

INSPECTION REPORT OF THE JOINT COMMITTEE CONSTITUTED BY THE HON'BLE NATIONAL GREEN TRIBUNAL (SOUTHERN ZONE) IN RESPECT OF O.A. NO. 99 OF 2020 (SZ) SUOMOTU ON THE BASIS OF THE NEWS PAPER REPORT PUBLISHED IN DINAMALAR CHENNAI CITY SUPPLEMENT EDITION DATED, 03.07.2020 UNDER THE CAPTION "WHEN WILL THE SLUICES OF MUDICHUR BIG LAKE BE SET RIGHT"

1. ORDERS OF THE HON'BLE TRIBUNAL

It is respectfully submitted that the Hon'ble National Green Tribunal (SZ), Chennai in its order dated 07.07.2020 in the matter of O.A.No. 99 of 2020 inter alia stated that:

"2. It is alleged in the news paper report that Mudichur Lake is situated in Tambaram was spread over an extent of 112 acres having a water storing capacity 17 Million Cubic Feet capacity. Due to the formation of Vandalur – Meenjur outer ring on the Western side of the lake, 20 per cent of the water catchment area has been reduced.

3. According to the report, during 2014-2015, desilting work in the lake to the extent of 8 feet depth was done by the Public Works Department. But thereafter no further maintenance or desilting work was done.

4. The lake's surplus weirs and sluices are in damaged condition thereby inflow and out flow from the lake were not properly maintained. Though lot of demands were made for maintaining the lake by the local people, no action was taken.

5. The dumping of waste from Perungalathur Town Panchayat has affected the lake in question and it has caused damage to the lake. During the heavy rainfall in the year 2015, excess water from the lake came through the surplus water canals which were blocked by the public by putting up large sand bags.

6. Apart from these, sewage water is being mixed with the water causing pollution to the water as well. This is being done by the Perungalathur Town Panchayat people. Steps must be taken to prevent the discharge of untreated sewage into the lake and excess water from the Perungalathur Lake during the rainy season has to be channelized to the Mudichur big lake on the Eastern side by cleaning the canals, so as to maintain the water storage system to avoid flood in future. Necessary sewage treatment plants have to be established in an environmental friendly manner without affecting or encroaching into the lake to treat the sewage water before it is being discharged into the lake to protect the quality of the water in the lake. Though requests have been made for maintaining the lake and also the weirs and sluices, no steps have been taken by the authorities to rectify the same.

9. There is a responsibility cast on the authorities to protect the lake against encroachment and pollution. In order to ascertain the real state of affairs, we feel it appropriate to appoint a Joint committee comprising of the District Collector, Chengalpattu District, a Senior Officer from the office of the Director of Panchayat, who is in charge of maintenance of the water bodies in the area, a Senior Officer from the Tamil Nadu Pollution Control Board nominated by the Chairman, Block Development Officer, St. Thomas Mount Panchayat Union, a Senior Officer not below the rank of the Superintending Engineer of Public Works Department and Water Resources Organisation to inspect the area in question and submit a factual well as action taken report, if there is any violation found to this Tribunal.

10. The committee is directed to go into the question regarding the verification of original extent of the lake as per the revenue records and nature of unauthorised encroachments and if so, what is the action taken and also any pollution is being

caused to the lake by discharging untreated effluents or sewage into the lake from that area.

11. The committee is also directed to conduct water analysis test to assess the quality of the water and if it is contaminated, find out the sources of contamination and suggest steps to be taken to restore the same to its original position.

12. The committee is also directed to mention as to whether there is any scheme launched by the Government or the local authorities for maintaining this water body and if so, its stage of implementation.

13. The committee is also directed to assess the environmental compensation if any damage caused to the lake on account of unauthorised encroachment or by causing pollution to the water in the lake.

14. The committee is also directed to ascertain the existence of the inflow and out flow canals and drains which act as a storm water drain to carry excess rain water into the lake and if there is any encroachment or any closure of the same which affects the inflow and outflow, then what are all the steps to be taken to restore the same to its original position and its feasibility.

15. The committee is also directed to suggest a long term as well as short term plan to protect the lake from further encroachment and pollution by establishing bio-diversity parks/tree plantation around the lake and construction of any compound wall or other protecting method to avoid future encroachment and the responsibility of the person who has to carry out the same as well.

16. The Public Works Department and Water Resources Organisation will act as the nodal agency for co-ordination and for providing all necessary logistics for this purpose."

2. COMPLIANCE OF THE DIRECTION

In due compliance of the said Hon'ble National Green Tribunal direction, surface water samples from the Mudichur Lake was collected on 21/01/2021 so as to ascertain the present water quality in the said water body

Collection of water sample to ascertain the quality of water in the Mudichur Lake



Statement showing the value of the Physico chemical parameters analysed

| Sl.No | Parameters | Units | Point of Collection | TNPCB Standards (Inland Surface Water) |
|-------|--------------------------------------|-------|---------------------|--|
| | | | Mudichur Lake | |
| 1 | pH @ 25°C | No. | 7.88 | 5.5-9 |
| 2 | Total Suspended Solids @ 105°C | mg/L | 16 | 100 |
| 3 | Total Dissolved Solids @ 180°C | mg/L | 379 | 2100 |
| 4 | BOD @ 27°C | mg/L | 12 | 30 |
| 5 | COD | mg/L | 128 | 250 |
| 6 | Copper as Cu | mg/L | <0.033 | 3 |
| 7 | Zinc as Zn | mg/L | <0.05 | 1 |
| 8 | Cadmium as Cd | mg/L | <0.013 | 2 |
| 9 | Lead as Pb | mg/L | <0.07 | 0.1 |
| 10 | Nickel as Ni | mg/L | <0.05 | 3 |
| 11 | Total Chromium Cr | mg/L | <0.01 | 2 |
| 12 | Hexavalent Chromium Cr ⁺⁶ | mg/L | <0.01 | 0.1 |
| 13 | D.O | mg/L | 6 | 5mg/l and above |

Statement showing the value of the Bacteriological parameters analysed

| Sl.No | Parameters | Units | Point of Collection | Primary Water Quality Criteria for Bathing Waters prescribed by Central Pollution Control Board |
|-------|-----------------|-------------|---------------------|---|
| | | | Mudichur Lake | |
| 1 | Total Coliform | MPN /100 ml | 20 | 500 or less. |
| 2 | Faecal Coliform | MPN /100 ml | <1.8 | 500 (desirable) 2500 (Maximum Permissible) |

The Report of analysis of the water sample collected from the said water body reveals that the Physico chemical parameters analysed satisfy the Inland surface water standards prescribed by the Board. Furthermore the water sample collected from the Mudichur Lake analysed for Bacteriological parameter Total Coliform and Faecal Coliform meets the Primary Water Quality Criteria for Bathing Waters prescribed by Central Pollution Control Board.

3. REPORT OF THE PUBLIC WORKS DEPARTMENT:

Mudichur Lake is located at S.F.No.342 of Mudichur Village in Tamabaram Taluk of Chengalpattu District and it is maintained by the Public Works Department. It has water spread area in an extent of 44.90.0 Ha and is intended to feed ayacut of 80.16.0 Ha. It receives water from its own catchment, surplus water from vandalur tank and upland drainages mostly from the rains of North East Monsoon period. The overflow of this tank leads to Mudichur Seekana Eri and finally confluence to Adyar River at crossing of Outer Ring Road. There are two sluices in the said water body in which one located at western part of the lake is fully demolished due to the formation of the outer ring road and another one located in the northern side of the lake is in good condition and also sluice is sufficient for the existing irrigation activities and the existing surplus weir is fairly week condition. Due to the formation of the outer ring road, the tank was over deepened; because of this the capacity of the tank is more than the original capacity. Due to agglomeration of the Chennai

city over the period of time, the Mudichur village is in the peripheral vicinity of the Chennai city and hence the ayacut fed by this tank has been substantially reduced. As per the enumeration of Revenue department during the year of 2009, there are about 86 Nos. of encroachments in the water spread area and bund in the western part of the tank.

It is submitted that there are plans for Flood mitigation works in Mudichur tank and Seekana Eri in Tambaram Taluk of Chengalpattu District at a cost of Rs.73 Crores and proposal has been sent to Government and after approval the said project scheme will be executed and all other component works to rehabilitate the Mudichur Lake will be taken up including eviction of encroachments in the manner known to law.

4. REPORT FROM BLOCK DEVELOPMENT OFFICER, ST. THOMAS MOUNT PANCHAYAT UNION (MUDICHUR VILLAGE PANCHAYAT)

In due compliance of the said Hon'ble National Green Tribunal direction, the Block Development Officer, St. Thomas Mount Panchayat Union (Mudichur Village Panchayat) furnishes the following detailed report:

| | | |
|-----------|---|--|
| 1. | Total Area of the Mudichur Village Panchayat : | Around 6.00 Sq Km |
| 2. | Total Population of the Village Panchayat : | 15438 Nos. as per 2011 census. Now around 26266 Nos. |
| 3. | Household in the above said area of the said Village Panchayat area : | 5480 Nos. |
| 4. | Total No of Panchayat Wards | 12 |
| 5. | Total Generation of sewage in the said areas: | |
| 6. | Solid waste generation : | 4 T/ day |

I. SOLID WASTE MANAGEMENT

Generation of total Solid Waste in the Panchayat: 4.00 MT/day (Biodegradable waste – 1.25 MT/day, Plastic Waste – 0.2 MT/day and Non Biodegradable waste – 2.73 MT/day)

Present status of collection and disposal of solid waste:

Presently the Village Panchayat carries out door-to-door collection of solid waste of 4 T/day deploying 6 E-Cart Tricycles, 9 push carts, 1 Tractor and with 7 Sanitary Workers and 5 from Self Help Group of Hand in Hand, 37 from Green friends and 27 Sanitary Police. Out of 4 T/day solid waste, biodegradable solid waste is 1.25 T/day, Plastic waste 0.2 T/day and the non biodegradable wastes is 2.73 T/day. The village panchayat has solid waste processing facility at Tiruvalluvar Nagar and is operating the micro composting centre to process the biodegradable waste.

Action Plan for Solid Waste Management

Short Term

1. The Village panchayat has proposed to collect all the solid waste and process within the premises and not to dump in the road side of Mudichur lake.
2. The Village panchayat has proposed to issue notice to the public and to the households not to dump the waste on the road sides and in the area in question, and to issue pamphlets regarding the importance of source segregation of the solid waste.

3. Persons dumping solid waste in the road side and in the area in question will be identified and fine will be imposed as per the provisions of the Local Body Act.
4. The Village panchayat has proposed to carry out strict vigilance around the Mudichur lake and to take action and to impose fine to the violators if found dumping of waste under the provisions of the Local Body Act.

Long Term :

1. The Village panchayat has proposed to strictly carry out Door to Door Collection of 100% segregated solid waste only from the village panchayat area.
2. The Village panchayat has proposed to carry out Micro-Composting of all the segregated biodegradable waste in the Micro-Composting facility and to dispose the non biodegradable waste through the recycling facilities.

II. SEWAGE GENERATION AND SEWERAGE SYSTEM:

Present method of collection and mode of disposal of sewage:

The households and commercial establishments in the above said village panchayat area have their own individual septic tank and soak pit arrangements for the treatment and disposal of the sewage. However during rainy season sewage / sullage from certain households/ commercial establishments dispose through storm water drains which reach the said water body.

Action Plan for Sewage Management

Short Term

1. The Village panchayat has proposed to identify vulnerable locations and proposed to provide decentralized community soak pit arrangements.

Long Term

1. The Village panchayat has proposed to provide sewer line and to connect to the Tambaram Corporation Common Sewage Treatment Plant to treat the same and completely arrest the sewage entering the lake.

5. JOINT INSPECTION OF THE COMMITTEE

The members of the joint committee have carried out the inspection in the area in question on 21/01/2021, 24/02/2021, 26/07/2021 & 17/05/2022.





6. OBSERVATIONS BY THE COMMITTEE

During the time of inspection, the committee observed the following

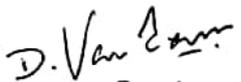
1. Mudichur Lake is located at S.F.No.342 of Mudichur Village in Tamabaram Taluk of Chengalpattu District
2. Mudichur Lake is a PWD tank. The Mudichur village is in the peripheral vicinity of the Chennai city and hence the ayacut fed by this tank has been substantially reduced and also this tank serves mostly as a natural aquifer.
3. It is bounded by vacant land in the Northern side, residences in the Eastern and Western side, forest area and vandalur tank in the Southern side.
4. Mudichur Lake spreads over in an extent of 80.16.0 Ha and storage capacity of 20.55 Mcft which is divided by the Outer Ring Road into two parts namely Western and Eastern part.
5. Mudichur Lake is receiving water its own catchment area, surplus water from vandalur tank and upland drainages mostly from the rains of North East Monsoon.
6. The overflow of this tank leads to Mudichur Seekana Eri and finally confluence to Adyar River at crossing of Outer Ring Road.
7. There are two sluices in the said water body in which one located at western part of the lake is fully demolished due to the formation of the outer ring road and another one located in the northern side of the lake is in good condition and also sluice is sufficient for the existing irrigation activities and the existing surplus weir is fairly week condition.
8. The households and commercial establishments in the village panchayat area have their own individual septic tank and soak pit arrangements for the treatment and disposal of the sewage. However certain households/ commercial establishments in the southern side of the tank dispose the sewage/sullage through storm water drains which reach Mudichur Lake.
9. The Village panchayat has not having any solid waste processing facility and the solid waste generated from the local body area is properly collected and disposed in their dumping yard.

10 Encroachments in the form of residences were noticed in the water spread area and a portion of bund in the western part of the lake.

7. RECOMMENDATIONS:

Based on the above observation, the joint committee submits the following recommendation before the Hon'ble National Green Tribunal (Southern Zone)

- 01 The Village Panchayat shall ensure 100% collection of solid waste being generated within its jurisdiction with proper segregation, door to door collection, processing and disposal by complying with the provisions of the Solid Waste Management Rules 2016.
- 02 The Village Panchayat shall not dump solid waste under any circumstances in the said area in question i.e. at Mudichur Lake of Mudichur Village.
- 03 The Village Panchayat shall operate the Micro composting centre to compost all the segregated Biodegradable wastes and to dispose the non degradable waste including plastic waste to the recycling facility complying with the provisions of the Solid Waste Management Rules, 2016
- 04 The Village panchayat shall identify and provide decentralized community soak pit arrangement at vulnerable locations within three months time to prevent the entry of sewage/sullage to the Mudichur Lake through storm water drain and to intercept sewage entering the lake immediately.
- 05 The Village panchayat shall levy fine on the violators found dumping solid waste and disposing sewage into the water body under Local body Acts.
- 06 The Village panchayat shall create awareness among the public with the help of associations in the local body area for proper segregation of solid waste.
07. The PWD with the help of Revenue Authorities shall make fresh survey to identify the exact number of encroachment and to evict them within six months.
08. The PWD shall revamp the weir and strengthening of the bunds in the said water body for smooth flow of surplus water within six months by obtaining necessary funds from the Government.

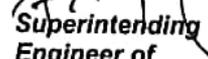

D. Van

Panchayat
Secretary
of
Mudichur
Village
Panchayat


Block
Development
Officer, St.
Thomas
Mount
Panchayat
Union
(Mudichur
Village
Panchayat)


District
Environmental
Engineer,
Tamil Nadu
Pollution
Control Board,
Maraimalai
Nagar


Revenue
Divisional
Officer,
Tambaram,
Chengalpet
District.


Superintending
Engineer of
Public Works
Department and
Water
Resources
Organization


District
Collector,
Chengalpattu
District