



Hon'ble Chief Minister of Tamil Nadu  
taking oath on  
"Plastic Pollution Free Tamil Nadu"  
on Children's Day



Hon'ble Deputy Chief Minister of Tamil Nadu  
distributing cloth bags to the tourists  
to create awareness on  
"Plastic Pollution Free Tamil Nadu"  
in Vaigai Dam



Hon'ble Minister for Environment flagging off  
"Smoke Free Bhogi"  
Awareness Campaign



## **ENVIRONMENT AND FORESTS DEPARTMENT**

**POLICY NOTE  
DEMAND No. 15**

**ENVIRONMENT  
2020-2021**

**K.C. KARUPPANAN**  
Minister for Environment

©  
**Government of Tamil Nadu**  
**2020**

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# **ENVIRONMENT DEPARTMENT**

## **Introduction**

An environment is the natural surroundings which support to grow and nourish life on this planet called Earth. Natural environment plays a key role in the existence of life on earth and it helps human beings, animals and other living things to sustain naturally. Nature-based solutions provide the best way to achieve human well-being, addressing Climate Change and protect the planet. A clean environment is necessary to live a peaceful and healthy life. Several initiatives have been taken up by the Government of Tamil Nadu for pollution abatement in rivers and lakes, eco restoration of water bodies, besides promoting environmental consciousness among the school children, college students in particular and public in general. The State government endeavours for sustainable environment and healthy resilient ecosystems in

perpetuity for the social, physical, cultural, biological and economic well being of the people.

The ecosystem regulates the air, water and soil on which we all depend and form a unique and cost-effective buffer against extreme weather events and Climate Change. Climate Change is a global phenomenon which largely impacts regional scale and increasing the frequency and intensity of extreme weather events such as heat waves, droughts, floods and tropical cyclones, aggravating water management problems, reducing agricultural production and food security, increasing health risks, damaging critical infrastructure and interrupting the provision of basic services like water, sanitation, education, energy and transport.

In general, there are two different strategies when it comes to dealing with Climate Change viz., Mitigation of Climate Change (efforts to reduce or prevent future warming) or

Adaptation to Climate Change (actions to manage risks from climate impacts). Adaptation is anticipating the effects of Climate Change and taking appropriate action to prevent or minimize the damage. Mitigation measures are actions that are taken to reduce and curb greenhouse gas emissions. Thus, the overall challenge of Climate Change Policy will be to identify the efficient synergies of mitigation and adaptation solutions that limit the overall impacts of Climate Change. Integrating or mainstreaming adaptation and mitigation into development plans, programmes and projects is an important strategy to ensure that adaptation and mitigation can match the scale and urgency of the Climate Change problem.

There are both external and domestic dimensions to India's Climate Change Policy which has been articulated through two key documents which aims to strengthen the global response to threat of climate change in the context of sustainable development and quality of life. One is

the National Action Plan on Climate Change (NAPCC) adopted on June 30, 2008. The other is India's Nationally Determined Contributions (NDC) submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in October 2, 2015. The NDC is a statement of intent on Climate Change action announced in the run upto the Paris Climate Change summit held in December, 2015. The NAPCC has an essentially domestic focus which incorporates India's vision of ecologically sustainable development and steps to be taken to implement it. In the Indian context, State Action Plans on Climate Change (SAPCC) serve as the primary policy document at the sub-national level to address vulnerabilities and increase resilience.

The Government of Tamil Nadu have formulated the Vision Tamil Nadu 2023 with the aim of catapulting Tamil Nadu onto a higher economic growth trajectory, while ensuring that it

benefits all sections of society. Out of the ten themes in the Vision Tamil Nadu 2023, the Theme 8 (Nurturing a rich heritage and preserving the ecology) and the Theme 9 (Protecting against vulnerability) are stressed upon in Tamil Nadu Environment Policy 2017, the Tamil Nadu State Action Plan on Climate Change 2015-2020 and the draft document of Tamil Nadu State Action Plan for Climate Change 2.0 (2020-2030).

The Sustainable Development Goals are known as the world's blueprint to achieve a better and more sustainable future for all. It addresses the global challenges such as poverty, inequality, climate change, environmental degradation, peace and justice. The 17 Sustainable Development Goals are interconnected and in order to leave no one behind, it is important to achieve the SDG targets by 2030. The Department of Environment is the Nodal Department for the Climate Change adaptation

and mitigation activities in the State and it is dealing with the Sustainable Development Goal SDG 13: Climate Action which is aimed at taking urgent action to combat climate change impacts by developing the capacity of State to mitigate climate risks and work towards adaptation.

**Good Governance Index is a comprehensive and implementable framework to assess the State of Governance in all States and UTs which enables ranking of States/Districts and represent a comparative picture by the Government of India. Realizing the criticality of environmental sustainability for sustainable development, environment has been taken as a separate sector. Tamil Nadu ranks third place in the Environment and Allied sectors as per the Government of India's Good Governance Index emphasizing**



**the State Action Plan on Climate Change as one of the with indicator weightage of 0.4.**

## **2. Department of Environment**

The Department of Environment was created in 1995 and it was entrusted with the co-ordination of major projects like pollution abatement in Cauvery, Vaigai and Tamiraparani rivers and in the waterways of Chennai City. Besides, the National Lake Conservation Programme, Coastal Zone Management and all other significant environment protection efforts except those dealt by the Tamil Nadu Pollution Control Board are the main responsibility of this Department. The Department of Environment being the Nodal Department is implementing all the Climate Change related programmes in the State of Tamil Nadu.

The Department is headed by a Director in the rank of Additional Principal Chief Conservator of Forests who is assisted by an Additional

Director in the rank of Chief Conservator of Forests / Conservator of Forests. The sanctioned strength of the Department is 34 which include three Deputy Directors, Assistant Conservator of Forests, Assistant Environmental Engineer, Accounts Officer, Sociologist, Forest Ranger, two Assistant Engineers and 22 ministerial staff.

## **2.1 Functions of the Department**

- Formulating Policies related to Environmental issues for the Government of Tamil Nadu.
- Creating a frame work to bring Synergy among the line Departments of the State and thus evolving policy initiatives for the State.
- Integration of knowledge and experiences of National and International agencies through collaboration and partnership.
- Developing frame work for capacity building of various stakeholders [Line Departments,

Institutions / Universities, Researchers, Experts, Non-Government Organizations (NGOs)] on Climate Change Adaptation and Mitigation.

- Implementing the Statutory provisions of Coastal Regulation Zone (CRZ) Notification and Environment Impact Assessment (EIA) Notification.

## **2.2. Activities of the Department**

- Creating Environment awareness in schools and colleges.
- Eco-restoration activities.
- Climate Change Adaptation and Mitigation initiatives.
- Implementing the provisions of the CRZ Notifications.
- Coastal Zone Management.
- Preparation of Environmental Management Plans.

- Dissemination of Information on Environment related issues by ENVIS.
- Synergy with Universities / Research Institutes to build capacity for research and training.

### **3. Tamil Nadu State Action Plan on Climate Change (TNSAPCC)**

The State has addressed the climate strategies aligned with the eight National Missions under the National Action Plan for Climate Change with strategies covering the period 2015-2020 and focus on issues of climate adaptation and mitigation in the Tamil Nadu State Action Plan on Climate Change (TNSAPCC). The Tamil Nadu State Action Plan on Climate Change (TNSAPCC) was endorsed by Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India (GoI) on 31.03.2015. Since then, the State have been implemented several sectoral projects under adaptation and mitigation. All the concerned line Departments are referring to

TNSAPCC as base document for their future plan formulations.

In light of India's Nationally Determined Contributions (NDC) to United Nations Framework Convention on Climate Change (UNFCCC), Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India have advised to revise the Tamil Nadu State Action Plan on Climate Change with technical support from German Corporation for International Cooperation (GIZ) and accordingly action has been taken to revise the TNSAPCC with the objectives to re-examine the State specific impact, risk and vulnerability, to take stock of the implementation of the SAPCC, to re-examine various actions (adaptations and mitigation) in the light of climate goals set in NDC and to prepare new short range(2023) and long range plans up to 2030. Workshops were conducted by the Department of Environment, with the participation of all line departments/ agencies,

obtained their comments/suggestions and incorporated in the draft TNSAPCC 2.0. The draft TNSAPCC 2.0 document emphasizes on Disaster Management and mitigation, Sustainable Development Goals and Composite Vulnerability Index (CVI) for the State.

The draft TNSAPCC 2.0 is placed for the views of the decision makers/ policy makers and general public for comments and suggestions during the final High Level Consultation Workshop held on 23.01.2020 and it will be available in the website till 29.02.2020. The final draft TNSAPCC 2.0 will be placed in State Level Steering Committee chaired by the Chief Secretary to Government of Tamil Nadu for onward submission to MoEF&CC, GoI.

**The Department of Environment is a Nodal Department, implementing all the Climate Change related programmes and coordinating with the concerned line**

**Departments on the TNSAPCC in the State for submitting proposals under Green Climate Fund (GCF) and National Adaptation Fund for Climate Change (NAFCC) in consultation with the National Bank for Agriculture and Rural Development (NABARD) which is the National Implementing Entity.** SDG 13: Climate action emphasizes on strengthening resilience and adaptive capacity to climate-related hazards and natural disasters in its Target 13.1. At cadastral level, Tamil Nadu State Action Plan on Climate Change (TNSAPCC) will serve as a baseline document for developing adaptation strategies and hence it will support the State to achieve both Target 13.1, 13.2 and 13.3.

### **3.1 National Adaptation fund for Climate Change (NAFCC)**

To address the Climate Change issues in India, the Ministry of Environment, Forest and

Climate Change (MoEF&CC), Government of India (GoI) evolved with a dedicated fund called the National Adaptation Fund for Climate Change (NAFCC) which was set up in the year 2015-16. The overall aim of NAFCC is to support concrete adaptation activities which mitigate the adverse effects of climate change. The activities under this scheme are implemented in a project mode. The projects related to adaptation in sectors such as Agriculture, Animal Husbandry, Water, Forestry, Coastal and Tourism etc. are eligible for funding under NAFCC. National Bank for Agriculture and Rural Development (NABARD) is the National Implementing Entity (NIE).

Tamil Nadu is a forefront State in evolving a project proposal on "Management and rehabilitation of coastal habitats and biodiversity for climate change adaptation and sustainable livelihood in Gulf of Mannar, Tamil Nadu, India" which is approved by the MoEF&CC, GoI, under



the NAFCC with an administrative approval of Rs. 24.74 Crores. This is the first NAFCC project in India on Coastal Area Management and in line with TNSAPCC.

This project involves carrying out a baseline study to assess vulnerability to climate change of both coastal ecosystems (including biodiversity and fishery) and coastal communities in the Gulf of Mannar, restoration of habitats (Coral reef and sea grass rehabilitation) in Kariyachalli and Vilanguchalli Islands, protection of Vann island and eco-development activities in coastal villages. The project work is nearing completion.

The MoEF&CC, GoI have also approved the project, "Climate Proofing of Rainfed Watersheds in Salem and Virudhunagar District of Tamil Nadu" by the Tamil Nadu Watershed Development Agency (TAWDEVA) and a sum of Rs.23.80 Crores has been sanctioned to implement the project and the works are under progress. Further the

following three NAFCC proposals from line Departments were placed at Eleventh Meeting of the Technical Scrutiny Committee (TSC) for National Adaptation Fund for Climate Change (NAFCC) and are in pipeline with MoEF&CC, GoI.

1. Mitigation of Coastal Wetlands, bordering Palk Bay and Gulf of Mannar in Ramanathapuram District, Tamil Nadu, with a view to manage the Climate and Non-Climatic Stressors for Biodiversity Conservation and the Sustainable Livelihood of the Dependent Fisher-folk by Department of Environment at a cost of Rs. 24.82 Crores.
2. Proposal for Conservation and Rehabilitation of Muthupet Mangroves in Thiruvarur Forest division of Tamil Nadu State by Tamil Nadu Forest department at a cost of Rs.25.00 Crores. The Detailed Project Report is under preparation.

3. Climate resilient fodder production through hydroponic mode to augment livestock productivity in Tamil Nadu, India by TANUVAS at a cost of Rs.16.10 Crores.

All the NAFCC projects are closely interlinked with Sustainable Development Goal 13 and interlinked with other SDGs. Projects under NAFCC play a crucial role in achieving targets of SDG 13: Climate Action viz., Target 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters and State Indicator 13.3.2 Strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions in the State.

### **3.2 Green Climate Fund (GCF)**

The Green Climate Fund (GCF) was adopted as a financial mechanism of the United Nations Framework Convention on Climate Change

(UNFCCC) to assist developing countries in adaptation and mitigation practices to counter adverse effects of the Climate Change.

As per the norms, all the projects seeking funds under GCF requires recommendation from the State Level Steering Committee (SLSC) headed by the Chief Secretary to Government and the Director of Environment is the Member Secretary.

The project "Improved resilience of Urban Ecosystems through targeted restoration of Wetlands" proposed by the Tamil Nadu Forest Department at a cost of Rs.165.69 Crores was approved by the State Level Steering Committee in Tamil Nadu and also by the Ministry of Environment, Forest and Climate Change, Government of India (MoEF&CC, GoI).The Detailed Project Report is under preparation.

After the acceptance of the State Level Steering Committee for Tamil Nadu State Action

Plan on Climate Change (TNSAPCC), the following five projects have been recommended from NABARD Mumbai to MoEF & CC, GoI for approval.

1. Mitigating Enteric Methane Emission from Livestock in different Farming Systems of Tamil Nadu through Farmer Friendly Feed Technologies/ Feeding Practices with a budget of Rs. 79.85 Crores by the Department of Agriculture, Fisheries & Animal Husbandry, Tamil Nadu Veterinary and Animal Sciences University (TANUVAS).
2. Deployment of Zero Emission Buses in Chennai - Smart Electric Buses with an total outlay of Rs.500.16 Crores aimed to procure and operate 250 electric buses proposed by the Department of Transport (Metropolitan Transport Corporation Ltd, Chennai).
3. Climate Proofing of Rainfed Watersheds in Tamil Nadu at a cost of Rs. 370.00 Crores

by Tamil Nadu Water Shed Development Agency (TAWDEVA).

4. Shoreline Management of Tamil Nadu Coast to address Sea Erosion caused by Climate Change by Department of Fisheries at Rs. 1220.00 Crores.
5. Augmentation of Groundwater for Climate Resilience of vulnerable communities by PWD- Water Resources Division, Chennai at total cost of Rs.1445.00 Crores.

After the acceptance of the State Level Steering Committee, the following three projects are under scrutiny at NABARD, Chennai.

1. Protection and Restoration of Appa and Kosawari Islands of Gulf of Mannar, Tamil Nadu by the Department of Environment at the cost of Rs. 102.58 Crores.
2. Sustainable Water Security Mission (SuWaSeM) for Tamil Nadu which is mainly to ensure water security in the urban local

bodies through various methods of Rainwater Harvesting (RWH) structures, at a cost of Rs.490.00 Crores proposed by the Department of Municipal Administration & Water Supply.

3. Climate Resilient Interventions for Restoration and Management of the Noyyal River Ecosystem by PWD, Water Resources Division, Chennai at a cost of Rs. 824.44 Crores.

The projects under Green Climate Fund will aid to attain the SDG 13: Climate Action, Target 13.a, which focuses on mitigation actions through the Green Climate Fund. All the projects under GCF are interlinked with other Sustainable Development Goals and will support the State to achieve SDG 13 Targets 13.1, 13.3 and 13.a.

### **3.3 Tamil Nadu State Climate Change Cell (TNSCCC)**

Realizing the importance of the role of State Government initiatives on Climate Change and in par with India's National Action Plan on Climate Change, Department of Environment established a Climate Change Cell (TNSCCC) on 01.12.2014. The Cell provides the central focus for Tamil Nadu State Government's climate change related initiatives and activities. The vision of TNSCCC is to respond to global climate change by building capacity and create awareness at the local level and the mission of TNSCCC is to establish a platform to collect, collate and disseminate climate change information pertaining to Tamil Nadu State to various stakeholders in order to enable effective climate change governance and climate change services.



### **3.4 National Mission on Strategic Knowledge Management for Climate Change (NMSKCC)**

Realising the importance of knowledge sharing and data dissemination to tackle the deleterious impacts of climate change, the National Mission on Strategic Knowledge Management was framed as part of the National Action Plan on Climate Change. The National Mission on Strategic Knowledge for Climate Change (NMSKCC) project funded by the Department of Science and Technology aims for the strengthening of the Tamil Nadu State Climate Change Cell (TNSCCC) along with the collaboration of Centre for Climate Change and Disaster Management, Anna University, Chennai at a project cost of Rs. 1.99 Crores for a duration of 5 years (2016 -2021).

The Tamil Nadu Climate Change Knowledge Portal ([www.tnsccc.in](http://www.tnsccc.in)) created to strengthen the existing TNSCCC of the Department of

Environment provides the Climate Change related information and policy related interventions taken under the National Action Plan on Climate Change (NAPCC) and Tamil Nadu State Action Plan on Climate Change (TNSAPCC). The knowledge portal enabled with GIS based Climate Change Information System (CCIS), can be accessed by users for the district wise temperature and the precipitation changes for the State of Tamil Nadu from 1951-2015 in both spatial and temporal scales. District wise socio-economic vulnerability to current climate change was assessed to understand how the socio-economic conditions of the districts influence climate vulnerability. The districts which have high exposure to climate variability and extremities, the districts which are highly sensitive to Climate Change due to its socio-economic status are identified and vulnerability maps are prepared.

The Tamil Nadu Climate Change Quarterly Newsletters under this programme will enhance the Climate Change knowledge of the policy makers, researchers, students and the community with the recent Climate Change related events and Climate Change related policy interventions at the National and the State level.

This scheme has high impact on SDG Target-13.2 which emphasizes on Integrating Climate Change measures into national policies, strategies and planning deals with policy and development planning in alignment with climate change action and Target 13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning. Under SDG 13 Target 13.3, central scheme of Information, Education and Communication is linked to State scheme of establishing Knowledge Portal for vulnerable sectors.

#### **4. Environment Management Agency of Tamil Nadu (EMAT):**

The Government of Tamil Nadu has created EMAT for monitoring the works carried out under National River Conservation Plan (NRCP) and National Lake Conservation Plan (NLCP) and has started functioning from 22.01.2003. The Principal Secretary to Government, Environment and Forest Department is the Chairman and the Director of Environment is the Member Secretary of the Environment Management Agency of Tamil Nadu.

The EMAT is implementing the National Green Corps (NGC) activities besides executing various eco-restoration activities in the State through various Departments/Agencies viz., Municipal Administration and Water Supply department, Public Works department, Fisheries department and Local Bodies etc.

## **4.1 National Green Corps (NGC)**

The Department of Environment is the Nodal Agency for implementing the National Green Corps (NGC) in Tamil Nadu and active since 2002-2003. There are 8000 NGC Eco-clubs functioning in 32 districts (250 per district). The MoEF&CC, GoI approved a grant of Rs. 5000/- per school during 2018-2019 for the activities of NGC. Training is given to the teacher coordinators in each district of the State for NGC activities. Every year, around 3,20,000 children participate in the awareness movement under this programme. NGC activities will be extended to the newly formed five Districts of Tamil Nadu.

The NGC students are engaged in various environmental awareness programmes like celebrating at least six Green Days in schools, school campus cleaning, tree planting, environmental awareness rallies, vermicomposting, enviro-expo, enviro competitions, anti-plastic

campaign, cultural programmes on environmental awareness, nature camps, Swachh Bharat, etc. NGC Programmes is allied with SDG Target 13.3 Improve education, awareness-raising and human and institutional capacity.

#### **4.2 Eco-restoration of water bodies:**

The restoration and conservation of the lakes aims at achieving the desired water quality besides improving the biodiversity conservation and preserving the ecosystem through activities like de-silting, diversion of sewage entering into lakes, deepening of ponds, construction of retaining walls, tree planting, etc.

The commitment of the Government of Tamil Nadu in restoration of water bodies in which the Department of Environment has developed a detailed framework for restoration of water bodies aligning to SDG 13: Climate Action. The Department of Environment through EMAT and with concerned line departments has undertaken

various eco-restoration activities as follows including the works of the current year.

- During 2014-15, the Phase-I Eco-restoration of Madhavaram (Rettai Eri), Ambattur and Korattur wetland complex in Thiruvallur district was completed at a cost of Rs.20.00 Crores. Under Phase-II, a sum of Rs.39.18 Crores was allotted for 2015-2016, 2016-2017 and 2017-18 and the eco-restoration works are completed.
- During 2016-2017, Eco-restoration of Periyakulam Eri in Vadamugam Vellodu Village in Erode district was taken up at a cost of Rs.4.90 Crores through the District Administration, Erode and the works are under progress.
- During 2018-19, Eco-restoration of five tanks at a cost of Rs.12.77 Crores for Nallathaneerkulam in Thiruthani Municipality of Tiruvallur District at Rs.1.50 crore, Vennandur Eri in Venandur Town Panchayat, in Namakkal District at a cost of Rs.3.50 Crores, Andikulam Eri, Senguttai

Eri and Karadipatti Eri in Erode at Rs.3.34 Crores, Rs.2.28 Crores and Rs.2.15 Crores respectively. Works in Thiruthani Nallathaneerkulam and Vennandur Eri are completed and the remaining works will be completed by March 2020.

- During 2019-20, Eco-restoration of Chitlapakkam Eri in Tambaram Taluk of Chengalpattu district is taken up through PWD, at a cost of Rs.25.00 Crores and work is under progress.
- During 2019-20 Eco-restoration of Odathurai Eri in Bhavani Taluk of Erode district is taken up through PWD, at a cost of Rs.3.20 Crores and work is under progress.

#### **4.3 Environment Protection and Renewable Energy Development Fund (EPRED)**

Tamil Nadu Government is implementing schemes for the protection of the environment and promotion of clean energy. For this purpose,



an “Environment Protection and Renewable Energy Development Fund” has been created during 2010-2011 and a fund of Rs.353.00 Crores has been utilized in the past.

The main objective of this fund is to promote, mitigate and take up adaptive measures to combat effects of climate change in the State. The eco-restoration of water bodies are taken up under EPRED funds under EMAT. The main scope of this fund is for promotional and project based activities like greening of Tamil Nadu through planting of trees outside the forests areas, initiatives and intervention in the field of renewable energy, prevention of environmental degradation etc.

Under Environment Protection and Renewable Energy Development Fund (EPRED fund), Eco- restoration works are taken up in the following water bodies in and around Chennai City viz., Adambakkam Tank in Alandur Taluk and

Perumbakkam Tank in Sholinganallur Taluk of Chennai District and Vengaivasal Periya Eri in Tambaram Taluk of Chengalpattu District at a cost of Rs.12.00 Crores sanctioned during January 2020. The Eco-restoration works proposed above will be completed in the year 2021.

## **5. Coastal Zone Management (CZM)**

The Department of Environment is implementing the Statutory provisions of the Coastal Regulation Zone (CRZ) Notification. The MoEF&CC, GoI issued the Coastal Regulation Zone Notification in 2011 under Environment (Protection) Act, 1986, in supersession of CRZ Notification 1991 to protect the coastal environment and to regulate development activities along the coastal areas, to ensure livelihood security to the fishing communities, other local communities living in the coastal areas, to conserve and protect the coastal

stretches and to promote sustainable development in the coastal areas.

The coastal areas have been categorized as four zones as follows in the CRZ Notification 2011.

- CRZ-I (ecologically sensitive),
- CRZ-II (built-up area),
- CRZ-III (rural area) and
- CRZ-IV (water area which includes the water areas up to 12 Nautical miles (Nm) of the territorial waters and the tide influenced water bodies).

At present, the MoEF&CC, GoI have promulgated CRZ Notification 2019, which will be implemented in Tamil Nadu after the preparation of Coastal Zone Management Plan (CZMP), based on the provisions of the CRZ Notification 2019. The work for the preparation of CZMP, as per the CRZ Notification 2019 is under progress.

All the State initiatives on coastal sector is linked with Sustainable development Goal 14: Life Below Water mainly on Target 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans and National indicator 14.2.2: Implementation of Coastal Zone Regulation Notification.

### **5.1 Coastal Zone Management Authorities**

The MoEF & CC, GoI have constituted State Coastal Zone Management Authority (SCZMA) for Tamil Nadu with the Principal Secretary, Environment and Forests Department, Government of Tamil Nadu as the Chairman and the Director of Environment as its Member Secretary besides ten Members, who have been nominated from various Departments, Institutions and Agencies. As on date, the SCZMA have

convened regular meetings and taken decisions on the several coastal related projects and issues in Tamil Nadu.

The District Coastal Zone Management Authorities under the Chairmanship of the respective Coastal District Collectors have been formed by the State Government during 1998. These Authorities convene periodical meetings to take decisions pertaining to CRZ matters.

## **5.2 Coastal Disaster Risk Reduction Project (CDRRP)**

The following schemes were implemented by the Department of Environment with the financial assistance from World Bank under CDRRP.

- **Demarcation of High Tide Line (HTL) along the Coast of Tamil Nadu**

The Department of Environment has demarcated high tide line for the entire coastline of the State including tidal

influenced water bodies and the high tide line reference points have been super imposed on the village cadastral maps on a scale of 1:5000. This work has been completed in the year 2011 through the Institute of Remote Sensing, Anna University at a cost of Rs.2.20 Crores and the said HTL maps are made available in the District Authorities.

- **Preparation of Integrated Coastal Zone Management Plan (ICZMP)**

To take appropriate decision on any development to be undertaken along the coast, the Integrated Coastal Management Plan has been prepared for the coastline of Tamil Nadu in the year 2013. The different layers of information available through the Geographical Information System (GIS) platform can be used to assess the damage and to plan for mitigation at times of coastal hazard and the said plan is utilized as base document for formulating future plans.

- **Erection of Stone Pillars on High Tide Line (HTL) reference points**

To identify the HTL on ground, high tide line stone pillars have been erected along the coast at a distance of 250 m interval all along the coast of Tamil Nadu in 2014-2015.

### **5.3 Integrated Coastal Zone Management Plan (ICZMP) Phase-II / Enhancing Coastal and Ocean Resource Efficiency Programme (ENCORE)**

Sustainable management of coastal and marine resources is essential to our State's economic growth. The Integrated Coastal Zone Management Plan (ICZMP) for the State was prepared with the objective of better co-ordination among implementing agencies for development along the coastal stretch of Tamil Nadu, targeted at socio-economic improvement of the people while keeping natural resources and the environment healthy and capable of sustaining future generation.

Integrated Coastal Zone Management Plan (ICZMP) Phase-II project for Tamil Nadu has been sanctioned by Society of Integrated Coastal Management (SICOM), MoEF&CC, GoI at a cost of Rs.336.00 Crores with an External financial share of 50 percent from World Bank, 30 percent share from Government of India and State share of 20 percent. The Government of Tamil Nadu has agreed to release the 20 percent State share of Rs.67.20 Crores to the Department of Environment, on receipt of the approval of Detailed Project Reports from SICOM/World Bank. The thematic areas of the ICZMP Phase II project are ICZM Plan, Conservation of coastal & marine ecological resources, Coastal Pollution management and related infrastructure upgrade, Livelihood security of coastal communities and capacity building and implementation of ICZM Plans.

The Detailed Project Report (DPR) for the activities viz., Preparation of ICZM plan for



Rs.20.00 Crores, Development of GIS based database on health of coral reefs and seagrass of Gulf of Mannar at the cost of Rs.6.40 Crores, Establishment of sea turtle conservation centre in Nagapattinam District for Rs.4.70 Crores, Eco-restoration of sacred groves in coastal Taluk of Nagapattinam District at a cost of Rs.7.35 Crores, Creation of awareness to control communities on CRZ provision, coastal pollution etc., for Rs.7.02 Crores, Establishment of Tamil Nadu Marine Forest Training Academy for Rs.25.68 Crores have been completed and forwarded to SICOM, MoEF&CC in consultation with the implementing Departments/ Agencies/NCSCM. To execute the ICZMP Phase II project, a State Project Monitoring Unit (SPMU) has been created at the Department of Environment with a Project Director, an Additional Project Director, a Procurement Officer, an Expert and an Accountant. The SPMU will act as the Secretariat to the project steering committee charged with

the day-to-day coordination and implementation of the ICZM activities in the State.

#### **5.4 Preparation of Coastal Zone Management Plan**

As per the provisions of the Coastal Regulation Zone (CRZ) Notification, 2011, the Department of Environment entrusted the work of preparation of draft CZMPs for all the coastal districts of Tamil Nadu to the National Centre for Sustainable Coastal Management (NCSCM), Chennai, which is an authorized agency approved by MoEF&CC, GoI, for the said purpose.

The MoEF&CC, GoI have conveyed the approval of the Coastal Zone Management Plan (CZMP) for Tamil Nadu, based on the recommendations of the National Coastal Zone Management Authority (NCZMA) on 24.10.2018. The approved Coastal Zone Management Plan (CZMP) in 117 maps have been uploaded in the Website of Department of Environment

(<http://www.environment.tn.gov.in>) and ENVIS (<http://tnenvis.nic.in>) on 29.11.2018. Soft copy of the approved CZMP has been sent to all the 13 District Coastal Zone Management Authorities and the Stakeholder Departments for necessary action.

The MoEF&CC, GoI have promulgated CRZ Notification 2019 on 18.01.2019. Work order has been issued to National Center for Sustainable Coastal Management (NCSCM) to carry out the preparation of Coastal Zone Management Plan (CZMP) as per the provisions of the CRZ Notification 2019, which is mandatory for the State. On receipt of revised CZMP as per the new CRZ Notification 2019, public hearings, public consultations shall be arranged before sending to the MoEF&CC, GoI for approval through Government of Tamil Nadu.

## **5.5 Beach Environment and Aesthetic Management System (BEAMS) programme for Blue Flag Certification in Tamil Nadu**

The Blue Flag Certification for beaches and marinas is run by the international, non-governmental, non-profit organization Foundation for Environmental Education (FEE). Blue Flag has become a truly global Programme, with an ever-increasing number of countries participating in it. FEE's Blue Flag criteria include standards for quality, safety, environmental education and information, the provision of services and general environmental management criteria. The Blue Flag is sought for beaches, marinas, and sustainable boating tourism operators as an indication of their high environmental and quality standards. Thus, Blue Flag has become a highly respected and recognised eco-label working to bring together the tourism and environmental sectors at local, regional and national levels.

The Blue Flag Beach must comply with 33 Blue Flag Criteria in order to be awarded Blue Flag accreditation including constitution of Beach Management Committee, display on Information about beach and bathing water quality, conducting environmental education activities, cleaning of beach, managing of sensitive areas, public safety control measures, emergency plans to cope with pollution risks, provision of toilets/rest rooms, monitoring of marine and freshwater sensitive habitats, supply of drinking water etc.

Kovalam Beach in Chengalpattu District has been chosen to develop, as per the principles of Blue Flag Beach Programme in Tamil Nadu, as a pilot project as it meets the water quality & safety criteria as per the Blue Flag Standards. The Beach Management Committee (BMC) has been constituted under the Chairmanship of the District Collector, Chengalpattu District to monitor and supervise the Blue Flag Beach Programme at

Kovalam Beach on 23.12.2019. Periodical water monitoring at an interval of 25 days and conducting Environmental Education activities are being carried out at Kovalam Beach. Work on Pollution Abatement Services and Safety Surveillance Services is commenced under the Beam Environment and Aesthetic Management System (BEAMS) under National Component of Integrated Coastal Zone Management Plan (ICZMP) Phase-II / Enhancing Coastal and Ocean Resource Efficiency Programme (ENCORE).

## **5.6 Geographic Information System (GIS) Cell**

The Department of Environment established a GIS Cell as a part of Emergency Tsunami Reconstruction Project (ETRP) funded by the World Bank. GIS Cell has monitored the project components under ETRP/CDRRP like demarcation of High Tide Line (HTL), preparation of Integrated Coastal Zone Management Plan (ICZMP), Coastal

Vulnerability maps, erection of Stone pillar on High Tide Lines along the coast of Tamil Nadu etc.

The Department of Environment is a State body which gives clearance for projects which are proposed in the Coastal Regulation Zone. To monitor the violations in CRZ area, the GIS Cell is accompanying the Green Squad and assists in identifying and mapping the location with the help of GPS instruments and furnishes reports based on which action has been taken.

The GIS Cell is monitoring the project works viz., preparation of CZMP in 1:25000 scale through NCSCM, preparation of CZMP in 1:5000 scale through IRS, Anna University, Oil spill Disaster Contingency plan for Tamil Nadu, Disaster Management Plan of Department of Environment and Report of the Committee on Assessment of Environmental impact of Oil spill occurred on 28.01.2017 due to collision of two

ships in the off sea, Ennore, Chennai. Training and awareness programmes on ICZMP have also been conducted through GIS Cell.

Under Coastal Disaster Risk Reduction Project (CDRRP) the Government of Tamil Nadu have accorded sanction for the preparation of Local Level Integrated Coastal Zone Management Plan mapping in 1:5000 scale at a cost of Rs.2.99 Crores on 10.02.2020 by Revenue and Disaster Management Department. Local level CZM Maps are for the use of local bodies and other agencies to facilitate implementation of the Coastal Zone Management Plans.

## **6. Environmental Information System (ENVIS)**

The Environmental Information System Centre sponsored by the MoEF&CC, GoI is functioning in the Department of Environment from October 2002. This Centre provides information on various aspects about the State of



Environment and related issues of Tamil Nadu. The ENVIS centre is also engaged in collection, collation, storage, retrieval and dissemination of environmental information through a website [www.tnenvis.nic.in](http://www.tnenvis.nic.in) and publication of Newsletters, creation of web based database, answering environmental queries, awareness programme etc.

The Additional mandates of ENVIS scheme are to conduct the Green Skill Development Programme (GSDP) and Grid Based Decision Support System (GRIDSS). ENVIS HUB in the Department of Environment has conducted certificate course in Bird Identification and Basic Ornithology under GSDP for twenty students from the various districts in Tamil Nadu during 2019-2020. On a pilot scale, ENVIS HUB carried out GRIDSS in Chennai district and prepared ten sectoral GRID based maps.

Most of the ENVIS schemes have positive impact on SDG Target 13.3 Improve education,

awareness-raising and human and institutional capacity. Under SDG 13 Target 13.3, central scheme of Information, Education and Communication is linked to State schemes under ENVIS.

## **7. Significant Activities of the Department**

### **7.1 World Environment Day**

World Environment Day is the United Nation's flagship day and the biggest annual event in the world to mark the environmental awareness among the people. World Environment Day celebrated on June 5<sup>th</sup> of every year, which is a powerful platform to accelerate, amplify and engage people, communities and governments around the world to take action on critical environmental challenges facing the planet.

The Department of Environment has celebrated World Environmental Day 2019 at B.M.Birla Planetarium, Periyar Science and Technology, Kotturpuram, Chennai. The Theme

for World Environment Day 2019 was Air Pollution. During this programme, Department of Environment has released the Environmental awareness brochure on "Air Pollution with special emphasis on Air Pollution Tolerant Species". Environmental awareness rally was conducted from B. M. Birla Planetarium to Guindy National Park, Chennai. Around 300 National Green Corps students and 10 Teacher coordinators were participated in the event.

The Department of Environment has also celebrated the World Environment Day 2019 at Mahabalipuram beach on 06.06.2019 along with Society of Integrated Coastal Management (SICOM) officials and NGC students. Beach cleaning activities, Awareness speech and prize distribution were held during this programme.

Year 2020 is a critical year for Nations commitments to preserving and restoring

biodiversity and hence the theme of World Environment Day 2020 is Biodiversity.

## **7.2 International Earth Day**

Earth and its ecosystems are our home. In order to achieve a balance among the economic, social, and environmental needs of present and future generations, it is necessary to promote harmony with nature. International Earth Day, United Nation's flagship day is celebrated on April 22<sup>nd</sup> of every year to remind each of us that the Earth and its ecosystems provide us with life and sustenance. This Day also recognizes a collective responsibility, as called for in the 1992 Rio Declaration. International Earth Day provides an opportunity to raise public awareness around the world to the challenges regarding the well-being of the planet and all the life it supports. This year 2020 will mark the 50 years of Earth Day. The theme for Earth Day 2020 is Climate Action. Climate Change is one of the largest threats to sustainable development globally and is just one

of many imbalances caused by the unsustainable actions of humankind with direct implications for future generations. The Department of Environment will conduct awareness activities on Climate Action during Earth Day 2020.

### **7.3 Environment Awards**

Environment Awards for the best efforts/contributions in Environmental protection, environmental management and environmental awareness are given to selected NGOs, institutions, individuals and researchers from the year 2000 and are distributed during the World Environment Day. Ten environmental awards in various categories worth Rs.1.13 lakhs per year are awarded by the Government. Applications have been invited from the public for the awards for the year 2019.

### **7.4 Mass Awareness Campaign**

The Department of Environment has undertaken mass awareness campaign through

Eco clubs and National Green Cops in the State. The Environmental Information Dissemination Centres (EIDCs) have been formed in 69 Educational Districts consisting of a library containing environment related books, display charts, boards, posters (both in English and Tamil) highlighting environmental and climate change issues along with audio-visual equipments in order to disseminate information to students and public. Frequent visits to these EIDCs by the students are encouraged to acquire first hand information on Environment related subjects.

### **7.5 Tree planting programme in schools through children in Tamil Nadu**

Under this scheme, to encourage the students, for fruitful involvement in Environmental related activities and to keep the school premises green and clean, the Government have sanctioned a sum of Rs.144.00 lakhs for Tree Plantation and maintenance in 960 Eco clubs and NGC at schools, at the rate of 30 schools per district,

in all the 32 Districts of the State. A sum of Rs.15,000/- per school have been sanctioned for planting trees, distribution of incentive and appreciation certificate to students and for further maintenance. The Programme has been implemented in schools of 32 districts during 2017-18 and 2018-19 (960 schools per financial year). The second instalment of Rs.10000/- per school will be released during March 2020 based on the receipt of report on the growth report of the trees. Through this programme about 96000 trees are planted in all 32 districts during 2017-18 and 2018-19.

## **7.6 Conducting Eco-Competitions and Eco -Camps**

To disseminate the importance of environment to the students, eco-competitions among the NGC students in three disciplines of quiz, elocution and drawing for two sections viz., students up to 8<sup>th</sup> standard and above 8<sup>th</sup> standard in all the Revenue districts have been conducted

at a cost of Rs.64.00 lakhs (Rs.2.00 lakhs per district) during 2018-2019. Besides, prizes/certificates, separate eco-tours for boys and girls, have also been conducted for the winners. Similar programme will be conducted during 2019-2020. Imparting Climate Change education, raises awareness and institutional capacity is one of the key targets in Sustainable Development Goal 13: Climate Action. Target 13.3 of Sustainable Development Goal features a central scheme on Information, Education and Communication, which can be achieved through this programme at the State level.

### **7.7 Tamil Nadu State Climate Change Information Dissemination Services (TNS-CIDS)**

Climate change information plays a crucial role in national development planning, for managing development opportunities and risks and for mitigation and adaptation. In this, context it is



proposed to offer “Climate Change Information Dissemination Services (CIDS)” to collect and disseminate updated climate change information, news and happenings to various offices of the line Departments of Government as envisaged in Tamil Nadu SAPCC, during the year 2019-2020. The works are under progress at a cost of Rs.8.00 lakhs. This scheme has better causatum on SDG 13: Climate Action with a specific impact on SDG Target 13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

### **7.8 Assessment of micro-plastics in coastal areas, estuaries and lakes in Tamil Nadu**

To assess the micro-plastics pollution in the coastal areas, estuaries and lakes in Tamil Nadu, a study was proposed by the Department of Environment. The results of this study would help to collect baseline data on the status of

micro-plastics in selected coastal areas, estuaries and lakes of Tamil Nadu on the basis of which appropriate remedial and management actions can be considered. The study will be conducted at a total cost of Rs.81.20 lakhs. During 2019-2020, the works will be carried out at a cost of Rs.25.40 lakhs.

### **7.9 Setting up of Climate Studio at the Centre for Climate Change and Disaster Management, Anna University**

**Climate Studio, at the Centre for Climate Change and Disaster Management, Anna University, a State-of-Art Lab in Tamil Nadu is one of its kind in India.** The objective of the Climate Studio will contribute to capacity building and knowledge Management on Climate Science and Research. The target groups will be Government officials, Scientists, Young researchers and other stakeholders. The Climate Studio will be established with the financial support of GIZ under their "Climate Change

Adaptation in Rural Areas of India” Programme for Rs.247.00 lakhs. Climate Studio will have greater impact on SDG13, Target 13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

### **7.10 Awareness campaign on the ill effect of plastics “Message on wheels”**

Inculcating awareness among students and public on ill effect of plastics is very much essential as plastics have created severe damage to the environment. Various awareness activities like folk songs, dramas, street plays like Villupattu, traditional dances were conducted by selected organizations / NGOs through mobile vans from 2013-2014, 2016-2017 and 2018-2019 which received appreciation from public. Hence, the programme was carried out at a cost of Rs.64.00 lakhs (Rs.2.00 lakhs per district in 20 places) during 2020. This programme is aligned

with the Sustainable Development Goal 13, Target 13.3.

### **7.11 Environmental Awards for best three Ad-films**

An amount of Rs.7.00 lakhs, Rs.6.00 lakhs and Rs.5.00 lakhs will be awarded for the best three Ad-films and about 69 Ad-films have been received from the producers/ agencies. The Government have formed a selection Committee to select the best films for the Environmental Awards. After the receipt of the Committee report, the details of Awardees will be finalized.

### **7.12 E-learning**

Under E-learning programme, all the 69 EIDCs (Environmental Information Dissemination Centre) of schools have been linked to the Department of Environment server in a phased manner up to the year 2020 to facilitate the students to interact with the Experts during the Green days celebrations directly and

the programmes are conducted regularly. The Experts and officials from the Department of Environment interact with the Eco-clubs students on matters relating to Environment and its Management. This kind of activity will entrust the student community to be aware of Environment problems in their surroundings and solutions for them. This programme is interlinked with SDG 13: Climate Action and linked with Central scheme Information, Education and Communication of SDG Target 13.3.

## **8. Sustainable Development Goals (SDGs)**

The Sustainable Development Goals (SDGs) are a universal set of 17 Goals and 169 targets to help organize and streamline development actions for greater achievement of human wellbeing, while leaving no one behind by 2030. Goal 13: Climate Action: Take urgent action to combat climate change and its impacts by regulating

emissions and promoting developments in renewable energy.

The Department of Environment is the Nodal Department for the Climate change adaptation and mitigation activities in the State. The Department of Environment is dealing with the SDG 13 on Climate Action which aims to integrate climate change measures into State policies and strategies and further aims to plan and promote mechanisms for raising capacity for effective climate change-related planning and management. SDG 13 is closely interrelated with other SDG's like SDG 1,2,3,4,5,6,7,9,10,11,12, and 14 and this inter-linkage of SDG's is considered for the effective action. The Department of Environment, the Department of Revenue Administration, Disaster Management and Mitigation and the Tamil Nadu Pollution Control Board are the main Departments involved to achieve the SDG 13: Climate Actions.

The targets for SDG 13: Climate Action are as follows:-

- Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
- Integrate climate change measures into national policies, strategies and planning.
- Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.
- Implement the commitment undertaken by developed-country parties to the UNFCCC to a goal of mobilising jointly USD 100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible.

- Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and Small Island developing states, including focusing on women, youth and local and marginalized communities.

The document for the State of Tamil Nadu for SDG13: Climate Action has been prepared for the above Targets with reference to 2020 and 2030 including Annual Status Report for 2020 with success stories, District Level details and data for the SDG dash board for Tamil Nadu. The above activities will serve as a pathway for achieving Sustainable Development Goal especially with respect to SDG 13.

## **9. Tamil Nadu State Environment Policy, 2017**

The Government of Tamil Nadu accords the highest priority to preserve and protect its ecological footprint and environmental resources, in light of the responsibility placed upon it as per the



Constitution of India section 48A. The National Environment Policy announced by Government of India in 2006 (NEP 2006) highlighted the role of environmental degradation as a causal factor in enhancing and perpetuating poverty and the growing evidence of poor environmental quality adversely affecting human health and social development outcomes. The Government of Tamil Nadu deemed it necessary to bring out this State-specific Environment Policy to address issues specific to the environmental context in Tamil Nadu and to provide a holistic policy framework, in the context of the outcomes targeted under the Vision TN 2023. The Tamil Nadu Environmental Policy 2017 was released by the Hon'ble Chief Minister of Tamil Nadu on 26.07.2017, envisages a dynamic document which would be periodically reviewed to align it with newer information, knowledge and developments to keep it current and contemporary. To facilitate implementation of the TN Environmental Policy 2017, TN Environment Mission

under the stewardship of Hon'ble Chief Minister Government of Tamil Nadu has been constituted. Under SDG 13, central scheme of decision support system for Environmental policy, planning and outcome evaluation is linked to this Environment Policy 2017.

### **10. State Environment Impact Assessment Authority (SEIAA) –Tamil Nadu**

In S.O. 1533 dated 14<sup>th</sup> September 2006, the Ministry of Environment and Forests (MoEF), GoI have notified EIA Notification 2006 under sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986 by imposing certain restrictions and prohibitions on new projects or activities, on the expansion or modernization of existing projects and activities based on their potential environmental impacts.

Under the notification, it is mandatory to obtain prior Environmental Clearance for certain new projects, expansion or modernization of existing projects based on their potential

environmental impact. Projects falling under Category 'A' in the Schedule of the Notification requires Environmental Clearance from the Ministry of Environment, Forest & Climate Change (MoEF & CC), GoI and for matters falling under Category 'B', depending upon the thresholds of the activities requires Clearance at State Environment Impact Assessment Authority (SEIAA).

The Notification provides for constitution of a SEIAA empowered to grant Environmental Clearance to mitigate pollution and protect environment. To assist SEIAA, a State Expert Appraisal Committee (SEAC) is constituted. The Expert Appraisal Committee appraised the projects and forwards its recommendations to the SEIAA for taking a decision on granting Environmental Clearance, by following the Statutory provisions stipulated under EIA Notification 2006.

The present SEIAA was constituted vide MoEF & CC, GoI notification dated 05/11/2018 comprising of a three members SEIAA and 12 Members SEAC for Tamil Nadu for a term of three years.

The SEIAA and SEAC have conducted meetings at frequent intervals periodically and issue clearances for the projects under their purview.

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# **Tamil Nadu Pollution Control Board**

## **1.0 Introduction**

The Government of Tamil Nadu constituted the Tamil Nadu Prevention and Control of Water Pollution Board, vide G.O.No.340, Health and Family Welfare Department dated 19.02.1982, under Section 4 (1) of the Water (Prevention and Control of Pollution) Act, 1974 (Central Act 6). The notification was issued in the Tamil Nadu Government Gazette on 27<sup>th</sup> February 1982 and the Board came into existence on the same day. Subsequently after framing of the Tamilnadu Water (Prevention and Control of Pollution) Rules, 1983, the Board was renamed as Tamil Nadu Pollution Control Board (TNPCB).

The TNPCB functions under the overall administrative control of Environment and Forests Department. The Board comprises of Chairman, Member Secretary, five officials to represent the State Government, five persons to represent the local authorities, three non-officials to represent

the interests of agriculture, fishery or industry or trade and two persons to represent the companies or corporations owned by the State Government.

## **2.0 Acts and Rules**

The TNPCB is a regulatory body which enforces the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986, besides the following Rules and Notifications made there under.

- The Tamil Nadu Water (Prevention and Control of Pollution) Rules, 1983
- The Tamil Nadu Air (Prevention and Control of Pollution) Rules, 1983
- The Environment (Protection) Rules, 1986
- The Fly Ash Utilization Notification ,1999
- The Noise Pollution (Regulation and Control) Rules, 2000
- The Batteries (Management and Handling) Rules, 2001

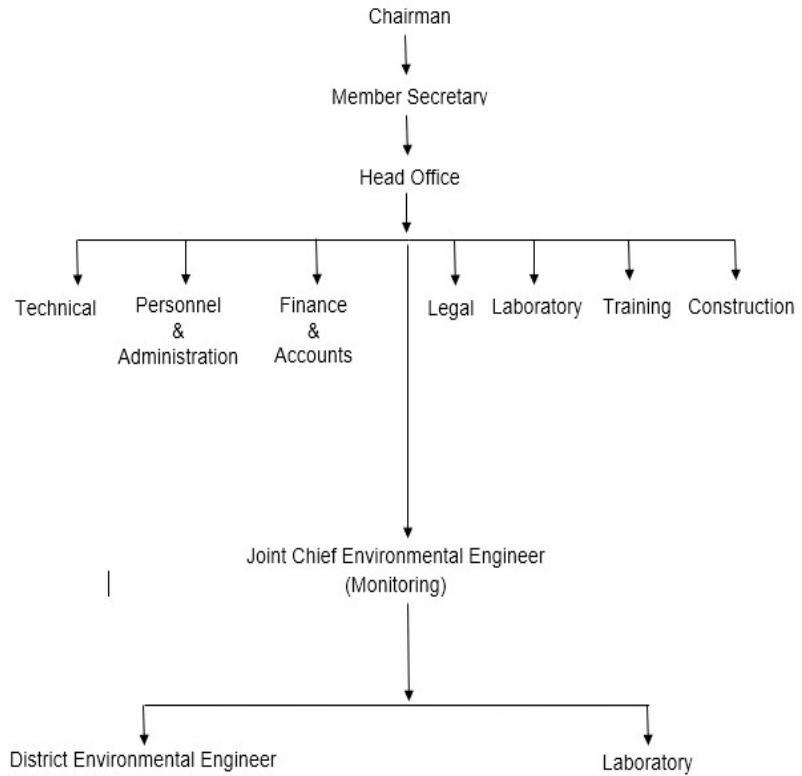
- The Environment Impact Assessment Notification, 2006
- Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.
- The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016
- The Bio-Medical Waste Management Rules, 2016
- The Solid Waste Management Rules, 2016
- The Plastic Waste Management Rules, 2016
- The E-Waste Management Rules, 2016
- The Construction and Demolition Waste Management Rules, 2016
- The Coastal Regulation Zone Notification, 2019

The Water (Prevention and Control of Pollution) Cess Act, 1977 which was earlier enforced by Tamil Nadu Pollution Control Board has been repealed following the implementation of Goods and Services Tax, since 01.07.2017.



## 3.0 Organisational Setup

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The organizational structure of the TNPCB is three-tier-system, consisting of Head Office, Seven Zonal Offices and 38 District Offices with a sanctioned strength of 998 staff. The Head Office is located at Chennai. The Seven Zonal Offices are headed by the Joint Chief Environmental Engineers (Monitoring) and the 38 District Offices are headed by the District Environmental Engineers. Apart from this, there are two flying squads headed by Environmental Engineers each one functioning at Erode and Tiruppur. The Tamil Nadu Pollution Control Board has also established 16 Laboratories (8 Advanced Environmental Laboratories and 8 District Environmental Laboratories) for monitoring the industries, water bodies and the ambient air quality of the State.

#### **4.0 Functions**

The TNPCB implements the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of

Pollution) Act, 1981. The main functions of the TNPCB as per Section 17 of the above Acts are as follows:

- To plan a comprehensive programme for the prevention, control and abatement of pollution of streams and wells besides air pollution in the State and to secure the execution thereof ;
- To advise the State Government on any matter concerning the prevention, control or abatement of water and air pollution;
- To inspect sewage or trade effluents, works and plants for the treatment of sewage and trade effluents and to review plants specifications or other data relating to plants set up for the treatment and the system for the disposal of sewage or trade effluents;
- To inspect air pollution control areas at such intervals as it may think necessary, assess

the quality of air therein and take steps for the prevention, control or abatement of air pollution in such areas;

- To collaborate with the Central Pollution Control Board (CPCB) in organizing the training of personnels engaged or to be engaged in programmes relating to prevention, control or abatement of water and air pollution and to organize mass education programme relating thereto;
- To encourage, conduct and participate in investigations and research relating to problems of water pollution and prevention, control or abatement of water pollution;
- To establish or recognize laboratories to enable the Board to perform its functions efficiently, including the analysis of samples of water from any stream or well or of samples of any sewage or trade effluents and emission of air pollutants;

- To perform such other functions as may be prescribed or as may, from time to time entrusted to it by the Central Pollution Control Board or the State Government.

## **5.0 Consent Management**

Tamil Nadu is highly industrialized State and second highest in the registered small and medium scale industries. To monitor the industries in respect of air and water pollution, mechanism of Consent to Establish and Consent to Operate the industries is being followed by TNPCB.

The consents are issued to the industries in two stages. In the first stage, 'Consent to Establish' (CTE) is issued to the industries, after assessing the suitability of the site before the industries take up their construction activities and in the second stage, 'Consent to Operate' (CTO) is issued to the established industrial units after

ensuring the unit's compliance of conditions stipulated in the Consent to Establish.

For efficient and effective implementation of the Acts and Rules and for efficient monitoring, the TNPCB has constituted various committees at Head, Zonal and District office levels. These committees conduct meetings at their levels and decide on the issues of consents, renewal of consents and authorisation for waste management.

### **5.1 Classification of Industries**

The Central Pollution Control Board has issued direction vide its letter dated 07.03.2016 to all State Pollution Control Boards (SPCBs) to maintain uniformity in categorizing the industries as Red, Orange, Green and White for grant of consent, inventorisation and other related activities. Based on that, TNPCB has classified the industries into a matrix of different categories by combining the pollution potential of an industry

and the value of its Gross Fixed Assets (GFA) for the purpose of monitoring. Thus, the industries are grouped as Red, Orange, Green or White and as Large, Medium or Small. As per CPCB direction, there shall be no necessity of obtaining consent for White category industries and only intimation to the concerned State Pollution Control Board shall suffice.

Category based on GFA	GFA (in crore)	Category based on polluting potential			
		Red	Orange	Green	White
Large	> 10 Cr.	Highly Polluting	Medium Polluting	Less Polluting	Non Polluting
Medium	5-10 Cr.				
Small	< 5 Cr.				

In addition, certain highly polluting industries have been brought under '17 category industries' based on the classification prescribed by the Central Pollution Control Board.

## **5.2 Online Consent Management**

The Board grants consent for establishment and operation of industries and processes based on the proposals submitted by the proponents. As a part of e-governance initiative of the Government of Tamil Nadu and with a view to provide a healthy and proactive interface between the regulatory authority and the industries, the TNPCB has introduced the facility of Online Consent Management and Monitoring System (OCMMS) from 19.01.2015 onwards.

The web based generic software package used in OCMMS has automated the work flow associated with consent management and monitoring which is one of the basic functions of the TNPCB. This system brings transparency and promptness in consent management, facilitating the industries for online submission of applications for Consent to Establish / Consent to Operate / Renewal of Consent, uploading of documents,



online payment of consent fees, online submission of clarifications, besides knowing the status of applications. In order to help the project proponents on filing of application through OCMMS, TNPCB operates Care Centre in all the district offices.

The TNPCB grants Consent to Establish (CTE) to industries with 7 years validity in cases of Environmental Impact Assessment (EIA) projects and 5 years in case of non-EIA projects. The Consent to Operate (CTO) is issued for eligible cases with a validity period of 5 years, 10 years and 14 years for Red, Orange and Green category industries respectively. The Tamil Nadu Pollution Control Board is also issuing auto renewal of consent to the units with respect to Red-Small, all sizes of Orange and Green category industries without inspections after getting and by getting specific undertakings from the units on compliance of previous consent order conditions.

## **Details of consent issued by TNPCB during 2019-2020**

Year	Consents issued for		
	Establishment	Operation	Renewal
From April 2019 to January 2020	656	4975	7575

### **5.3 Inspection Periodicity and Sample Collection**

Inspections and sample collections are carried out by the Board for various categories of industries as per the periodicity furnished below.

<b>Type of Industry</b>	<b>Category</b>	<b>Inspection</b>	<b>Sample Collection</b>
Large	Red	Once in 3 months	Once in a month
	Orange	Once in 6 months	Once in 4 months
	Green	Once in 2 years	-----

<b>Type of Industry</b>	<b>Category</b>	<b>Inspection</b>	<b>Sample Collection</b>
Medium	Red	Once in 4 months	Once in 3 months
	Orange	Once in 6 months	Once in 6 months
	Green	Once in 2 years	-----
Small	Red	Once in a year	Once in 3-6 months
	Orange	Once in 2 years	Once in 6 months
	Green	Once in 2 years	-----
17 Category of Industry		Once in a month	Once in a month

#### **5.4 Public Hearing**

As per the Environmental Impact Assessment Notification, 2006, industrial projects falling under "A" category require prior Environmental Clearance from the Ministry of Environment, Forest and Climate Change

(MoEF&CC), Government of India and projects falling under “B” category from the State Environmental Impact Assessment Authority (SEIAA). As per the notification, the TNPCB conducts public hearings under the Chairmanship of the District Collectors and the proceedings of the meeting are forwarded to the MoEF&CC, GoI or SEIAA as the case may be. From April 2019 to January 2020, TNPCB has conducted public hearing for 23 projects.

## **6.0 Grievance Redressal System**

Due to increased awareness on environment related issues, several complaints are being received from various public, Organizations, NGOs etc., The TNPCB has introduced online grievance petition redressal system from 1<sup>st</sup> March 2016 onwards. During the period from April 2019 to January 2020, 11798 complaint petitions were investigated and disposed.

## **6.1 CM Cell Petitions**

The TNPCB has established a separate section in Head Office to take immediate action to clear CM Cell petitions within 15 days. From April 2019 to January 2020, 183 petitions were disposed.

## **6.2 Amma Call Centre Petitions**

The TNPCB has established a separate section in Head Office to take immediate action on Amma Call Centre petitions and to dispose the petitions within 7 days. From April 2019 to January 2020, 287 petitions were disposed.

## **6.3 Grievance Redressal Centre**

The TNPCB has established a Grievance Redressal Centre during February 2018 at the Head Office with an objective of guiding Entrepreneurs and Project Proponents for submitting the consent applications, on the latest and cleaner technologies in pollution prevention

and control and also to answer the general public on environmental related issues.

## **7.0 Common Effluent Treatment Plants**

In the State of Tamil Nadu, tanneries and textile sectors contribute considerable export earnings and also provide huge employment opportunities. These industries are small scale in nature and operate in clusters in various parts of the State mostly in Ranipet, Tirupathur, Erode, Dindigul and Tiruppur Districts, thereby necessitating the operation of Common Effluent Treatment Plants (CETPs) to treat the trade effluent generated from their operations to ensure sustainable operation of these industries.

The TNPCB plays a supportive role towards the establishment of CETPs for cluster of small scale industries and also offers technical scrutiny of the proposals submitted by them, through IIT Madras and Anna University. The CETPs are established with the subsidy from State and

Central Government and contribution by the member industries. In Tamil Nadu, 36 CETPs are functioning, out of which 20 are in textiles, 13 are in tanneries, two are in electroplating and one is in Hotel and Lodges sectors. Apart from the above existing CETPs, 10 new CETPs are proposed to treat the trade effluent generated from the textile bleaching and dyeing industries located as cluster in Erode and Namakkal Districts. The TNPCB has issued Consent for Establishment to five CETPs.

To protect and conserve the critical water sources, the system of Zero Liquid Discharge (ZLD) was pioneered by TNPCB. The system provides for the recovery and reuse of water from the trade effluent, without allowing for discharge of effluent into any land or water sources. Out of 13 CETPs operated for tanneries, 11 CETPs are achieving ZLD. The remaining two CETPs located at Madavaram and Pallavaram have provided primary and secondary treatment system and

have opted for dilution of treated effluents with treated municipal sewage to meet the standards prescribed by the Board.

Out of 20 CETPs functioning for the textiles, 19 CETPs (18 CETPs in Tiruppur and one CETP in Perundurai) have achieved ZLD. For modernization / improvement of ZLD system in 18 CETPs in Tiruppur, the Government of Tamil Nadu have announced Rs.203.29 Crores as interest free loan, out of which Rs.199.15 Crore has been sanctioned and released to the respective CETPs through the Director of Handlooms and Textiles. The remaining one CETP at Ayyampet-Muthyalpet in Kancheepuram district has proposed to provide ZLD plant after getting the grant from the Central and State Governments.

### **7.1 Scientific Study Through Expert Institutions**

**(i)** In order to find a solution for disposal of salt generated from ZLD System of Tannery CETPs,



the All India Skin and Hide Manufacturers Association (AISHTMA) has engaged Central Salt & Marine Chemical Research Institute, Bhavnagar, Gujarat. They have demonstrated a technology and conducted studies for segregation of Sodium Chloride (NaCl) and Sodium Sulphate (Na<sub>2</sub>SO<sub>4</sub>) from the mixed salt so as to reuse the same. Utilization of these salts in Chlor Alkali units, Soda Ash, Pulp and Paper manufacturing industries is under trial.

**(ii)** In order to identify the contaminated area, source of contamination and subsequent remedial measures to restore the Odai Kattur Eri, Perundurai, Erode District, a detailed hydro-geological study is under progress in and around the SIPCOT Industrial Complex, Perundurai by National Geophysical Research Institute (NGRI), Hyderabad.

## **8.0 Plastic Waste Management**

The Ministry of Environment, Forest and Climate Change, Government of India have

notified the Plastic Waste Management Rules, 2016. As per the annual report for the year 2018-19, the estimated plastic waste generated from 664 Urban Local Bodies of Tamil Nadu is around 1098 tons/day, out of which 90% is collected and segregated by the respective urban bodies in which the recyclable plastic waste are sold to the recyclers, low value / low calorific plastic waste are utilized for road laying and the non-recyclable, high calorific plastic waste are sent for co-incineration in cement plants.

As per Rule 13 of Plastic Waste Management Rules, 2016, the TNPCB has issued Registration to 91 plastic manufacturing units, 98 plastic recycling units and 8 multilayer plastic units. The TNPCB submits annual report in Form-VI of the Rule to the Central Pollution Control Board.

## **8.1 Use and Throwing Plastic Ban Notification**

The Hon'ble Chief Minister of Tamil Nadu made an announcement under Rule 110 on 05.06.2018 imposing ban on manufacture, storage, supply, sale and use of certain 'use and throwaway plastics' with effect from 01.01.2019.

The Government of Tamil Nadu, in exercise of the powers conferred under Section 5 of the Environment (Protection) Act, 1986 notified ban on manufacture, storage, supply, transport, sale or distribution and use of 1) Plastic sheet / cling film used for food wrapping 2) Plastic sheet used for spreading on dining table 3) Plastic Thermocol plate 4) Plastic coated paper plates 5) Plastic coated paper cups 6) Plastic tea cups 7) Plastic tumbler 8) Thermocol cups 9) Plastic carry bags of all size & thickness 10) Plastic coated carry bags 11) Non-woven Polypropylene carry bags 12) Water packets/pouches 13) Plastic straw and 14) Plastic flags.

## 8.2 Government Orders for effective implementation of the Ban

For effective implementation of the ban, the following Government orders were issued

<b>S. No.</b>	<b>Purpose</b>	<b>Government Order</b>
1.	Formation of Steering Committee	G.O.(Ms)No.92,E&F(EC.2) Department, dated 05.07.2018
2.	Appointment of Regional Coordinators	G.O.(Ms).No.82,E&F(EC.2) Department, dated 15.06.2018
3.	Sanction of Rs.54 lakhs for conducting Regional Workshops	G.O.(2D)No.30,E&F(EC.2) Department, dated 05.07.2018
4.	Implementation of ban on use and throwaway plastics at all Government Departments	G.O.(D).No.265,E&F(EC.2) Department, dated 20.09.2018
5.	Appointment of TNPCB Officials for assisting Regional Coordinators	G.O.(D).No.319,E&F(EC.2) Department, dated 10.11.2018

### **8.3 Awareness initiatives for successful implementation of Plastic Ban**

The TNPCB has carried out the following initiatives for awareness creation among the concerned stakeholders and the public and for effective implementation of ban.

- Meetings conducted with the representatives of Shopping Malls, Hotels and Marriage Halls, TASMACH, Eco-Clubs, NGC Coordinators and District Coordinators of Tamil Nadu
- District Environmental Committee meetings and massive awareness rallies conducted under the Chairmanship of the District Collectors. Monitoring groups formed by the District Collector are carrying out enforcement of plastic ban notification.
- Workshops for alternative eco-products conducted at all districts
- An exhibit vehicle was inaugurated by the Hon'ble Chief Minister of Tamil Nadu and

created awareness at 75 locations all over Tamil Nadu.

- Regional Conferences to create awareness among various stake holders for Plastic Pollution Free Tamil Nadu were conducted.
- Awareness was created through various media such as hosting of website, social media platforms like Facebook, Twitter, etc. and screening of awareness videos and animation short movies in shopping malls, theatres, etc.
- Display boards showing banned items were placed at 45 toll plazas across NHAI.
- The TNPCB has directed all the large industries throughout the State to comply with the plastic ban order and to create awareness in areas adjoining the industries.
- The Hon'ble CM launched "Reverse Vending Buyback" Machine to Recycle the PET bottles and aluminium cans and the same was installed at different locations.

## **8.4 Action taken against manufacturers of banned plastic items**

The TNPCB has issued closure directions and disconnection of power supply to 52 industries involved in the manufacture of banned plastic items

## **9.0 Hazardous Waste Management**

As per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 the hazardous waste generators shall follow the steps namely prevention, minimization, reuse, recycling, recovery, utilization including co-processing and safe disposal of the hazardous wastes. The State Pollution Control Board shall grant authorization for handling the hazardous wastes.

In the State of Tamil Nadu, there are 3,492 units identified as hazardous wastes generating units and authorization has been issued to them through online consent management system. Of

the 18.06 lakh tons of hazardous wastes generated during 2019-20, 2.07 lakh tons are landfillable, 2.01 lakh tons are recyclable, 0.41 lakh tons are incinerable, 13.57 lakhs tons of wastes are utilizable.

The TNPCB is taking effective steps in handling and management of hazardous wastes, its treatment and disposal in an environmentally safe manner. Two common hazardous waste "Treatment, Storage and Disposal Facilities" (TSDF) have been established at Gummidipoondi and Virudhunagar and they are in operation. Further, the TNPCB has taken efforts to utilize the hazardous wastes generated from Common Effluent Treatment Plants (CETPs) of the textile processing units and tanneries as raw material for co-processing in the cement factories. So far, 2.11 lakh tons of ETP primary sludge has been disposed off to various cement industries for co-processing.



## **10.0 Solid Waste Management**

The Ministry of Environment, Forest and Climate Change, Government of India have notified the Solid Waste Management Rules, 2016. The role of local bodies have been specified under Rule 15. As per Rule 16, the TNPCB enforces these Rules through local bodies.

In Tamil Nadu, there are 15 Corporations, 121 Municipalities and 528 Town Panchayats. During 2018-19 and the total quantity of solid waste generation was 13,968 tons/day, as reported by the local bodies, of which 12,850 tons/day of solid wastes was collected. From this collected quantity, 7,196 tons/day of solid waste was treated and 5,654 tons/day were land filled in the landfill sites.

The TNPCB has issued Authorisation to 219 Urban Local Bodies (ULBs) generating solid wastes greater than 5 tons/day. The TNPCB issues directions to ULBs based on complaints

received for improper solid waste management. The TNPCB monitors the water and air quality in and around the dumpsites of ULBs periodically. The TNPCB submits the annual report in Form-V to the CPCB.

### **11.0 Biomedical Waste Management**

As per the Bio-Medical Waste Management Rules, 2016, the Bio-medical waste generators and the operators of the Common Bio-Medical Waste Treatment and Disposal facilities (CBMWTF) are responsible for safe handling and disposal of the bio-medical wastes. The TNPCB issues authorization to the health care facilities and the CBMWTFs through online and monitors the compliance of various provisions of the Rules. The Government have constituted the State Level Advisory Committee to oversee the implementation of the Rules.

In the State of Tamil Nadu, so far 18,372 Private and Government hospitals, including the bedded and non bedded clinics, Veterinary

Institutions, Pathological Labs, Blood Banks and Research Institutions have been issued with authorizations under BMWM Rules, 2016. All these hospitals have executed agreement with the CBMWTFs for the collection, transport, treatment and scientific disposal of the biomedical wastes. In Tamil Nadu, there are 11 CBMWTFs, out of which, eight facilities are in operation. The remaining three facilities were issued with closure directions by the TNPCB for non compliance of Bio Medical Waste Management Rules, 2016. On an average, 58 tons/day of bio-medical waste are handled by these facilities. Consent for Establishment has been issued for three more common facilities at Tiruvallur, Cuddalore and Tiruppur Districts.

## **12.0 E-Waste Management**

As per the E-Waste Management Rules, 2016 the producer of the electrical and electronic equipments shall be responsible for collection and channelization of e-wastes generated from the

'end-of-life' of their products under Extended Producers Responsibility (EPR). The CPCB issues authorization to the producer of electrical or electronic equipments for channelization of e-wastes to ensure environmentally sound management of such waste. The TNPCB monitors the compliance of the conditions of the Extended Producer Responsibility (EPR) Authorisation. The TNPCB grants authorization to the manufacturers, dismantlers, recyclers and refurbishers and conducts random inspections. The Board has so far issued authorizations to 25 units, which includes 23 Dismantlers, one Recycler and one Refurbisher.

### **13.0 Construction and Demolition Waste Management**

The Ministry of Environment, Forest and Climate Change, Government of India have notified the Construction and Demolition (C&D) Waste Management Rules, 2016 which is to be scrupulously implemented by the ULBs. The

TNPCB has issued necessary directions to all the local bodies to identify sites for collection and processing facilities for the C&D Wastes.

#### **14.0 TNPCB Laboratories**

The TNPCB has established well equipped laboratories for the analysis of water, waste water, sewage, soil samples and for monitoring the ambient air quality and stack monitoring of the industries at district level. At present, there are eight Advanced Environmental Laboratories (AELs) functioning at Chennai, Coimbatore, Cuddalore, Madurai, Salem, Tirunelveli, Trichy and Vellore. Eight District Environmental Laboratories (DELs) are functioning at Ambattur, Dindigul, Hosur, Manali, Maraimalai Nagar, Tiruppur, Tuticorin and Perundurai. All the TNPCB laboratories receive the samples collected by the District Environmental Engineers in their region and the samples are analysed for the major environmental parameters and the reports are

furnished to the District Environmental Engineer's within 15 days. The TNPCB laboratories also conduct air quality studies at industries at regular frequency to monitor the emission level and to comply with the standards.

The AELs at Chennai, Coimbatore, Cuddalore, Madurai and Salem has got the NABL accreditation. The AELs at Chennai, Salem and Cuddalore have obtained OSHAS 18001 Certification. 21,209 numbers of water / effluent samples were analyzed and stack monitoring and ambient air quality survey were conducted for 818 industries from April 2019 to January 2020.

#### **14.1 Water Quality Monitoring**

The TNPCB is monitoring the inland water quality under Global Environmental Monitoring System (GEMS) and Monitoring of Indian National Aquatic Resources System (MINARS) along the four major rivers of Cauvery, Tamirabarani, Palar and Vaigai and eight lakes located in Udthagamandalam, Kodaikanal, Yercaud,

Veeranam, Porur, Poondi, Pulicat and Redhills. At present, 79 stations are being monitored by the TNPCB with the financial assistance of the CPCB. Results are uploaded in the CPCB / TNPCB website.

## **14.2 Water Quality Watch Centre**

The TNPCB has established a “Water Quality Watch Centre” at Corporate Office, Chennai for online monitoring of the parameters such as flow, TDS, pH, BOD, COD, TSS and other specific parameters of treated effluent at the outlet of the treatment plant on 24x7 continuous basis. As on January 2020, 343 units of 17 category highly polluting industries, Red Large industries and CETPs are monitored at the centre.

## **14.3 Continuous Water Quality Monitoring Stations**

The TNPCB has installed online real time continuous water quality monitoring stations in River Cauvery, Noyyal, Bhavani, Tamirabarani and Kalingarayan canal to watch the quality of the

water. The parameters such as pH, Total (DO) Dissolved Solids (TDS) and Dissolved Oxygen levels are monitored.

#### **14.4 Chennai City Waterways Monitoring Programme**

The TNPCB is monitoring the water quality of four city waterways in Chennai city (i.e.) Adyar River, Buckingham Canal, Cooum River and Otteri Nallah in 30 locations to assess the pollution level.

#### **14.5 Ambient Air Quality Monitoring**

The TNPCB is operating 28 Ambient Air Quality Monitoring Stations (AAQMS) in Tamil Nadu under National Air Quality Monitoring Programme (NAMP) funded by the CPCB. These stations are located at Chennai, Coimbatore, Madurai, Salem, Tiruchirapalli, Thoothukudi, Mettur and Cuddalore. The parameters viz., Particulate Matter (PM<sub>10</sub>), Particulate Matter (PM<sub>2.5</sub>), Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>2</sub>) and Ammonia (NH<sub>3</sub>) are monitored. All the above stations are functioning on 24 hours basis



twice a week. The survey results are displayed in the TNPCB website.

#### **14.6 Continuous Ambient Air Quality Monitoring Stations**

The TNPCB has installed Continuous Ambient Air Quality Monitoring (CAAQM) stations in Chennai at Koyambedu, Royapuram, Perungudi, Manali, Kodungaiyur and in the SIPCOT complex of Gummidipoondi, Thoothukudi, Perundurai and SIDCO complex of Coimbatore to monitor the parameters  $PM_{10}$ ,  $PM_{2.5}$ ,  $NO_x$ ,  $SO_2$ , CO,  $O_3$ , Benzene and VOCs in the ambient air. The TNPCB monitors the air quality in hot spots and complaint prone area through mobile monitoring van. The TNPCB has also installed 25 CAAQM stations in urban and industrial areas of major districts of the State.

#### **14.7 Care Air Centre**

The TNPCB Care Air Centre is functioning at Corporate Office, Chennai for online monitoring of the parameters such as  $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$ ,  $NO_x$  in

the ambient air and source emission of the industries on 24x7 continuous basis. As on January 2020, 615 industries are connected to this centre for source emission and ambient air quality monitoring. On exceedance of standards and connectivity failure during maintenance, SMS and e-mail alert is sent to the concerned industries and district field officers to take necessary action.

#### **14.8 National Ambient Noise Monitoring Network Programme**

The TNPCB in association with CPCB has established 10 Real Time Ambient Noise Monitoring Stations in Chennai City at Egmore, T.Nagar, Perambur, Guindy, Triplicane, Pallikaranai, Velachery, Washermanpet, Anna Nagar and Sowcarpet under National Ambient Noise Monitoring Network Programme. The datas are uploaded in the CPCB website.

## **15.0 Legal Actions**

If any industry is found to violate and pollute the environment, the TNPCB issues show cause notice followed by personal hearing so as to give a chance to rectify their defects but if they still continue to violate and pollute, the TNPCB issues orders for closure and stoppage of power supply to the units under Section 33A of the Water (P&CP) Act, 1974 as amended and under Section 31 A of the Air (P&CP) Act, 1981 as amended. From April 2019 to January 2020, 17,851 industries were issued with show cause notices and 554 industries were issued with directions for closure and stoppage of power supply. Once the industries rectify the defects and approach for revocation, the Board after necessary inspections and verifications, issue orders for revocation of closure and restoration of power supply.

However, the industries if aggrieved of Board's closure directions or any other directions issued by the Board could make an Appeal before the Hon'ble Appellate Authority and Hon'ble National Green Tribunal.

### **15.1 Hon'ble Appellate Authority**

Hon'ble Appellate Authority has been constituted and functioning under the Chairmanship of a Hon'ble Justice with two Technical Members. The Authority examines the appeals preferred by the industries against the orders of the TNPCB, issued under Section 25,26 and 27 of the Water (Prevention and Control of Pollution) Act, 1974, as amended in 1988 and any orders issued under the Air (Prevention and Control of Pollution) Act,1981 as amended in 1987.

### **15.2 Hon'ble National Green Tribunal**

The Southern Zone of the Hon'ble National Green Tribunal is functioning at Chennai. Any

person aggrieved by the orders of the Appellate Authority and by the orders passed by TNPCB / State Government, under Section 28, 29 and 33A of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 5 of the Environmental (Protection) Act, 1986 can prefer an appeal before the NGT within 30 days of the orders passed by the Board / State Government / Appellate Authority.

### **15.3 Right to Information Act**

The TNPCB is having a separate section to deal with Right To Information (RTI) Act applications. In pursuance to the directions of Government of Tamil Nadu, the TNPCB has designated Joint Chief Environmental Engineer (JCEE) in the Corporate Office, all the JCEEs (M) in the Regional Office, all DEEs in the District Office and Head of the laboratories as Public Information Officers (PIOs) to provide information to public under the RTI Act, 2005. Chief

Environmental Engineer (CEE) at Corporate Office has been designated as Appellate Authority. From April 2019 to January 2020, Board has furnished informations to 1446 applications.

## **16.0 Activities Based On Hon'ble NGT Directions**

The following activities are being carried out by the TNPCB in compliance with the directions of the Hon'ble National Green Tribunal.

### **16.1 Comprehensive Environmental Pollution Index (CEPI)**

The MoEF&CC has identified eight Polluted Industrial areas in Tamil Nadu namely Vellore, Cuddalore, Manali, Coimbatore, Tiruppur, Mettur, Erode and Tuticorin, based on the environmental quality monitoring conducted by CPCB all over the country. Based on CPCB's report, Hon'ble NGT in its order dated 14.11.2019 in the O.A. No. 1038/2018 directed all the SPCBs/PCCs to conduct environmental quality monitoring in its Polluted Industrial Areas (PIAs) and submit time

bound action plans on or before 31.01.2020 to CPCB. The NGT has also imposed moratorium for setting up of new and expansion of Red and Orange category industries in the PIAs.

Based on this, TNPCB conducted study, evaluated CEPI score and prepared time bound action plan and submitted to CPCB on 28.01.2020. The CPCB has also been addressed to lift the moratorium imposed in Polluted Industrial Areas.

## **16.2 Environmental Compensation**

As per the direction of the Hon'ble National Green Tribunal in the matter of O.A No. 710 to 713 of 2017 and also in NGT (PB) O.A.No. 593/2017 (Earlier in Supreme Court of India W.P. (Civil) No. 375/2012) the CPCB has formulated the methodology to assess and recover compensation from Industries, Health Care Facilities (HCFs) and CBMWTFs for the damage caused to the environment and utilize

such amount for protection of the environment & restoration of damage and instructed all the SPCBs to impose Environmental Compensation to all the violating industries.

### **16.3 Action plan for utilization of treated sewage**

Based on the orders of Hon'ble NGT Principal Bench, New Delhi, action plan for further utilization of treated sewage from ULBs sewage treatment plants by Industries and others in the State of Tamil Nadu was prepared by Municipal Administration and Water Supply Department, Government of Tamil Nadu. The same has been submitted to CPCB by TNPCB.

### **16.4 Polluted River Stretches**

In Tamil Nadu, CPCB has identified six numbers of Polluted River Stretches based on the Bio-Chemical Oxygen Demand (BOD) values and categorized into five priorities (Priority I: BOD > 30mg/l, Priority II: BOD 20 to 30mg/l,



Priority III: BOD 10 to 20 mg/l, Priority IV: BOD 6 to 10 mg/l, Priority V: 3 to 6 mg/l).

1. River Sarabanga - Thathayampatti to T. Konagapadi Stretch -(15 Kms)-Priority-I.
2. River Thirumanimutharu - Salem to Papparapatti Stretch - (15Kms)-Priority-I
3. River Vasishta - Manivilundhan to Thiyaganur Stretch - (10Kms) - Priority-I.
4. River Cauvery - Mettur to Mayiladuthurai Stretch - (200 Kms) - Priority-I.
5. River Bhavani-Sirumugai to Kalingarayan Stretch - (60Kms) - Priority-IV.
6. River Thamirabarani-Pappankulam to Arumuganeri Stretch - (80Kms) - Priority-V.

The water quality of the polluted river stretches indicated that the main cause of pollution is due to discharge of untreated domestic sewage / sullage and dumping of

Municipal Solid Wastes from the urban local bodies. Based on the CPCB reports, the Hon'ble National Green Tribunal (NGT) Principal Bench took suo-moto cognizance and issued the following directions by its orders dated 20.09.2018 & 19.12.2018 in O.A. No.673/2018.

*".....all the States and the Union Territories to prepare action plans for bringing all the polluted river stretches to be fit at least for bathing purpose."*

Accordingly, TNPCC has prepared and submitted the action plans with time lines for all the six stretches in coordination with the various departments and the approved action plans are under implementation to prevent the discharge of sewage for the Restoration and Rejuvenation of rivers with the coordination of various Government Departments through Solid Waste Management.

## **16.5 Non Attainment Cities**

The CPCB has identified 102 cities as non attainment cities in India including Thoothukudi in Tamil Nadu based on the monitoring data for the period 2011-2015. The Hon'ble NGT in its order dated 8.10.2018 in O.A No 681 of 2018 has directed the TNPCCB to prepare and finalize the action plan for the non attainment city – Thoothukudi in coordination with various Government Departments. Accordingly, action plan was prepared and the same was approved by the CPCB. The action plan for the Thoothukudi city is now under implementation in coordination with various stake holders. The Hon'ble NGT (PB), Delhi in its order dated 06.08.2019 has also identified Trichy as non attainment city for which action plan to improve the air quality was prepared and forwarded to the CPCB for approval.

## 17.0 Environmental Training Institute

The Environmental Training Institute (ETI) of TNPCB provides training to the staff of TNPCB, industrial representatives, Executives of Municipalities and Corporations, Line Departments and NGOs on pollution control and environmental protection.

During the period of April 2019 to January 2020, the TNPCB has conducted the following training programmes through ETI:

S. No.	Training Programmes	Beneficiaries	No. of participants
1	Ban on use and throw away plastics	HR&CE Department, Food & Safety Department, District Officials of TASMACH	90
2	E-Waste Management	Authorized Producers, Dismantlers, Manufacturers, Recyclers and Refurbisher	123

<b>S. No.</b>	<b>Training Programmes</b>	<b>Beneficiaries</b>	<b>No. of participants</b>
3	Biomedical Waste Management	Doctors / para medical staff of Apollo Hospitals, Chennai	22
4	Solid Waste Management - Biomining	Commissioners of Corporations, Municipality and Sanitary Inspectors and school students	410
5	Solid Waste Management and Plastic Waste Management	Executive Officers of Town Panchayat	520
6	Functioning of TNPCB	11 IAS officers, 5 Deputy Collectors, 40 Section Officers of Secretariat and 16 Assistant Directors of Industrial Safety and Health	72
7	Vehicular emission monitoring	Operators of "Pollution Under Control" certificate issuing Centre	226

## **18.0 Environmental Awareness**

The TNPCB conducts various environmental awareness programmes during Bhogi, World Environment Day, Vinayagar Chathurthi, Deepavali and Tiruvannamalai - Karthigai Mahadeepam Festivals to create awareness among public and to take positive action to protect the environment through rallies, environmental quiz competitions, planting of tree saplings, campaign through auto rickshaws, pamphlets distribution to the public, displaying boards in public places, broadcasting in FM Radio and screening of short films through visual media.

### **18.1 Government Exhibitions**

The TNPCB participates in Government Exhibitions conducted every year at Island Grounds, Chennai and exhibits models on Effluent Treatment Plants, Air Pollution Control Measures, Solid Waste Management and also provides information on environmental protection. The

TNPCB also participates in the Government Exhibitions conducted at the District Level.

## **18.2 Green Awards**

The Hon'ble Chief Minister of Tamil Nadu presents Green Awards to the District Collectors, industries, educational institutions and residential welfare associations recognizing their contribution in environmental protection and awareness creation. Special awards presented to the District Coordinators for taking effective steps to implement the ban on use and throwaway plastics to a greater extent.

## **19.0 Funding For Pollution Abatement Projects and other projects**

The TNPCB participates in various pollution abatement projects and awareness programs by providing financial assistance to the Government Departments to improve the quality of environment in the State of Tamil Nadu.

The TNPCB has released funds for the following pollution abatement projects

<b>S. No.</b>	<b>Details of project</b>	<b>Status</b>
19.1	Funding for Massive tree plantation on the occasion of 71 <sup>st</sup> birthday of Hon'ble former Chief Minister.	The Government vide G.O.(2D).No.49 E&F (FR.6) dept dated 03.12.2019 has sanctioned Rs.13.40 Crores and the TNPCB has released Rs.6.7 Crores (Rupees Six Crores and Seventy Lakhs only) as first installment to the Principal Chief Conservator of Forests vide B.P.No.83 dated 30.12.2019.
19.2	Eco restoration of Chitlapakkam Eri in Chengalpattu District as per the 110 Announcement made in the Assembly by the Hon'ble Chief Minister during the year 2019-20	The TNPCB released Rs.25 Crores to the Department of Environment (DoE) vide G.O.(D).No.283 E&F Department dated 25.10.2019.



<b>S. No.</b>	<b>Details of project</b>	<b>Status</b>
19.3	Eco Restoration of Odathurai Eri Bhavani Block in Erode District.	The TNPCB released Rs.3.20 Crores for eco restoration of Odathurai Eri, Bhavani Block in Erode District vide G.O. (Ms).No.294, E&F (EC-1) Dept. dated: 04.11.2019.
19.4	Creation of Urban Arboretum in Greater Chennai Corporation as per the Announcements of Hon'ble Minister for Environment in the Legislative Assembly session 2018-19.	The TNPCB has released Rs.139 lakhs on 11.12.2019 to the District Forest Officer (DFO), Chennai Forest Division vide B.P.No.69 dated 26.11.2019.
19.5	Conducting Eco Competitions and Eco-camps to NGC eco club students at a cost of Rs.2.00 Lakhs per district for 32 districts	The TNPCB released a fund of Rs.64 Lakhs for the year 2019-20 to the Department of Environment (DoE) vide G.O. (D).No.34 E&F Department dated 14.10.2019.

<b>S. No.</b>	<b>Details of project</b>	<b>Status</b>
19.6	Tamil Nadu State Climate Change Information Dissemination Services (TNS-CIDS) as per the Announcements made in the Assembly by the Hon'ble Minister for Environment during the year 2019-20	The TNPCB released Rs.8 Lakhs to DoE vide G.O. (D).No.278 E&F Department dated 23.10.2019
19.7	Funds released to the district offices to create awareness on E-Waste Management to the school teachers and other stake holders	Tamil Nadu Pollution Control Board has granted Rs.38 Lakhs @ Rs.1 lakh per District office for conducting awareness programmes to the School Teachers and other stake holders on E-Waste management vide BP.No. 76 dated 29.11.2019.
19.8	Study on assessment of microplastics in coastal area estuaries and lakes in Tamil Nadu by the DoE as per the announcement of the Hon'ble Minister for Environment	The TNPCB has sanctioned Rs.81.2 lakhs and released an amount of Rs.25.4 lakhs for the year 2019-2020 to the Member Secretary, EMAT as per B.P. No.15, dated 21.02.2020.

<b>S. No.</b>	<b>Details of project</b>	<b>Status</b>
19.9	Awareness campaign on the ill effects of plastics through "Message on Wheels" in all the Districts by the DoE as per the announcement of the Hon'ble Minister of Environment.	The TNPCB has released Rs.64 lakhs @ Rs.2 lakhs / district (32 districts) to the Member Secretary, EMAT as per B.P. No.75, dated 28.11.2019

## **20.0 Sustainable Development Goals**

India is a signatory to the Sustainable Development Goals (SDGs) which is an intergovernmentally agreed set of goals relating to international development to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The SDGs cover 17 goals and 169 targets resolved in UN Summit held in September 2015.

The SDG set a target (6.3) by 2030, to improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally and percentage of industries complying with waste water treatment is set as an Indicator (6.3.2). The TNPCB emphasize all the highly polluting industries to achieve ZLD system for trade effluent with an aim to recycle and reuse treated waste water.

The SDG set another target (12.4) to achieve environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment by 2030 and quality monitoring by

introduction of monitoring stations across the State is set as an Indicator (12.4.2). The TNPCB propose to increase the number of ambient air quality monitoring stations from 38 to 87 by adding 25 new CAAQMS and 24 manual monitoring stations in the year 2020-21, covering the entire State of Tamil Nadu. Under, water quality monitoring programme, TNPCB proposes to increase the number of water quality monitoring stations from 79 to 85 by adding 6 new stations in the year 2020-21, to monitor the water quality of water bodies in the State of Tamil Nadu.

The SDG under Target 13.3 aims to improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning and set an Indicator 13.3.1.2 for strengthening of systemic and individual capacity building to implement adaptation, mitigation and

technology transfer, and development actions in the State. Training programmes on environmental related topics and awareness programmes during the festival seasons are conducted by the TNPCB to achieve the target.

## **21.0 Ease of Doing Business**

The Government of Tamil Nadu have established a single window facilitation mechanism under Tamilnadu Industrial Guidance and Export Promotion Bureau to accord in-principle composite approval for pre-project clearances at the State Government level. Guidance Bureau is the nodal agency for convening for Global Investors Meet (GIM) to attract investments. The TNPCB issued consent for 70 industries registered in GIM 2019 upto January 2020 and consent to 23 industries applied through Single window portal from April 2019 –January 2020.

## **22.0 Cauvery Delta Region – Prohibition of certain new industrial activities under the Environment (Protection) Act, 1986**

The Government of Tamil Nadu have issued G.O. Ms. No. 21 E&F (EC.3) Dept dated 24.02.2020 to protect the ecologically fragile agricultural zone of the Cauvery delta region, considered as rice bowl of the State. In this regard, Tamil Nadu Government have issued Notification No.II(2)/EF/148(j)/2020 dated 24.02.2020 prohibiting certain new projects in the delta areas of Thanjavur, Tiruvarur and Nagapattinam Districts, Blocks of Kattumannarkoil, Melbhuvanagiri, Keerapalayam, Parangipettai and Kumaratchi of Cuddalore District, Blocks of Aranthangi, Avudaiyarkoil, Manamelkudi, Tiruvarangulam and Karambakudi of Pudukkottai District. The prohibited project activities include (i) Zinc Smelter (ii) Iron ore process plant, integrated steel plant and sponge iron plant (iii) Copper Smelter (iv) Aluminium Smelter (v) Bone meal, processing of animal

horn, hoofs and other body parts (vi) tannery (vii) Exploration, drilling and extraction of oil and natural gas including coal bed methane, shale gas and other similar hydrocarbons and (viii) ship breaking industry.

### **Highlights of performance during the year 2019-20**

- i. As per the announcement of the Hon'ble Chief Minister of Tamil Nadu, the TNPCB issued B.P. No. 1, Dated: 13.01.2020 that the Green category industries can obtain "CTO-direct" if the industry is to be located in Industrial Use Zone / Industrial Estate as classified by the DTCP / CMDA / LPA.
- ii. The TNPCB in co-ordination with the Department of Environment has prepared State Environment Plan based on the District Environmental Plan obtained from District Collectors and submitted to the CPCB as per the Hon'ble NGT order dated 26.09.2019 in OA No. 360/2018.



- iii. The Hon'ble Chief Minister of Tamil Nadu inaugurated new building for District Environmental Engineer's office at Tiruvallur.
- iv. The TNPCB has relaxed the distance criteria for establishment of another Common Biomedical Waste Treatment Facility (CBMWTF) within a radial distance of 75 kms and also allowed the disposal of biomedical wastes from health care facilities located anywhere in Tamil Nadu to any CBMWTF within 48 hours.
- v. The TNPCB issued Bio Medical Waste authorization to a facilitator for handling body fluids from various health care facilities in Tamil Nadu for further beneficial use.
- vi. The TNPCB approved that NHAI shall open the road for traffic after obtaining Consent to Operate (CTO). Subsequently, Renewal

of Consent (RCO) shall be obtained by NHA I based on the toll plaza Gross Fixed Asset (GFA) value as per BP No.61, dated: 26.11.2019.

- vii. The TNPCB vide BP 63, dated: 26.11.2019 ordered Textiles and Tannery industries to switch over to Agitated Thin Film Dryer (ATFD) in place of Solar Evaporation pan which should be followed Mechanical Evaporator for disposal of final rejects on or before 31.03.2020.
- viii. The Government in G.O. Ms. No. 127, dated 08.05.1998 have imposed a ban on setting up of foundry industries within five kilometers radius from certain important water sources. Representations were received from the foundry industries association for exemption from the said G.O., as the modern foundries generate less quantity of effluent which is solar

evaporated to achieve ZLD. The TNPCB has considered the Industries representation and has recommended to the Government for exempting of the foundrics from the purview of the above Government order. Based on Board's recommendation, the Government vide E&F, Letter (MS). No. 93 / EC.3 / 2019, Dated: 17.09.2019 has issued an amendment by exempting the foundry industries from the purview of the G.O MS. No. 127, Environment and Forests Department, dated 08.05.1998.

- ix. The TNPCB has decided vide B.P.65 dated 27.11.2019 that once the construction project is completed and handed over to the Owners / Residents' Welfare Association, the Owners / Association of the residential apartments irrespective of area are required to apply to the Tamil Nadu Pollution Control Board for fresh consents to operate for the common utilities which includes the Sewage

Treatment Plants, DG sets, Organic Waste Converters etc., under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981. Such Consents to Operate will be issued for a period of five years on payment of single fee each under Water (P&CP) Act, 1974 and the Air (P&CP) Act, 1981 based on the Gross fixed Asset values of these amenities. Thereafter, they shall apply for the renewal of consents once in five years along with the consent fees.

- x. The TNPCB awarded the work of inventorisation of E-Waste in the State of Tamil Nadu to the National Productivity Council at a cost of Rs.47.08 Lakhs as per B.P. 28, dated: 06.08.2019.

**K.C.KARUPPANAN**  
**MINISTER FOR ENVIRONMENT**