

BEFORE THE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI

ORIGINAL APPLICATION No.258 of 20245 (SZ)

IN THE MATTER OF

SUO MOTU in respect of news item published in Udayavani dt: 25.06.2024 titled "Pavoor Uliya Kudru shrinking due to illegal sand mining. Locals demand justice".

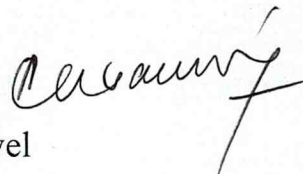
Vs

Central Pollution Control Board, Through its Member Secretary, New Delhi & others

:Respondents

REPLY FILED BY THIRD RESPONDENT, NATIONAL CENTRE FOR  
SUSTAINABLE COASTAL MANAGEMENT, CHENNAI

Through



Mr.A.R.Sakhivel

SENIOR PANEL COUNSEL

FOR THIRD RESPONDENT

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

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It is respectfully submitted that cognizance was taken *suo motu* by the Hon'ble National Green Tribunal based on the news article titled "Pavoor Uliya Kudru shrinking due to illegal sand mining, Locals demand justice," published in Udayavani on 25.06.2024. The article highlighted the environmental crisis facing Pavoor Uliya Kudru, a small island near Ullal in the Mangaluru taluk. The island is rapidly shrinking as a result of rampant illegal sand mining, which has caused significant erosion and threatens the homes and livelihoods of the local inhabitants. In response to this urgent issue, the residents, organized a protest, demanding immediate government intervention and justice against the illegal sand miners. The

  
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protesters emphasized how the unchecked mining activities have devastated the community's ability to sustain itself.

In response to the above OA, the third Respondent, National Centre for Sustainable Coastal Management, Chennai wishes to place the following reply:

### **1. Factual Background & Magnitude of the Shrinkage**

Pavoor Uliya Kudru, a small riverine island situated in the Netravathi River between Pavoor and Adyar near Mangalore, has experienced significant shrinkage in recent decades, posing severe ecological and socio-economic concerns. Home to roughly 35–52 households reliant on fishing, agriculture, and seasonal fruit cultivation, the island has lost much of its land area due to a combination of sand mining and reduced sediment supply from the upstream catchment. In particular, sand extraction has destabilized the riverbed and eroded island margins. Recent construction on and around the Netravathi River may have further aggravated the crisis. Riverbank development disrupts natural sediment deposition and alters channel hydraulics, with hard structures intensifying water velocity, scouring banks, and preventing the natural lateral migration necessary for island stability. The removal of river bank vegetation could also weaken soil cohesion, reducing resilience against erosion. Collectively, these anthropogenic pressures diminish sediment replenishment, accelerate land loss, degrade habitats, and increase vulnerability to floods and hydrological extremes, threatening both ecological integrity and community livelihoods.

### **2. Scientific and Environmental Impacts**

Researchers and local observers note that the indiscriminate use of heavy machinery earth movers and motorized boats has led to deep trenches of 15–25 feet in riverbeds, that has the potential to disrupt hydrological equilibrium, erode riverbanks, destabilize the island's base, and altering the river's natural flow dynamics. These

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alterations deepen river channels and widen estuaries, increasing the susceptibility to saline intrusion and destabilizing aquatic habitats.

In October 2024, the Mangalore sub-division Assistant Commissioner issued a local administrative order banning all forms of sand extraction within a 2 km radius of Pavoor Uliya Island. This order banned movement of sand-transporting boats and machinery, as well as storage and distribution of sand on riverbanks, except boats used strictly for island access.

### **3. Urgency of Measures & Need for Scientific Restoration**

Considering the evident shrinkage, from a halved landmass, degraded ecosystems, loss of livelihoods, and a declining community presence (with families reduced from over 50 to about 35), immediate scientific and ecological remediation is imperative. To conclude the exact reasons for the shrinkage of Pavoor Uliya Kudru, scientific data from detailed hydrodynamic and particle transport studies (along with geospatial mapping) are essential. Such analyses help determine how flow velocity, channel hydraulics, and sediment dynamics influence erosion and deposition around the island. By quantifying sediment supply, transport pathways, and scouring intensity, these studies can distinguish the impacts of natural processes from anthropogenic pressures like sand mining and riverbank construction. Equally important are social and ecological impact studies, which assess how habitat loss, declining fish populations, and reduced agricultural productivity affect both biodiversity and the livelihoods of local communities. Together, these integrated scientific investigations provide evidence-based guidance for designing restoration measures, enforcing regulations, and ensuring long-term ecological and socio-economic sustainability of the island. Ecosystem restoration plays a vital role in rebuilding sediment structures, strengthening riverbanks with native vegetation such as mangroves and riparian species, and enhancing soil stability through bioengineering techniques (such as green coastal infrastructure). Finally, community-led conservation engaging local residents in monitoring, awareness, and

alternative livelihood programs is critical to ensure long-term resilience of the river island.

### **Immediate Management Measures:**

#### 1 . Protect Coastal Vegetation:

Designate the area as a Coastal Vulnerable Zone to protect and restore mangroves, riparian vegetation, and other natural features.

Implement strict regulations against clearing natural vegetation along the riverbanks.

#### 2. Ban Riverfront Development:

Enforce a complete ban on unauthorized construction or development near the riverbanks.

Conduct Environmental Impact Assessments (EIA) for any planned projects to assess ecological risks.

#### 3. Strict Adherence to CRZ Norms

Mandate that all construction activities in the area comply with Coastal Regulation Zone (CRZ) regulations.

Make CRZ clearances a precondition for any developmental or construction activity in the region.

#### 4 Address Illegal Sand Mining:

Conduct regular monitoring and patrolling to curb illegal sand mining activities.



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Impose penalties on violators and establish checkpoints for mining vehicles.  
Promote alternative livelihood programs for local communities dependent on sand mining.

5 Community Engagement:

Involve local communities and stakeholders in conservation programs.  
Educate residents about the negative impacts of sand mining and benefits of sustainable practices.

6. Hydrological and Ecological Restoration:

Initiate restoration projects to stabilize riverbanks and rebuild degraded areas.

Employ nature-based solutions like planting native species to enhance resilience.

**Recommendations for study:**

1. Comprehensive Field Visit
2. Hydrological and Sediment Flow Analysis
3. Stakeholder Consultations
4. Geospatial Mapping
5. Scientific Recommendations

Develop site-specific management strategies, including erosion control, sustainable alternatives to sand mining, and biodiversity restoration initiatives.

  
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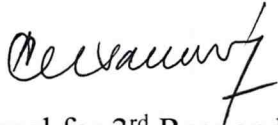
## Implementation and Monitoring:

Establish a task force involving local authorities, environmental experts, and community representatives.

Set up a long-term monitoring framework to track ecological health and ensure compliance with conservation measures.

It is therefore humbly prayed that this Hon'ble Tribunal may be pleased to take cognizance of the submissions made herein, and issue appropriate directions to the concerned authorities for the implementation of the proposed measures, enforcement of existing environmental laws, and formulation of a long-term conservation and management plan for the Pavor Uliya Kudru.

Dated at Chennai this 16<sup>th</sup> day of September 2025



Counsel for 3<sup>rd</sup> Respondent

3<sup>rd</sup> Respondent



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AFFIDAVIT

I, Dr. Purvaja Ramachandran daughter of G V Ramachandran aged 57 years, employed as Scientist - G & Division Chair at National Centre for Sustainable Coastal Management, (MoEF & CC) Anna University Campus, Chennai – 600 025, do hereby solemnly affirm and sincerely state as follows:

1. That I, the deponent herein, am the authorized representative to represent the 3<sup>rd</sup> Respondent NCSCM in the present case, and as such, I am well conversant with the facts and circumstances of the present case on the basis of the information derived from the official records, and hence, I am competent to verify, sign and swear this affidavit on behalf of the 3<sup>rd</sup> Respondent NCSCM.

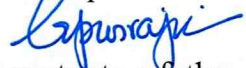
2. That the accompanying reply may be read part and parcel of the present affidavit

  
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3. That the accompanying reply has been drafted and filed under my instructions and Authority the contents thereof are true and correct on the basis of the record maintained during ordinary course of business of NCSCM and available records and documents and the contents of the same are read over and explained to me and are not repeated herein for the sake of brevity.

Dated at Chennai on this 16<sup>th</sup> day of September, 2025.

3<sup>rd</sup> Respondent



Verified at Chennai on this 16<sup>th</sup> day of September 2025 that the contents of the above reply are correct and true on the basis of the record of the day-to-day affairs of the NCSCM. Nothing has been concealed therefrom or mis-stated.

**DR. PURVAJA RAMACHANDRAN**

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Verified at Chennai on this 16<sup>th</sup> day of September, 2025.

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