4) Department, dated.20.02.2017, the Government has streamlined the retail sale of sandalwood in view of dwindling supplies of sandalwood.

The Tamil Nadu Government has supplied 780 kg of sandalwood to nine temples in Tamil Nadu under the control of HR & CE Department at a cost of Rs.2.01 crore during past 4 years (2021-25).

In addition, a quantity of 1250 kg of Sandalwood has been supplied to renowned temples of other state namely (i) Puri Jaganathar Temple, Orissa & (ii) Kasi Viswanathar Temple,

Varanasi, Uttar Pradesh at a cost of Rs.3.68 crore. during the past 4 years (2021-25).

As a charity and gesture of harmony, the government has allocated a quantity of 180 Kg of Sandalwood to Nagoor Dhargh at free of cost during past 4 years (2021-25)

Red Sanders

Red sander (*Pterocarpus santalinus*) which is known as Sivappu Sandhanam is found mainly in the Chengalpattu, Tiruvallur, Dharmapuri and Vellore districts of North part of Tamil Nadu. Red Sanders are sold through tender cum global e-auction sale.

Government of India in Lr.No.F.No.4-14/ 2012 WL Ministry of Environment and Forests (Wildlife Division) dated.07.08.2012 have issued orders for export of Red Sanders wood per year from artificially propagated source and one time export of specimens of any type from confiscated or seized source. In continuation, subsequent order was issued by Tamil Nadu Government for

selling of 229.732 MT of Red Sanders wood through Global e-Tender cum e-auction through M/s MSTC Limited, a Govt. of India enterprise vide G.O.(D).No.160, Environment & Forest (FR.4) Department, dated.29.06.2017.

The online sale of red sanders wood through Global e-tender cum e-auction was conducted on 29.12.2018 and all the lots kept for sale have been sold over and above the fair price fixed by the Government and a revenue of Rs.63.70 crore has been realized to Government. The confirmation orders for the sale of red Sanders wood conducted on 29.12.2018 has been issued by Government vide G.O.(D).No.1, Environment & Forest Department, dated.03.01.2019 and the sold Red Sanders wood has been exported successfully.

For the extraction, possession and transport of Red Sanders grown on Patta lands guidelines have been issued by the Principal Chief Conservator of Forests. The details have been

uploaded in Forest Department website for public information.

As of now 1310.836 M.T (Tirupattur - 1022.321 MT+282 MT Salem + Sathyamangalam 6.515 MT) stock is available in the Tamil Nadu Forest Department including the wind fallen and red sanders seized by the customs for sale in the ensuing years.

Teak wood sale revenue to the Government for the past 15 years:

A sum of Rs.41.585 crore (upto December 2024) of revenue has been realized during the past 4 years by auction of teakwood.

Flag pole (Kodimaram):

Teak tree logs are provided for the purpose of pole (Kodimaram) to Temples / Religious Institutions at a concessional rate of 50% based on recommendation of Hindu Religious and Charitable Endowments Department.

Forest Raw Materials for Industries:

The following raw materials are used by the user industries for making paper, rayon, Wood pulp materials:

1. Eucalyptus Globulus
2. Eucalyptus Grandis
3. Eucalyptus Hybrid
4. Bluegum Pulpwood
5. Bluegum lops and tops
6. Bluegum leaves
7. Wattle lop and tops
8. Wattle Barks
9. Bamboo

The Major user industries which use most of the forest raw materials of Tamil Nadu are:

1. Tamil Nadu News Print and Papers Limited, Pugalur.
2. Seshsayee Paper and Boards Limited, Pallipalayam, Erode.

An amount of Rs.30.619 crore has been realised due to sale of pulpwood during the last 2 years.

13.1.2 Minor Forest Produce (MFP)

As per G.O.(Rt).No.79, E&F(FR-XIV) department, dt:29.04.2005, the yield of MFP such as Tamarind, Gallnut, Nelli, Lemon, Illavam etc., can be collected by tribal people at free of cost by forming tribal Village Forest committee.

1. The Tribal communities have been given the right to collect the MFP free of cost with an objective to improve their income and livelihood options by forming VFCs. This will ensure the participation of Tribals in protection and improvement of forests.
2. In plains (Territorial Forests) the yield estimation for Minor Forest Produce is done at departmental level and sold in open auction and the revenue is realized to Government.

An amount of Rs.2.66 crore has been realised due to sale of MFP during the last 4 years.

14. Conclusion

Forests play a vital role in maintaining the natural ecosystem, supporting biodiversity and providing essential resources like clean water and air. These ecosystems offer numerous benefits including regulating the global climate, and supplying various ecosystem services that support communities.

As forests face increasing pressure from urbanization and exploitation, conservation and management of our remaining invaluable forests have become crucial. Forest conservation globally has evolved to prioritize biodiversity conservation, carbon sequestration and sustainable resource management. Forest is no longer seen as a source of revenue. It is also important to ensure participation of local communities in the sustainable management of forests. Accordingly, Government initiatives are directed towards policy frameworks which help in conservation, climate

change mitigation, and reducing carbon emissions through healthy and resilient forests. Through our novel initiatives, we aim to make this planet a better place for future generations.

DR. K. PONMUDY
MINISTER FOR FORESTS & KHADI

The Hon'ble Minister (Forests) Dr. K. Ponmudi handing over Dividend of the Tamil Nadu Forest Plantation Corporation for the year 2023-2024 to the Hon'ble Chief Minister Thiru.M.K. Stalin.

The Hon'ble Deputy Chief Minister Thiru. Udhayanidhi Stalin launched Trek Tamil Nadu Project and website www.trektamilnadu.com

Hon'ble Minister for Forests Dr. K. Ponmudy conducted a stakeholders meeting to discuss issues regarding protection of *Olive ridley turtles* along Chennai Coast.

Elephant proof Trench created in Ittarai tribal hamlet to reduce Human Wildlife conflict in Satyamangalam Forest Division in Erode district.

The Hon'ble Minister for Forests Dr. K. Ponmudi, inaugurating Palmyra planting in Villupuram District

The Project 'Trek Tamil Nadu' is designed to create awareness on nature conservation, provide sustainable income to the local communities and support and Wildlife conservation.

Dr. K. Ponmudi, the Hon'ble Minister (Forests), providing loan assistance to tribal people for their livelihood improvement at Villupuram district.

Saplings raised in Intertidal Nursery established in Killai, Cuddalore for mangrove restoration.

Mangrove plantation taken using fish bone channel plantation method at Muthupet, Thiruvarur