

2.11. Ecology and Environment

Introduction

Environmental conservation is an integral part of the socio economic development. The growing population, high degree of urbanization and steep rise in energy use, have affected the sustainability of the environment. Deforestation results in the reduction of the sink for carbon dioxide and increases soil degradation. Industrialization leads to water and air pollution. The water resources get polluted due to the discharge of untreated or partially treated wastes from industry, domestic sewage and fertilizer and pesticide run off from agricultural fields.

Conservation is not opposed to development, since it includes both protection and rational use of natural resources. One of the greatest challenges is how to accelerate economic growth without exhausting natural resources.

Environment is influenced by a variety of factors, hence environmental management is a complex issue. A benchmark survey of the present status of various factors that govern the environment is a pre requisite to formulate an appropriate environmental policy. The Tamil Nadu Government has prepared a 'State of Environment Report', which has broadly outlined the environmental issues in various sectors and possible approaches to tackle them. The key sectors in Tamil Nadu that are concerned with the environment are agriculture and horticulture, forests and wildlife, water resources, coastal and marine environment, energy, industrialization, urbanization and archaeology and tourism.

The State, while planning for social and economic progress that satisfies the present needs of the citizen, has the moral obligation to pass on the nature's gifts to the future generation. One of the critical activities in this regard is preservation of our environment.

The Tamil Nadu Pollution Control Board and the Department of Environment are the two agencies dealing with the environmental concerns of the State.

Performance of the sector during 2007-08

1. Department of Environment

During 2007-08 an amount of Rs 9.85 crore has been approved for the Ecology and Environment sector. Against this it is expected that the expenditure would be around Rs. 4.77 crore. The Physical target and Achievements for 2007-08 are as follows:

Physical Target and Achievement

Sl. No.	Item	Unit	Target for 2007-08	Anticipated achievement for 2007-08
Department of Environment				
1	Financial assistance to Eco-Clubs for awareness activities	No. of Ecoclubs	1200	1200
2	Awards	Nos.	1	1
3	Workshops /Seminars	Nos.	7	7
4	Celebrating Environment day	World Nos.	1	1
5	Environment Management Plan	Nos.	1	1
6	Competition and Environmental Awareness	Nos.	30	30
7	Eco-Camps	Nos.	30	30
8	Research Activities	Nos.	1	1
9	Training/Workshops	Nos.	4	4
10	Eco -friendly demonstration activities	Nos.	42	42
11	Eco Restoration of Lake	Nos.	1	1
12	Demarcation of HTL	No.of Districts	10	10
13	Erection of stone pillars	Nos.	3	3

Objectives of the Directorate of Environment

- To evolve environmental policy framework for sustainable management of the resources of the state.
- To integrate conservation and development and to bring out sound resource management for economic development of the State.
- To restore and rehabilitate the ecologically fragile and sensitive eco-systems by ameliorative management
- To deal with all aspects of environment other than those dealt with by Tamil Nadu Pollution Control Board from time to time.
- To provide web-based information through Environmental Information System on the Status of Environment of Tamil Nadu.
- To develop environmental awareness and education programmes for all sections of the society

- To coordinate and monitor environmental protocols.

2. Tamil Nadu Pollution Control Board

The Tamil Nadu Pollution Control Board is enforcing the provisions of the Water (Prevention and Control of Pollution) Act, 1974 (a Central Act), the Air (Prevention and Control of Pollution) Act 1981 and the various Rules framed under the Environment (Protection) Act, 1986.

The Tamil Nadu Pollution Control Board has been monitoring industries and plays an important role in the establishment of Common Effluent Treatment Plants (CETPs), management of solid wastes, monitoring of vehicular emission, water quality etc. and increasing environmental awareness.

The Board has prepared the environmental plan for Chennai City. The Board is implementing spatial environmental planning programme for preparing district environmental status in respect of Thiruvallur, Kancheepuram, Coimbatore, Vellore and Thoothukudi.

Schemes

1. Department of Environment

Environmental awareness programme

To create environmental awareness among the school and college students, 1200 eco-clubs have been formed in 30 districts of the State involving selected educational institutions and NGOs. Tamil Nadu has the distinction of launching eco-clubs in all 30 districts of the state with the State Government funds. Environmental exhibitions are being conducted every year at District level through the Eco-clubs. Financial assistance to the extent of Rs.1,00,000/- per district is released for the activities of the Eco-clubs from the year 2007-08.

Conducting training workshops/seminars through awareness network

To create awareness among the students and general public seminars and workshops are being conducted at a cost of Rs.2 lakhs.

This scheme will be continued during the year 2008-09 also and will be taken up as a regular activity during this plan period.

Awards

NGOs, Experts and individuals are honored with environmental awards in recognition of their excellent contribution in the field of environment. The awards are distributed in the areas of Environmental Awareness & Education, Environmental Management, Environmental Protection and Environmental Research during the World Environment Day celebration as follows:

1. First Prize - Rs.10,000/- with a certificate
2. Second Prize - Rs.7,500/- with a certificate
3. Third Prize - Rs.5,000/- with a certificate
4. Best Research Paper - Rs.5,000/- with a certificate

Ongoing Schemes with 100% Government of India Grant National Green Corps

Enthused by the success of school eco-clubs, Eco-clubs have been started in 7500 schools at the rate of 250 schools in 30 districts under the National Green Corps (NGC) programme. About 40 to 50 students are enrolled in each school under a teacher coordinator. On the whole, over 3,00,000 school children have been covered under this massive eco-awareness programme. Environmental awareness under this programme is organized through thematic campaigns, tree planting, competitions and eco-camps. The Department of Environment is functioning as the State Coordinator of NGC. A sum of Rs.2.05 crore has been sanctioned for NGC activities during the year 2007-08 by Government of India.

Environmental information system (ENVIS)

An Environmental Information System (ENVIS) centre has been commissioned in the Department of Environment under the World Bank supported project called Environment Management Capacity Building Technical Assistant Project (EMCB-TAP) of Government of India. This ENVIS centre provides a web based

database on the State of Environment and related issues and answers environmental related queries for the policy makers, academics and the user groups. A sum of Rs. 0.08 crore has been approved for the year 2007-08 by Government of India. The outlay has been stepped up to Rs.0.15 crore for the year 2008-09.

Preparation of report on State of Environment / SoE atlas

Preparation of a State of Environment (SoE) Report, SoE Atlas Photo/Video catalogue and SoE website have been completed.

World Bank Assisted Emergency Tsunami Reconstruction Project Demarcation of High Tide Line (HTL) along the Coast of Tamil Nadu from Palar River Mouth to Thengapattinam in Kanyakumari District

The Department of Environment has already undertaken HTL demarcation from Pulicat Lake to Palar River Mouth through the Chief Naval Hydrographer, Dehradun at a cost of Rs.50.00 lakhs. Demarcation of HTL for the remaining stretch of the coastline including tidal influenced water bodies will be undertaken and the HTL reference points will also be superimposed on CRZ maps in 1:25000 scales and also on the village cadastral maps containing survey numbers in 1:5000 scales at a cost of Rs. 2.21 crore. The work will be completed during the year 2008-09.

Erection of Stone Pillars on HTL reference points

In order to facilitate the coastal community to identify the HTL on ground, HTL stone pillars will be fixed along the coast wherever necessary at a cost of Rs.1.00 crore. The work will be completed during the year 2008-09.

Preparation of Integrated Coastal Zone Management Plan, Coastal Vulnerability Maps & training modules

In order to achieve economic prosperity without sacrificing ecological security, Integrated Coastal Zone Management Plan (ICZMP) is being prepared for the coastline of Tamil Nadu. Since the ICZMP & vulnerability maps are new concepts, training has to be imparted to the coastal community, stakeholders, Government Departments, &

Local Panchayat Officials by preparing suitable training modules. The above works are undertaken at a cost of Rs. 4.92 crore and will be completed during the year 2008-09.

Capacity Building and Awareness Creation

The concept of ICZMP and coastal vulnerabilities being relatively new, it is important to develop awareness about the actual spirit of these plans among various stakeholders. Therefore, to develop suitable training modules for various stakeholders and also create awareness among the coastal communities about the CRZ, importance and advantage of ICZMP and Vulnerability Maps Rs.1.00 crore has been sanctioned. Training programmes at different levels will be taken up for the Panchayat leaders, officials of the Government departments and the local bodies. Special awareness programme on CRZ/ICZMP will be conducted for better understanding of these concepts by the Coastal community and students of National Green Corps (NGC). The local academicians and NGO's will be involved in conducting workshops/ seminars/street plays/exhibitions, etc. The work will be taken up on completion of preparation of training modules and will be completed during the year 2008-09.

2. Tamil Nadu Pollution Control Board

Tamil Nadu Pollution Control Board has all along been carrying out most of its activities from the Board funds. Besides, the Board-supported programmes, it also undertakes specific schemes covering Spatial Environmental Planning and Water/ Air Quality Monitoring of critical areas in the State using funds provided by the Central Pollution Control Board. In addition, the Board plays an important role in the establishment of Common Effluent Treatment Plants (CETPs) for clusters of small-scale industries in various parts of the State, for which 25% of the project cost is derived from the Central Government.

The following are proposed for implementation by the Board's own resources:

Formation of New District Offices

Due to rapid industrial development in the State and consequent growth of industries, a need has arisen to bifurcate some of the district offices so as to enhance the level of monitoring the industries for ensuring better compliance of pollution control norms. Further, the Board will construct its own buildings in order to accommodate the district offices which are now functioning in private buildings, in order to improve its corporate image and efficiency.

Construction and upgradation of TNPCB Laboratories

Buildings for housing the district laboratories will be constructed along with the offices of District Environmental Engineers so as to economize on the cost. In order to improve the analytical capabilities of the Board, in the light of the growing awareness on new air pollutants like VOC (volatile organic compound), POP (persistent organic pollutants) instrumentation facilities in the laboratories will be augmented.

Solid Waste Management

TNPCB has undertaken several works for sensitising the local bodies and the general public regarding the need for reduction of solid waste generation at source, source segregation, effective recovery and recycling of non biodegradable waste and composting of organic, biodegradable part of the wastes. The Board contributed by way of grant-in-aid to the Municipalities and Town Panchayats for creating wider awareness on Municipal Solid Waste Management and also funded the successful model Solid Waste Management Project in certain Municipalities during the Tenth plan. It is proposed to extend the funding for developing successful Solid Waste Management models in Five Municipalities of the State during the Eleventh plan period at a cost of Rs.1 crore.

Research and Development

During the Eleventh Plan period, it is proposed to resume the sanction of financial assistance for research projects related to

environment pollution abatement. University and college departments as well as autonomous institutions will be identified to undertake the research work. The total outlay for this proposal is Rs. 0.50 crore which will be met out of the Water Cess funds available with the TNPCB.

Environmental Education

An awareness cell has been established in the head office, Guindy, Chennai to promote environmental awareness. Various awareness campaigns, workshops, rallies are being conducted regularly to highlight important environmental issues.

A special awareness campaign is regularly conducted against air and noise pollution during festival seasons such as Deepavali and Bhogi. The noise level monitoring and air quality survey are conducted during Deepavali in the important cities, viz. Chennai, Salem, Madurai, Coimbatore, Vellore, Hosur, Tiruppur, Cuddalore, Tirunelveli and Trichy. A special ambient air quality survey on pre-bhogi and post-bhogi days are conducted in Chennai. These campaigns were found to be quite successful in reducing the level of noise and improving the quality of ambient air compared to the previous years. Awareness programmes are broadcast regularly through Anna F.M. of Anna University every month.

Theme based mass education and awareness campaigns will be organised throughout the year by the Awareness Cell of the Board for which an outlay of Rs.50 lakh has been proposed.

Plan Outlay for 2008-09

A sum of Rs.10.32 crore is approved for the Ecology and Environment sector for the year 2008-09. The Tamil Nadu Pollution Control Board implements its schemes with its own resources.