

**BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE AT  
CHENNAI**

(Under Sections 16(h) read with 18(1) of the National Green Tribunal Act, 2010)

**Appeal No. 77 of 2025**

K. Saravanan

...Appellant

Vs.

The Tamil Nadu Coastal Zone Management Authority & Ors. ...Respondents

**PRELIMINARY REJOINDER FILED BY THE APPELLANT**

The appellant submits as follows:

1. The contents of the counter affidavit filed by the 2<sup>nd</sup> respondent dated 13.02.2026 and the counter affidavit dated 17.06.2026 filed by the 1<sup>st</sup> respondent are denied as false except to the extent expressly admitted hereunder. It is submitted that despite clear orders from this Hon'ble Tribunal to file their reply in advance, even after taking several adjournments, the 1<sup>st</sup> respondent has served their reply only at 9.30 AM today (18.06.2026) and it was thereafter seen that they had uploaded the affidavit under reply on the NGT portal only today i.e., 18.06.2026, when the appeal is listed for final hearing. In order to avoid delay, the present preliminary rejoinder is filed.

**Reply to counter affidavit of 2<sup>nd</sup> respondent**

2. The contents of the counter affidavit filed by the 2<sup>nd</sup> respondent is denied as false, except to the extent expressly admitted hereunder. It is submitted that except self-serving banal assertions, the affidavit under reply contains no reply to the grounds and issues raised in the appeal.

3. The contents of para 1 to 14 of the affidavit under reply are denied and it is stated that the respondent has failed to appreciate that the subject inter tidal mudflats are ecologically significant, sensitive areas and not barren waste lands. It is submitted that the natural discharge of freshwater to the sea as submarine groundwater discharge has an important role in the ecology of marine environments. The dynamics of seawater and freshwater within coastal aquifers are highly sensitive to disturbances and cannot be tinkered at the whims and fancies of the respondent. The present project will only result in destruction of a fragile coastal wetland that services a unique indispensable ecological function. Adopting more resilient/suitable water strategies and increasing the capacity of existing reservoirs would be the best course of action. The WRD has not disclosed any data concerning alternative sites for the project; factors such as desalination expansion, wastewater reuse, aquifer recharge, restoration of existing tanks, or decentralized storage have been strategically bypassed.
4. It is submitted that the cessation of salt production does not extinguish wetland values, as the ecological function of a habitat is independent of commercial use. The WRD itself admits that the depth across 95% of the site ranged between 0.5 – 1.5 feet, and 65% 'Kazhuveli' and 35% 'Uppangazhi' and records the birdlife in the salt pans. It is unfortunate that the respondent state authorities have failed to even appreciate their own studies. It is a fact admitted in their own reports that the wetlands in question support migratory avifauna, fish, crustaceans, and other aquatic invertebrates. The respondents have sought to justify the destruction of the wetland by proposing establishing a network of nearby existing Kazhuveli wetland habitats of 3.45 sq. km and converting abandoned salt pans of area 2.37 sq. km on the southern side and 2.75 sq. km on the northern side.

Firstly, the destruction of such a unique coastal ecosystem is unjustifiable, and the contention that the respondents will convert a salt pan into marshland is ecologically unsound and infeasible. These measures do not offset the impact of the proposed destruction of more than 17 sq. km of shallow coastal wetland habitats.

5. It is submitted that the reservoir bund will not ensure sustainable ecological flow, as surplus water will flow out only during the monsoon. However, the crucial migratory bird season in the estuary is between January and March, when obstruction of natural tidal flow will severely affect the bird populations, which need shallow coastal wetlands for their very survival. When bird census was commenced, Chennai district forest officer V A Saravanan has been quoted to say that such large congregations are unique to Nemmeli. "This scale of sighting is possible only in Nemmeli. Even in the Pallikaranai marsh, not many ducks have arrived this season when compared to Nemmeli".
6. It is submitted that the East Coast houses shallow lagoons, estuaries, and backwaters connected to the sea. These shallow brackish ecosystems are of immense ecological significance as they support huge populations of migratory birds and play host to species that have evolved to thrive in this unique ecosystem, which will not survive in freshwater ecosystems. The area is also a prime thriving fishing ground for artisanal fishers. Among avifauna, waders are especially vulnerable. Unlike ducks, which swim in water, waders 'wade/walk' through water, which is possible only if the habitat remains shallow. But the project proposes to enclose the area with an earthen bund for about 30.436 km all around with a height of 3 meters, to create a total storage depth of 3 meters and a water spread area of 17.71 sq km. If the depth of the wetland increases, so would the water level –

thereby leading to the waders that have been visiting the area every year to spend the winter, abandoning the site altogether. Even partial destruction and fragmentation of such a highly biodiverse region could lead to a total ecological collapse.

7. It is submitted that merely ensuring hydraulic connectivity does not translate into ecological connectivity. Artificially canalized tidal exchanges cannot replicate sediment deposition, nutrient exchange, and larval/fish migration pathways that natural backwater channels allow for.
8. It is submitted that the respondent has failed to see that the presence of large numbers of wading birds is the main indicator of biologically active mudflats – showing that benthic life is highly productive – which the EIA fails to recognize. It is also silent on the impact anticipated, and the respondent appears to be under the misconception that they can create salt marshes, which would magically justify the proposed ecocide. One cannot simply build or create intertidal ecosystems or coastal brackish wetlands. These ecosystems depend on a delicate balance of myriad factors, which have evolved over millennia. The EIA report dated November 2025 miserably fails to assess the anticipated impact of the proposed project. The report is said to be based on monitoring for baseline data from April 2025 to June 2025, the driest period. However, in Chapter III of the EIA report, titled 'Description of Environment', there is a complete lack of any description of the ecosystem which is being converted and offers irrelevant data instead as a distraction.
9. It is submitted that abrupt geographical isolation of the wetland by taking away its connection to the sea and constructing tidally influenced peripheral drains is no compensation. This 'mitigation measure' will not ensure sustained ecological functioning of the area, as 'brackish ecology' depends

on holistic inundation and the salinity profile of the entire region. And during excavation and bund formation, exposed soil will wash into adjacent wetlands and canals, and the consequent siltation can smother benthic organisms and reduce water clarity, thereby affecting the foraging efficiency of waders dependent on shallow, clear water.

10. It is submitted that creating six artificial islands totaling a mere 1,200 sq. m (0.3 acres) by actively destroying the thousands of acres of pre-existing biologically active mudflats that house diverse benthic invertebrate communities is ecologically absurd. This represents a near 100% loss of functional habitat and a dire lack of viable mitigation strategies. Because these islands will be encased by 3 meters of deep water, they are biologically useless for the thousands of waders and dabbling ducks such as Sandpipers, Stilts, and Teals which depend on this wetland's expansive, shallow mudflats and marshlands. Recreated/artificially constructed wetlands cannot achieve the ecological functionality of natural wetlands. One cannot simply build or create intertidal ecosystems or coastal brackish wetlands. These ecosystems depend on a delicate balance of myriad factors which have evolved over millennia. The contentions of the respondent are bereft of merit.
11. The contents of para 16 to 35 are denied as false. The respondent's assertions and tailor-made reports are without evidence and contrary to facts and the law. The contention that the project will reduce flood risk is speculative and unsupported by disclosed basin-wide hydraulic modelling. Flooding in Chennai is strongly linked to the loss of wetlands and poor drainage systems. Destroying another wetland would only worsen the city's flood dynamics. Coastal wetlands significantly reduce flood losses and storm surge impacts. Presently, the Kovalam wetland receives runoff from the entire catchment, and drains it into the sea – creating space for

accumulation of further runoff from the catchment. This function will be severely restricted if the wetland is blocked with drains and bunds – also affecting the tidal inflow through both the estuaries and the Buckingham canal. The impoundment blocks the water. By constructing embankments and regulators to block the entry of tidal waters, the respondent proposes to create a dam to keep tidal waters out – whether the tidal and storm surges will be accommodated has not even been considered. The flood risk to the catchment has also not been studied or assessed.

12. The respondent has admitted that they have copied secondary data and the EIA lacks crucial primary data and this has also been admitted. It is submitted that the EIA report cannot even be called an EIA study. The use of the term 'waste land' in section 3.4.3.1 is demonstrative of the manner in which this ecologically sensitive area has been viewed and the same classification has been used to denote the coastal wetlands of the study area in CRZ 1B. In section 3.4.3.1 of the rapid EIA, while being entirely irrelevant to the sensitive coastal wetland habitat that would be primarily affected, the report inaccurately, and inadequately focuses on inland deciduous, scrub vegetation while the highly eco-sensitive intertidal habitats such as mudflats, estuaries, and mangroves that host critical aquatic biodiversity including migratory avifauna, that is necessary for crucial ecosystem functions has been ignored and has led to mischaracterization with respect to CRZ classification. Section 3.4.3.2 is entirely repeated from the previous section without any additional information, and does not provide any insights about the coastal wetlands at stake, should this project move forward. The rapid EIA conducted during April 2025 - June 2025 erases the year-round ecosystem services provided by the wetland through multiple seasons. The report states that May is the hottest month in the district in section 3.4.2,

although fails to acknowledge that during dry months intertidal habitats such as the proposed project area appear to be barren, or simple intertidal flats. Without an EIA during the monsoons, presence of migratory birds, or important ecosystem functions cannot be documented. This had led the region to be classified as CRZ - 1B based on inaccurate and incomplete data.

13. It is submitted that the acknowledgement of artisanal and traditional fishers dependent on the coastal wetland indicates the presence of 'biologically active' mudflats that mandates a CRZ - 1A classification. The 'biologically active' mudflats that provide livelihood to the subsistence fishing practices indicate spawning or breeding grounds for prawns, and fish that would warrant an additional 'protected wildlife habitat' status, cementing the project area's classification status as CRZ - 1A. The report has failed to acknowledge the Irula Fishing Community, and the thousands of artisanal fishers who do not fall under the formal 'employee' category, and by extension has also failed to address the disastrous consequences of the loss of significant breeding/marine nursery habitats by not conducting an on-site survey to re-establish accurate socio-economic data and by presenting decade old information.
14. It is submitted that Section 4.2.2, Noise environment claims that noise from "DG sets and Vehicles during construction of earth bund is the main factor to be considered". The EIA is aimed at understanding the impact of a project on the environment as a whole, and not just humans. The earlier analysis of noise pollution under section 3.7.1 of the report only mentions noise levels being maintained within acceptable range for 'humans' but does not include the impact of noise during construction however short its duration may be on benthic, mammalian or avi fauna. The report has misclassified important intertidal habitats as independent waterbodies in

Section 3.4.8 that addresses the geo-morphology of the project site. Classifying eco-sensitive, and interconnected intertidal habitats as independent inland water depression reduces the overall significance of the coastal wetland ecosystem pertaining to its CRZ status, and the legality of developmental activities. So far, five intertidal habitats including Buckingham Canal, Tirupporur inlet, Tandalam inlet, Manamathy inlet, and the Bay of Bengal have been mislabeled as independent freshwater waterbodies under section 3.3, table 3-2, and much earlier in the report under section 1.4, table 1-1. Four of these intertidal habitats excluding the Bay of Bengal lie within the project site, and will be converted to a freshwater reservoir. Additionally, the project description under section 2 of the report has selectively swapped ecological terms to create a legal narrative including using the term 'coastal reservoir' instead of the naturally occurring 'lagoon', and treating estuaries as closed systems meant for freshwater storage/catchment areas instead of addressing them as naturally open systems that maintain salinity through freshwater influx and tidal charge. Under section 3.4.9, table 3-3 of the report that covers land-use and land cover of the study area, coastal wetlands, waterbodies, and rivers, streams and canals are ambiguously represented. As pointed out earlier, multiple important intertidal habitats have been clubbed into inland water depressions/independent freshwater bodies. The addition of one more category 'Rivers, streams and canals' avoids using the term 'Tidal marshlands' or 'Tidal influenced wetlands' by omission. The report does not acknowledge the role of inlets/streams in maintaining a coastal wetland and treats them as separate waterbodies, whereas ecologically they function together. Segregating the intertidal habitats as wetlands and freshwater habitats decimates the coastal wetlands and their entire existence. This is



further evidenced in figure 3-8 under section 3.4.9, where intertidal habitats are shown as independent freshwater bodies within the coastal wetland, rivers/canals/streams are shown as another layer of freshwater flowing through them, while surrounded by barren scrub land that is actually intertidal marshlands during dry seasons like May, which is when this map was created. The interconnectivity between the tidal inlets that feed into the coastal wetlands and keep them alive are shown as multiple fragmented habitats that have no connection with one another instead of a single critical ecosystem. While the report mentions the primary assessment to have been conducted during April 2025 to June 2025, bird surveys were claimed to be conducted during July 2025 to November 2025 to capture the migratory species as well. The earlier figure 3-8 that illustrated LULC of the project site was created during summer where intertidal flats seem to be barren owing to the dry season, hence appear as separate waterbodies, whereas during the monsoon and post monsoon seasons the tidal connectivity between these creeks, streams and marshes can be clearly seen on the map. Collecting biological data during the monsoon months, and submitting a dry season map is misrepresentation of the habitat and the diversity it holds. A EIA is meant to provide integrated information about the ecosystem. If the avi faunal data was collected during November, the LULC map should be representative of the flooded connected and integrated coastal wetland system that allows the estimated 102 species of birds to thrive. Preliminary environmental data (noise, air, soil, and water) collected during one season, and biological avi faunal data collected during another season, leave the impact assessment invalid and unfit for use to make development related decisions, including CRZ classification. Section 4.2.4, Water environment and impacts is poorly understood and discussed. Effectively converting a

brackish water body into a freshwater reservoir means leaving the region vulnerable to storms and floods. Contrary to what the project claims, instead of providing flood relief and preventing groundwater salinization, the reservoir could increase risk of floods in neighbouring villages, and promote saltwater intrusion due to the lack of tidal charge, and block water movement. This would lead to a collapse of the brackish water ecosystem along with its breeding/spawning grounds, eventually leading to the loss of livelihood of local communities. Fishers who have access to nurseries/breeding grounds free of cost without the need for any equipment, especially women, will be forced to find alternative forms of livelihood. The mitigation measures provided by the EIA are vague at best. The report fails to mention how the project plans to tackle severe storms and cyclones. The proposed bund is 4.8 m whereas wave surges in the region during cyclones/storms can reach up to 5.5 m. Currently, the coastal wetland acts as a storm surge buffer, and prevents flooding of surrounding areas.

15. The disastrous ecological impacts of removing sediment to build bunds has barely been discussed in the matrix. It addresses only the milder ecological issues that are the after-math of an ecosystem destruction, and conveniently skips the devastating impact sediment removal would have on the geo-morphology of the system. Benthic ecosystems are rich in organic matter since they're an ecotone. This organic matter is constantly in motion, owing to tidal charge, allowing for vast biodiversity to exist in the sediments. In the absence of the tidal flux, removing sediments can mean releasing trapped pollutants, and stagnating organic matter that can cause large algal blooms, and a sudden chemical shock that could kill fish, and other organisms that inhabit the benthic ecosystem. Removing sediment can create artificial deeps and barriers, causing scouring and erosion in other

parts of the wetland. Currently the ecosystem acts as a self-cleaning system through the tidal flush, by trapping pollutants, and non-stagnant organic matter. The removal of sediments will erase this self-balanced ecosystem and create ecological issues that did not exist prior to the project, most of which the project has demonstrated unprepared to manage.

16. The impact matrix has falsely stated that the bund construction will have minimal ecological damage without scientific evidence. In fact, constructing a bund and creating a barrier to water flow between estuaries, rivers, canals and the ocean is the final nail in the coffin to making sure the Ecologically Sensitive Areas (ESAs) are permanently submerged, and destroyed. The report has added the aspect of 'removes invasive species Prosopis' to make it look more appealing and eco-friendly. However, that is far from the truth. The construction of a 30km bund that is 5 m wide, and 4.8 m high involves entirely clearing out any existing vegetation, constructing the bund, and then planting natives. The report has not mentioned which native species would be planted since the chosen species needs to be tolerant to saline conditions. Additionally, restoration of ecosystems involves a step-by-step process where primary species are planted to create a habitable ecosystem for other secondary, and tertiary species to take over. The report seems to have ignored the most significant aspect of restoration which is the duration for an ecosystem to bounce back from a 'clean wiped slate' . Without consulting coastal wetland experts, an on-field team and consistent efforts based on scientific evidence for at least a decade, there is no possible way for the bunds to be able to host native plant species.
17. The impact on inlets of water has again been minimised by the matrix to a couple of sentences. The report contradicts itself by stating the loss of

Kazhuveli wetland, which is an Ecologically Sensitive Area, and is prohibited from destruction due to developmental activities under CRZ -1A. The mention of loss of feeding ground for waders throughout the matrix is a violation of the Wildlife (Protection) Act, yet continues with the project as per plan. The matrix proposes unscientific methods of tackling the destruction of a complex coastal wetland that show poor understanding of what the ecosystem is, and how it functions. The matrix mentions 'Formation of embankment may alter water flow into adjacent wetlands or salt pan, possibly impacting fish and prawn populations until natural hydrology is restored'. However, it does not address how the project plans to restore natural hydrology while destroying the tidal influxes that keep the ecosystem alive. This point is particularly misleading and treats the loss of a complex, functioning ecosystem as something that can be 'brought back'. There is no mention of salinity, pH balance, protection of marine nurseries or feeding regions for juvenile fish/prawns but the report confidently states 'Regulated flow supports both aquatic and shallow wetland habitats' under post-mitigation conditions.

18. It is submitted that the EIA is scientifically invalid. The report has used LULC vector data (Fig 3-8) that is more than a decade old (2010/2011) and satellite imagery from 2015 which does not account for the more recent geo-morphological changes, livelihood dependence in a highly dynamic tidal environment. With rising sea levels, and increasing sea water temperatures, the report provides only a 'Ghost map' of the project site land use that no longer exists. Further, the report further invalidated the entire rapid EIA by conducting their avifaunal surveys during monsoon as compared to their pre-monsoon primary surveys, emphasising the lack of integrated presentation of ecological data while side-stepping the ecosystem's core

features that are seen during the monsoon. The EIA has mislabeled 5 tidally influenced habitats as “independent waterbodies within the project site” under Ecologically Sensitive Areas (ESAs) in section 3.3. Most tidal marshes appear as independent waterbodies instead of an interconnected network within the larger coastal wetland ecosystem due to less water availability during the dry seasons. By adding additional habitat categories that are ecologically, and legally ambiguous, the report has also mentioned the presence of streams, canals, and rivers as extra layers of water cutting through the wetland, instead of representing it as the complex, integrated brackish ecosystem it is.

19. It is submitted that the fact remains that even the comprehensive studies sought by the TEC were not submitted and the clearance was issued even before such studies were conducted. It is submitted that the respondent cannot hope to destroy the law and an ecologically sensitive wetland with such impunity. It is submitted that the following documents are annexed to this reply to further testify as to the ecological significance and biodiversity of the area this project will destroy.
  - a. Letter from Asad R. Rahmani on the importance of the Kovalam-Nemmeli backwaters – Annexure A 19.
  - b. Letter from Divya Karnad, Associate Professor, Ashoka University on the concerns regarding the Mamallan Reservoir Project in the Kovalam-Nemmeli backwaters - Annexure A 20.
  - c. News report in The Times of India titled “More than 16,000 migratory ducks spotted at Nemmeli waterbody, region’s biggest” - Annexure A 21
  - d. State of India’s Birds – Birds of Nemmeli Coastal Wetland Complex - Annexure A 22.

- e. SACON Study – Criteria for wetland prioritization and frame work for wetland monitoring in the state of Tamil Nadu - Annexure A 23
- f. Nemmeli Coastal Wetland- Qualification against Ramsar Site Criteria- Annexure-A 24
- g. Birds of Kovalam – Nemmeli Wetland Complex – photographs and reports - Annexure A 25.
- h. Species Nursery Documentation – conservation report focusing on the Muthukadu Estuary - Annexure A 26.
- i. Raptor Wintering Site Documentation and Conservation Evidence Report - Annexure A 27.
- j. Kovalam Nemmeli - Climate Change – Coastal Hazard Assessment Report - Annexure A 28.
- k. Salt Pans as Avifaunal Habitat - The scientific case for the Nemmeli salt pans, and why freshwater impoundment would destroy them - Annexure A 29.
- l. Record of an insectivorous plant from the Nemmeli Coastal wetland Annexure A 30.
- m. Field Evidence of Active Avian Breeding Landscape - Annexure A 31.
- n. Media articles on Kovalam-Nemmeli Coastal Wetland Complex – Wetland Conservation Network - Annexure A 32.

### **Reply to counter affidavit of Respondent No. 1**

- 20. The contents of the counter affidavit filed by the first respondent TNSCZMA are denied as false, except to the extent expressly admitted hereunder.
- 21. The contents of para 1 to 8 are denied as false and it is submitted that the 1<sup>st</sup> respondent has repeated the statements of the project

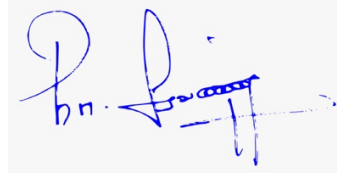
proponent and the above reply may be read as reply to these assertions as well.

22. The contents of para 9 to 15 are extracts from minutes and the impugned clearance and the assertions of the project proponent are denied as false. It is submitted that it is trite that the impugned clearance has to be tested based on the order and not based on any affidavit filed subsequently. It is submitted that TNSCZMA has miserably failed to act as the regulator under the statute and has failed to appraise the project as required by the law and has issued the impugned clearance without considering the disastrous ecocide proposed by the subject project. The DCZMA and TNSCZMA minutes clearly evidence the fact that there has been absolutely no discussion on the ecological and biodiversity impacts of the project, the merits and adequacy of the EIA report and other reports submitted by the project proponent.
23. The TNSCZMA has admittedly issued the impugned clearance without even the studies sought by the TEC. The impugned clearance was issued with supersonic speed and without even noticing that the provisions of the CRZ notification referred to by them do not apply to the present project and the destruction of the subject biologically active mudflats- shallow coastal wetlands is prohibited by law. It is submitted that local inhabitants mentioned in the CRZ notification is a reference to projects necessary for those residing in CRZ and is inapplicable to the subject project. The impugned clearance is liable to be quashed as it is contrary to the law and has been issued without any consideration of relevant factors, including prohibitions under law.

It is therefore prayed that this Hon'ble Tribunal allow the appeal as prayed for and thus render justice.



Counsel for the Appellant

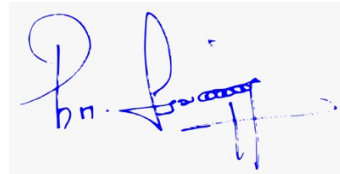


Appellant

### **VERIFICATION**

I, K. Saravanan, the Applicant herein, do hereby verify that the contents in the above paragraphs are true to the best of my knowledge and based on legal advice and that I have not suppressed any material fact.

Date: 18.06.2026  
Place: Chennai



Appellant