

TAMILNADU POLLUTION CONTROL BOARD



Abstract

TNPCB-P&D- Proposal for necessary financial concurrence and release of fund Rs.139 lakhs to the District Forest Officer (DFO), Chennai Forest Division for creation of Urban Arboretum in Greater Chennai Corporation as per the Announcements made by the Hon'ble Minister for Environment while moving the budget demand for the Environment Department in the Legislative Assembly session 2018-19- Orders –Issued :

B.P. No. 69

Dated: 26.11.2019

- Read:**
1. Announcement No.13, made by the Hon'ble Minister for Environment in the floor of the Assembly during the Budget session 2018-19
 2. DFO Lr.No.C.No.3058/2019/D, Dated 12.09.2019
 3. Board Resolution No.279-3-16 Dated 18.11.2019

The Hon'ble Minister for Environment during the Budget session 2018-19 made an announcement in the Tamil Nadu Legislative Assembly that under the Urban Forestry scheme an "Arboretum" will be developed in the suburbs of Chennai besides raising and supply of 25000 tall grown seedlings in other Districts at a cost of Rs. 175 Lakhs through the Forest Department.

Based on the announcement, the MOU has been signed between the Tamilnadu Pollution Control Board (TNPCB) and Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB). The CMWSSB agreed to provide 4 acres of land on the Eastern side in Kilpauk Water Treatment plant comprised in Survey NoS.23 & 29/2 of Egmore Village and Taluk, Chennai District to TNPCB for creating the urban Arboretum.

The DFO, Chennai forest Division vide his letter dated 12.09.2019 submitted a proposal for the creation of urban Arboretum in Greater Chennai Corporation area for planting 4000 seedlings and in between raising some medicinally important plants within that 4 acres (approximate 1.5 Hectare) during 2019-20 and further

maintenance of the planted seedlings over a period of 3 years from 2020-2021 to 2022-23. The total project cost for the urban Arboretum works out to be Rs.139 lakhs and furnished the necessary model estimates for Raising and maintenance of the plantation and requested for executing the same during this year.

PROPOSAL FOR CREATION OF URBAN ARBORETUM OF NATIVE TREES IN GREATER CHENNAI CORPORATION:

The Geographical area of Chennai district is 426 kms located on the Eastern Coastal Plains of India. It is situated on the North eastern corner of Tamil Nadu along the Coromandel Coast, a region bounded by the Bay of Bengal and inland by the districts of Tiruvallur & Kancheepuram. The terrain of the district is very flat with contours ranging from 2mt to 10mt above Mean Sea Level (MSL) with a few isolated hillocks at St. Thomas mount, Pallavaram. The coast line of the district is about 25.60 km which represents 2.5% of the total coastal line of the Tamil Nadu. This district is divided into 3 regions namely Sandy, Clayey & Hard rock regions. The soil comprises of Clay, Shale and Sand stone.

The Forest area of Chennai district is very meagre in which 2.71 sq.km area represents Guindy National Park. Hence, the Reserved Forest area of Chennai district is very less when compared to the Geographical area of this district. Even the available forest area consists of shrub and thorny vegetation. The pressure on forest land is increasing phenomenally due to rapid urbanization of Chennai City. The district depends on seasonal rains and majority of the rain fall is expected during the Northeast monsoon. Hence from the status of rainfall, there is heavy pressure on the available water resources, obviously because of the massive development and extraction of ground source thereby the ground water table is going down day by day.

Considering the meagre forest area, it becomes necessary to take remedial measures and urgent action for conservation and enrichment of the existing biodiversity in the Forest areas and the surrounding areas. Since, Forest area is



TAMILNADU POLLUTION CONTROL BOARD



very meager in Chennai District, Creation of Urban Arboretum by planting in the RF areas is not feasible. In the interest of conservation and enrichment of the existing biodiversity it is proposed to create and develop an "Urban Arboretum" in the open spaces available with Government and public sector for carrying out planting activity.

The main concept of creating Urban Arboretum is aimed at to have ambitious targets of 40% coverage of the land area with trees at 10m² / capita for the whole city and 35% coverage and 6m²/capita in the city core areas.

Scope for the Work:

An announcement was made during the Budget session of Tamil Nadu to create Urban Arboretum in Chennai City during 2018-19. In this connection, a meeting was convened by the TNPCB on 06.09.2019 in which the Chief Conservator of Forest, Chennai Circle and the District Forest Officer, Chennai Division have attended. The officials of TNPCB and CMWSSB have also attended. During the meeting the Pollution Control Board requested the Chief Conservator of Forests that an Urban Arboretum may be created in Chennai City over an area of about 1.5 ha. It was also informed that MoU has been executed with CMWSSB in this regard to provide the required land for creation of the Urban Arboretum.

The CMWSSB area now proposed to be taken up for creating Urban Arboretum is having unwanted growth and invasive species. The unwanted growth invasive species are to be removed to make the site fit for carrying out planting operations.

During the year 2019-20, 4000 seedlings will be planted in the area earmarked for the purpose. Good quality, tall grown seedlings will be obtained from the available nurseries to achieve good results and to ensure good survival.

Objectives:

- Abatement of pollution in city of Chennai for improved micro climate.
- This will increase the tree cover.

- Improved moisture regime and enhanced bio-diversity of the area.
- Quantum of rain water harvest will improve and recharge the ground which will result in increasing of ground water table.
- Creation of a "Nucleus of Arboretum" for dissemination of Knowledge for School/College students, general public over the significance of Native Trees.

Planting Operation:

- 60 cm³ pits will be dug up for planting the Native taller seedlings of good quality with good collar thickness.
- Taller seedlings will be planted in the pits during the rainy season and refilled with the dug up earth.
- Weeding and soil working for each plant will be carried out around the planted seedlings once in a month during November - December.
- Watering the plants during the non-rainy period from January - March at 20 liters per seedlings @ once in 6 days.
- Replacement of casualties at 20% of the planted seedlings in the first year maintenance and 10% casualties in the remaining 2nd and 3rd year maintenance of the plantations to ensure 100% survival.
- Protection mazdoor at 1 mazdoor for 500 plants will be engaged to protect the planted seedlings for 3 months after planting. Subsequently for 1st year and 2nd year maintenance the protection mazdoor has been provided for the whole year in order to protect the seedlings from browsing and vandalism from public.
- Dwarf species of Medicinal Plants including climbers will be raised in between the planted seedlings with a view to provide Herbal medicines which will be of immense use for which necessary provisions has been made in the cost table.

TAMILNADU POLLUTION CONTROL BOARD



Maintenance:

The planting activity is proposed to be undertaken in 2019-20. The planted seedlings will be maintained over a period of 3 years subsequently after planting from 2020-21 to 2022-23.

Project Cost:

The project is implemented with an outlay of Rs.139.00 Lakhs. The details of physical and financial target is given in the annexure. The required funds for the project will be made available by the Tamilnadu Pollution Control Board (TNPCB).

Documentation:

Documentation of the effects of the project pre and post on tree cover, bio-diversity, moisture conservation etc., will be done for evaluation of the success of the project. It will help in making necessary corrections/changes in future projects.

Implementation of the Project:

This project will be implemented by the District Forest Officer, Chennai Forest Division, having Head quarters at Chennai of Tamil Nadu Forest Department. The well trained field staff like Forest watcher, Forest guard, Foresters and Forest Range Officers will implement the project under the overall guidance and supervision of the District Forest Officer, Chief Conservator of Forest and the Chairman Tamilnadu Pollution Control Board.

Physical and Financial Target Amount Proposed (Rs. In Lakhs)						
Sl. No.	Major Activities	1 Year (2019-20)	II Year (2020-21)	III Year (2021-22)	IV Year (2022-23)	Total (Rs. in lakhs)
1	Planting of seedlings	4000 seedlings @ Rs.1100/each =Rs.44.00 lakhs				44.00
a	1st Year maintenance		4000 seedlings @ Rs.561/each =Rs.22.44 lakhs			22.44

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b	2nd Year maintenance			4000 seedlings @ Rs.570/each =Rs.22.80lakhs		22.80
c	3rd Year maintenance				4000 seedlings @ Rs.618/each =Rs.24.72lakhs	24.72
2	Raising dwarf species of Medicinal quality plants in between the areas available planted seedlings and maintenance for 2 years	2000 seedlings @ Rs.360/each = Rs.7.20 lakhs	2000 seedlings @ Rs.267/each = Rs.5.34lakhs	2000 seedlings @ Rs.294/each = Rs.5.88 lakhs		18.42
	Sub Total	51.20	27.78	28.68	24.72	132.38
3	Documentation @ 2%	1.02	0.56	0.57	0.49	2.65
4	Monitoring & Evaluation @ 2%	1.02	0.56	0.57	0.49	2.65
5	Contingencies @ 1%	0.51	0.28	0.29	0.25	1.32
	Grand Total	53.76	29.17	30.11	25.96	139.00

The subject was placed before the Board in the meeting held on 18.11.2019 and the Board vide Resolution No. 279-3-6 dated 18.11.2019 stated that the Board took note that an announcement made in the Floor of Assembly by the Hon'ble Minister for Environment during the budget session 2018-19 under the Urban forestry scheme an 'Arboretum' will be developed in the suburbs of Chennai at a cost of Rs.175 lakhs through Forests Department from TNPCB fund.

Considering the above, the Board resolved to approve the proposal to release the fund Rs.139 lakhs (Rupee One Crore Thirty Nine Lakhs Only) to the District Forest Officer, Chennai Forest Division for creation of "Urban Arboretum" in Greater Chennai Corporation area subject to the following conditions

1. The Forest Department should furnish progress report on the works carried out along with Bench mark photograph and subsequent illustrations periodically.



TAMILNADU POLLUTION CONTROL BOARD



2. Necessary display Board shall be erected elucidating the financial assistance of the TNPCB.
3. The Utilization Certificate along with audited expenditure statement shall be furnished to TNPCB.
4. No further funding will be provided for this scheme. Any unspent amount shall be returned to TNPCB along with interest.
5. Only Trees of Native species should be planted such a way that a model Nucleus of Native Trees Arboretum is created for Educational, Environmental Purposes.
6. The JCEE (M), TNPCB, Chennai shall monitor the progress of works and report to the Board once in a month.

The Board authorized the Chairman, TNPCB to release the fund.

Sd/-xxxx
Member Secretary

K. G. M.
27-11-2019
For Member Secretary

To

The Joint Chief Environmental Engineer (P&D)

Copy to

1. Financial Advisor
2. PS to Chairman
3. PS to Member Secretary
4. JCEE (M), TNPCB, Chennai
5. BMS
6. File copy

