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INTRODUCTION

In January 2024, a three judge panel consisting of Justice (Retd) S. Muralidhar, Justice (Retd) K. Kannan and Justice (Retd) D. Hariparanthaman received the first copies of "The People's Plan for Eco-restoration of Ennore Wetlands" at an event organised by the Ennore People's Protection Group (Ennore Makkal Paathukaappu Kuzhu). The Plan was released amidst heightened anxiety over the Government of Tamil Nadu's negligent attitude towards North Chennai following the twin disasters of December 2023, namely, the oil spill and an ammonia gas leak.

The People's Plan outlined concrete actions, including compliance to extant laws, court orders and judgements, and measures to improve the quality of life and livelihoods in the Ennore region. At the time, the Government of Tamil Nadu announced a number of initiatives to assure Ennore residents that steps will be taken to restore environmental quality, improve health and health care infrastructure and revive local livelihoods and economy2. The following report is an assessment of the steps taken over the past twenty months by the Government to deliver on its commitments.

Background

Since the late 1960s, the Ennore wetlands have been encroached upon by industrial infrastructure and degraded by industrial and domestic effluents and wastes. The high concentration of toxic air polluting industries – thermal power plants, petroleum refinery and petrochemical facilities – and the high heavy vehicle traffic due to the presence



Fig 1. Three retired judges unveil the People's plan for Eco-restoration of Ennore Wetlands

of industries and three ports has turned this densely populated region into a global toxic hotspot.

Over the last year, the Government has intensified industrialisation in the region. The Chennai Peripheral Expressway which will connect the ports on Kattupalli island to the East Coast Road will open up the low-lying, but fertile and groundwater rich floodplains of the Araniyar Kosasthalaiyar basin to industrialisation and urban real estate speculation. A 655-acre TIDCO Heavy Engineering Hub in Kattur-Ebramapuram is currently at DPR stage. A high-tension transmission network has been illegally set up running almost entirely through the river and its backwaters, drastically compromising the river's vitality and flow. In the pipeline are plans to set up a Ponneri Industrial Township Area which will convert 2,200 acres of productive Poromboke commons, including 1,734 acres of wetland poromboke into industrial real estate serving the Adani and Kamarajar Ports. Additionally, the air quality of the region is at

risk of worsening if plans to commission three new power plants – NCTPS Stage III (800 MW); Ennore SEZ (1,320 MW) and ETPS Expansion (660MW) – materialise. While reparative and restorative works for healing Ennore's environment progress at a slow pace, further industrialisation, diversion of wetlands and their degradation are accelerating.

Organisation of Report

The following sections present various commitments made by the Government of Tamil Nadu and its obligations under various laws or as per court orders, and records the extent to which commitments/obligations have been fulfilled/complied with. The first section will deal with the "Commitments by the Government of Tamil Nadu." The second section will deal with "Obligations under Law or as per Court Orders." The third section will deal with "Components Not Covered by Above two sections."

 ${\tt 1.}\ https://story of ennore.word press.com/wp-content/uploads/2024/01/peoples-plan-final-compressed.pdf$

2. The schemes announced as part of Housing and Urban Development Department (CMDA) policy note (Demand No. 26, 2024-2025) either exclusively for North Chennai or with components targeting the region include: Vada Chennai Valarchi Thittam, Chennai Shoreline Renourishment and Revitalisation Project and Re-development of Ennore Perishable Market and Community Hall. Separately, the government announced various initiatives under Manali Ennore Restoration and Rejuvenation Company and Tamil Nadu Coastal Restoration Mission.

A

Commitments by the Government of Tamil Nadu

I. Eco Restoration of Ennore Creek (Chennai Rivers Restoration Trust (CRRT)

1. Sustainable River Mouth Opening (Public Works Department (PWD))

Status: DONE & UNSATISFACTORY.

Background: National Institute of Ocean Technology (NIOT) had studied sustainable creek mouth opening and recommended curved training walls of 480 m on the northern side and 340 m on the southern side. NIOT also recommended desilting of the river mouth and removal of debris from the mouth to 500 m upstream (5.3 lakh m³) to ensure better interaction with marine water within Creek. However, GoTN's Water Resources Department (WRD) obtained CRZ clearance for non curving training walls longer than prescribed by NIOT. Dredging activities were to be carried out in two phases - Phase I (river mouth to 550 m upstream) involving removal of 5.3 lakh m3 of sediment; Phase II (550 m upstream to 2000 m upstream), involving removal of 10.6 lakh m3 sediments, demolition and removal of old jetty/piers at river mouth. Dredged sand was to be deposited at various locations to the south of the southern training wall, and along a 500 m stretch to the north.

Training walls have been constructed deviating from NIOT's recommendation. Only the river mouth has been dredged. Removal of debris from and dredging of mouth to 550 m upstream has not been done. According to a Nettukuppam fisherman (Interview: May 14, 2025), "a portion of the dredged sand was dumped near the river mouth adjacent to the hot water discharge point along the northern riverbank. Another portion of dredged sand has been disposed of at Nettukuppam and Thazhankuppam.



Map 1 – NIOT-recommended training walls (in red) overlaid on satellite imagery, indicating on-ground deviations.(Source: Training wall alignment – DPR, Eco-restoration of Ennore Creek, CRRT; GIS mapping – K. Saravanan)

Accretion at these sites is now obstructing boat movement into the sea." Discharge of hot water from NCTPS is also eroding the river bed and carrying the sand to the river mouth, where it is accumulating over time and silting up the estuary. "It is unclear if they considered this issue when designing the intervention to address the issue of sustainable river mouth opening," said a Kattukuppam fisherman.

2. Sewage & Sanitation (Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB))

Status: NOT DONE.

Background: The DPR estimated that 1.8 MLD of raw sewage was flowing into the Buckingham Canal/Ennore Creek at 8 identified locations. It proposed that diversion weirs would be provided

to intercept the flow and direct it to the Kodungaiyur STP. The work was accorded administrative sanction via G.O. (Ms) No. 107, MA&WS (MW1) Dept., dated 20.08.2019, and was entrusted to CMWSSB-Metrowater as part of the "Restoration of Buckingham Canal" project.

The Restoration of Buckingham Canal project only pertained to the central stretch of the Canal flowing in Chepauk and Mylapore constituencies. This project was abandoned in 2024³.

A new Buckingham Canal restoration project⁴ covers 5 km from Chepauk to Greenways Road, aimed at increasing water carrying capacity, with bund strengthening, vegetation, footpaths, and four parks. Details on sewage mitigation remain unknown.

^{3.} https://www.newindianexpress.com/cities/chennai/2024/Nov/04/tamil-nadu-government-scraps-buckingham-canal-restoration 4. www.thehindu.com/news/cities/chennai/water-resources-department-to-explore-feasibility-of-turning-buckingham-canal-in-to-a-functional-waterway/article69928753.ece

Solid Waste Management (Public Works Department (PWD))

Status: NOT KNOWN.

Background: The project promised a one-time Clean-up of 295 tonnes of Solid Waste dumped inside the creek to be moved to the Kodungaiyur Dumpyard and provision of Dumper Bins (22 Nos.), Battery operated E-rickshaws (4 Nos.) to the nearby residential areas along the creek.

Local residents are not aware of any such activity and can neither confirm nor negate claims about the completion of the tasks. However, solid waste continues to be dumped inside the canal and creek.

4. Removal of Incomplete Pile Structures (Public Works Department (PWD))

Status: NOT DONE.

Background: 30 numbers of unremoved pile structures around bridge column footing that were obstructing tidal flow and boat movement were to be removed from three of 11 bridges/conveyor corridors crossing the river at various points.

5. Habitat Restoration(Dept of Forests)

Status: ONGOING & UNSATISFACTORY

Background: This work is entrusted to the Forest department of TamilNadu. 188 Hectares has been demarcated for mangrove restoration. 124 Hectares

(40%) of the total available area (wetland area as per CRRT) to be used for resting/ docking spaces for fisher folk and service road within the creek boundary. About 1,59,180 numbers of mangrove species are proposed around land area, along creek boundary at an interval 1m x 1m in 2 rows for a length of about 79,590 m. 1110 nos. of mangrove associate plants per Hectare at an interval of 3mx3m are suggested for restoration. About 2,10,000 nos. of mangrove associate trees are proposed at an interval of 3mx3m. About 86,350 mangrove associate shrubs and about 18,000 nos. creepers are proposed at an interval of 1.5mx1.5m.

"Mangrove restoration is ongoing on 10 metres on either side of backwaters. In islets, native species including Arasam, Maa, Poosa, Aalai, Pungam have been planted. Earlier, they were watered using tractors. Now, watering frequency is down and trees are stunted and struggling. River sand dredged from the Buckingham canal stretch between Annamar Thittu (near kattukuppam) and the Ennore Lock (near Sivanpadaiveedhikuppam has been sold off.) The top layer is sewage sludge; beneath that is good sand. That should not have been sold. It could have been used to layer the islets to improve the survival of saplings as the soil could aid in holding more water for longer. Revegetation is ongoing, and it is a much needed effort. But there is no coordination between different departments. Dredging is seen as a separate activity, and the Water Resources Department's contractor is keen to sell off the sand. Revegetation is seen as an isolated activity to be carried out by Forest Department. They don't see all this as one activity - that is to revive the river. Now, dredging, carried

out by Water Resources Dept (funded by TANGEDCO) in order to comply with court's order to remove ash, is ongoing between Samudra Munai paadu (Bridge across the Creek) to Puliamaram paadu (Athipattu-NCTPS road). That sand must not be sold but used for restoration. That sand has ash, but 70 percent will be sand." (Interview: Kattukuppam Fisherman, March 12, 2025)

"Restoration is being carried out by cutting canals in Annamarthittu, in the area where the only playground of Kattukuppam exists, without consultation with fisherfolk. This has led to the loss of playground commons of fisherfolk. The existing natural habitat for several kinds of birds including kokku, naarai, kaadai, and others is destroyed. Birds used to come here every day for water, and in the past, their chirping would fill the area. They came not just for water, but also to breed - they nested, laid eggs, and incubated them here."

(Interview: Kattukuppam Fishermen, August 13, 2025)

Vegetation has been carried out on construction debris dumped in paraval areas. The debris was originally dumped to lay temporary roads for transmission tower erection, but these roads have not been removed despite court orders.

Three roads laid across the Buckingham Canal for carrying out vegetation work remain unremoved⁵. These roads hinder tidal flow within the canal and obstruct fishing. (Interview: Kattukuppam Fishermen, August 13, 2025)

 $5.\ https://storyofennore.wordpress.com/2024/10/15/open-letter-to-government-of-tamil-nadu-about-removal-of-obstructions-to-flood-water-flow-in-kotralaiyar-and-ennore-backwaters/$

II. Manali Ennore Restoration and Rejuvenation Company (MERRC)

Via G.O. (Ms) No. 43, Environment, Climate Change and Forest (EC.4) Department, dated 15.03.2024⁶, Government of Tamil Nadu sanctioned the setting up of a Special Purpose Vehicle – Manali Ennore Restoration and Rejuvenation Company – with market capitalisation of Rs. 1 crore.

The following works were to be undertaken as per the G.O.

Setting up of SPV (Environment, Climate Change and Forest (EC.4) Department)

Status: DONE & SATISFACTORY.

Background: On 19.12.2024, a state government owned private limited company named Manali – Ennore Restoration and Rejuvenation Council was set up with two directors – Ms. Jayanthi Murali, chairperson, TNPCB, and Mr. Palaniyandi Senthilkumar who was secretary, Environment & Forests, at the time. (Source: Ministry of Corporate Affairs)⁷

2. Command Centre and Emergency Response Centre (TNPCB)

Background: TNPCB to set up a command centre at Manali with 10 technical staff, including DEE, AEE, AE, Chief Scientific Officer for inspection of industries, air quality monitoring, redressal of complaints, green belt development,

implementation of monsoon preparedness plan etc.

TNPCB to set up an emergency response centre at Manali with representatives from Manali industries, various line departments and local community to carry out health camps, mock drills for disaster response, and awareness programs.

Status: PARTIALLY DONE & UNSATISFACTORY

Call for application⁸ for only two technical staff have been published in the TNPCB website dated 25.02.2025, whereas at least 6 staff in addition to the four already available (DEE, AEE, AE, CSO) were proposed for the command centre. Though emergency response centre is set up at Tondiarpet, residents confirm that no awareness programs or drills have been conducted to educate them on appropriate response in the event of a toxic gas leak, oil spill or other hazardous event.

3. Establishment of Dedicated Flying Squads (TNPCB)

Background: Two flying squads, one each for Manali and Ennore, with one Environmental Engineer, 2 AEE/AE will conduct surprise inspections to prevent effluent discharge, prevent unauthorised movement of hazardous wastes and preserve the ecology and

ecosystem of water bodies on a daily basis.

Status: PARTIALLY DONE & UNSATISFACTORY

Squads have been set up. However, pollution incidents continue to plague the area. In April 2025, chemical release into the river turned the water yellow, an episode that fishers say occurs every month9. Despite repeated occurrences, TNPCB has failed to identify the source or remedy the problem. In May 2025, residents of Sathyavani Muthu Nagar were assailed by toxic dust that carpeted their floors and contaminated food and water. TNPCB responded by taking samples of dust after several days of pollution¹⁰ and complaints. But till the date of writing, it has not shared the results of analysis with concerned residents.

4. Conducting Manali-Ennore Carrying Capacity Study and Safety Audit (TNPCB)

Background: Undertake a carrying capacity study for a sustainable industrial development in the area, and safety audit of all industries through an expert agency.

No reports are available in the public domain.

Status: NOT DONE

^{6.} Refer: https://www.indiafilings.com/search/manali-ennore-restoration-and-rejuvenation-council-cin-U84119 TN2024 NPL1755524. https://tnpcb.gov.in/PDF/Updates/Recruitment/RecruitmentofTechnicalOfficer.pdf

^{7.} Refer: https://www.indiafilings.com/search/manali-ennore-restoration-and-rejuvenation-council-cin-U84119TN2024NPL175552

 $^{8.\} https://tnpcb.gov.in/PDF/Updates/Recruitment/RecruitmentofTechnicalOfficer.pdf$

^{9.} https://www.thehindu.com/news/cities/chennai/yellow-chemical-covers-waters-of-ennore-creek-fishermen-want-government-to-step-in/article69498254.ece

^{10.} https://www.thehindu.com/news/cities/chennai/ennore-residents-claim-dust-pollution-from-nearby-fertilizer-plant-company-refutes-allegations/article69638401.ece

5. Sustainable Fishing in Ennore Creek (Dept of Fisheries, Animal husbandry, Dairying, Fisheries and Fishermen Welfare)

Background: Commissioner of Fisheries to engage an expert institution to suggest ways and means for sustainable fishing in Ennore Creek. Fisheries department to set up a special centre for boat repair, mending fishnets and provide special training.

*Note: This component is aimed at

*Note: This component is aimed at improving the livelihoods of inland fishers (creek-dependent fisheries) and not ocean fishers.

5.1) Special training and suggestion on ways and means for sustainable fishing

Status: NOT DONE

"No special training or engagement by the Fisheries department on sustainable fishing practices in Ennore creek has been provided." (Interview: Kattukuppam fisherman, May 2025)

5.2) Special centre for mending fishnets

Status: PARTIALLY DONE & UNSATISFACTORY.

Regarding the construction of fishnet mending centers:

Kattukuppam, Mugathwarakuppam, and Sivanpadaiveethi Kuppam are the three fishing villages dependent on Ennore Creek. "No fishnet mending centers are proposed in Kattukuppam and Sivanpadaiveethi Kuppam due to space constraints. In Mugathwarakuppam, the proposal was declined on the basis that a center already exists." (Interview: Kattukuppam fisherman) The funds, instead, are being diverted for construction of new mending centres in places like Nettukuppam, Thazhankuppam, Periyakuppam and Chinnakuppam. These are sea fisher villages. While a real need exists for net mending spaces in these villages, the department ought to have focused on

using current funds for the purpose

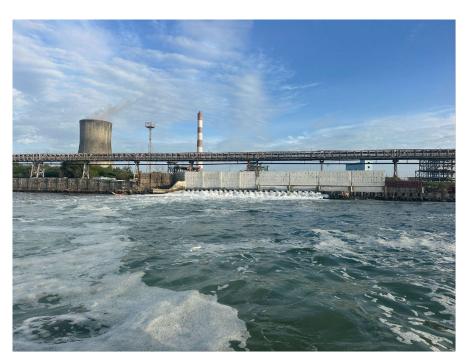


Fig. 1 Hot water discharge into estuary from NCTPS

identified, and mobilised separate funds for the above villages. One way to correct this would be to identify fresh funds to provide/upgrade fishnet mending centres in Kattukuppam and Sivanpadaiveethi Kuppam.

6. Habitat Restoration (Dept of Forests)

Background: Forests department to undertake restoration of 1) mangroves, 2) mudflats and 3) benthic flora and fauna

6.1) Restoration of mangroves:

Status: ONGOING & UNSATISFACTORY

Same as mentioned in section A. I.5. Habitat Restoration (Dept of Forests) Note: It is unknown whether funds through MERRC are allocated for this work.

6.2) Restoration of mudflats:

Status: NOT DONE

6.3) Restoration of benthic flora and

fauna

Status: NOT DONE

7. Arrest discharge of flyash and hot water beyond permissible temperatures (TANGEDCO).

7.1) Discharge of Flyash

Status: NOT DONE

Discharge of fine ash slurry from the ash pond continues unabated, both towards Seppakkam and into the creek through the Manjal Machine Kalvai, which enters the backwaters between NCTPS-Athipattu Road and the Ash Pipeline Road. (Interview: Kattukuppam fisherman. 12 March, 2025)

Multiple incidents of ash leakage were reported by fishers in the ash pipelines carrying ash slurry from NCTPS to the ash pond during the months of July, August, and October 2025. These leaks were observed in both newly replaced pipelines and existing old pipelines, which remain severely corroded and structurally compromised. Despite clear directions and binding court orders



Figure 2: Hot water discharge outfall from NTECL

mandating the replacement of ash pipelines, the leaks continue unabated, indicating that the replacement measures undertaken have been inadequate and ineffective. The continued discharge of ash slurry through these leaking pipelines has resulted in the release of ash into the Ennore Creek and Paraval. Ongoing restoration efforts will be rendered meaningless unless and until the discharge of ash into the creek is fully and effectively arrested.

7.2) Hot water

Status: NOT DONE

Hot water: "The water is too hot, sometimes ok." (Interview: Kattukuppam fisherman. 12 March, 2025)

8. Skill Development for Local Youth (Dept of Labour)

Status: DONE & UNSATISFACTORY

Background: Commissioner of Labour shall launch a special drive to build skills so that local youth can get employment in existing industries.

Same as mentioned in section A. III .1. 1. Vada Chennai Valarchi Thittam (VCVT) Note: It is unknown whether funds through MERRC are allocated for this work.

9. Solid Waste, Roads and Green Belt (Municipal Administration and Water Supply Department – GCC/CMWSSB)

9.1) Solid waste, Road and Green Belt

Background: Greater Chennai Corporation shall manage solid waste, laying of roads and undertake greenbelt development.

a. Road (GCC)

Status: DONE & PARTIALLY SATISFACTORY

"Roads have been constructed from Ernavur Bridge to Thazhankuppam. However, the road has at least 8 transverse rumble strips (a type of speed breaker) that create strong vibrations when crossing them. Many residents in Ennore are already ill and vulnerable; traveling over these strips makes it even more difficult for them. In case of medical emergencies, these strips can worsen the patient's condition. Rumble strips are acceptable at major safety spots such as schools, but many are laid across the road, making it difficult for vulnerable individuals. Moreover, the roads are not wide enough and are thick at the edges that could lead to skidding" (Interview: Kattukuppam Fisherman. 12 March and 13 August, 2025)

"My street's road was very bad, and it hadn't been built for the previous 15 years, but now that the corporation has built a paver block road, it's very convenient." (Interview: Kattukuppam fisherwoman. May 22, 2025).

b. Solid Waste Management (GCC)

Status: DONE & SATISFACTORY

"Door to door municipal solid waste collection has been carried out since the last five years. Also, the Corporation has closed all the open storm water drains in the village. When left open, they used to get clogged with plastic wastes and caused a mosquito menace. Now, it is much better. However, the roadside dust is not managed like in cities where ride-on suction sweepers are employed." (Interview: Kattukuppam fishermen, May 2025)

"Due to the construction of the new market in Ennore, the vendors have been shifted to the roadside, and of which a few locations have been observed with waste products. However, those locations are cleaned regularly.

The dustbins in the market area are emptied regularly, and there is no overflow of waste from the garbage bins. In cases where there is excess waste, the Greater Chennai Corporation (GCC) ensures that the bins are cleared. "Before the corporation people wouldn't come regularly inside the village to take trash

from the house but now every day people come to collect solid waste from the house and if a place is reported unclean the corporation immediately arrives and cleans it" (Focus Group: Ennore Women. May 21, 2025)

c. Greenbelt (GCC)

Status: NOT DONE & POOR

"No trees have been planted in Ennore on the roadside. But recently the corporation renovated the Arignar Anna Park where a few trees have been planted by the corporation. Apart from this no trees have been planted by the corporation." (Kattukuppam Fisherwoman, May 22, 2025).

While the planting of trees in Arignar Anna Park is welcome, that is not a greenbelt. This is an aspect on which GCC must improve.

 9.2) Unauthorised outfalls, underground sewerage system and STP (GCC/CMWSSB)

Background: GCC/CMWSSB to identify all unauthorised outfalls in the Kosasthalaiyar River, Buckingham Canal and Ennore Creek and provide underground sewerage system with household connections and Sewage Treatment Plant.

Status: NOT DONE

The same work was identified and sanctioned vide G.O. (Ms) No. 107, MA&WS (MW1) Dept., dated 20.08.2019, and was entrusted to CMWSSB-Metrowater as part of the "Restoration of Buckingham Canal" project. This commitment

was re-stated in CRRT's DPR for "Eco Restoration of Ennore Creek" in October 2020. The current G.O. dated 15.03.2024 setting up the Manali-Ennore Restoration and Rejuvenation Council repeats a long-pending promise. But no action has been taken on this front.

10. Desilting of Kosasthalaiyar River, Buckingham Canal and Ennore Creek (Water Resource Department)

Status: ONGOING & UNSATISFACTORY

Buckingham Canal: Unsatisfactory dredging was carried out along the stretch between the east of Annamarthittu (near Kattukuppam) and Ennore Lock (near Sivanpadaiveedhikuppam), as only the eastern portion of the canal was dredged, leaving the western portion undredged. Further south, only excavation using a barge (non-dredging) was carried out, which now obstructs boat movement.

Kosasthalaiyar: Unsatisfactory dredging is carried out as per case number OA 8 of 2016 pertaining to ash remediation in Ennore creek. Refer to section B. I. 1. OA 8 of 2016 (NGT South Zone)

Note: Not known whether funds through MERRC are allocated for this work.

11. Upgradation of Urban Primary Health Centre at Kathivakkam (Department of Health and welfare and GCC (Health and family welfare)

Background: Upgradation of Kathi-

vakkam PHC to a 10 bed facility with once-a-week specialist services for dermatology, pulmonology, ENT etc.

Status: OUTCOME AWAITED

While work appears to be progressing as per commitments, during a Focus Group Discussion (Annexure I) conducted by Dr. Kalpana Karunakaran and P.S. Vaishnavi, Ennore women reported a need for a basic testing facility (X-ray, blood tests) locally. Given the high demand for emergency treatment using nebulisers, women said the PHC should be equipped with nebulisers.

Including these facilities (X-ray, blood tests, nebulisers) will be beneficial to local users and bring the government's plans in line with people's expressed needs.

"Around ten years ago, the
Kathivakkam PHC in Ennore
offered prenatal care, regular
check-ups, medications, and
normal deliveries, with cesarean
cases referred in advance to
Thiruvottiyur General Hospital.
Now, all prenatal services and
deliveries have been shifted to
Thiruvottiyur, forcing women
to travel long distances during
emergencies. The newly
constructed PHC must be
equipped for both normal and
cesarean deliveries."

(Interview: Kattukuppam fisherwoman, 13 August 2025)



Fox & the Fish by Kirubavathy, From the 2023 Save Ennore Campaign Exhibition

III. Schemes announced under Budget 2024-25 Housing and Urban Development Department (CMDA) Policy Note Demand No. 26¹¹



Figure 3: One-day skill development and Job fair

The below-mentioned schemes/initiatives were announced by the CMDA as part of Budget 2024-25.

1. Vada Chennai Valarchi Thittam (VCVT)

Background: For the development of North Chennai and to ensure equitable and comprehensive growth across Chennai, the Government has planned to invest Rs. 4,000 crore over the next three years.

1.1) Skill Development: The Tamil Nadu Skill Development Corporation will identify the vocational skills needs in the Ennore and Manali areas and provide free skill training with travel incentives in collaboration with leading institutions according to the educational qualifications of the youth.

a) One- day skill development & Job Fair

Status: Done & Unsatisfactory

In September 2024, a one-day Skill Development and Job Fair was organised at a well-connected location in George Town. Save Ennore Creek Campaign volunteers attended the Fair to assess it and interact with job aspirants and companies that had set up stalls. Overall, the aspirants welcomed the initiative and said that this was very needed. However, they noted that it was

poorly organised. It was not advertised adequately or in advance. Many people heard about it only in the morning when the announcement was made by the garbage collection e-auto. Because of poor attendance and organisation, the event began to slow down after 12 noon with many companies closing their stalls and leaving. Direct employers were only few as most stalls were taken by professional



Figure 4: Focus group discussion with women in Ennore

11. Policy Note Demand No. 26, 2024-25: https://cms.tn.gov.in/cms_migrated/document/docfiles/cmda_e_pn_2024_25.pdf



Figure 5: Focus group discussion with women in Ennore

training companies.

Options for women were limited and ill-suited for the needs and constraints of local residents. The few options available for women required them to travel long distances to the places of work. Even for men, training was offered, but post-training employment was not guaranteed. Aspirants left without availing the options saying the stipend was inadequate. Even though a stipend of Rs. 22,000/month is advertised - Rs. 12,000 (state) + Rs. 10,000 (company) the company component is not handed to the trainee and used instead for accommodation and boarding. A poorly managed half-day job fair cannot be taken to be a "special drive" to build skills.

b) Industrial Training Institute

Status: Ongoing & Outcome awaited.

An Industrial Training Institute (ITI) is being constructed in ward 5 of Thiruvottiyur.

c) Recruitment call for training cum job placement

Status: Unknown

A recruitment call by Tamil Nadu Skill

Development Corporation is issued for training cum job placement in Thiruvottiyur govt ITI dated 10.01.2025.

A series of Focus Group Discussions with women from Ennore were conducted by Dr. Kalpana Karunakaran and labour journalist P.S. Vaishnavi in 2024. The observations of the discussions revealed women's concerns about hardships faced by women due to the absence of livelihood options, and excess expenditure incurred due to government policies relating to education, health and alcohol. The full report is included as Annexure 1.

Key findings:

a) Increased expenditure due to state neglect of environment, health and education: The polluted state of the river has hurt the local economy as fisher livelihoods have suffered and fishers' purchasing power has diminished. Poor air quality has increased the burden of health care expenditure. Poor quality of education in government schools is pushing parents to spend more for education in private schools.

b) Masculinisation of labour and diminished opportunities for local labour: Local industries do not employ local labour; jobs are poor quality with insecure tenure (contract work); options for women are absent in local industries. Participation and contribution of women in the fisher economy – the only local 'industry' with opportunities for a large female workforce – have drastically declined because of pollution-related decline of fisheries.

c) Poor transport infrastructure: Poor frequency and connectivity of bus-train options further reduce options for women who are required to travel to central or south Chennai to avail of job opportunities. Given the pressure of domestic responsibilities, women insist that job options must be created in the proximity of Ennore.

d) Lack of appropriate skill development options: Skill development and support with post-training marketing or placement was identified as a pressing need.

e) Alcoholism and Addiction: These were identified as major sources of anxiety and increased economic burden on women and households. The location of TASMAC stores on public roads also discouraged women from taking jobs in places that would require them to return home after sunset.



Figure 6: Relocated Ennore Fish Market which is located near the railway station (App. 150m away from the old market)

f) Mental health issues for women: A lack of career opportunities and the inability to repay debts incurred to meet health expenditure is taking a toll on women's mental health. Alcoholism by husbands and adolescent males further aggravates the problem. Women expressed a need for mental health support and counselling services with safe spaces for them to unburden themselves and seek therapy.

2. Chennai Shoreline Renourishment and Revitalisation (CSRR) Project

Status: NOT DONE

This project envisions a community development project for Kasimedu and Thiruvottiyur beaches in the first phase, and Ennore beach at a later phase with "development of pedestrian facilities, user amenities and ecologically sensitive landscaping."

CMDA commenced work on Phase 1 of the project in Kasimedu and Thiruvottiyur. However, it had to suspend the work as it was being carried out without CRZ clearance. Ennore does not feature in Phase 1 plans.

3. Re-Development of Ennore Perishable Market & Community Hall

Background: The scheme "aims to create a functional space that fosters community engagement and promotes small business and economic development in the Ennore area. The proposed project consists of a Community Hall with dining facilities, a market block with 68 shops, storage facility and food courts."

3.1) Market Block

Status: ONGOING & UNSATISFACTORY

Market block's design appears to have been created without any consultation with vendors. The vendors were unaware of the layout of the construction, nor were they aware that it would be a two-story building, making it dissatisfactory for the vendors because they are concerned that they will have to carry their belongings upstairs. Also, vendors have been relocated to the pavement

more than 100 metres from the old market where they have been selling their wares in the open and exposed to rain, dust and heat. Umbrellas were promised at the time of relocation, but never given. Only a very few sheds have been provided to fish/meat shops, just enough for accommodating their belongings.

The absence of toilet facilities at the relocated site has caused considerable hardship for hawkers. In addition, the lack of water drainage infrastructure for fish hawkers has resulted in unhygienic conditions, posing health risks and undermining their ability to carry out their livelihood in a safe manner. (Source: Interviews with Street Vendors. May 21, 2025).

3.2) Community Hall:

Status: ONGOING AND OUTCOME AWAITED

Fishers are aware that a community hall is being constructed along with the market block, but they have no information about its layout or which floor it will be located on.



Figure 7: Shed established in the relocated location for the fish vendors in Ennore

IV. Tamil Nadu Sustainably Harnessing Ocean Resources and Blue Economy (TN-SHORE) Project/ Tamil Nadu Coastal Restoration Mission

G.O. (Ms) No. 11, Environment, Climate Change and Forest (EC.4) Department dated 10.01.2024 envisaged Rs. 2000 crore project to be implemented in mission mode over five years through schemes and initiatives aimed at preventing sea erosion, reducing marine pollution and conserving marine biodiversity. A budget of Rs. 40 crore has been allocated for "Ennore Creek Restoration" under this World Bank-funded project.

Status: UNKNOWN

В

Legal Obligations: As per Law or Court Orders

I. Court Orders – Compliance

OA 8 of 2016 (NGT South Zone) (Ash Remediation Case)

The case calls for remediation and protection of wetlands damaged by coal ash from TANGEDCO's North Chennai Thermal Power Station. Through its order dated 05.07.2022, the NGT made several directions. A selection of the directions and their compliance status are as below:



Figure 8: Ash pipeline leak from a replaced (new) pipepline. Photo dated 13 July 2025

Direction (Para number)	Comment	Status
Replace leaking ash pipelines within timeframe. Para 120 (ii)	TANGEDCO has repeatedly missed deadlines and sought extensions. Although some pipelines have been replaced, the replacement of aged, leaking pipelines remains incomplete. Pipeline leaks were observed as recently as 13 July 2025, in both a replaced pipeline and an unreplaced one (see Figures 8 and 9: Ash pipeline leaks.	Partially complied & Unsatisfactory
TNPCB is directed to monitor functioning of NCTPS and take action, including prosecution, if violations are detected. Para 120 (v).	TANGEDCO continues to illegally discharge flyash into the wetlands through: a) The Manja Machine Kalvai, which carries discharge from the ash dyke. b) The Buckingham Canal, which carries intermittent discharge from within the NCTPS compound, leading to ash deposits along the stretch between NCTPS and Kamarajar Port. This, in turn, enters the creek through canals connecting the river and the Buckingham Canal.	Not Complied & Poor
	TANGEDCO continues to violate emission norms. The report titled Breathless in Ennore- 2025 ¹² contains an analysis of online continuous stack emissions monitoring data for the period November 2024 to January 2025. A summary of findings is in *Note below this table.	

¹² https://storyofennore.wordpress.com/wp-content/uploads/2025/07/breathless-in-ennore-2025.pdf



 $\textbf{\it Figure 9:} Ash\ pipeline\ leak\ from\ a\ n\ unreplaced\ (old)\ pipepline.\ Photo\ dated\ 13\ July\ 2025$

Government of Tamil Nadu directed to finalise the tender for preparation of DPR. DPR tender to be awarded within 6 months of order. DPR to be completed within 9 months of finalisation of tender. Para 120 (vii)	10.04.2023: Vellore Institute of Technology selected as DPR consultant. 28.10.2024: Work order for preparation of DPR issued by 01.02.2025. Inception report by VIT was submitted on 01.02.2025 DPR not ready despite 3 years delay.	Ongoing and Unsatisfactory (as delayed)
TANGEDCO directed to immediately remove fly ash deposits. Para 120 (xiii)	Currently dredging work by Water Resources Department (funded by TANGEDCO) is ongoing on the northern stretch from Railway Bridge to Athipattu-NCTPS Road. Sand from these stretches should not be sold in the open market instead can be used in local restoration, the fishers urge. The dredging is not done to any rational plan. In some sections, only the eastern side is dredged – for instance, near Samuthiramunai paadu or NTECL coal conveyor to Jamaraangal paadu or the river stretch opposite the NCTPS III cooling tower, the deepening is ad hoc. Boat movement is obstructed at undredged portions. See figure 10. (Interview: Kattukuppam fisherman, May 2025).	Ongoing and Unsatisfactory

TANGEDCO directed not to cause any further harm to coastal ecology or environment by violations of conditions noticed by regulators earlier. Para 120 (xv)	TANGEDCO continues to illegally discharge flyash into the wetlands through: c) The Manja Machine Kalvai that carries discharge from ash dyke d) The Buckingham Canal, which carries intermittent discharge from within the NCTPS compound, leading to ash deposits along the stretch between NCTPS and Kamarajar Port. This, in turn, enters the creek through canals connecting the river and the Buckingham Canal. TANGEDCO continues to violate emission norms. The report titled Breathless in Ennore-	Not Complied
	2025 ¹³ contains an analysis of online continuous stack emissions monitoring data for the period November 2024 to January 2025. A summary of findings is in *Note below this table.	
The Additional Chief Secretary for Environment, Forest and Climate Change is directed to conduct a study regarding the unutilized Ennore Wetland on the basis of the 1996 CZMP as directed by this Tribunal in similar matter of this nature and protect that area against further development and declare the same as part of Ennore Wetland under the Government Wetland Mission and develop a plan for restoration of the fragile Ennore creek ecosystem and the wetland complex of Ennore.	Since the order was issued, numerous electricity transmission towers were illegally erected inside the wetlands revealing no further protection of the area. Additionally, while this report was being written, at least one construction activity (reportedly for a petrol bunk) was underway at Athipattu Camp Road, which is located within the unused Ennore Wetland as indicated on the 1996 map. Though Ennore creek is listed as the 100th ¹⁴ wetland under TN wetland mission, portions of the unutilised wetlands remain unprotected.	Not Complied
Chief Secretary, Tamil Nadu, directed to consider grievance of residents of Seppakkam, near ash pond, for relocation or securing their safety and to provide potable water	There has been no move to relocate or securing their safety from a coal ash flood in the event of a breach or from coal dust pollution from the dyke and movement of heavy vehicles.	Not Complied

 $^{^{\}rm 13}$ https://storyofennore.wordpress.com/wp-content/uploads/2025/07/breathless-in-ennore-2025.pdf $^{\rm 14}$ https://tnswa.tn.gov.in/pdf/list_of_100_wetlands.pdf

*NOTE

Summary of analysis of online continuous stack emissions monitoring data from TANGEDCO's NCTPS Stages I and II and NTPC-TANGEDCO's NTECL for the period November 2024 to January 2025

Key findings

Stack parameters were analysed for non-compliance in terms of exceedance hours and no data/no reliable data – invalid data hours. The total number of monitoring hours for the three-month period is 2208 hours.

a. None of the three thermal power plants (NCTPS I, NCTPS II, NTECL) was fully compliant with emission norms and monitoring requirements. They either violated emission norms or had valid data that did not span the entire 3-month winter period when atmospheric conditions worsened ground-level air quality.

b. NCTPS II had Zero Compliance; its emissions were non-compliant 100% of the time during the 3-month winter period.

c. NTECL was non-compliant 40% of the time.

d. NCTPS I was non-compliant 23% of the time.

Taken together, TPPs were non-compliant for 49% of the time during the three winter months from November 2024 to January 2025.

In the assessment period, Unit 2 of NCTPS Stage II violated emission norms for all parameters during periods of data availability, while TNPGCL has acknowledged¹⁵ violations only for SO₂. TNPGCL further claims that invalid data are due to forced outages and annual overhauls. The reasons for data non-availability should be published alongside real-time data so that pollution-impacted communities are

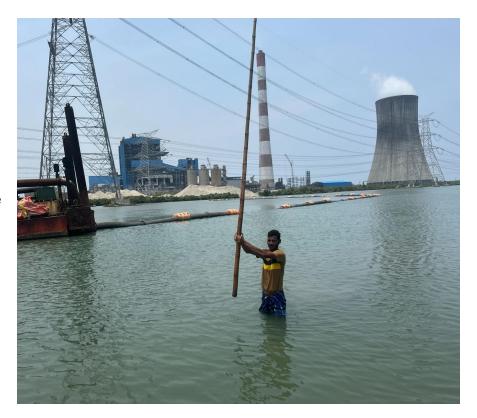


Figure 10: Fisher bathymetry using kol - Fisher holding the depth level (1.5 feet). Photo dated 10 June 2025

alerted, as even short-term exceedances can aggravate health effects. Without this disclosure, people cannot know whether data gaps are due to equipment malfunction or actual episodes of dangerous pollution, making timely regulatory action critical.

2. OA 241 of 2017, OA 131 of 2022 and OA 101 of 2023. NGT (1996 CZMP as baseline for Ennore)

OA 241 pertains to a case filed by an Ennore fisher challenging a CRZ map of 1997 that wrongfully replaced a 6000-acre block of Ennore wetlands, including a section of the Kosasthalai River, with a block that read TIDCO Petrochem Park. The original Government of India-approved CRZ map of 1996 was declared lost, until activists retrieved it and presented it to court. On 22.02.2021, the NGT found that the 1997 map was not an approved map, and that the 1996 CRZ map was the only official map. It ordered that the 1996

CRZ map, which designates the entire extent of the wetlands as CRZ I (ecologically sensitive), should be the basis for preparation of all future map/plans under CRZ Notification, 2019.

OA 131 pertains to a case seeking to direct the Tamil Nadu State Coastal Zone Management Authority (TNSCZMA) to prepare the draft CZMP in accordance with the Judgment dated 22.02.2021 in O.A. No.241 of 2017 (SZ) and the CRZ Notification, 2019. On 17.10.2024, the NGT directed the Tamil Nadu State Coastal Zone Management Authority to strictly follow orders in OA 241 while preparing CRZ map/plan for Ennore in accordance with law.

OA 101 pertains to a case seeking directions from NGT to the Government of Tamil Nadu to prepare the CRZ maps/plans as per the Notification, including aspects such as long-term housing plan, fisher livelihood spaces and fishing grounds and fish breeding areas.

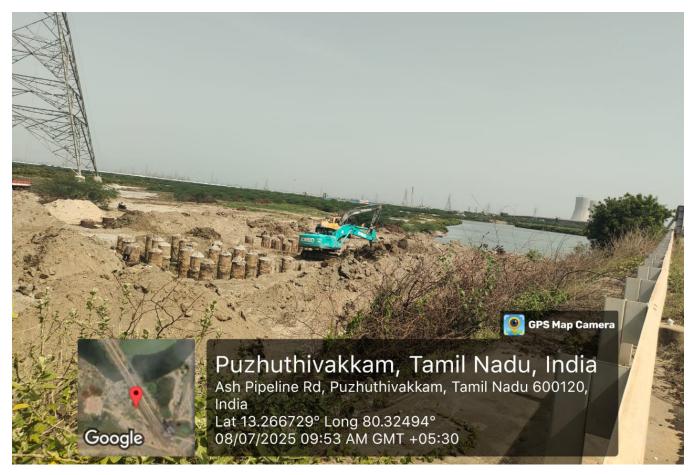


Figure 11: Ongoing works to remove concrete structures located on land and along the riverbanks, but not from within the river. Photo dated 08 July 2025

Though OA 131 of 2022 is squarely covered with OA 101 of 2023, OA 131 case is kept open still as Ennore is a special case of industrial area.

Compliance Status: NOT COMPLIED

Two key requirements of any management plan/map under CRZ Notification are identification and demarcation of fishing grounds and preparation of a long-term housing plan for fishers. In Ennore, fishers have submitted details regarding fishing grounds – paadu – demarcated by fishers from Mugatwarakuppam and Kattukuppam to the Department of Fisheries and the State Coastal Zone Management Authority. They have participated in demonstrations at the office of the SCZMA and insisted on its inclusion in the official

CZM plan. Similarly, along with fishers from other villages, they have petitioned and demonstrated to insist on a long-term housing plan in light of the heightened risk of loss of living spaces due to sea level rise induced by global warming and land-use changes due to reckless urbanisation and industrialisation. The state is obliged under the CRZ Notification, and NGT's orders in OA 101 of 2023 (mentioned above) to demarcate the fishing grounds and include long-term housing plans as part of the coastal zone management plan for the region.

On 05.03.2025, the final draft CZMP was presented by the National Centre for Sustainable Coastal Management to fishers in a meeting convened at the office of Fisheries and Fishermen Welfare Department. The final draft

in sheets numbered TN 110 and TN 111 (covering Ennore to Kalanji) did not demarcate the fishing grounds (Paadu) or include the long-term housing plan for the region. Fishing grounds for other parts of Thiruvallur district were demarcated. Only the fishing grounds used by Kattukuppam and Mugatwarakuppam fishers falling in the wetland areas proposed to be "developed" under Ponneri Industrial Township Area or other industrial projects are excluded from the plans.

3. OA 162 of 2021 and MA 13 of 2024 (Konamudukku Kalvai encroachment)

Background: The case pertains to illegal encroachment of the river at a point known as Konamudukku Kalvai by TANGEDCO to construct a coal conveyor corridor for its 2x660MW

Ennore SEZ power project. TANGEDCO obtained approval for a certain alignment, and then amended it arbitrarily without approval running the corridor through a productive fish-and-prawn breeding zone. This prompted fishers to physically block the dumping of dredged sand. The matter was taken suo motu by the NGT, while a fisher leader separately approached the Madras High Court (WP No. 16353 of 2021) which issued an interim order directing TANGEDCO to fully remove the dumped material and restore the river to its original condition.

On 13.03.2025, the petitioner in the High Court submitted a memo containing photographic evidence of improper removal of foreign material from the river, including concrete structures left behind. The Government Pleader sought time to respond.

On 23.09.2024, the NGT acknowledged the presence of 5,460 m3 of concrete structures inside the river and conceded TANGEDCO's request of 5 months time to float tender and remove the same.

Compliance Status: NOT COMPLIED

Concrete pillars laid on land at the banks of Konamudukku region of Kosasthalaiyar are being removed. However, no efforts have been made to remove construction sand, concrete structures from within the waterbody. The construction debris and sand have settled in the river bed has decreased the depth in this region. During low tide, boats are unable to pass through this region.

4. OA 152 of 2023 (Kaaka Azhi infestation case)

Background: This case pertains to the infestation of Kaaka Aazhi (Mytella strigata) – an invasive mussel – in Ennore-Pulicat backwaters. The infestation has rendered several fishing grounds unproductive and blocked



Figure 12: Depicts below-knee level depth at the concrete structures removal site-Konamudduku. The construction debris and sand have settled in the river bed decreasing the depth in this region. During low tide, boats are unable to pass through this region. No efforts have been made to remove the foreign materials from the river bed.

the passage for boats. Certain sites like Karukkumaram paadu are heavily infested. As warned by the fisher-petitioner, the infestation has rapidly spread during the pendency of the case and corrective action by the government to new areas.

On 04.10.2023, the NGT took cognizance of the study dated 13.03.2023 by Dr MGR Fisheries College and Research Institute that recommended dredging as the immediate measure for removal and expected WRD to undertake dredging. However, even after the passage of two years heavy infested sites have not been dredged, and infestation has spread to new sites.

Recently, on 19.08.2025, NGT directed "the Chief Secretary to the Government to step into the matter and ensure sanction of the proposed funds, at least in installments, so that the dredging work may be commenced without further delay."

Compliance Status: NOT COMPLIED

5. OA 67 and OA 93 of 2022. NGT (SZ) (Transmission towers case) Background: These cases pertain to the unlicensed alteration of the alignment of electricity transmission towers, and their subsequent illegal erection by TANTRANSCO and the disturbance to fishing and tidal flow caused by illegally dumped construction debris inside the river and on fishing zones. The unlicensed alignment encroaches on more than 40 acres of ecologically sensitive wetlands, including 17 acres of mangroves.

Court confirmed that TANTRANSCO has changed the alignment in deviation of the original CRZ clearance.

On 10.11.2022, the court directed TANTRANSCO to temporary structures dumped inside the river to erect transmission towers

Status: Partially Complied and Unsatisfactory

The temporary "roads" in the Kosasthalaiyar were removed only superficially and were untouched in certain locations. Only the shallow gravel was removed and the debris were not removed to the original depth of the river. C

Components Not Covered by sections A & B

I. Infrastructures

1. Bus Depot

Status: Ongoing and outcome awaited

A new bus depot is being constructed on the site of the old one. The design looks impressive, but it has not yet been opened for public use.



Figure 13- Ennore bus depot under construction

2. Library

Status: Done and outcome awaited

A new library, large in size, digitized, and air-conditioned, was recently inaugurated. However, it has not yet been made available for public use.



Figure 14- Library

Annexure - 1

Report of Focus Group Discussions with Ennore Women

Three focus group discussions among Ennore women from different backgrounds were conducted to understand the women's perspectives on what ails the environment, health and local economy and what needs to be done to improve the same.

Researchers: Dr. Kalapana Karunakaran, scholar in women's studies and P.S Vaishnavi, labour journalist

Contributors: Durga Moorthy, Nityanand Jayaraman

Co-ordinated by: Durga Moorthy, Save Ennore Creek Campaign

Rapporteurs: Benisha, Anupama

Method: Qualitative research using In person focus group dicussion approach with pre- determined open ended questions on environment, local economy and health. Wherever required reseachers used flexible follow-up queries to gather deeper perspectives of participants. Data was recorded in a recorder device and transsribed/translated for analysis. The report is annexed.

FGD 1 (24.06.2024) - Among key women leaders - fisherwomen, non-fisher women who are part of groups engaging woman in skill development trainings, self help groups, education. Number of women participated: About 12

FGD 2 dated 27.07.2024- Among Dropouts/ skill learners from muslim community; women in search of jobs, in groups like societies/SHG/ Ennore Anaithu Grama sangam. Number of women participated: 9

FGD 3 dated 09.08.2024- Conservancy workers, informal waste pickers and

domestic helpers - Kaatunaickan community and fisherwomen

Number of women participated: 10

Key findings:

a) Increased expenditure due to state neglect of environment, health and education: The polluted state of the river has hurt the local economy as fisher livelihoods and purchasing power of fishers has diminished. Poor air quality has increased the burden of health care expenditure. Poor quality of education in government schools is pushing parents to spend more for education in private schools.

b) Masculinisation of labour and diminished opportunities for local labour:
Local industries do not employ local labour; jobs are poor quality with insecure tenure (contract work); options for women are absent in local industries. Participation and contribution of women in the fisher economy – the only local 'industry' with opportunities for a large female workforce – has drastically declined because of pollution-related downslide of fisheries.

c) Poor transport infrastructure: Poor frequency and connectivity of bus-train options further reduce options for women who are required to travel to central or south Chennai to avail of job opportunities. Given the pressure of domestic responsibilities, women insist on the need for jobs in the proximity of their homes.

d) Lack of appropriate skill development options: Skill development and support with post-training marketing or placement was identified as a pressing need.

 e) Alcoholism and Addiction: These were identified as major sources of anxiety and increased economic burden on women. The location of TASMAC stores on public roads also discouraged women from taking jobs in places that would require them to return home after sunset.

f) Mental health issues for women: A lack of career opportunities and the inability to repay debts incurred to meet health expenditure is taking a toll on women's mental health. Alcoholism by husbands and adolescent males further aggravates the problem. Women expressed a need for mental health support and counselling services with safe spaces for them to unburden themselves and seek therapy.

A remembered past

Earlier, fishes were aplenty in the river and the sea. The siruvalai (small fishing net) was used for freshwater fishing and the peruvalai (large fishing net) was used for fishing in the sea. Locally, fishing was carried out using a small boat (padagu), and the fishermen would bring back a full pari (container made of palm leaves) of fish which fetched an income of around Rs.2000 to 3000.

The women were responsible for selling the fish brought in by the men of their households. They also gathered the small silver-belly fish, that were usually thrown away from the catch, and sold them directly or as dried fish (karuvadu).

The older fishermen and women also found opportunities to earn upto Rs.100 or so, by selling small fish, and were thus able to feed and support themselves even in their old age. A respondent said: "My paternal grandmother and her friends would dig for clams and sell them for a livelihood".

Even (non-fisher) women working in salt pans were able to catch the abundant fish in these river waters, which they would also bring home for the family's consumption. Fish was a big part of the everyday diet in the homes of fisher households.

They enjoyed good health because they lived in unpolluted lands, and had fresh, nutritious meals. They also had a steady source of livelihood. However, that is not the case today.

Environmental degradation and resource crisis

The respondents spoke of a significant decline in fishing and fish trading in Ennore and Manali since the 2000's, as of just a couple of decades ago. While a few said that the deterioration was particularly acute over the last 10 years.

A woman from a non-fisher family said: "When we were in college, we could visibly see the deterioration of the economic conditions of our [fisher family] friends... We wondered why things started to decline after that period..."

Over the years, as the competition among fishermen increased, many more people have been fishing. Some fishermen invested in boats with powerful engines imported from China that enabled fishing in the deep sea. The nets they used, effectively trapped small fishes and even hatchlings, which further depreciated fish resources.

Industrial pollution, the release of fly ash and coal dust in the water, the disappearance of mangroves and destruction of natural habitats have led to a decline in the local flora and fauna, the wildlife, and fish population in the river and the sea. The loss of these natural resources has had a cascading effect, leading to reduced economic activity in the region overall.

Currently, there are two categories of fishing operations. One group consists of those who go out daily for short trips, using small boats. The other group operate larger boats, around 60 to 70 feet long, and they fish in the sea for eight days at a time.

In addition to the ongoing release of industrial, medical waste, and sewage that have contaminated the sediments in the river bed, incomes from river fishing have fallen due to the declining availability of the lug worm, which is crucial for the growth of shrimp and other aquatic organisms. It was reported that aquaculture pond owners have paid local inhabitants (men and women), to collect and remove the lugworm from the river for the purposes of commercial shrimp farming.

Those who fish in the large boats face declining return on their investments owing to the rising costs of inputs. Diesel that used to cost Rs.40 a litre about 10 or 15 years ago now costs Rs.100 a litre. As the fishermen use about 1000 to 3000 litres, they are able to earn no more than Rs.10,000 now (this used to be Rs.50,000 earlier).

Apart from the Hindu Pattinavars who constituted the bulk of the fishing community, some Muslim families in Kaatukuppam and Thazankuppam have also been engaged in fishing. For the most part of the local community, they work as wage labourers on boats owned by others, and are also subject to the declining incomes from fishing.

Changing livelihoods of fisher families

As a consequence of the economic and ecological changes discussed earlier, many boat owners have had to sell off their boats, as their livelihoods have become unfeasible.

Not only the livelihoods of men, but even the livelihood of women is deeply affected, as they are correlated. Women, who were formerly engaging in selling fish, are now working as cleaners, sweepers, and in assorted housekeeping jobs in the Chennai Central Railway Station, Egmore Railway Station, other Metro stations, big shopping malls like Express Avenue in Royapettah, the Life Insurance Corporation office (Mount

Road), and so on. For those women who continue to sell fish, the paltry earnings have forced them to juggle two sources of employment and work two shifts. Some women sell fish in the morning and work a housekeeping job in the afternoon and evening.

In some cases, the distances involved are formidable. Women from Ennore/Manali have to travel by train to places such as Minjur, Athipattu, and Pudhunagar to sell their fish, return to their homes for a brief refreshment, and thereafter, travel to their employers' homes/offices in Thiruvanmiyur (South Chennai).

Some fisher families have completely given up fishing and started small businesses, such as snack shops that sell idli, dosa, and samosas, to support themselves. As fisherwomen withdrew from fish trade, families no longer enjoyed a steady supply of fish for their daily diet. The competition forces the predominant supply from larger boats to be sold outside, and smaller domestic fishers have declined. Several respondents bitterly commented on the skyrocketing prices of fish, due to the declining supply of fish and the increasing costs of fishing. As a woman said, 'we used to get good fish for Rs.100, but now, even for 500, we get only low-quality fish. Even poultry meat is more affordable. Fisher communities cannot afford to eat fish anymore.'

Despair, debt, alcoholism and health crises

Many women insisted that the local economy had taken a big hit due to the systemic environmental degradation. Their livelihoods are further pushed to a crisis due to the rampant use of drugs by men across castes and communities, in a context marked by growing frustration and despair over failing livelihoods, falling incomes/wages, and the absence of viable employment alternatives. Importantly, men's alcoholism has led to an increasing abdication of

their household provisioning responsibilities.

Just like the proliferation of alcohol shops in this area, we have an increasing number of women whose necks carry bare threads instead of the thirumangalyam (nuptial gold chain)... Previously, we all availed free education at government schools. But now, everybody is seeking admission in private schools that charge about INR 1,00,000 per year. The cost of living has gone up. In spite of the metro availability, we can only spend INR 5 on transport; we are all deep in debt... We have to borrow even to pay school fees. To pay back one loan, we take another...

A significant contributory factor to the mounting debt for basic family expenditure was the excessive medical expenditure, which is a consequence of the environmentally degraded conditions. The money is spent on seeking treatment for respiratory tract illnesses, dust allergies, lung diseases, other related health crises and medical emergencies. The detrimental effects of environmental pollution on people's health and well-being have been compounded by the woeful state of public health facilities.

The women noted that Ennore does not even have a maternity care hospital, and that emergency care has to be sought from the Stanley Government Hospital or the RSRM Hospital (Royapuram). Roja (name changed), an Ennore resident and social worker, has been conducting weekly UNANI medical camps through a social welfare organisation that she runs. Of the 200 people who seek free treatment in the camp every week, her medical records show that the major complaints pertain to colds, respiratory problems, and skin-related conditions. Other respondents corroborated Roja's observations.

Due to the heavy pollution in Ennore, there is nobody here without health problems. In every household, from the elderly to the new-born, everybody suffers from poor health... Even if both husband and wife together earn an income of INR 30,000, about 10,000–15,000 is spent on medical bills.

The foundries here are filled with metal dust. My father, a foundry worker for many years, died of lung cancer.

I went to a healing course. I attended four classes. Everyone would do breathing exercises in the basic class. But I couldn't do it. When others were breathing quietly, I would cough. I came to know that I had a dust allergy after visiting the hospital...

We were informed that many women were widowed early, as men died in their mid-30s due to substance abuse and alcohol-related complications, such as impaired liver and kidneys, and even bike accidents (on account of drunk driving). A woman commented: 'For young men, surviving beyond 35 years is a significant achievement in these areas.' The young widows were forced to take up marginal livelihoods and support their dependent children. A related phenomenon was the drop-out of girl children (not boys) from school, and the inability to afford schooling, driven by the alcohol addiction of many fathers. Teenage girls dropped out as early as class 8 in order to take up odd jobs and help their families tide over financial crises. The gender dimension of the school drop-out phenomenon is reflected in the families' decisions to finance the education of their sons at the expense of their daughters. A woman noted that her daughter was deeply upset that she had sacrificed her education for her brother, who was hanging around with his friends, experimenting with drugs, and avoiding his school books.

Another reason that private schools were preferred over local public schools, was the supposedly better supervision and monitoring of children. Some respondents noted that the government school was managed well only until a few years ago and had taken

a turn for the worse more recently. All the respondents we met informed us that adolescent boys were easily attracted to drugs, marijuana, the ever-available 'wine shops' run by TASMAC, and even addicted to their phone screens. Online classes during the pandemic had brought smartphones into many homes and made it a necessary acquisition for young people.

Public transport and barriers to women's wage employment

In order to cope with such a crisis of economic hardship, and male alcoholism, women and girls, at considerable costs, have stepped forward and taken the initiative for the financial upliftment or for the sheer survival (as the case may be) of their families. Women were reported to be more willing to seek employment outside North Chennai and use public transport (buses, trains) to reach their jobs elsewhere in the city. On the other hand, young men demanded that their parents invest in motorcycles as a prerequisite for seeking employment anywhere. Our respondents noted that stores and supermarkets in North Chennai were willing to hire young girls, in order to avoid paying higher salaries for men. Girls who dropped out of school often worked a 10 to 12-hour shift, starting at 8 AM in the local shops and supermarkets. Yet, they earned no more than Rs. 7,000 a month. The respondents we spoke to observed that salaries were likely to be higher for similar jobs in South and Central Chennai. However, inadequate public transport services and infrastructure have severely limited their chances of securing employment outside North Chennai.

A young woman from a fisher family had acquired a diploma in Nursing at great personal cost from a private institute in Pallavaram (South Chennai), as there were no training institutes in North Chennai. She reported that nursing jobs in private hospitals in North Chennai fetched a monthly income of about Rs. 6,000 to 8,000 for 8-hour work shifts, which often increased to 12 hours. As the daily commute to work would cost about Rs. 2,000 a month, she expected that the income she retained would amount to only Rs. 4,000–5,000. Higher-paid nursing jobs for Rs. 15,000 to 20,000 were available only in Central or South Chennai. Since the bus service to her neighbourhood did not extend beyond 8:30 PM, she could not seek employment in nursing homes or clinics in other parts of the city.

No woman can be at the bus depot beyond 7:30 PM because there is a wine shop right across it. Whether it is safe or not is secondary; we will have constraints about being in a place where there are people who are drunk. I do not feel safe when there are drunk people standing right across the road... Initially, there used to be four wine shops right next to each other at Ennore. When I pass that way at 7 PM, I would be stressed about the comments they may pass, irrespective of whether they actually do it or not. "I am alone. He is drunk. Will he say something?" These thoughts would run in my head...

Previously, our primary job was selling fish... As we are not earning much from selling fish these days, people go to many places seeking those job opportunities available, like housekeeping. So the buses run to full capacity between 7:45 AM and 10 AM. They take us [in the buses] the way they do dogs in the dog vehicles... Even if you provide free bus service, the situation remains the same, as there is no bus for the next half hour...

All our respondents agreed that traveling outside Ennore was necessary in order to find a job with a decent salary. However, an 8-hour workday combined with long commutes was simply out of the question (to Central or South Chennai), given the abysmal state of public transport services and infrastructure.

Moreover, the women added that men would never consider contributing to household chores or child care in any substantive way in the absence of their wives for long hours. Entrenched gender ideologies regarding the division of household and care work also limited women's time availability.

Self-employment and skill training opportunities for women

A welfare organisation run by Ennore resident Roja (name changed) offers tailoring and computer training to young girls and women from the surrounding neighbourhoods. Established after the big Chennai flood of 2015, the services offered by this training centre appear to have many takers. Women who had studied up to class 10 or 12 and had early marriages, usually sought this training to earn some income when their husbands failed to provide for the family. Roja reported that women who attended their training had set up their own shops, while others had found jobs in export (garment) companies. At the end of the 3-months training, several women were provided sewing machines and were assisted in creating a small tailoring business. Roja followed up with the women who had undergone the training programmes and assisted them in finding income-earning opportunities in their own homes or outside. While this centre caters to women of all religious communities and castes, it enabled us to meet and interact with women college graduates from Muslim families. The young graduates expressed their desire to find suitable jobs, even as they ruefully acknowledged that their families would not allow them to work outside the home. By virtue of being located in their neighbourhood, Roja's training centre had at least provided them with a skill that could potentially be put to use in the future.

There appears to be a great (and unmet) need for employment-oriented training

and assistance of the kind provided by Roja's NGO. Indeed, many of the women we met confirmed that they could easily identify other women in their neighbourhoods who were keen to undergo training in a vocational skill. They were also ready to use the skills, jointly set up and manage a small-scale enterprise, provided that capital investment, training inputs, and marketing assistance were provided by the government, an NGO, or a private/ commercial actor.

The guarantee of assured markets for any product they made, in particular, was a necessary input. The women reiterated that they require the relevant information, guidance, and proactive mentoring that would help them engage in productive economic activities within or close to their neighbourhoods.

I am a homemaker. There are many women like me. We want to earn a living. I feel inspired to start something along with them. There are at least ten such women in my own family... They are unsure of what they can do. And they are in dire need of money... They cannot step out of the house (for work). Is there anything that can be done from home? We will do well if we get the right opportunity... Even if we can earn about INR 100 by doing something, it will make us proud. We all miss that very much...

Several women had obtained large-sized loans from nationalised banks through their microcredit-based Self Help Groups. A woman mentioned that her SHG had received a bulk loan of INR 50 lakhs from the Indian Overseas Bank; the money had been distributed as Rs. 50,000 per head among the group's members. In the absence of any systematic or institutionalised effort to help SHG women set up enterprises and effectively market their products, these loans were usually used for household consumption-related expenses. Training programs such

as learning to make pickles, snacks and savouries, bake cakes, or drive two-wheelers and four-wheelers had been provided to women SHG members through government programmes.

None of these had led to enterprise or business activity, owing to the absence of any follow-up intervention.

We have been holed up in this area...
We are not aware of what is happening outside. Maybe bulk orders [for some production/manufacturing activity] can be generated... We can be given the raw materials. We can be paid for making the product. If there is such an opportunity, women will definitely come forward to participate...

Non-availability of industrial employment

The women categorically disproved the popular notion that the presence of factories and manufacturing industries in Ennore automatically created a favourable environment for women's employment. As a respondent argued, 'on the contrary, it is because of the factories that we are pushed to this low level of income!'. The masculinization of factory-based industrial employment in Ennore, and the absence of women-targeted manufacturing activities (such as food manufacturing or textiles) in the region, has depressed the demand for female labour. Besides the non-employment of women workers, it appeared that even local male labour was not adequately provided in the many industrial units, factories and workshops in Ennore. Our respondents speculated that the reluctance to employ local labour was perhaps because the companies feared that they may be more vocal in representation than labour brought in from elsewhere, consequently, they would complain, agitate and protest against bad working conditions. As a result, even graduates with professional degrees, in Engineering and IT-relevant courses and

young women with B.Com or Computer Science degrees from the local communities remained unemployed.

Some respondents recalled that in the 1970s and 80s, local workers used to be employed in the foundries of Ashok Leyland (working on melting iron) or companies such as the Hinduja Group and their subsidiaries. However, the companies' efforts to actively seek out local workers had ceased over a period of time. The children of retired workers, who had held permanent jobs, were not automatically preferred for employment either. When some local workers did find jobs in the companies and factories, these were always contractual, non-permanent jobs that would bring them a monthly income ranging from Rs.9000 - 11,000. The women asked, 'How is this salary sufficient to run a family?'.

A related issue was the unemployment of first-generation school and college graduates in Ennore, especially those belonging to very marginalized communities. Several families belonging to a designated Scheduled Tribe (Kattunayakan) had settled in an Ennore neighbourhood over 60 years ago. They had initially collected waste hair from barbers' shops which they re-sold as sauri mudi (hair used to make wigs). However now, they have transitioned over a period of time to collect and re-sell discarded plastic waste. They could not ply their trade during the monsoon months and were subject to police harassment and extortion for daily bribes whenever they set out on their three-wheeled cycles to pick up waste. While they aspired for better employment opportunities for their children with a class 10 or class 12-level of schooling, they mentioned with great anguish that such employment was just not to be found! The youngsters, who had received school education and were unwilling to collect plastic waste with their parents, demanded that the latter give them a weekly cash allowance from their plastic business. Since the local shops would only pay Rs.200 a day for

8 to 10 hours of work, their children (in particular, young boys) refused to seek employment in these shops. Girls were often married early, usually shortly after they had completed schooling. Under these circumstances, escaping the inter-generational cycle of poverty appears to be an elusive, even unattainable goal.

Specific demands

>>Efforts to recruit willing and interested women in income-earning opportunities that are household and/or neighbourhood-centered. In such cases, there must be effective hand-holding and support with regard to initial capital investment (if required), sourcing raw material, training in the manufacturing process and the guarantee of market access.

>>In the case of women from fisher households, examples of possible business activities that leverage their existing skills and knowledge include fish processing, dried fish based dishes, prawn pickles and food preparation and delivery through cloud kitchen-type arrangements, facilitated by adequate institutional support.

>>A special drive must be conducted to identify women workers in Ennore and make them members of the Unorganized Worker Welfare Boards, depending on their occupational status (domestic workers, petty vendors etc).

>>Skill development programmes for women and young girls based on their stated preferences, as well as, in non-traditional occupations (auto drivers, plumbing, carpentry, machine repair work) that will enable them to seek high-income jobs in the private sector. In such cases, training programmes must be followed by job placement and opportunity-creation initiatives.

>>Provision of marine certificates for local fishermen on a preferential basis that would allow them to engage in the loading and unloading of goods from ships. It was alleged that these certificates were issued to corporates that were in cahoots with the bureaucrats responsible for issuing certificates and that the entire process has marginalized fishermen from the area.

- >>At least 10% of jobs in the local factories and companies that pollute Ennore's air and water bodies must be reserved for local inhabitants.
- >>Increase in frequency and availability of public transport (buses, local train services) connecting Ennore to other parts of the city. Extension of public transport beyond 8.30 PM to all Ennore neighbourhoods.
- >>Setting up a fully-equipped public hospital in Ennore with respiratory and

skin disease-screening, diagnostic and treatment facilities, besides a range of all other required specialised curative services. Screening for lung diseases must be regularly and proactively conducted for all sections of the population with referral linkage to hospitals, without waiting for people to complain of breathlessness or other symptoms.

- >>Drug and alcohol de-addiction centres and rehabilitation programmes must be provided and extended based on the needs of the local population.
- >>Mental health support and counselling services for women as well as the creation of 'safe spaces' where women can unburden themselves and seek therapeutic care.

- >>Training programmes for entrance exams to government jobs such as banks, insurance, railways and Tamil Nadu Public Service Commission (TNPSC) should be set up in Ennore and must be provided by accredited institutions.
- >>Special initiatives to improve spoken English, public speaking and communication skills of school-going children in Ennore.
- >>Ensuring women's representation, substantive participation and leadership in local committees that are created for the purpose of overseeing development assistance (such as the proposed Special package for Ennore) provided to local communities.

Clam Curry and Idly by R Rajesh From the 2023 Save Ennore Campaign Exhibition





