

Regional Office :

**Karnataka State Pollution Control Board**

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Mangaluru - 575 011

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ಪ್ರಾದೇಶಿಕ ಕಛೇರಿ :

ಪರಿಸರ ಭವನ, 10ಬಿ

ಬೈಕಂಪಾದಿ ಕೈಗಾರಿಕಾ ಪ್ರದೇಶ

ಮಂಗಳೂರು - 575 011

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ಮುಲೈನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ



towards a cleaner Karnataka

PCB/RO (MNG)/NGT (PB)/OA:No. 219/2022-23/1637

Date: 10-1-2023

To,

The Member Secretary  
Karnataka State Pollution Control Board  
#49, Parisara Bhavana  
Church Street, Bengaluru-01

**Through: Law Officer-Legal Cell, KSPCB**

Sir,

**Sub:** Submission of Joint Committee Report pertaining NGT Case OA  
No. 219/2022 Dated: 25.04.2022- reg.

**Ref:** The Hon'ble National Green Tribunal, Principal Bench, New  
Delhi Order dated: 25.04.2022 in respect of OA No.219/2022.

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With respect to above subject and reference, please find herewith the enclosed signed report prepared by the joint committee pertaining to NGT case vide OA No. 219/2022 dated: 25.04.2022 vide reference above, based on the application filed by the president and Secretary of Nadhi Minugarara Sangha, Dakshina Kannada, Mangaluru, alleging the commercial sand mining activity being carried out by use of machinery in the garb of removal of sandbars in the CRZ areas.

The soft copy of the PDF of the report is mailed for onward submission to Hon'ble NGT.

This is for your kind information and further needful action.

Thanking you,

Your's faithfully

R. W. K. M. 10/1/23  
REGIONAL OFFICER,  
KSPCB, Mangaluru

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH, NEW  
DELHI**

**ORIGINAL APPLICATION NO:219 OF 2022 (PB)**

**IN THE MATTER OF:**

**“COMPLAINT FILED BY NADI MEENUGARARA SANGHA AGAINST THE ILLIGAL  
SAND MINING DETERIOTING THE CAOSTAL ECOSYSYTEM ”**

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**REPORT OF JOINT COMMITTEE APPOINTED BY HON'BLE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH, NEW DELHI (NGT) IN MATTER OF O.A NO. 219/2022, ORDER, DATED 25.04.2022, WITH RESPECT TO COMPLAINT FILED AGAINST THE ILLIGAL SAND MINING DETERIOTING THE COASTAL ECO SYSTEM.**

**1.0 Preamble:**

Hon'ble NGT, Principal Bench, New Delhi has registered a complaint based on letter petition by President and Secretary of Nadhi Minugarara Sangha, Dakshina Kannada, Mangalore, Salian Nivas, Sulthan Battery, Bolur, Mangalore in OA No:219 of 2022 dated: 25.04.2022, regarding their grievances that illegal sand mining is being detrimental to fish stock and deteriorating the coastal environment/ecosystem.

The complainants representing the fishermen community allege that *“amendment was made in the CRZ Notification 2011 permitting removal of sand bars in the intertidal areas by traditional Coastal communities only by manual methods i.e., in non-mechanized dinghies or small boats using baskets/buckets in various Coastal States. Guidelines dated 24.02.2011, 09.06.2011 and 08.11.2011 were issued by MoEF & CC for extraction of sand from the sand bars to enable movement of fishing vessel. It is stated in the letter petition that none of the criteria laid down in the above said guidelines is being followed and commercial sand mining activity is being carried out by building mafia by use of machinery in the garb of removal of sandbar in the CRZ areas. Such illegal sand mining is. It is detrimental to the fish stock including the fish migration and the occurrence of estuarine fishes also deteriorating the environment causing serious erosion of the coast depriving the beaches of the sand. Saline ingress and stagnation of water is creating anoxic conditions deteriorating the water quality. It is further stated that several companies are operating by the side of rivers and sea in the Coastal area and discharging polluted chemical water/drainage effluents into the river and sea causing pollution of river and sea water and damage to the fish seedlings. Complaints were made to the concerned authorities but no action has been taken”*.

In view of the serious allegations related to coastal ecosystem made in the letter Petition by the complainants, Hon'ble NGT opined that *“it would be appropriate to have a factual and action taken report from a Joint Committee comprising of representatives of Regional Office of MoEF & CC, Bangalore and National Coastal Zone Management Authority, State Coastal Zone Management Authority, State PCB, Deputy Commissioner, Mangalore and Additional Chief Secretary, Department of Forest and Ecology, Government of Karnataka”*. The State PCB was made the Nodal agency for coordination and compliance. The Joint Committee was directed to meet within four weeks and undertake visit to the site, interact with the stakeholders, ascertain the cause of the incident and suggest remedial measures. If polluters were identified, it was directed to issue them the

notice so that they could also file their response, if any, before the tribunal. Copy of the Hon'ble NGT order is enclosed as **Annexure-1**.

## 2.0 Constitution of Committee:

In compliance to Hon'ble NGT order, Department of Forest, Ecology and Environment, GOK, have constituted a committee vide Government Order No. FEE, dated: 14.07.2022 consisting of the following members, the copy of the same is enclosed as **Annexure-2**.

**Table1: Constitution of Committee as per Hon'ble NGT Order**

Sl. No	Name & Designation	Details
1	Sri Vijay Mohan Raj V.,IFS, Principal Secretary to Government, (Ecology and Environment) Forest, Ecology and Environment Department.	Chairman
2	The District Magistrate, Dakshina Kannada District represented by Sri Krishnamurthy H.K, KAS, Additional Deputy Commissioner, Dakshina Kannada District.	Member
3	Dr. Muralikrishna Chimata, Scientist 'E', Ministry of Environment, Forest & Climate Change, Integrated Regional Office, Bengaluru, 4th Floor, E & F –wings, Kendriya Sadan, 17th Main Road, 2nd Block, Koramangala, Bengaluru -560 034	Member
4	Dr. K. Balakrishna, Professor of Geology, Department of Civil Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal.	Member
5	Dr. Shivakumar M, Dean, College of Fisheries, Yekkur, Kankanady Post, Mangaluru Dakshina Kannada -575 002	Member
6	Dr. Dineshkumar Y.K, IFS, The Regional Director (Environment), Department of Forest, Ecology and Environment, Mangaluru, Dakshina Kannada- 575003.	Member
7	Smt. Vijaya Hegde, Zonal Senior Environmental Officer, Karnataka State Pollution Control Board, Zonal Office-Mangaluru Mangaluru, D.K District-575 011	Member

8	Sri Ramesh K.M, Environmental Officer, KSPCB, Regional Office Mangaluru-575 011	Member Convenor
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The Joint Committee sought three months extension of time for submission of the factual and action taken report. Copy of the letter is enclosed as **Annexure-3**. Accordingly, Hon'ble NGT vide its Order dated: 10.10.2022 granted extension of 3 months' time for submission of the joint committee report and listed the case on 24.01.2023. Copy of the Hon'ble NGT order is enclosed as **Annexure-4**.

## 2.1: Site Visit

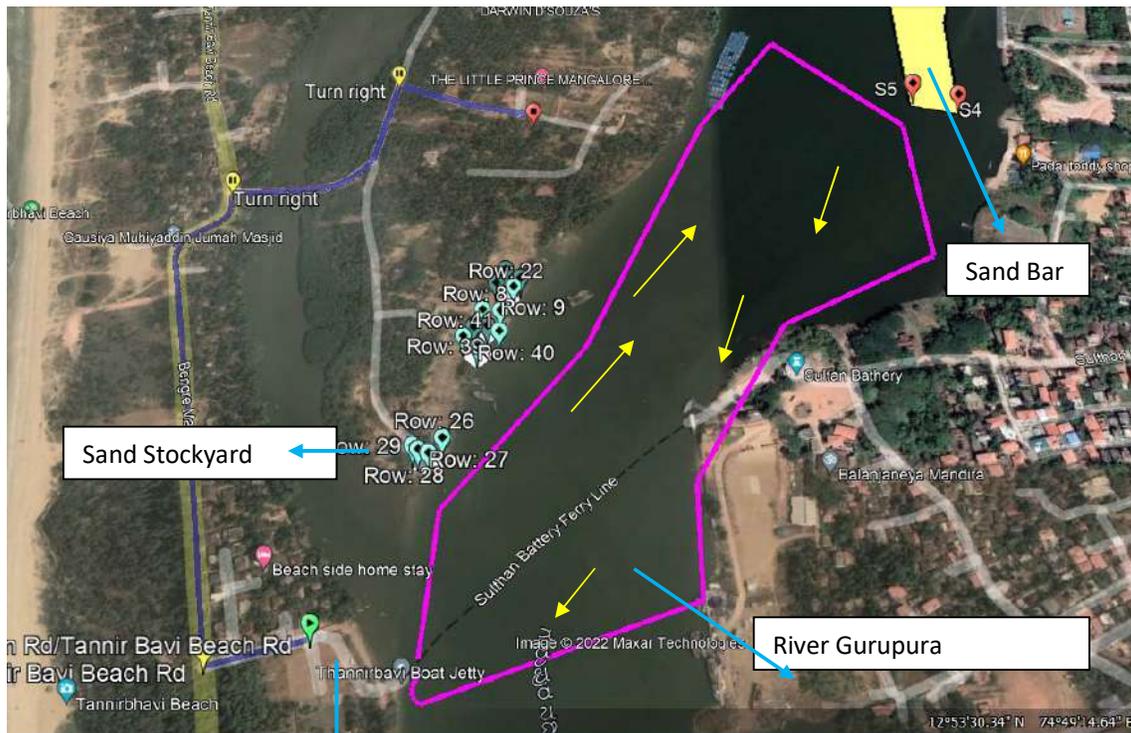
The Joint Committee made a Spot inspection along with other invitees and complainants on 14.11.2022, with prior intimation to all the stake holders and line Departments. Discussions were held with the members after the spot visit. The members and invitees who attended the spot inspection are as below:

Sl. No	Name & Designation	Details
1	Sri Vijay Mohan Raj V.,IFS, Principal Secretary to Government, (Ecology and Environment) Forest, Ecology and Environment Department.	Chairman
2	The District Magistrate, Dakshina Kannada District represented by Sri Krishnamurthy H.K, KAS, Additional Deputy Commissioner, Dakshina Kannada District.	Member
3	Dr. Muralikrishna Chimata, Scientist 'E', Ministry of Environment, Forest & Climate Change, Integrated Regional Office, Bengaluru, 4 <sup>th</sup> Floor, E & F –wings, Kendriya Sadan, 17th Main Road, 2nd Block, Koramangala, Bengaluru -560 034.	Member
4	Dr. K. Balakrishna, Professor of Geology, Department of Civil Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal.	Member
5	Dr. Shivakumar M, Dean, College of Fisheries, Yekkur, Kankanady Post, Mangaluru Dakshina Kannada -575 002	Member
6	Dr. Dineshkumar Y.K, IFS, The Regional Director (Environment), Department of Forest, Ecology and Environment, Mangaluru, Dakshina Kannada- 575003.	Member

7	Smt. Vijaya Hegde, Zonal Senior Environmental Officer, Karnataka State Pollution Control Board, Zonal Office-Mangaluru Mangaluru, D.K District-575 011	Member
8	Sri Ramesh K.M, Environmental Officer, KSPCB, Regional Office Mangaluru-575 011	Member Convenor
9	Sri Kiran, President, Nadhi Minugarara Sangha, Dakshina Kannada, Mangalore, Salian Nivas, Sulthan Battery, Bolur, Mangalore.	Complainant
10	Sri Naveen, Secretary, Nadhi Minugarara Sangha, Dakshina Kannada, Mangalore, Salian Nivas, Sulthan Battery, Bolur, Mangalore.	Complainant
11	Sri Lingaraju, Deputy Director, Mines and Geology Department, Mangaluru, D.K District.	Invitee

**2.2: Location of the Joint Inspection:** The Joint Committee visited following locations along with complainants and officers from line departments.

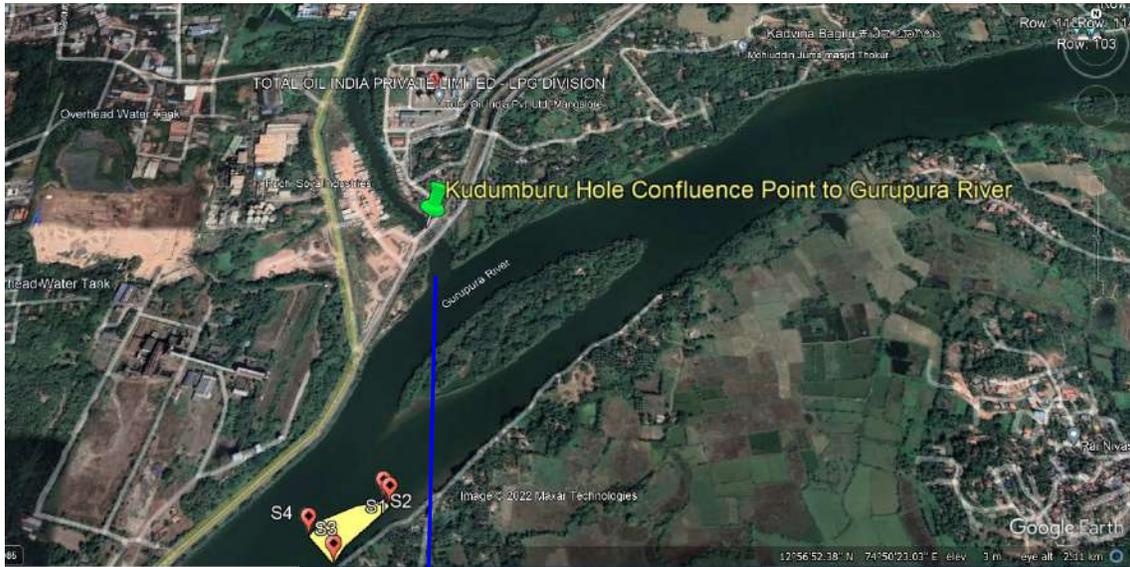
**a. Sand Bar Areas in Phalguni (Gurupura) River from Fathima Church Thannirbhavi Village to Nayarkudru via Sulthan Batteri, Dambel through boat**



**Fathima Church Boating Point**

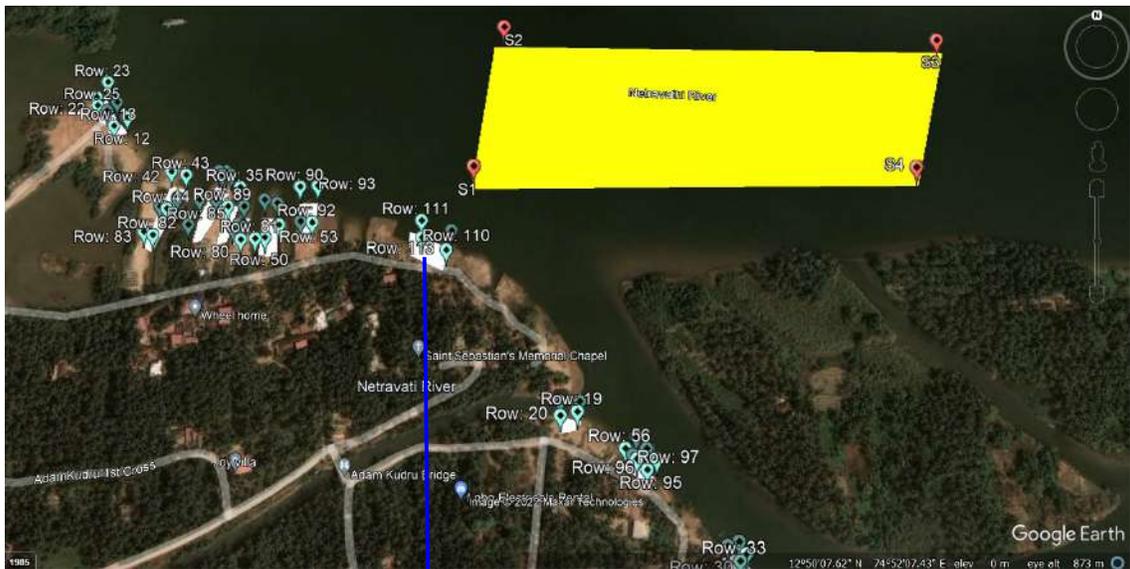
**Map1:** Indicates route map of Joint Committee Visit through Boat in River Gurupura.

***b. Kudumbur Hole Confluence Point to the Phalguni (Gurupura) River by Road***



**Map 2:** Map showing location of Joint Committee visit at Kudumbur Hole Confluence Point to the Phalguni (Gurupura) River by Road

***c. Sand Bar Areas in Nethravathi River at Adam Kudru, Jeppinamogaru, Mangaluru Taluk, Dakshina Kannada District***



**Map 3:** Map showing location Joint Committee visit at Nethravathi River, at Adam Kudru, Jeppinamogaru

➤ **Observations made during inspection by Joint Committee:**

1. The Joint committee met the Complainants, interacted with them and accompanied them on a boat to visit the areas in question in Phalguni (Gurupura) river i.e. sand bars and probable points of pollution.
2. As can be seen from the map-1 above, Committee started Gurupura river survey from Fathima church, Thanneerbhavi village, travelled via boat towards upstream of the river, went up to Nayar Kuduru and checked if there were ongoing sand bar removal activities in the river. At the time of inspection, no sand bar removal was observe
3. The Joint Committee found river to be quite wide and the possibility of sand bars emerging due to river action was likely.
4. With respect to sand bars, the Joint Committee during inspection learnt that there was traditional artisanal fishing carried out in the above-mentioned areas. The complainant mentioned that nearly 1000 families are dependent on these river stretches for traditional livelihood and urged the committee not to consider sand bar removal from river mouth to Maravoor dam which is built across the river Phalguni upstream side.
5. With respect to the ingress of industrial/sewage effluents, the complainants took the Committee members to the point where Kudumburu rivulet (hole in Kannada) joins the Phalguni (Gurupura) River (Point can be seen in Map2) and alleged about discharging of industrial effluents/drainage effluents into river. However, at the point of inspection, no direct discharge of effluents was noticed. The committee directed KSPCB to submit the details of industries that are likely to pollute along with the measures taken to mitigate pollution.
6. Adam Kudru at Jeppinamogaru village in Nethravathi river as alleged by complainants was also visited and observed that there was no sand bar removal at the time of inspection.
7. During interaction with Deputy Director, Department of Mines and Geology, Mangaluru, it was learnt that there is prescribed policy and procedure followed for sand bar removal in CRZ areas. He informed that Sand bars in Dakshina Kannada District are identified based on Bathymetric Survey carried out by esteemed technical institute like National Institute of Technology Karnataka (NITK), Surathkal every year. There is a 7 Member Committee headed by Deputy Commissioner to look into each and every application seeking temporary permits for sand bar removal. This 7 membered committee, based on scientific studies (Bathymetric studies) and as per

MOEF Guidelines for Sand bar identification vide Office Memorandum No.11-83/2005-IA-III (Vol. III) Dated: 24.02.2011, 09.6.2011 and 08.11.2011, permits sand bar removal specifically by non-mechanised boats through manual methods only.

8. The Joint Committee interacted with the officers' present and it was learnt that due diligence was exercised by District Committee while permitting sand bars. Not all sand bars were permitted for removal. Local objections from traditional fishermen, and ecological sensitivities were also considered. In such instances, sand bar removal was not permitted.
9. As informed by Deputy Director, Department of Mines and Geology there is also a task force to engage in surveillance of illegal sand bar removal, storage and transportation based on the public complaints and a system of levying penalty for the violators/those involved in illegal sand bar removal/storage and transportation in the district.
10. Committee also asked for historical data on patterns of fish catch in the region from the Department of Fisheries to know if there was any reduction in fish catch in the area over the years. However, there were no such records available with the Department to make comparison.

**4.0** After the site inspection, a meeting was conducted with all the members of the Committee and during the meeting the Chairman directed all the concerned Departments to submit the details pertaining to them to the Nodal Officer i.e KSPCB and further directed the KSPCB to compile the data given by the members to form a report. Accordingly, the details from individual Department are furnished which are summarised as below:

**4.1 Details furnished by Department of Mines and Geology, Mangaluru:**

- a. **Sand Bars Identification:** Minimum of 1m of water depth is necessary for the movement of the fishing boats. Wherever the depth of water level is less than 1m, it indicates sand bar formations which have to be removed so as to enable easy movements of fishing boats. **These** sand bars are identified based on Bathymetric Survey carried out by NITK, Surathkal every year. In such places sand bars mapping is done. Latest copy of Bathymetric Survey conducted by NITK Surathkal (2022) is enclosed as **Annexure-5**.

- b. Sand bar Allocation:** Once the Bathymetric study report is available; the Department will invite the applications for temporary permits for sand bar removal through Paper Notification. The received applications are then scrutinized and placed before 7 Membered Committee headed by Deputy Commissioner to look into each and every application seeking temporary permits for sand bar removal. This committee, based on scientific studies (Bathymetric studies) and MOEF Guidelines for Sand bar identification vide Office Memorandum No.11-83/2005-IA-III (Vol. III) Dated: 24.02.2011, 09.6.2011 and 08.11.2011, gives approval for issue of permits for sand bar removal specifically by non-mechanised boats through manual methods. Copy of Guidelines dated 24.02.2011, 09.06.2011 and 08.11.2011 issued by MoEF & CC for extraction of sand from the sand bars is enclosed as **Annexure 6**.
- c. Based on the proceedings of the 7 membered Committee, the eligible applicants are issued with temporary permits for sand removal with conditions by Dept. Of Mines and Geology. The applications which do not fulfil the criteria as per MOEF Guidelines are rejected.
- d. Number of Sand bars identified in River Phalguni and River Nethravathi for past 3 years are tabulated below:**

Sl No.	Year	Number of Sand bars Identified		Total Tonnage (MT)
		River Phalguni	River Nethravathi	
1	2019-2020	09	13	11,53,222.86
2	2020-2021	04	08	10,03150.8
3	2021-2022	05	09	9,99,105.6
	<b>Total</b>	<b>17</b>	<b>30</b>	<b>32,10,926.76</b>

- e. Number of Temporary Permits issued in DK District for last 3 years is as below:**

Sl No.	Year	Number of Applications Received Permits	Number of Temporary Permits Issued	Number of Applications Rejected
1	2019-2020	105	105	<b>0</b>
2	2020-2021	318	106	212
3	2021-2022	282	148	82 (52 applications pending for issue)
	<b>Total</b>	<b>705</b>	<b>359</b>	<b>294*</b>

\*As can be seen from the above table, 294 applications are rejected since they were not meeting with the MoEF guidelines.

**f. Constitution of Task Force for to control illegal sand bar removal/transportations and storage:**

To control the illegal sand bar removal in the CRZ area, District administration has constituted a 24/7 Task force consisting of members from Revenue, Police, Forest, Fisheries Department, CRZ, Zilla Panchayath, Department of Mines and Geology, order dated:19.08.2022 and enclosed as **Annexure-8**. The Task force is engaged in surveillance of illegal sand bar removal, storage and transportation and works based on the public complaints.

**g. Details of CRZ Violation with respect to Sand bar Removal:**

There is also a system of levying penalty for the violators/those involved in illegal sand bar removal/storage and transportation in the district. Department of Mines and Geology has been booking cases and penalizing the violators. For the year 2021-22, the Department has collected a penalty of 31,95,960/- for 92 cases of illegal sand bar removal and Rs.14,13,600/- for 50 cases of illegal sand transportation. Apart from these, the Department has booked 5 cases of private complaints at the concerned Taluk JMFC courts.

**Further**, there are 4 Nos. of check post across the District to check the illegal transportation.

**4.2 : Karnataka State Pollution Control Board, Mangaluru:**

With respect to the ingress of industrial effluents, the KSPCB has already investigated and identified the point sources of pollution that is joining the river and submitted a detailed report to Hon'ble NGT in OA No. 307/2022 which was registered based on the **News item published in "The Hindu" dated 26.04.2022 titled, "Flow of industrial effluents into Phalguni results in fish kill"**.

As per the report, contributing factors for pollution of the river in question are due to gaps observed in the UGD network leading to flow of sewage in drains and poor waste management in the adjacent KIADB industrial area at Baikampady and also joining of untreated/partially industrial effluents from some small and medium category industries which are listed in the said report. Copy of the conclusive part of the report is enclosed for the kind perusal of the Hon'ble NGT in **Annexure-9**. Hon'ble NGT has heard the matter 21.11.2022 and has passed an order which states as below:

*“There is immediate need for remedial action for protection of environment. The joint Committee already constituted, with addition of nominee of NCSCM and NIO, Goa, may prepare an action plan in light of its report and above observations within one month. It will be at liberty to co-opt any other Expert/Institution and interact with the stakeholders. The action plan may include immediate stopping of sources of pollution and fixing accountability of the industries, Mangalore Municipal Corporation and KIADB for past violations. The action plan may be executed within one month thereafter”.* Copy of the Order enclosed as Annexure-10. The Joint Committee is in the process of meeting for preparation of action plan as directed by the Hon’ble Tribunal.

#### **4. 3: Details submitted by Dean, College of Fisheries:**

Dean, College of Fisheries being one member of the joint committee, after interaction with fishermen community and the members of the Joint committee expressed that there is an urgent need for continuous study in the said area to initiate livelihood improvement activities while educating the primary stakeholders. He informed that removal of sand affects water quality, disturbs benthos, breeding grounds, feeding grounds and affects the settlement of mussels and Oysters. However, there is possibility for rejuvenating the benthos/breeding grounds of the river so as to help improving the fish population in the region. Keeping these things in mind, he has proposed a service project titled *“Fisherman community development in the river mouths of Netravathi and Gurupura rivers”* which aims at development of scientific evidences and other scientific management strategies to build confidence among the stakeholders and increased faith on competent authorities. The copy of the proposal is enclosed as Annexure-11.

#### **5.0 CONCLUSIONS AND RECOMMENDATIONS:**

- There is prescribed policy and procedure followed for sand bar removal in CRZ areas of Dakshina Kannada District. Sand bars are identified based on Bathymetric Survey carried out by esteemed technical institute like National Institute of Technology Karnataka (NITK), Surathkal every year and there is also a 7 Membered Committee headed by Deputy Commissioner to look into the applications seeking temporary permits for sand bar removal. This 7 membered committee, based on Bathymetric studies and MOEF Guidelines permits sand bar removal specifically by non-mechanised boats through manual methods only.

- Committee observed that due diligence was exercised by District Committee while permitting sand bars. Not all sand bars were permitted for removal. Local objections from traditional fishermen, ecological considerations were also considered. In such instances, sand bar removal was not permitted.
- A detailed assessment of sand bars specific to this region may be done by any accredited agency. The study shall also focus on the impact of removal of sand bars on traditional fishing on a small stretch of the river on pilot basis. The findings of pilot study may be placed before the Hon'ble NGT within 6 months, i.e before Monsoon 2023.
- TORS in pilot study shall include
  - a. Establishment/ emerging of sand bards
  - b. Rates of replenishment
  - c. Water quality during period of studies as per CPCB standards
  - d. Impact on fish life
- Committee also felt the need for sand bar replenishment studies if not conducted so far recommended to be conducted by engaging institutes like NITK/MIT to take up the replenishment studies. This pilot study can also be further extended to other west flowing rivers of the State. The time period for study to be carried out and cost estimate can be obtained from the institutes to whom studies are entrusted. The cost for the study can be met by District Administration through District Mineral Funds (DMF) of Department of Mines and Geology.
- Committee also looked into details of pattern of fish catch in the region. It was felt that a quick assessment with historical data of fish /marine catch including bivalves can be assessed in the estuarine ecosystem by College of Fisheries, Mangalore. The study can also suggest various means and methods to increase fish catch in that area- Time is 6 months. Study shall be funded either by District administration or by the KCZMA. In this regard, Dean, College of Fisheries has submitted a proposal which goes as part of this report.
- With respect to the ingress of industrial/sewage effluents in to Phalguni/Gurupura river, there is already an ongoing complaint in OA No. 307/2022 before Hon'ble NGT(PB) and the Joint Committee has submitted its report. Based on the recommendations of the Joint Committee Hon'ble Tribunal has Hon'ble NGT has passed its order for preparation of action plan for entry of sewage/industrial

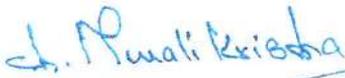
effluents in to the river. The Joint Committee is in the process of preparation of action plan as directed by the Honble Tribunal.

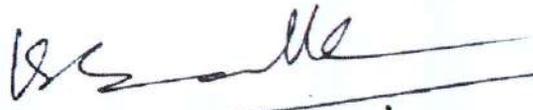
- The Committee is of the opinion that traditional livelihood needs to be upheld and decision on sand bar removal have to be arrived only after scientific assessment of the sand bar removal and its impact on traditional livelihood and fishing currently which is not available. Based on the outcome of the study the District Administration after careful consideration shall take decision keeping in view of matters on various sand policies, NGT Orders and CRZ Notification, Supreme Court Orders etc.,

  
**Sri Vijay Mohan Raj V., IFS,**  
Principal Secretary to Government, (Ecology and Environment),  
Forest, Ecology and Environment Department,  
Government of Karnataka.  
**Chairman of the Joint Committee**

  
**Dr. Dineshkumar Y.K., IFS,**  
The Regional Director (Environment),  
Department of Forest, Ecology and  
Environment, Mangaluru,  
Dakshina Kannada- 575003.  
**Member**

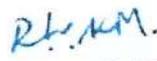
  
**Sri. Krishnamurthy., KAS**  
Additional Deputy Commissioner,  
Dakshina Kannada District  
**Member**

  
**Dr. Muralikrishna Chimata Scientist E**  
Regional Office, MOEF&CC,  
Bangalore  
**Member**

  
**Dr. K. Balakrishna, Professor of Geology,**  
Department of Civil Engineering, Manipal Institute  
of Technology, Manipal Academy of Higher  
Education, Manipal.  
**Member**

  
**Dr. Shivakumar M,**  
Dean, College of Fisheries,  
Yekkur, Kankanady Post, Mangaluru  
Dakshina Kannada -575 002  
**Member**

  
**Smt. Vijaya Hegde**  
Senior Environmental Officer,  
Zonal Office, KSPCB, Mangaluru  
**Member**

  
**Sri Ramesh K.M.**  
Environmental Officer,  
KSPCB, Mangaluru  
**Member Convenor**

Item No.1

(Court No. 2)

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH**

(By Video Conferencing)

Original Application No. 219/2022

Kiran

Applicant

Versus

State of Karnataka

Respondent

Date of hearing: 25.04.2022

**CORAM: HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER  
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER**

**Application is registered based on a complaint received by Post**

**ORDER**

1. The grievances raised by the President and Secretary of Nadhi Minugarara Sangha, Dakshina Kannada, Mangalore, Salian Nivas, Sulthan BATTERY, Bolur, Mangalore in the present letter petition are that on representation by the fishing communities, amendment was made in the CRZ Notification 2011 permitting removal of sand bars in the intertidal areas by traditional Coastal communities only by manual methods i.e., in non-mechanized dinghies or small boats using baskets/buckets in various Coastal States. Guidelines dated 24.02.2011, 09.06.2011 and 08.11.2011 were issued by MoEF & CC for extraction of sand from the sand bars to enable movement of fishing vessel. It is stated in the letter petition that none of the criteria laid down in the above said guidelines is being followed and commercial sand mining activity is being carried out by building mafia by use of machinery in the garb of removal of sandbar in the CRZ areas. Such

illegal sand mining is detrimental to the fish stock including the fish migration and the occurrence of estuarine fishes. It is also deteriorating the environment causing serious erosion of the coast depriving the beaches of the sand. Saline ingress and stagnation of water is creating anoxic conditions deteriorating the water quality. It is further stated that several companies are operating by the side of rivers and sea in the Coastal area and discharging polluted chemical water/drainage effluents into the river and sea causing pollution of river and sea water and damage to the fish seedlings. Complaints were made to the concerned authorities but no action has been taken.

2. In view of the serious allegations related to coastal ecosystem made in the present letter Petition, it would be appropriate to have a factual and action taken report from a Joint Committee comprising of representatives of Regional Office of MoEF & CC, Bangalore and National Coastal Zone Management Authority, State Coastal Zone Management Authority, State PCB, Deputy Commissioner, Mangalore and Additional Chief Secretary, Department of Forest and Ecology, Government of Karnataka. The State PCB will be the Nodal agency for coordination and compliance. The Joint Committee may meet within four weeks, undertake site visits, look into the grievances of the applicants and take requisite action by following due process of law. Factual and action taken report may be furnished within two months by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.

List the matter for further consideration on 18/07/2022.

A copy of this order, along with a copy of the complaint, be forwarded to the Regional Office of MoEF & CC, Bangalore, National

Coastal Zone Management Authority, State Coastal Zone Management Authority, State PCB, Deputy Commissioner, Mangalore and Additional Chief Secretary, Department of Forest and Ecology, Government of Karnataka. by e-mail for compliance.

Arun Kumar Tyagi, JM

Dr.Afroz Ahmad, EM

April 25, 2022  
Original Application No. 219/2022  
AG

NADHI MINUGARARA SANGHA DAKSHINA KANNADA,  
MANGALORE,  
SALIAN NIVAS, SULTHAN BHATTERY, BOLUR, MANGALORE - 575 003  
Mobile. No. 9880549122/7411243736

BEFORE THE HON'BLE CHAIRMAN, NATIONAL GREEN  
TRIBUNAL FARIDKOT HOUSE COPERNICUS MARG, NEW  
DELHI - 110001

An humble appeal submitted by "Nadhi Minugarara Sangha" Dakshina  
Kannada, Mangalore, Salian Nivas, Sulthan BATTERY, Bolur,  
Mangalore - 575 003 01.02.2022

202/14/2022  
09/02/2022

Sub: Deletion of Provision relating to removal of sand bars,  
salt mixed sand from the seashore and river side - reg

Respected Sir,

We, the aggrieved fisherman of the above association  
respectfully submits:

1. We the fishing community of Karnataka would like to inform  
you the factual position with regard to the Provision under CRZ  
Notification 2011 and thereafter now being introduced in CRZ  
Notification 2019.

2. In the CRZ Notification 1991, there was no provision for  
removal of sand or any substrata material other than rare minerals in  
the CRZ area. However, in the CRZ Notification 2011 an amendment  
was issued based on the representation made by fishing communities  
who were facing problems with regard to navigation in the estuarine  
and bar mouth areas due to obstruction on account of disposition of  
sand. Accordingly, the Ministry considered the request and amended  
the CRZ Notification 2011 by inserting a provision as below:-

" The sand bars in the intertidal areas shall be removed by traditional  
coastal communities only by manual method (i.e. sand collection in  
non-mechanized dinghies or small boats using baskets/buckets by  
human beings) in various coastal states. The State Government may  
permit such removal of sand in specified time period in a particular  
area along with specific quantity subject to conditions such as  
registration of local community persons permitted to remove the sand  
manually and shall be renewed on yearly basis"

3. Further, the Ministry issued guidelines dated 24.02.2011;  
9.06.2011 and 08.11.2011 of the extraction of sands from the sand bars  
to enable movement of fishing vessel. However, none of the criteria  
laid down in the guidelines issued by the MOEF & CC is followed. The

Ld. R. S. G.  
04-02-2022  
L.P.

KIRAN

NATIONAL GREEN TRIBUNAL  
Principal Bench, New Delhi  
Receipt & Issue Slip  
04 FEB 2022  
488

...

entire sand removal is being carried out by **Builder Mafia** and instead of sand removal the activity is now " Sand Mining". The sand removal has gone to depth exceeding more than 4-5 meters in the estuarine areas and river mouth areas. Continuous removal of sand is being undertaken with the guidance of the Geology Department of the State and the **sand is sold on commercial basis to collect revenue**. The Fisheries Department who are the main nodal office for directing the sand removal are silent onlookers.

4. On account of such commercial, vested interest, unsustainable sand mining under the grab off removal of sandbar in the CRZ areas has become detrimental to the fish stock including the fish migration and the occurrence of estuarine fishes. Such fisheries is extremely important for traditional communities who operate in small non-mechanized boats for their livelihood. Such unmindful and illegal activities are not only deteriorating the environment as serious erosion of the coast is seen on account of sand mining as beaches are deprived of sand. The fishing communities houses are washed off in the monsoon and cyclonic conditions. Further, saline ingress and stagnation of water is creating anoxic conditions deteriorating the water quality.

5. It is understood in the 42<sup>nd</sup> meeting of the NCZMA this issue is being reconsidered to amend the CRZ notification 2019 by introducing the same provision of removal of sand bars item No.8 of the minutes of the said meeting held on 23.03.2021 may kindly be seen.

6. We have submitted appeal by appeals before the Hon'ble Prime Minister, Hon'ble Minister for Environment, Union Government, Secretary and Chairman NCZMA, the Director and the local Karnataka Ministers requesting them to rectify the defects in the Rules and Regulations made in the aforesaid notifications and amendments but all our efforts are in vain.

7. We humbly submit before your Benign-Self that due to the notifications of the State and Central Governments the fishermen will have to struggle for their livelihood due to the lack of fish. On the other hand all the amendments referred above are made for the benefits of rich and influential people (Building Mafia) who are removing the sand day and night and selling the same for commercial purpose to earn revenue. There is no provision or law are made to prevent or restrict them from removing the sand from the side of sea, river. They have no respect for safeguarding the environment. Apart from that there were several companies are operating by the side of rivers and sea in the coastal area and the polluted chemical water, drainage water from the

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KoTAH

Diam

said companies are directly gushing into the river and sea and the same resulted the pollution of river and sea water and also cause damage to the fish seedlings and the same caused lack of fish and it made the lives of the fisherman sorrowful.

8. In view of the above factual information and the serious environmental issues faced including loss of fishing by the traditional fishing communities we the fisherman association of Karnataka strongly recommend you not to consider the proposed amendment as agreed upon by the NCZMA. Hope we will get justice in the matter.

Thanking you,

Yours Faithfully

*Kirah*  
President

*Aliam*  
Secretary

Proceedings of the Government of Karnataka.

Sub: Re-constitution of Joint Committee with respect to letter petition O.A No. 219/2022 (PIL) - on the file Hon'ble National green tribunal



- Read:
1. The orders of the Hon'ble National Green Tribunal, Principal Bench, New Delhi in Original Application No.219/2022 dated: 25.04.2022
  2. Government Order No. FEE 01 EAA 2022, Dated: 29.06.2022

\* \* \* \* \*

Preamble:

Pursuant to the order of the Hon'ble National Green Tribunal, Principal Bench, New Delhi in Original Application No.219/2022 the Government have constituted a Joint Committee on the file Hon'ble National green tribunal in the Government Order read at (2) above.

It has been decided to re-constitute the said Joint Committee for quick compliance.

The Government have considered the issue and have decided to reconstitute the joint committee to have a factual and quick action taken report. Hence the following order.

Government Order No. FEE 01 EAA 2022,  
Bengaluru, Dated: 14.07.2022.

In view of the facts and circumstances traversed in the preamble, the Government hereby reconstitutes the following Joint Committee issues related under NGT O.A No. 219/2022 (PIL) to have a factual and quick action report.

1.	The Principal Secretary to Government, (Ecology and Environment) Forest, Ecology and Environment Department	Chairman
2.	The Deputy Commissioner, Dakshina Kannada District. Mangalore,	Member
3.	Dr. Muralikrishna Chimata, Scientist 'E', MOEFCC, Integarted regional office ( southern zone)	Member
4.	Dr. K Balakrishna, Professor of Geology, Department of Civil Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal.	Member

ಮುದ್ದಾಂ/ಅಂಚೆ/ಕೊತಿಯರ್

...2

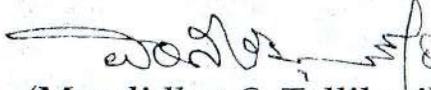
5.	Dean, College Of Fisheries, Mangaluru (As Representative from Karnataka State Coastal Zone Management Authority)	Member
6.	The Regional Director ( Environment) Department of Forest, Ecology and environment, Mangaluru (Representative of Additional Chief Secretary , Forest, Ecology and environment	Member
7.	Zonal Senior Environmental Office, Zonal Office, Karnataka State Pollution Control Board, Mangaluru	Member
8.	The Environmental Officer, Regional officer, Karnataka State Pollution Control Board, Mangaluru	Member-Convener

The Karnataka State pollution control Board Shall be the nodal agency for coordination and compliance.

The subcommittee shall have the following functions and responsibilities .

- 1) The State PCB will be the Nodal agency for coordination and compliance.
- 2) The Committee shall submit the report within the period of three weeks.
- 3) The Regional Director (Environment), Mangalore has to take the responsibility for co-ordination and logistics for the Sub-Committee.

By order and in the name of  
Governor of Karnataka

  
(Muralidhar S. Tallikeri)

14/07/2022

Under Secretary to Government,  
(Ecology and Environment)

Forest, Ecology and Environment Department.

**To:**

1. The Principal Secretary to Government (Ecology and Environment), Department of Forest, Ecology and Environment, M S building, Bengaluru.
2. Deputy Commissioner, Dakshina Kannada District, Mangalore.

- Dr. K Balakrishna, Professor of Geology, Department of Civil Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal.
4. Dr. Muralikrishna Chimata, Scientist 'E', MOEFCC, Integrated regional office ( southern zone), 4<sup>th</sup> floor, E and F wing, Kendriya sadan, 17<sup>th</sup> main Road, II block, Koramangala, Bengaluru-560 034.
  5. Dr. Shivakumar M, Dean, College of Fisheries, Yekkur, Kankanady P.O. Mangaluru - 575 002.
  6. The Regional Director (Environment), Forest, Ecology and Environment Department, 1<sup>st</sup> Floor, Urva Store, Urban Development Authority Building, Mangaluru.
  7. Zonal Senior Environmental Officer, Zonal Office, KSPCB, Mangaluru.
  8. The Environmental Officer, Regional Office, Karnataka State Pollution Control Board, Mangaluru.

Copy to:

1. The PS to Additional Chief Secretary to Government (Ecology and Environment), Department of Forest, Ecology and Environment, M S building, Bengaluru.
2. The PS to Principal Secretary to Government (Ecology and Environment), Department of Forest, Ecology and Environment, M S building, Bengaluru.
3. The PS to Commissioner (Technical Cell), Department of Forest, Ecology and Environment, M S Building, Bengaluru.

**Regional Office :**

**Karnataka State Pollution Control Board**  
Parisara Bhavana, 10B, Baikampady Industrial Area,  
Mangalore - 575 011

Tel.: 0824-2406586, 2408239, Fax: 2406586

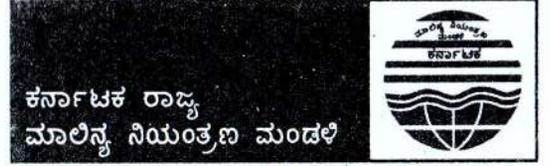
e-mail: mangalore@kspcb.gov.in website: http:kspcb.gov.in

ಪ್ರಾದೇಶಿಕ ಕಛೇರಿ :

ಪರಿಸರ ಭವನ, 10ಬಿ

ಬೈಕಂಪಾದಿ ಕೈಗಾರಿಕಾ ಪ್ರದೇಶ

ಮಂಗಳೂರು - 575 011



towards a cleaner Karnataka

**PCB/RO (MNG)/NGT (PB)/OA.No. 219/2022-23/692** Date:

04 AUG 2022

To,

**The Member Secretary**  
**Karnataka State Pollution Control Board**  
**#49, Parisara Bhavana**  
**Church Street, Bengaluru-01.**

**Through: Law Officer-Legal Cell, KSPCB**

Sir,

**Subject: Seeking extension of time for the submission of report in the matter of OA No. 219/2022, dated: 25-04-2022 -reg.**

**Reference:**

1. The Hon'ble National Green Tribunal, Principal Bench, New Delhi Order dated:25.04.2022 in respect of OA No.219/2022
2. Government Order No. FEE 01 EAA 2022, Bengaluru, dated: 14-07-2022.

\*\*\*\*\*

Hon'ble NGT, Principal Bench, New Delhi has passed an order in OA No: 219/2022 dated: 25.04.2022 vide reference -1 above, based on the application filed by the president and Secretary of Nadhi Minugarara Sangha, Dakshina Kanrada, Mangaluru, alleging the commercial sand mining activity being carried out by use of machinery in the garb of removal of sandbars in the CRZ areas.

Such illegal sand mining being detrimental to the fish stock including the fish migration and the occurrence of estuarine fishes and also as it was stated that several companies are operating by the side of rivers and sea in the coastal area and discharging polluted chemicals water/drainage effluents into the river and sea causing pollution of river and sea water and damage the fish seedlings, Hon'ble NGT, Principal Bench, New Delhi has called for a factual and action taken report from a Joint Committee comprising of the Representatives from Regional Office of MoEF & CC, Banagalore, National Coastal Zone Management Authority, State Coastal Zone Management Authority, State Pollution Control Board, Deputy Commissioner, Mangaluru and Additional Chief Secretary, Department of Forest and Ecology, Government of Karnataka. It is mentioned that the State Pollution Control Board would be the nodal agency.

Based on the Hon'ble NGT order, a joint committee was constituted by the Dept. of Ecology and Environment, GOK, under the chairmanship of Principal Secretary to Govt.,

Dept. of Ecology and Environment, GOK, vide reference (2) above and consisting of the following members.

1	The Principal Secretary to Government, (Ecology and Environment) Forest, Ecology and Environment Department	Chairman
2	The Deputy Commissioner, Dakshina Kannada District, Mangalore	Member
3	Dr.Muralikrishna Chimata, Scientist 'E', MoEF&CC, Integrated Regional Office (Southern Zone), Bangalore	Member
4	Dr.K.Balakrishna, Professor of Geology, Department of Civil Engineering, Manipal Institute Technology, Manipal Academy of Higher Education, Manipal.	Member
5	Dean, College of Fisheries, Mangaluru (As Representative from Karnataka State Coastal Management Authority	Member
6	The Regional Director (Environment) Department of Forest, Ecology and Environment, Mangaluru. (Representative of Additional Chief Secretary, Forest, Ecology and Environment)	Member
7	Zonal Senior Environmental Officer, Zonal Office, Karnataka State Pollution Control Board, Mangaluru	Member
8	The Environmental Officer, Regional Officer, Karnataka State Pollution Control Board, Mangaluru	Member convener

The copy of the said proceedings of Karnataka is enclosed as **Annexure-1** above.

Further, it is to be submitted that the whole district of Dakshina Kannada including Mangalore is in the peak of Monsoon and cloud bursts and the District Disaster Management Authority under the leadership of the Deputy Commissioner is busy with the rescue operations in the affected area and added to this is the recent Communal violence. The Monsoon in the region will remain active until September end and until then; it's going to be difficult for the Joint committee to carry out its inspections and samplings. Another point is that the river water samples that we collect and analyze during Monsoon will not represent the true scenario due to huge dilution factor.

Considering these issues, the Principal Secretary to Government, (Ecology and Environment), Dept. of Forest, Ecology and Environment and also the Chairman of the

Joint Committee, has suggested to seek three months' time for submission of the Joint Committee report.

**Hence, during the forthcoming hearing of the Tribunal which is on 05.09.2022, it is kindly requested to seek an extension of time by another three months for submission of the Joint Committee report.**

Thanking you,

Yours's faithfully,  
**Sd/  
Environmental Officer,  
KSPCB, Mangaluru and Member Convener,  
Joint Committee**

**Copy Submitted to Joint Committee Members**

1. The Principal Secretary to Government, (Ecology and Environment) Forest, Ecology and Environment Department for kind information
2. The Deputy Commissioner, Dakshina Kannada District, Mangaluru for kind information
3. Dr. Muralikrishna, Professor of Geology, Department of Civil Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal for kind information.
4. Dr.K.Balakrishna, Professor of Geology, Department of Civil Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal for kind information.
5. Dean, College of Fisheries, Mangaluru ( As Representative from Karnataka State Coastal Zone Management Authority) for kind information
6. Regional Director (Environment), Department of Forest, Ecology and Environment, Mangaluru (Representative of Additional Chief Secretary, Forest, Ecology and Environment) for kind information.
7. Zonal Senior Environmental Officer, Karnataka State Pollution Control Board, Mangaluru, D.K for kind information

  
**Environmental Officer,  
KSPCB, Mangaluru and Member Convener,  
Joint Committee**

Item No.4

(Court No. 2)

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH**

(By Video Conferencing)

Original Application No. 219/2022

Kiran

Applicant

Versus

State of Karnataka

Respondent

Date of hearing: 10.10.2022

**CORAM: HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER  
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER**

Applicant: None.

Respondent: Mr. Mukesh Kumar, Advocate for State PCB.

**Application is registered based on a complaint received by Post**

**ORDER**

1. The grievances raised by the President and Secretary of Nadhi Minugarara Sangha, Dakshina Kannada, Mangalore, Salian Nivas, Sulthan BATTERY, Bolur, Mangalore in the present letter petition are that on representation by the fishing communities, amendment was made in the CRZ Notification 2011 permitting removal of sand bars in the intertidal areas by traditional Coastal communities only by manual methods i.e., in non-mechanized dinghies or small boats using baskets/buckets in various Coastal States. Guidelines dated 24.02.2011, 09.06.2011 and 08.11.2011 were issued by MoEF & CC for extraction of sand from the sand bars to enable movement of fishing vessel. It is stated in the letter petition that none of the criteria laid

illegal sand mining is detrimental to the fish stock including the fish migration and the occurrence of estuarine fishes. It is also deteriorating the environment causing serious erosion of the coast depriving the beaches of the sand. Saline ingress and stagnation of water is creating anoxic conditions deteriorating the water quality. It is further stated that several companies are operating by the side of rivers and sea in the Coastal area and discharging polluted chemical water/drainage effluents into the river and sea causing pollution of river and sea water and damage to the fish fingerlings. Complaints were made to the concerned authorities but no action has been taken.

2. Vide order dated 25.04.2022, the Tribunal constituted a Joint Committee comprising of Regional Office of MoEF & CC, Bangalore and National Coastal Zone Management Authority, State Coastal Zone Management Authority, State PCB, Deputy Commissioner, Mangalore and Additional Chief Secretary, Department of Forest and Ecology, Government of Karnataka to look into the grievances of the applicant with direction to submit factual and action taken report within three months.

3. Application for extension of time for submission of the factual and action taken report in terms of order dated 25.04.2022 has been filed by KSPCB through email dated 08.08.2022.

4. Even though strictly speaking, we do not find any justification for extension of time, yet in the interest of justice, we grant extension of time and report in terms of order dated 25.04.2022 be now submitted

5. It is clarified that in case of non receipt of report within the permitted period of time, exemplary costs may be imposed on State of Karnataka and KSPCB for non-compliance with the order passed by this Tribunal.

6. List for further consideration on 24.01.2023.

7. A copy of this order, along with a copy of the complaint, be forwarded to the Regional Office of MoEF & CC, Bangalore and National Coastal Zone Management Authority, State Coastal Zone Management Authority, State PCB, Deputy Commissioner, Mangalore and Additional Chief Secretary, Department of Forest and Ecology, Government of Karnataka by e-mail for compliance.

Arun Kumar Tyagi, JM

Dr. Afroz Ahmad, EM

October 10, 2022  
AG



ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಉಪ ನಿರ್ದೇಶಕರ ಕಛೇರಿ, ಗಣಿ ಮತ್ತು ಭೂವಿಜ್ಞಾನ ಇಲಾಖೆ, 1ನೇ ಮಹಡಿ, ಜುಗಲ್ ಟವರ್, ಮಲ್ಲಿಕಟ್ಟೆ, ಮಂಗಳೂರು-575002.

Office of the Deputy Director, Dept. of Mines and Geology, Jugal Tower Mallikatte, Mangalore.

ದೂರವಾಣಿ ಸಂಖ್ಯೆ:0824-2429932

ಇ-ಮೇಲ್:ddmangalore.dmg@gmail.com

ಸಂಖ್ಯೆ:ಗಭೂಇ/ಉನಿ(ಮಂ)/ಕಗಗು/ಮರಳು/2022-23

5445

ದಿನಾಂಕ 18-11-2022

ಇವರಿಗೆ,

ಪರಿಸರ ಅಧಿಕಾರಿಗಳು

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ

ಮಂಗಳೂರು.

ಮಾನ್ಯರೇ,

ವಿಷಯ: ಮಾನ್ಯ ರಾಷ್ಟ್ರೀಯ ಹಸಿರು ಪೀಠ ನ್ಯಾಯಾಲಯ, ಚೆನ್ನೈ ಇಲ್ಲಿ ದಾಖಲಾಗಿರುವ O.A.No.219 of 2022 ರ ಕುರಿತು ದಾಖಲಾತಿಗಳನ್ನು ಒದಗಿಸುತ್ತಿರುವ ಬಗ್ಗೆ.

ಉಲ್ಲೇಖ: ದಿನಾಂಕ 14-11-2022 ರಂದು ಮಾನ್ಯ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಗಳು, ಅರಣ್ಯ, ಪರಿಸರ & ಜೀವಿಶಾಸ್ತ್ರ ಇಲಾಖೆ, ಬೆಂಗಳೂರು ಇವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ನಡೆದ ಜಂಟಿ ಪರಿಶೀಲನಾ ಸಮಿತಿ ಸಭೆಯ ನಿರ್ಣಯದಂತೆ.

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ಮೇಲ್ಕಂಡ ವಿಷಯ ಹಾಗೂ ಉಲ್ಲೇಖಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆಯ ಕರಾವಳಿ ನಿಯಂತ್ರಣ ವಲಯದಲ್ಲಿ ಮರಳು ದಿಬ್ಬ ತೆರವುಗೊಳಿಸುವುದರ ವಿರುದ್ಧ ಮಾನ್ಯ ರಾಷ್ಟ್ರೀಯ ಹಸಿರು ಪೀಠ ನ್ಯಾಯಾಲಯ, ಚೆನ್ನೈ ಇಲ್ಲಿ O.A.No.219 of 2022 ರಂತೆ ದೂರು ದಾಖಲಾಗಿದ್ದು, ದೂರಿಗೆ ಸಂಬಂಧಪಟ್ಟಂತೆ ವರದಿಯನ್ನು ಸಿದ್ಧಪಡಿಸಲು ಅಗತ್ಯ ದಾಖಲಾತಿಗಳನ್ನು ಒದಗಿಸುವಂತೆ ಉಲ್ಲೇಖಿತ ಸಭೆಯಲ್ಲಿ ಸೂಚಿಸಲಾಗಿರುತ್ತದೆ. ತತ್ಸಂಬಂಧ, 2018-19 ನೇ ಸಾಲಿನಿಂದ ಇಲ್ಲಿಯವರೆಗೆ ಕರಾವಳಿ ನಿಯಂತ್ರಣ ವಲಯ ಪ್ರದೇಶದಲ್ಲಿ ಮರಳು ದಿಬ್ಬಗಳನ್ನು ತೆರವುಗೊಳಿಸುವ ಸಂಬಂಧ ನಡೆಸಲಾದ ಬ್ಯಾತಿಮೆಟ್ರಿಕ್ ಸರ್ವೆ ವರದಿ, ಎನ್.ಐ.ಟಿ.ಕೆ. ಸುರತ್ಕಲ್ ಸಂಸ್ಥೆಯ ತಾಂತ್ರಿಕ ವರದಿ, ಜಿಲ್ಲಾ 07 ಸದಸ್ಯರ ಸಮಿತಿ ಸಭೆಯ ನಡವಳಿ, ಕರಾವಳಿ ನಿಯಂತ್ರಣ ವಲಯ ನಿರಾಕ್ಷೇಪಣಾ ಪತ್ರ (CRZ Clearance) ಹಾಗೂ ಮರಳು ದಿಬ್ಬಗಳ ವಿವರಗಳ ಪಟ್ಟಿಯನ್ನು ಈ ಪತ್ರದೊಂದಿಗೆ ಲಗತ್ತಿಸಿ ತಮ್ಮ ಮಾಹಿತಿ ಹಾಗೂ ಮುಂದಿನ ಕ್ರಮಕ್ಕಾಗಿ ಕಳುಹಿಸಿದೆ.



ತಮ್ಮ ವಿಶ್ವಾಸಿ,

ಉಪ ನಿರ್ದೇಶಕರು  
ಗಣಿ ಮತ್ತು ಭೂವಿಜ್ಞಾನ ಇಲಾಖೆ  
ಮಂಗಳೂರು

219 flh

6  
MOST URGENT  
BY SPEED POST  
OUT TODAY

No.11-83/2005-IA-III  
Government of India  
Ministry of Environment and Forests  
(IA-III Division)

Paryavaran Bhawan,  
CGO Complex, Lodhi Road,  
New Delhi - 110003.

Dated, the 24<sup>th</sup> February, 2011

OFFICE MEMORANDUM

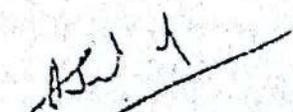
Sub: Implementation of provisions of Coastal Regulation Zone Notification, 2011 issued vide S.O.No.19(E), dated 6<sup>th</sup> January, 2011-regarding.

This has reference to the issue of the Coastal Regulation Zone (CRZ) Notification, 2011 vide S.O.No.19(E), dated 6<sup>th</sup> January, 2011. As per para 3(v)(d), "measures to prevent sand bars, installation of tidal regulators, laying of storm water drains or for structures for prevention of salinity ingress and freshwater recharge based on carried out by any agency to be specified by MoEF." In this regard, the Ministry specifies the following institutions who will be involved for the above activities:-

- (i) Central Water and Power Research Station
- (ii) IIT Chennai, IIT Bombay
- (iii) Department of Erosion Directorate, Ministry of Water Resources
- (iv) ICMAM
- (v) National Centre for Sustainable Coastal Management
- (vi) NIT, Suratkal

All proposals relating to the projects indicated in the above para of the Notification shall be examined by the Institutions from technical angle and based on the recommendations made by these Institutions the project would be considered for clearance by the concerned authorities indicated in the Notification.

This issues with the approval of Competent Authority.

  
(Dr. A. Senthil Vel)  
Director

As per list enclosed.

No.11-83/2005-IA-III(Vol.III)  
Government of India  
Ministry of Environment and Forests  
(IA-III Division)

Paryavaran Bhawan,  
CGO Complex, Lodhi Road,  
New Delhi - 110003.

Dated, the 8<sup>th</sup> November, 2011

OFFICE MEMORANDUM

**Sub: Removal of sand in the Coastal Regulation Zone area of rivers/estuaries by manual methods by traditional communities - regarding.**

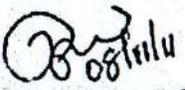
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This is in continuation to the Ministry's Office Memorandum (OM) dated 24<sup>th</sup> February, 2011 and 9<sup>th</sup> June, 2011 with regard to guidelines for management of the sand bars including its removal.

2. The Ministry had now received request from State Government of Karnataka with regard to removal of the sand bars by manual methods by traditional communities.

3. After examining the proposal and the provisions of the Coastal Regulation Zone Notification, 2011 the Ministry hereby stipulates the following conditions for removal of sand bar by traditional coastal communities only by manual method (i.e., sand collection in non-mechanised dinghies or small boats using baskets/buckets by human beings) in various coastal States:-

- (a) The District Collector shall chair a seven-member Committee consisting of, concerned officials as also atleast one representative of each from a scientific or technical Institute, the local communities, like fisher folk and the local civil society.
- (b) Based on the recommendations of the above Committee, the District Collector may permit such removal of sand in the specified time period in a particular area alongwith specific quantity subject to such conditions, such as registration of local community persons permitted to remove the sand manually.
- (c) The Environmental Official at district level shall monitor the removal of sand and submit report to the Collector, as may be specified, say quantity of sand removed in the period concerned.
- (d) The above permit shall be renewed on yearly basis.
- (e) The agenda and the minutes of the aforesaid Committee, permits issued by Collector and monitoring reports of the removal of sand would be uploaded on the website of the Collectorate and also made available hard copy to Zila Parishad etc., as may be directed by the Collector.
- (f) The accumulation of sand bar, its removal the process etc., shall be studied by the State Government with the help of satellite imageries, GPS, etc. It shall be ensured that the permits are not accorded in such areas which are identified as eco-sensitive zones, fish migratory and breeding grounds. The permits shall be given taking into consideration the local circumstances and ecological settings.

  
(E. Thirunavukarsu)  
Deputy Director

To,

As per list enclosed.

## LIST

1. Chairman, West Bengal Coastal Zone Management Authority, Government of West Bengal, Writer's Building, G - Block, 2<sup>nd</sup> Floor, Kolkatta - 700 001.
2. Chairman, Gujarat State Coastal Zone Management Authority & Principal Secretary, Forests and Environment Department, Block No. 14, 8<sup>th</sup> Floor, Sachivalaya, Gandhinagar - 382010, Gujarat.
3. Chairman, Karnataka State Coastal Zone Management Authority & Principal Secretary, Department of Forest, Ecology and Environment, Government of Karnataka, Multistoried Building, K.G. Road, Bangalore - 560 001.
4. Chairman, Orissa State Coastal Zone Management Authority & Principal Secretary, Science, Technology & Environment and Forests Wing, Orissa Secretariat, Bhubaneshwar - 751001.
5. Chairman, Andhra Pradesh State Coastal Zone Management Authority & Additional Chief Secretary, Government of Andhra Pradesh, Environment Forests Science and Technology Department, Secretariat, Hyderabad - 500 022.
6. Chairman, Daman & Diu Coastal Zone Management Authority & Administrator, Daman and Diu, Daman - 396210.
7. Chairman, Pondicherry Coastal Zone Management Authority & Principal Secretary, Department of Science, Technology and Environment and Housing Board, Pondicherry - 605001.
8. The Chairman, Tamil Nadu State Coastal Zone Management Authority & Principal Secretary, Department of Environment and Forests, First Floor, Panagal Building, Saidapet, Chennai - 600015, Tamil Nadu.
9. The Chairman, Maharashtra Coastal Zone Authority, Environment Department, 15<sup>th</sup> Floor, New Administrative Building Opposite Mantralaya, Madam Cama Road, Bombay - 400 020.
10. Chairman, Goa State Coastal Zone Management Authority & Chief Secretary, Secretariat, Alto Porvorim, Panjim, Goa. 2419626
11. Chairman, Kerala State Coastal Zone Management Authority, Sasthra Bhawan, Pattom, Thiruvananthapuram - 4.

### Member Secretary, State/Ut Coastal Zone Management Authority

12. Member Secretary, West Bengal Coastal Zone Management Authority, West Bengal Pollution Control Board, Paribesh Bhavan, 10A, Block-L.A, Sector III, Salt Lake City, Kolkata - 700 098.
13. Member Secretary, Gujarat Coastal Zone Management Authority, & Director, Forests and Environment Department, Forests & Environment Department, Block No.14, 8<sup>th</sup> Floor, Sachivalaya, Gandhinagar - 382010.
14. Member Secretary, Karnataka State Coastal Zone Management Authority, & Director, Environment Technical Cell, Department of Forest, Ecology and Environment, Government of Karnataka, Multistoreyed Building, K.G. Road, Bangalore - 560 001.
15. Member Secretary, Orissa Coastal Zone Management Authority, & Director, Science, Technology and Environment and Forests Wing, Orissa Secretariat, Bhubaneshwar-751001.
16. Member Secretary, Andhra Pradesh State Coastal Zone Management Authority, Government of Andhra Pradesh, Environment Forests Science and Technology Department, Secretariat, Hyderabad - 500022.
17. The Deputy Conservator of Forests, Administration of Daman & Diu, Office of the Deputy Conservator of Forests, Daman and Diu, Daman-396210.
18. Member Secretary, Pondicherry Coastal Zone Management Authority, & Director, Department of Science, Technology and Environment and Housing Board, Pondicherry - 605001.

19. Member Secretary, Tamil Nadu State Coastal Zone Management Authority, & Director, Department of Environment, Government of Tamil Nadu, Ground Floor, Panagal Building, Saidapet, Chennai-600015.
20. Member Secretary, Kerala Coastal Zone Management Authority & The Director, Science, Technology & Environment Council, Government of Kerala, Sasthra Bhavan, Pattom, Thiruvananthapuram-4.
21. Member Secretary, Maharashtra Coastal Zone Management Authority, Environment Department, Deputy Secretary, Mantralaya, New Administrative Building, 15<sup>th</sup> Floor, Madam Cama Marg, Mumbai - 400032.
22. The Member Secretary, Goa Coastal Zone Management Authority, Government of Goa, Department of Science, Technology and Environment, Opp. Saligao Seminary, Saligao, Goa-403511.

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No.11-83/2005-IA-III(Pl.III)  
Government of India  
Ministry of Environment and Forests  
(IA-III Division)

Paryawaran Bhawan  
CGO Complex, Lodhi Road  
New Delhi-110003

Dated, the 9<sup>th</sup> June, 2011

OFFICE MEMORANDUM

Sub: Implementation of provisions of Coastal Regulation Zone Notification, 2011 vide S.O.No.19(E), dated 6<sup>th</sup> January, 2011 - regarding.

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This is in continuation to our earlier Office Memorandum of even number dated 24<sup>th</sup> February, 2011 regarding removal of sand bar as indicated in para 3(iv)(d) of Coastal Regulation Zone Notification, 2011 dated 6<sup>th</sup> January, 2011, a copy of same is enclosed.

2. A guideline for management of the sand bars including its removal which are as follows:-
- Sand bars which pose danger to navigation of fishing boats and vessels shall be identified by the concerned Department in the State Government.
  - The State Government in consultation with the State agencies such as PWD, Water Resources Department, Fisheries Department, etc., may formulate a proposal for management of the sand bars including its removal.
  - The proposal shall be examined by any of the six institutions identified in the above Office Memorandum dated 24<sup>th</sup> February, 2011, namely, (a) Central Water and Power Research Station, Pune; (b) IIT, Chennai; IIT, Bombay; (c) Department of Erosion Directorate, Ministry of Water Resources; (d) Integrated Coastal and Marine Area Management, Chennai; (e) National Centre for Sustainable Coastal Management; and (f) National Institute of Technology, Surathkal.
  - Based on the suggestions/recommendations received from these institutions the concerned State Government agency(s) shall obtain necessary recommendations from the State/Union Territory (Ut) Coastal Zone Management Authority.
  - Based on the recommendations of the State/Ut Coastal Zone Management Authority the Environment Department of the State/Ut shall take final decision on the proposal with valid justification.
  - The decision shall be put on the website of the concerned agency undertaking the project and also on the website of the State/Ut Coastal Zone Management Authority.

Encl: As above

  
(Dr. A. Senthil Vei)  
Director

To,

As per list enclosed

**Details of Sand Bars identified in Coastal Regulation Zone (CRZ) and Removable Sand Quantity as per CRZ Clearances 2018-19 & 2019-20, 2020-21 & 2021-22 and 2022 enclosed as Annexure-8.**

<b>Details of Sand Bars identified in Coastal Regulation Zone (CRZ) and Removable Sand Quantity as per CRZ Clearance (2018-19 &amp; 2019-20)</b>							
<b>Sl. No.</b>	<b>Sand Bar</b>	<b>River</b>	<b>Taluk</b>	<b>Village</b>	<b>Extent (in Acres)</b>	<b>No. of TP's issued</b>	<b>Sand Quantity as per CRZ Clearance(in MT)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>9</b>
1	N-1	Nethravathi	Mangalore	Jappinamogaru	3.786	4	26353.63
2	N-2	Nethravathi	Mangalore	Jappinamogaru	3.873	4	26959.09
3	N-3	Nethravathi	Mangalore	Harekala	4.025	0	28019.86
4	N-4	Nethravathi	Mangalore	Arkula	7.222	0	50275.52
5	N-5	Nethravathi	Mangalore	Arkula	13.109	14	91246.68
6	N-6	Nethravathi	Bantwal	Pudu	7.54	10	52528.09
7	N-7	Nethravathi	Bantwal	Pudu	6.01	8	41891.84
8	N-8	Nethravathi	Bantwal	Pudu	3.80	6	26477.43
9	N-9	Nethravathi	Bantwal	Thumbe	2.98	5	20769.97
10	N-10	Nethravathi	Bantwal	Thumbe	1.73	4	12075.22
11	N-11	Nethravathi	Bantwal	Thumbe	2.82	5	19666.04
12	N-12	Nethravathi	Bantwal	Sajipamunnur	2.31	4	16103.71
13	N-13	Nethravathi	Bantwal	Sajipamunnur	2.58	4	17990.56
<b>Total</b>					<b>61.785</b>	<b>68</b>	<b>430357.64</b>
14	P-1	Phalguni	Mangalore	Kasaba Bengre	13.13	0	91442.25
15	P-2	Phalguni	Mangalore	Kasaba Bengre	40.39	4	281168.40
16	P-3	Phalguni	Mangalore	Bolur	8.21	2	57185.70
17	P-4	Phalguni	Mangalore	Bengre	5.87	0	40910.02

18	P-5	Phalguni	Mangalore	Bengre	3.48	1	24255.78
19	P-6	Phalguni	Mangalore	Bolur	2.84	5	19781.54
20	P-7	Phalguni	Mangalore	Padukode	8.30	5	57813.84
21	P-8	Phalguni	Mangalore	Kunjathbail- Padukode	15.15	8	105484.84
22	P-9	Phalguni	Mangalore	Kenjar- Kunjathbail	6.43	12	44822.85
<b>Total</b>					<b>103.8</b>	<b>37</b>	<b>722865.22</b>
<b>Grand Total</b>					<b>165.585</b>	<b>105</b>	<b>1153222.86</b>

**Details of Sand Bars identified in Coastal Regulation Zone (CRZ) and No. of TP's issued in Dakshina Kannada (2020-21 & 2021-22)**

**1. Details of Sand Bars identified and Sand Quantity in Nethravathi River**

Sand Bar	Taluk	River	Village	Extent (in Acres)	Sand Quantity (in MT's)	No. of TP's issued
N1	Mangalore	Nethravathi	Jeppinamogaru	12.52	65408.6	27
N2	Bantwal	Nethravathi	Pudu- Devarapalu	6.85	47701.7	15
N3	Bantwal	Nethravathi	Pudu	15.72	54720.4	11
N4	Bantwal	Nethravathi	Sajipanadu	16.62	57848	6
N5	Bantwal	Nethravathi	Sajipanadu- Thalemogru	6.98	36443	3
N6	Bantwal	Nethravathi	Sajipanadu- Thalemogru	19.14	99963.9	8
N7	Bantwal	Nethravathi	Thumbe	16.16	84382.7	5
N8	Bantwal	Nethravathi	Sajipamunnur	21.56	112568	2
<b>Total</b>				<b>115.55</b>	<b>559036.3</b>	<b>77</b>

**2. Details of Sand Bars identified and Sand Quantity in Phalguni River**

Sand Bar	Taluk	River	Village	Extent (in Acres)	Sand Quantity (in MT's)	No. of TP's issued
P1	Mangalore	Phalguni	Bengre	42.04	292640	5
P2	Mangalore	Phalguni	Gandhinagara- Kudroli	13.45	93658	0

P3	Mangalore	Phalguni	Kasaba Bengre- Ashoknagara	12.04	41904.9	11
P4	Mangalore	Phalguni	Kenjar	3.26	15911.6	10
<b>Total</b>				<b>70.79</b>	<b>444114.5</b>	<b>26</b>
<ul style="list-style-type: none"> <li>• <b>Total Sand Bars Identified – 12</b></li> <li>• <b>Total Sand Quantity as per CRZ Clearance – 1,003,150.8 MT</b></li> <li>• <b>Total TP's issued - 103</b></li> </ul>						

**Details of Sand Bars identified in Coastal Regulation Zone (CRZ) 2022**

**1. Details of Sand Bars identified and Sand Quantity in Nethravathi River**

<b>Sand Bar</b>	<b>Taluk</b>	<b>Village</b>	<b>Grama Panchayath</b>	<b>Removable Sand Quantity as per CRZ Clearance(in MT)</b>	<b>No. of TP's issued</b>
N1	Mangalore	Kadearu-Jappinamogaru	City Corporation	72749.56	56
N2	Mangalore	Kadearu-Jappinamogaru	City Corporation	167561.4	13
N3	Mangalore	Arkula	Adyar	47490.59	7
N4	Bantwal	Farangipete	Pudu	45637.92	6
N5	Bantwal	Pudu-Devarapalu	Pudu	16923.62	7
N6	Bantwal	Pudu	Pudu	25358.38	5
N7	Bantwal	Thumbe	Thumbe	169521.5	14
N8	Bantwal	Thumbe	Thumbe	99007.07	3
N9	Bantwal	Thumbe	Thumbe	23635.81	0
<b>Total</b>				<b>667885.85</b>	<b>111</b>

**2. Details of Sand Bars identified and Sand Quantity in Phalguni River**

<b>Sand Bar</b>	<b>Taluk</b>	<b>Village</b>	<b>Grama Panchayath</b>	<b>Removable Sand Quantity as per CRZ Clearance(in MT)</b>	<b>No. of TP's issued</b>
P1	Mangalore	Hoigebailu-Bolur	City Corporation	114124.4	12
P2	Mangalore	Dambel-Ashoknagar	City Corporation	36169.54	0
P3	Mangalore	Bangrakulur	City Corporation	113451.65	9
P4	Mangalore	Panjimogaru-Padukodi	City Corporation	52643.22	3
P5	Mangalore	Kunjathbail	City Corporation	14830.94	13
<b>Total</b>				<b>331219.75</b>	<b>37</b>

•Total Sand Bars – 14

•Total Sand Quantity as per CRZ Clearance– 999105.6 MT

8

ಜಿಲ್ಲಾಧಿಕಾರಿ ಹಾಗೂ ಜಿಲ್ಲಾ  
ದಂಡಾಧಿಕಾರಿಯವರ ಕಾರ್ಯಾಲಯ,  
ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆ,  
ಮಂಗಳೂರು - 575 001.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ  
  
(ಕಂದಾಯ ಇಲಾಖೆ)

Deputy Commissioner &  
District Magistrate's Office,  
Dakshina Kannada District,  
Mangaluru - 575 001.

ನಂ:ಎಂ.ಎಂ.ಸಿ/ಸಿ.ಆರ್/ಸಿ.ಆರ್.ಝಡ್/ಮರಳು/2022-23

ದಿನಾಂಕ 19-08-2022

ಜಿಲ್ಲಾಧಿಕಾರಿ ಹಾಗೂ ಅಧ್ಯಕ್ಷರು, ಜಿಲ್ಲಾ ಮಟ್ಟದ ಕಾರ್ಯಪಡೆ, ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆ, ಮಂಗಳೂರು.

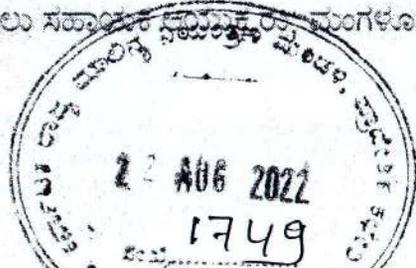
ವಿಷಯ: ಕರಾವಳಿ ನಿಯಂತ್ರಣ ಪಲಯ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಅನಧಿಕೃತ ಮರಳು ಗಣಿಗಾರಿಕೆ/ಸಾಗಾಣಿಕೆ/  
ದಾಸ್ತಾನು ಚಟುವಟಿಕೆಗಳನ್ನು ಪರಿಣಾಮಕಾರಿಯಾಗಿ ನಿಯಂತ್ರಿಸುವ ಕುರಿತು.

ಉಲ್ಲೇಖ: 1.ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಅಪಜಿ 9 ಇಎವಿ 2017, ಬೆಂಗಳೂರು, ದಿ:29-06-2022.  
2.ದಿನಾಂಕ:08-08-2022ರಂದು ನಡೆದ ಮಾನ್ಯ ರಾಷ್ಟ್ರೀಯ ಹಸಿರು ನ್ಯಾಯಮಂಡಳಿ(ದಕ್ಷಿಣ  
ಪಲಯ)(NGT),ಚೆನ್ನೈ ಫೀತದ ಮೂಲ ಅರ್ಜಿ ಸಂಖ್ಯೆ:252/2017 ದಿನಾಂಕ:18-05-  
2022ರಂತೆ ರಚಿಸಿರುವ ಜಿಲ್ಲಾ ಮಟ್ಟದ ಕಾರ್ಯಪಡೆಯ ಮೊದಲನೇ ಸಭೆಯ ನಡವಳಿ

\*\*\*\*@\*\*\*\*

ಪ್ರಸ್ತಾವನೆ:

ಕರಾವಳಿ ನಿಯಂತ್ರಣ ಪಲಯ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಮೀನುಗಾರಿಕಾ ದೋಣಿಗಳ ಸಂಚಾರಕ್ಕೆ ತಡೆ ಉಂಟು ಮಾಡುವ ಮರಳು  
ದಿಬ್ಬಗಳ ನಿರ್ವಹಣೆಗಾಗಿ ಮಾನ್ಯ ರಾಷ್ಟ್ರೀಯ ಹಸಿರು ನ್ಯಾಯಮಂಡಳಿ (ದಕ್ಷಿಣ ಪಲಯ) (NGT), ಚೆನ್ನೈ ಪೀತದ ಮೂಲ  
ಅರ್ಜಿ ಸಂಖ್ಯೆ:252/2017 ರ ಆದೇಶ ದಿನಾಂಕ:18-05-2022 ರ ಕಂಡಿಕೆ 73 (xiii) ರಂತೆ ಕಂದಾಯ, ಪೊಲೀಸ್, ಅರಣ್ಯ,  
ಮೀನುಗಾರಿಕೆ, ಜಿಲ್ಲಾ ಪಂಚಾಯತ್, ಕರಾವಳಿ ನಿಯಂತ್ರಣ ಪಲಯ (ಪರಿಸರ) ಹಾಗೂ ಗಣಿ ಮತ್ತು ಭೂವಿಜ್ಞಾನ ಇಲಾಖೆಯ  
ಅಧೀನ ಅಧಿಕಾರಿಗಳನ್ನೊಳಗೊಂಡಂತೆ ಸರ್ಕಾರವು ಜಿಲ್ಲಾ ಮಟ್ಟದ ಕಾರ್ಯಪಡೆಯನ್ನು ರಚಿಸಿ ಉಲ್ಲೇಖದಂತೆ ಆದೇಶ  
ಹೊರಡಿಸಿರುತ್ತದೆ. ತತ್ಸಂಬಂಧ, ಜಿಲ್ಲಾ ಮಟ್ಟದ ಕಾರ್ಯಪಡೆಯ ಮೊದಲನೇ ಸಭೆಯನ್ನು ದಿನಾಂಕ 08-08-2022 ರಂದು  
ನಡೆಸಲಾಗಿದ್ದು, ಸಭೆಯಲ್ಲಿ ಸುಧೀರ್ಘವಾಗಿ ಚರ್ಚಿಸಿ ಮಾನ್ಯ ರಾಷ್ಟ್ರೀಯ ಹಸಿರು ನ್ಯಾಯಮಂಡಳಿಯ ಆದೇಶದಲ್ಲಿನ ಸೂಕ್ತ  
ಅಂಶಗಳನ್ನು ಜರುಗಿಸುವ ಸಲುವಾಗಿ ಕರಾವಳಿ ನಿಯಂತ್ರಣ ಪಲಯ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಅನಧಿಕೃತ ಮರಳು ಗಣಿಗಾರಿಕೆ/ ಸಾಗಾಣಿಕೆ/  
ದಾಸ್ತಾನು ಚಟುವಟಿಕೆಗಳನ್ನು ಪರಿಣಾಮಕಾರಿಯಾಗಿ ತಡೆಗಟ್ಟಲು ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ ಮಂಗಳೂರು ಉಪ ವಿಭಾಗ ಇವರ  
ನೇತೃತ್ವದಲ್ಲಿ ತನಿಖಾ ತಂಡವನ್ನು ಪುನರ್ ರಚಿಸಲಾಗಿದೆ.



10/1  
22/08/2022

ಕರಾವಳಿ ನಿಯಂತ್ರಣ ವಲಯ ಪ್ರದೇಶದಲ್ಲಿ ಪ್ರತಿ ದಿನ ತನಿಖಾ ತಂಡದಲ್ಲಿ ಕಾರ್ಯ ನಿರ್ವಹಿಸುವ ಅಧಿಕಾರಿ/ ಸಿಬ್ಬಂದಿ ವರ್ಗದವರು ಪಾಲಿಸಬೇಕಾದ ಕರ್ತವ್ಯ ಮತ್ತು ಜವಾಬ್ದಾರಿಗಳು:

- ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆಯ ಕರಾವಳಿ ನಿಯಂತ್ರಣ ವಲಯ ವ್ಯಾಪ್ತಿಯ ಈ ಕೆಳಕಂಡ ಪ್ರದೇಶಗಳಲ್ಲಿ ಅನಧಿಕೃತವಾಗಿ ಮರಳು ಗಣಿ ಚಟುವಟಿಕೆಗಳು ನಡೆಯುತ್ತಿರುವ ಬಗ್ಗೆ ದೂರುಗಳು/ ಮಾಹಿತಿಯಿರುವ ಸ್ಥಳಗಳ ವಿವರ ಈ ಕೆಳಕಂಡಂತಿದೆ.

ಕ್ರ.ಸಂ.	ತಾಲ್ಲೂಕು	ಗಸ್ತು ಕಾರ್ಯ ನಡೆಸಬೇಕಾದ ಸ್ಥಳಗಳು
1	ಬಂಟ್ವಾಳ	ತುಂಬೆ, ಪುದು, ದೇವರಪಾಲು ಹಾಗೂ ಇತರೆ ಪ್ರದೇಶಗಳು.
2	ಮಂಗಳೂರು	ಅರ್ಕುಳ, ಕಣ್ಣೂರು, ಅಡ್ಡಾರು, ವಳಚ್ಚಿಲ್, ಫೈಸಲ್ ನಗರ, ಕೊಳೂರು, ಬಣಾಲು, ಕಲ್ಲಾಪು, ಇನ್ನೋಳಿ, ಪಾವೂರು, ಬಂಗ್ರಕೊಳೂರು ಹಾಗೂ ಇತರೆ ಪ್ರದೇಶಗಳು.
3	ಉಳ್ಳಾಲ	ಉಳ್ಳಾಲ, ತಲಪಾಡಿ, ಕೋಟೆಪುರ, ಬೆಟ್ಟಪಾಡಿ, ಸೋಮೇಶ್ವರ ಹಾಗೂ ಇತರೆ ಪ್ರದೇಶಗಳು.
4	ಮುಲ್ಕಿ	ಅತಿಕಾರಿಬೆಟ್ಟು, ಮಾನಂಪಾಡಿ, ಬಪ್ಪನಾಡು ಹಾಗೂ ಇತರೆ ಪ್ರದೇಶಗಳು.

- ಕರಾವಳಿ ನಿಯಂತ್ರಣ ವಲಯ ವ್ಯಾಪ್ತಿಯ ಮೇಲ್ಕಂಡ ಪ್ರದೇಶಗಳಲ್ಲಿ ಹಾಗೂ ಇನ್ನಿತರೆ ಪ್ರದೇಶಗಳಲ್ಲಿ ಗಸ್ತು ಕಾರ್ಯ ನಡೆಸಲು ಚಾಲಿತ ದಳದ ಎಲ್ಲಾ ಸದಸ್ಯರು ತಂಡದ ಮುಖ್ಯಸ್ಥರೊಂದಿಗೆ ಸಮಾಲೋಚಿಸಿ ಕಾರ್ಯ ಪ್ರವೃತ್ತರಾಗುವುದು.
- ಅನಧಿಕೃತ ಮರಳು ಗಣಿಗಾರಿಕೆ/ ಸಾಗಾಣಿಕೆ/ ದಾಸ್ತಾನು ಕಂಡುಬಂದಲ್ಲಿ ನಿಯಮಾನುಸಾರ ತಂಡದ ಮುಖ್ಯಸ್ಥರು ಕ್ರಮ ಕೈಗೊಂಡು, ಕೈಗೊಂಡ ಕ್ರಮದ ಬಗ್ಗೆ ವರದಿಯನ್ನು ಪ್ರಾದೇಶಿಕ ನಿರ್ದೇಶಕರು, ಕರಾವಳಿ ನಿಯಂತ್ರಣ ವಲಯ, ಮಂಗಳೂರು ಇವರಿಗೆ ಸಲ್ಲಿಸತಕ್ಕದ್ದು.
- ತನಿಖಾ ತಂಡವು ಅನಧಿಕೃತ ಮರಳು ಗಣಿಗಾರಿಕೆ/ ಸಾಗಾಣಿಕೆ/ ದಾಸ್ತಾನು ಚಟುವಟಿಕೆಗಳನ್ನು ನಿಯಂತ್ರಿಸುವ ಕುರಿತು ಗಸ್ತು ಕಾರ್ಯ ನಡೆಸುತ್ತಿರುವ ಬಗ್ಗೆ ಸಹಾಯಕ ಆಯುಕ್ತರು, ಮಂಗಳೂರು ಉಪವಿಭಾಗ, ಮಂಗಳೂರು ಇವರು ಮೇಲ್ವಿಚಾರಣೆ ನಡೆಸುವುದು ಹಾಗೂ ಈ ಬಗ್ಗೆ ಸಮಸ್ಯೆಗಳಿದ್ದಲ್ಲಿ ಜಿಲ್ಲಾಡಳಿತದ ಗಮನಕ್ಕೆ ತರುವುದು.
- ತನಿಖಾ ತಂಡದ ಮುಖ್ಯಸ್ಥರು ಅನಧಿಕೃತ ಮರಳು ಗಣಿಗಾರಿಕೆ/ ಸಾಗಾಣಿಕೆ/ ದಾಸ್ತಾನು ಚಟುವಟಿಕೆಗಳಲ್ಲಿ ವಶಪಡಿಸಿಕೊಂಡ ವಾಹನಗಳು/ ಯಂತ್ರೋಪಕರಣಗಳು/ ಮರಳಿನ ದಾಸ್ತಾನನ್ನು ಸಂಬಂಧಪಟ್ಟ ಪೊಲೀಸ್ ಠಾಣಾ ಸುಪರ್ದಿಗೆ ನೀಡಿ ವರದಿಯನ್ನು ಗಣಿ ಮತ್ತು ಭೂವಿಜ್ಞಾನ ಇಲಾಖೆ ಹಾಗೂ ಕರಾವಳಿ ನಿಯಂತ್ರಣ ವಲಯ ಇಲಾಖೆಗೆ ಸಲ್ಲಿಸುವುದು.
- ತನಿಖಾ ತಂಡವು ಅನಧಿಕೃತ ಮರಳು ಗಣಿಗಾರಿಕೆ/ ಸಾಗಾಣಿಕೆ/ ದಾಸ್ತಾನು ಚಟುವಟಿಕೆಗಳಲ್ಲಿ ವಶಪಡಿಸಿಕೊಂಡ ವಾಹನಗಳು/ ಯಂತ್ರೋಪಕರಣಗಳು/ ಮರಳಿನ ದಾಸ್ತಾನಿನ ವಿರುದ್ಧ ಕರ್ನಾಟಕ ಉಪ ಖನಿಜ ರಿಯಾಯಿತಿ ನಿಯಮಾವಳಿ 1994 ರನ್ವಯ ಗಣಿ ಮತ್ತು ಭೂವಿಜ್ಞಾನ ಇಲಾಖೆಯು ಕ್ರಮ ವಹಿಸಿ ವರದಿಯನ್ನು ಕರಾವಳಿ ನಿಯಂತ್ರಣ ವಲಯ ಇಲಾಖೆಗೆ ಸಲ್ಲಿಸುವುದು.
- ಪ್ರತಿ ದಿನದ ಗಸ್ತು ಕಾರ್ಯದ ತನಿಖಾ ತಂಡವು ಅನಧಿಕೃತ ಮರಳು ಗಣಿಗಾರಿಕೆ/ ಸಾಗಾಣಿಕೆ/ ದಾಸ್ತಾನಿನ ಬಗ್ಗೆ ಸಾರ್ವಜನಿಕರಿಂದ ಬರುವ ದೂರು ಕರೆಗಳನ್ನು ಸ್ವೀಕರಿಸಿ ಅದರ ಬಗ್ಗೆ ಕಾರ್ಯಪ್ರವೃತ್ತರಾಗಲು ಒಂದು ಮೊಬೈಲ್ (ದೂರವಾಣಿ ಸಂಖ್ಯೆ 9141036341) ಹೊಂದುವುದು. ಸದರಿ ಮೊಬೈಲ್ ಅನ್ನು ನಿಗದಿಪಡಿಸಿದ ದಿನದಂದು ತಂಡದ ಮುಖ್ಯಸ್ಥರು ಸಹಾಯಕ

ಆಯುಕ್ತರ ಕಛೇರಿ, ಮಂಗಳೂರು ಉಪ ವಿಭಾಗ, ಮಂಗಳೂರು ಇಲ್ಲಿ ಖುದ್ದಾಗಿ ಪಡೆದು ಚಾಲನೆಯಲ್ಲಿಟ್ಟುಕೊಂಡು ಆ ದಿನದ ಗಸ್ತು ಕಾರ್ಯವನ್ನು ಪೂರ್ಣಗೊಳಿಸಿ, ಸದರಿ ಮೊಬೈಲ್ ಅನ್ನು ಸಹಾಯಕ ಆಯುಕ್ತರ ಕಛೇರಿಗೆ ಹಿಂತಿರುಗಿಸುವುದು. ಇದೇ ರೀತಿ ಪ್ರತಿ ದಿನ ನಿಗದಿಪಡಿಸಿದ ತಂಡವು ಗಸ್ತು ಕಾರ್ಯವನ್ನು ಕೈಗೊಳ್ಳುವುದು.

- ನಿಯೋಜಿಸಲ್ಪಟ್ಟ ಅರಣ್ಯ ಇಲಾಖೆ, ಮಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ ಮತ್ತು ತಾಲ್ಲೂಕು ಪಂಚಾಯತ್ ಅಧಿಕಾರಿಗಳೊಂದಿಗೆ ತಂಡದ ಮುಖ್ಯಸ್ಥರು ಸಮಾಲೋಚಿಸಿ ಕರ್ತವ್ಯ ನಿರ್ವಹಿಸಲು ಸಹಕರಿಸುವಂತೆ ತಿಳಿಸುವುದು.
- ಪ್ರತಿ ತನಿಖಾ ತಂಡವು ರಾತ್ರಿ ಗಸ್ತು ಕಾರ್ಯದಲ್ಲಿ ನಿರತವಾಗಿದ್ದಲ್ಲಿ ಅಧಿಕಾರಿ/ ಸಿಬ್ಬಂದಿಯವರಿಗೆ ಮರುದಿನ ಅರ್ಧ ದಿನ ವಿಶ್ರಾಂತಿ ಪಡೆದು ನಂತರ ಕಛೇರಿಗೆ ಹಾಜರಾಗಬಹುದು.

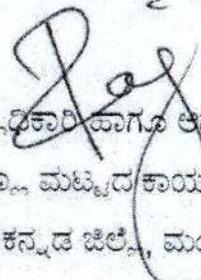
ತತ್ಸಂಬಂಧ, ಕರಾವಳಿ ನಿಯಂತ್ರಣ ವಲಯ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಅನಧಿಕೃತ ಮರಳು ಗಣಿಗಾರಿಕೆ/ ಸಾಗಾಣಿಕೆ/ ದಾಸ್ತಾನು ಚಟುವಟಿಕೆಗಳನ್ನು ತಡೆಗಟ್ಟಲು ಈ ಕೆಳಕಂಡಂತೆ ಆದೇಶ.

### ಆದೇಶ

ವಾ|| ರಾಜೇಂದ್ರ ಕೆ ವಿ, ಭಾ.ಆ.ಸೇ., ಜಿಲ್ಲಾಧಿಕಾರಿ ಹಾಗೂ ಅಧ್ಯಕ್ಷರು, ಜಿಲ್ಲಾ ಮಟ್ಟದ ಕಾರ್ಯವಡೆ, ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆ ಆದ ನಾನು ಪ್ರಸ್ತಾವನೆಯಲ್ಲಿ ವಿವರಿಸಿದಂತೆ ಕರಾವಳಿ ನಿಯಂತ್ರಣ ವಲಯ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಅನಧಿಕೃತ ಮರಳು ಗಣಿಗಾರಿಕೆ/ ಸಾಗಾಣಿಕೆ/ ದಾಸ್ತಾನು ಚಟುವಟಿಕೆಗಳನ್ನು ಪರಿಣಾಮಕಾರಿಯಾಗಿ ತಡೆಗಟ್ಟಲು ಈ ಕೆಳಗಿನಂತೆ ತನಿಖಾ ತಂಡವನ್ನು ರಚಿಸಿ ತಕ್ಷಣದಿಂದ ಜಾರಿಗೆ ಬರುವಂತೆ ಆದೇಶ ಹೊರಡಿಸಿದೆ.

ತನಿಖಾ ತಂಡ	ಸೋಮವಾರ	ಮಂಗಳವಾರ	ಬುಧವಾರ	ಗುರುವಾರ	ಶುಕ್ರವಾರ	ಶನಿವಾರ	ರವಿವಾರ
ತಂಡದ ಮುಖ್ಯಸ್ಥರು	ಪ್ರಾದೇಶಿಕ ನಿರ್ದೇಶಕರು (ಪರಿಸರ), ಮಂಗಳೂರು 9482507212	ಜಂಟಿ ನಿರ್ದೇಶಕರು, ಮೀನುಗಾರಿಕೆ ಇಲಾಖೆ 9449017324	ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು PWD 9900264230	ಹಿರಿಯ ಭೂವಿಜ್ಞಾನಿ (ಚಾಲಿತದಳ), ಗಣಿ & ಭೂವಿಜ್ಞಾನ ಇಲಾಖೆ 9008599623	ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು ಸ.ನೀ.ಸ ಇಲಾಖೆ 9480813131	ಪರಿಸರ ಅಧಿಕಾರಿಗಳು KSPCB 9448268171	ಸಹಾಯಕ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ, ಮಂಗಳೂರು 9448134012
	ವಲಯ ಆರಣ್ಯಾಧಿಕಾರಿ, ಬಂಟ್ವಾಳ 9845732332	ವಲಯ ಆರಣ್ಯಾಧಿಕಾರಿ, ಮೂಡಬಿದ್ರೆ 9483383467	ಶ್ರೀ ಪ್ರಶಾಂತ್ ಜೈ ವಲಯ ಆರಣ್ಯಾಧಿಕಾರಿ, ಮಂಗಳೂರು 9620426901	ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಧಿಕಾರಿ, ತಾಲ್ಲೂಕು ಪಂಚಾಯತ್, ಮಂಗಳೂರು 9480862110	ಶ್ರೀ ಅಬ್ದುಲ್ ಖಾದರ್, ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರ, ಮಹಾನಗರ ಪಾಲಿಕೆ 9448216005	ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಧಿಕಾರಿ, ತಾಲ್ಲೂಕು ಪಂಚಾಯತ್, ಬಂಟ್ವಾಳ 8217830169	ಶ್ರೀ ಶರತ್ ಗೌಡ ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರ, ಮಹಾನಗರ ಪಾಲಿಕೆ 7760862490
ಸದಸ್ಯರು	ಕಂದಾಯ ನಿರೀಕ್ಷಕರು, ಗುರುಪುರ ಹೋಬಳಿ	ಕಂದಾಯ ನಿರೀಕ್ಷಕರು, ಮಂಗಳೂರು ವಿ ಹೋಬಳಿ	ಕಂದಾಯ ನಿರೀಕ್ಷಕರು, ಮಂಗಳೂರು ವಿ ಹೋಬಳಿ	ಕಂದಾಯ ನಿರೀಕ್ಷಕರು, ಸುರತ್ತಲ್ ಹೋಬಳಿ	ಕಂದಾಯ ನಿರೀಕ್ಷಕರು, ಮುಲ್ಕಿ ಹೋಬಳಿ	ಕಂದಾಯ ನಿರೀಕ್ಷಕರು, ಮೂಡಬಿದ್ರೆ ಹೋಬಳಿ	ಕಂದಾಯ ನಿರೀಕ್ಷಕರು, ಪಾಣಿಮಂಗಳೂರು ಹೋಬಳಿ

ಉಪ ಪೋಲೀಸ್ ಆಯುಕ್ತರ ತಂಡ, ಮಂಗಳೂರು	ಉಪ ಪೋಲೀಸ್ ಆಯುಕ್ತರ ತಂಡ, ಮಂಗಳೂರು	ಉಪ ಪೋಲೀಸ್ ಆಯುಕ್ತರ ತಂಡ, ಮಂಗಳೂರು	ಉಪ ಪೋಲೀಸ್ ಆಯುಕ್ತರ ತಂಡ, ಮಂಗಳೂರು	ಉಪ ಪೋಲೀಸ್ ಆಯುಕ್ತರ ತಂಡ, ಮಂಗಳೂರು	ಉಪ ಪೋಲೀಸ್ ಆಯುಕ್ತರ ತಂಡ, ಮಂಗಳೂರು	ಉಪ ಪೋಲೀಸ್ ಆಯುಕ್ತರ ತಂಡ, ಮಂಗಳೂರು
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 ಜಿಲ್ಲಾ ಅಧಿಕಾರಿ ಹಾಗೂ ಅಧ್ಯಕ್ಷರು  
 ಜಿಲ್ಲಾ ಮಟ್ಟದ ಕಾರ್ಯಪಡೆ  
 ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆ, ಮಂಗಳೂರು

ಇವರಿಗೆ,

ಸಂಬಂಧಪಟ್ಟ ಎಲ್ಲಾ ಅಧಿಕಾರಿಗಳಿಗೆ

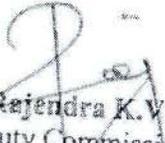
## 5.0 Conclusions and Recommendations:

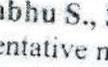
1. The Committee from the Monitoring results and from other available data is of the opinion that the present fish kill is an isolated, very small one possibly by the Organic/Sewage load dumped in this particular location leading to oxygen stress during summer season.
2. There was no fish kill in the main Gurupura river, fish kill has happened in the stagnant pockets of the storm water drain leading to the river. Measured Dissolved oxygen levels at locations of fish death (along the two stagnant pockets of storm water drain) were 0.8mg/l and 0.9 mg/l, whereas, at the point where storm water joined the river, DO level was 4 mg/l, which shows that the fish death must have occurred due to inadequate tidal flushing in the creek/storm water drain resulting in low D.O levels.
3. The Committee has also observed that there is no traces of any discharge of industrial effluent in that Storm Water Drain in which fish kill has occurred.
4. Committee has observed entry of domestic sewage all along the river through Storm Water Drains; this needs an urgent attention by Mangaluru City Corporation (MCC).
5. There is no Underground drainage (UGD) facility with terminal Sewage Treatment Plant (STP) in Baikampady industrial area to take care of-sewage/sullage discharge from Godown, commercial establishments, hotels and some small industries, Labour quarter's/sheds. etc. Responsible organisations like KIADB and Mangaluru City Corporation (MCC) are required to initiate action to construct a proper UGD system with terminal sewage treatment plant.
6. Mangaluru City Corporation also has to initiate action for treatment and disposal of sewage generated from the area around the Baggundi lake such as, MSEZ RR colony, Angaragundi, Kudumbur Villages so as to prevent joining of untreated sewage into Baggundi lake thereby to Gurupura river.
7. Action plan for SI No.4,5 and 6 along with cost estimate and timelines shall be prepared by MCC and KIADB and necessary funds have to be released by Urban Development Department, Government of Karnataka and CEO, KIADB respectively for undertaking the above work.

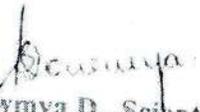
8. Town Panchayath, Bajpe and Grama Panchayath, Jokatte are unsewered area along the catchment of the river Gurupura. Chief Officer, Bajpe has to take action for treatment and disposal of sewage generated in the area near airport and Bajpe village to avoid entering of sewage into the storm water drain ultimately joining the Gurupura river and PDO, Grama Panchayat, Jokatte has to take action for treatment and disposal of Sewage generated from Jokatte areas. Directions have to be issued to DMA and CEO, ZP to release necessary funds required for undertaking the STP work.
9. There is no proper Solid waste collection mechanism in the Baikampady industrial Area. Construction debris (C and D waste) and solid waste including plastic waste are being dumped everywhere across the industrial area including the bank of the back water of Gurupura River. KIADB and Mangaluru City Corporation (MCC) being responsible agencies are required to initiate action to bring in a proper collection mechanism of Municipal solid waste/C and D /plastic and other types of waste and create awareness too in co-ordination with Industrial Associations.
10. There were lot of complaints in Media and by Industries Association that cess pool operators are discharging sewage through tankers and dumping/discharging indirectly in to rivers. Committee suggests that KIADB, MCC, ZP, PRED, Industrial Association and Police shall have to install CCTV Camera at Strategic locations in their respective jurisdiction to prevent any unauthorized/illegal dumping of waste water/sewage/solid waste in to the river.
11. The Committee suggests that the Minor Irrigation department who is in charge of protecting the river boundaries shall initiate steps to conduct a comprehensive survey on river encroachment along with other line departments such as, Revenue, CRZ, MCC and corresponding Town/Grama Panchayats and take appropriate action on the encroachers.
12. Upstream of the Gurupura river a vented dam is built, which is the drinking water source for Maravooru Grama Panchayath and 14 other villages. Since the construction of the dam, the river doesn't get minimum flow and during summer seasons fish kill incidents are happening in the river during summer seasons due to

build-up of organic load as a result of inadequate flushing. Zilla Panchayat, PRED, Mangalore Officials will have to submit compliance to conditions imposed during clearance of vented dam.

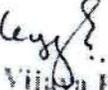
13. KSPCB to ensure Zero Liquid Discharge in all industries and establishment of ETP in all small scale industries irrespective of effluent quantity.
14. KSPCB has listed out few non-complying industries which are habituated to discharge into storm water drains in spite of some of them having the ETP units. Continuous monitoring of such non-complying industries followed by action as per law shall be initiated by KSPCB on priority.
15. KSPCB to take up strengthening of its laboratory at Mangaluru, adequate manpower to be deployed and upgrade the laboratory with advanced equipments.

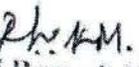
  
Dr. Rajendra K.V., IAS  
Deputy Commissioner,  
Dakshina Kannada District  
Chairman of the Joint Committee

  
Dr. Prabhu S., Scientist D,  
Representative nominated by  
Regional Office, MOEF&CC, Bangalore  
Member

  
Smt. Sowmya D., Scientist D.,  
Representative nominated by  
Regional Director,  
Central Pollution Control Board, Bangalore  
Member

  
Dr. Harish Kumar, Deputy Director  
Representative nominated by The Director,  
Department of Fisheries, Bangalore  
Member

  
Smt. Vijaya Hegde  
Senior Environmental Officer,  
Zonal Office, KSPCB, Mangaluru  
Member

  
Sri Ramesh K.M.  
Environmental Officer,  
KSPCB, Mangaluru  
Member Convenor

Item Nos. 04&05

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

(By Video Conferencing)

Original Application No. 307/2022

(With report dated 11.10.2022)

In re: News item published in The Hindu dated 26.04.2022 titled "**Flow of industrial effluents into Phalguni results in fish kill**"

**WITH**

Original Application No. 572/2022

Anil Kumar Sastry

Applicant

Versus

State of Karnataka

Respondent

Date of hearing: 21.11.2022

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER  
HON'BLE PROF. A. SENTHIL VEL, EXPERT MEMBER  
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER**

Respondent: Mr. Mukesh Kumar, Advocate for KSPCB

**ORDER**

1. The matter has been put up in the light of captioned media report to the effect that hundreds of fish were found dead and floating in Phalguni (Gurupura) river, downstream the Malavoor vented dam,

the effluents released by the industries in Baikampady industrial area in Mangalore, Dakshina Kannada, Karnataka.

2. Vide order dated 29.04.2022, the Tribunal constituted a five-member joint Committee comprising of Regional Officers of MoEF&CC and CPCB, Bengaluru, State PCB, Director, Fisheries, Karnataka and District Magistrate, Dakshina Kannada District to undertake site visit, ascertain factual position and furnish a report to this Tribunal. It was further directed that identified polluters may be put to notice of these proceedings so that they can file their response, if any.

3. The operative part of the order is reproduced below:-

*"2. We have considered the matter. Prima facie, it appears that untreated effluents are being discharged in the river in question by the industries in the area, without any regulation by the concerned statutory authorities in violation of the Water (Prevention and Control of Pollution) Act, 1974.*

*3. Accordingly, it appears to be necessary to ascertain facts and ensure remedial action for enforcement of Rule of Law, protection of environment and bio-diversity. The stretch of Phalguniriver may be treated as polluted river stretch for formulation and execution of restoration plan, defining timelines and budgetary backup. Field survey be conducted to identify sewage and industrial effluent entering into the said river. Target for restoration of water quality is required to be at level of Class B of Primary Water Quality Criteria.*

*4. We constitute a five-member joint Committee comprising of the Regional Officers of MoEF&CC and CPCB Bengaluru, State PCB, Director, Fisheries, Karnataka and District Magistrate, Dakshina Kannada District. The State PCB will be the nodal agency for coordination and compliance. The Committee may meet within two weeks and undertake visit to the site. It will be open to members of the Committee to participate online except for site visit. The Committee may interact with the stakeholders, ascertain the cause of the incident and suggest remedial measures. **If polluters are identified, they may be put to notice so that they can file their response, if any, before this Tribunal.** Based on the observations during the proceedings of the Committee, **the statutory regulators may take remedial action, following due***

4. In pursuance of above, the joint Committee has filed its report on 11.10.2022 after undertaking visit to the site, collecting water samples and getting them analyzed finding that pollution is caused by the industries and the Municipal Corporation. However, the identified polluters do not appear to have been notified about these proceedings nor adequate remedial action taken.

5. Relevant extracts from the report are:-

**“3.1: Observations of the Committee:**

**3.1.1: General Observations:**

- ✦ Residential/commercial developments on either side of the river and, no UGD in certain areas. Even in sewerred areas, there is missing links/gaps.
- ✦ Major and minor storm water drains were observed to be joining the river and **plenty of Organic load was observed at Kudroli, SulthanBatteri, Dambel, Kulur Church and ELF Gas. Map showing storm water drains joining Gurupurriver at different locations** is enclosed as Annexure-11.
- ✦ **Solid waste was found floating in the storm water drains which joined the river.**
- ✦ **Dumping/disposal of sewage collected from Hotels and selected industries and from other residential areas through Cess Pool at selected places along the banks of river back water, which needs a proper investigation.**
- ✦ Upstream of the Gurupurriver about 6 K.M. from Baikampady industrial area is built a vented dam which is the drinking water source for MaravooruGramapanchayath limit. The dam was built in the year 2016-17. Since the construction of the dam, the river doesn't get minimum flow and **during summer seasons fish kill incidents are happening in the river during summer seasons due to build-up of organic load as a result of inadequate flushing.** It's only during the rainy season that the dam overflow reaches the river.

**3.1.2: Observations near Baikampady Industrial Area**

- ✦ **Sullage/sewage is being discharged to Storm water drain from many Godowns, commercial establishments, hotels and some small industries, Labourquarter's/shed. Etc.**
- ✦ **No proper collection mechanism for Municipal and other Solid Waste in Baikampady industrial area. Solid waste heaps dumped along road sides were observed. Photos enclosed as Annexure-12.**
- ✦ **Construction debris and solid waste is being disposed at ODC Road to Jokatte at the bank of the back water of Gurupura River.**
- ✦ **The Back water /Creek at the Baikampady Industrial area is blocked and the water is stagnated, there is no easy flushing.**
- ✦ **During random inspection of industries in the Baikampady industrial area by KSPCB officials, it is observed that the following industries are discharging untreated effluents to the storm water drain, some of them in spite of having ETP facilities.**

Table 2: Details of Industries in Baikampady Industrial Area discharging untreated effluents along with action taken:

Sl No.	Name and address of the industries	Activity	Action initiated by the KSPCB
1	M/s Ocean Proteins, Plot No. 281/282, Baikampady Industrial Area, Mangaluru, D K District-575 011.	Fish processing(Surimi)	Personal hearing held and action being initiated to close down the industry and to file criminal case
2	M/s R.K. Industries, Plot No.191-A Baikampady Industrial Area, Mangalore, D K District-575 011.	Vehicular Servicestation	Notice of proposed directions to close down the industry is issued.
3.	M/s Shree Gurudev ServiceStation, Plot No. 102, Near Canara Steel Industry, Industrial Area,Baikampady, Mangaluru,Dakshina Kannada	Tanker washing /vehicular Servicestation	
4	M/s Stems and Leaves International, Plot No.162-C, Baikampady Industrial Area, Mangalore, D.K District-575011	Granite cutting and polishing	Notice of proposed directions (NPD) to close down the industry is issued
5	M/s Viceroy Exports India Pvt. Ltd., Plot No.55, Baikampady Industrial Area, Mangalore, D.K District-575011.	Fish Processing (Freezing andExport)	
6	M/s Sunrise Mats, Plot No. 6-16,	Plastic	Restraining order and NPD

7	M/s Marine Food Packers, Industrial Area, Baikampady, Mangaluru, Karnataka 575011	Fish Processing (Freezing and Export)	Show cause notice is issued
8	M/s A. K. Veneers Pvt. Ltd., Plot No. 449, Industrial Area, Baikampady, Mangaluru, D. K. District	Plywood and Veneers manufacturing	Show cause notice is issued

Subsequent to the issue of show cause notices/ Notice of proposed directions/restraining orders, **some industries have rectified the problems and initiated action for providing STP/ETP. Industries who have continued the violations even after issue of Notice of proposed directions, KSPCB is in the process of initiating further course of action as per Law.**

**4.0 Based on Literature:** Literature review from various researchers reveals that the incidence of river blackening and fish kill at times is not a very uncommon phenomenon and this bio-geochemical phenomenon has been most of the times co-related to presence of high organic load and inadequate tidal flushing especially in summers. High organic load quickly depletes the dissolved oxygen leading to anaerobic conditions. The anaerobic microbes degrade the dissolved organics which may further react with minerals in water and sediment forming black precipitates. A copy of one of the research review paper published by Zhiwei Leian *et al.*, 2018 on subject matter is enclosed for kind reference as **Annexure-13**.

#### **5.0 Conclusions and Recommendations:**

1. The Committee from the Monitoring results and from other available data is of the opinion that the present fish kill is an isolated, very small one possibly by the Organic/Sewage load dumped in this particular location leading to oxygen stress during summer season.
2. There was no fish kill in the main Gurupura river, fish kill has happened in the stagnant pockets of the storm water drain leading to the river. Measured Dissolved oxygen levels at locations of fish death (along the two stagnant pockets of storm water drain) were 0.8mg/l and 0.9 mg/l, whereas, at the point where storm water joined the river, DO level was 4 mg/l, which shows that the fish death must have occurred due to inadequate tidal flushing in the creek/storm water drain resulting in low D.O levels.
3. The Committee has also observed that there is no traces of any discharge of industrial effluent in that Storm Water Drain in which fish kill has occurred.

commercial establishments, hotels and some small industries, Labour quarter's/sheds. etc. Responsible organisations like KIADB and Mangaluru City Corporation (MCC) are required to initiate action to construct a proper UGD system with terminal sewage treatment plant.

6. Mangaluru City Corporation also has to initiate action for treatment and disposal of sewage generated from the area around the Baggundi lake such as, MSEZ RR colony, Angaragundi, Kudumbur Villages so as to prevent joining of untreated sewage into Baggundilake thereby to Gurupura river.
7. Action plan for Sl No.4,5 and 6 along with cost estimate and timelines shall be prepared by MCC and KIADB and necessary funds have to be released by Urban Development Department, Government of Karnataka and CEO, KIADB respectively for undertaking the above work.
8. Town Panchayath, Bajpe and GramaPanchayath, Jokatte are unsewered area along the catchment of the river Gurupura. Chief Officer, Bajpe has to take action for treatment and disposal of sewage generated in the area near airport and Bajpe village to avoid entering of sewage into the storm water drain ultimately joining the Gurupurriver and PDO, Grama Panchayat, Jokatte has to take action for treatment and disposal of Sewage generated from Jokatte areas. Directions have to be issued to DMA and CEO, ZP to release necessary funds required for undertaking the STP work.
9. There is no proper Solid waste collection mechanism in the Baikampady industrial Area. Construction debris (C and D waste) and solid waste including plastic waste are being dumped everywhere across the industrial area including the bank of the back water of Gurupura River. KIADB and Mangaluru City Corporation (MCC) being responsible agencies are required to initiate action to bring in a proper collection mechanism of Municipal solid waste/C and D /plastic and other types of waste and create awareness too in co-ordination with Industrial Associations.
10. There were lot of complaints in Media and by Industries Association that cess pool operators are discharging sewage through tankers and dumping/discharging indirectly in to rivers. Committee suggests that KIADB, MCC, ZP, PRED, Industrial Association and Police shall have to install CCTV Camera at Strategic locations in their respective jurisdiction to prevent any unauthorized/illegal dumping of waste water/sewage/ solid waste in to the river.
11. The Committee suggests that the Minor Irrigation department who is in charge of protecting the river boundaries shall

12. *Upstream of the Gurupur river a vented dam is built, which is the drinking water source for Maravooru Grama Panchayat and 14 other villages. Since the construction of the dam, the river doesn't get minimum flow and during summer seasons fish kill incidents are happening in the river during summer seasons due to build-up of organic load as a result of inadequate flushing. Zilla Panchayat, PRED, Mangalore Officials will have to submit compliance to conditions imposed during clearance of vented dam.*
13. *KSPCB to ensure Zero Liquid Discharge in all the industries and establishment of ETP in all small-scale industries irrespective of effluent quantity.*
14. *KSPCB has listed out few non-complying industries which are habituated to discharge into storm water drains in spite of some of them having the ETP units. Continuous monitoring of such non-complying industries followed by action as per law shall be initiated by KSPCB on priority.*
15. *KSPCB to take up strengthening of its laboratory at Mangaluru, adequate manpower to be deployed and upgrade the laboratory with advanced equipments."*

6. From the report, it is self-evident that sources of pollution include dumping of solid waste and discharge of untreated sewage and effluent by the local bodies, hotels and industries. There is no collection mechanism for municipal waste, construction debris and preventing discharge of untreated effluents. In spite of such gross violations which amount to serious offences, the State Pollution Board who act as the custodian of environmental law does not appear to have performed its statutory functions of fixing accountability of the violators by initiating prosecution, stopping polluting activity and fixing liability on polluter pays principle for past violations. Even identified industries have not been suitably dealt with resulting in failure of rule of law. It further appears that at the joining point at backwater of Gurupura river, mangroves have been damaged. Cess pools are operated in the river

Mangaluru appear to be underutilized. We fail to understand reasons for such failure of the statutory regulators. Vide order dated 18.11.2022 in OA No. 383/2022, In re : News item published in the Newspaper named, DHNS, Mangaluru dated: 15th May, 2022, titled "Officials term disclouring of water in beaches as algal bloom", the Tribunal observed:-

*"5. We note that as per status report about waste management filed by the State of Karnataka on 12.10.2022 in O.A. No. 606/2018, In re: Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues, there are four STPs at Mangalore - Pachanady (8.75 MLD), Kavoor (43.50 MLD), Surathkal (16.50 MLD) and Bajal (20 MLD) which are underutilized. The Tribunal has directed Karnataka State to bridge gaps in waste management for which compensation has been levied for restoration measures by ring-fencing an amount of Rs. 2900 crores. The relevant extract from the order is reproduced below:-*

*"61.....xxx.....xxx.....xxx*

*(iii) Admitted gap in generation and scientific handling of waste has resulted in damage to the environment and public health for which the State of Karnataka is liable to pay compensation of Rs. 2900 crores as per details already mentioned above (para 58). The amount of compensation is to be utilized for restoration measures preferably by evolving a suitable centralized single window mechanism by the Chief Secretary, Karnataka in the light of above observations in paras 31 to 34 & 38 to 51 above. The laid down timelines need to be strictly adhered to and monitored."*

7. Thus, there is immediate need for remedial action for protection of environment. The joint Committee already constituted, with addition of nominee of NCSCM and NIO, Goa, may prepare an action plan in light of its report and above observations within one month. It will be at liberty to co-opt any other Expert/Institution and interact with the stakeholders. The action plan may include immediate stopping of sources of pollution

8. An action taken report may specify the gap in sewage generation in the catchment and its treatment, latest compliance status by the violators and remedial measures taken, if any, as on 31.01.2023. The report may be filed before this Tribunal by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF on or before 15.02.2023. A copy of the action taken report may be placed on the website of the State PCB with intimation to the violators by email that if they wish to respond to the report before this Tribunal, they may do so within two weeks thereafter by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/ OCR Support PDF.

List for further consideration on 14.03.2023.

A copy of this order be forwarded to the Regional Officers of MoEF&CC and CPCB Bengaluru, State PCB, Director, Fisheries, Karnataka, District Magistrate, Dakshina Kannada District, NCSCM and NIO, Goa by email for compliance.

Adarsh Kumar Goel, CP

Arun Kumar Tyagi, JM

Prof. A. Senthil Vel, EM

Dr. Afroz Ahmad, EM

# The College of Fisheries

Mangalore, India



Dr Shivakumar M., M.F.Sc., Ph.D.  
Dean (Fisheries)

No: CoF/Dean/Compt.- 07/2022-23/Date: 28-10-2022

**To,**  
**The Deputy Director**  
Department of Mines and Geology  
Mangalore

Dear Sir,

**Sub: Request for Funding support for "River Mouth Project"-reg.**  
**Ref.: 1. Orders of Hon'ble NGT, Principal Bench, New Delhi/219/2022 dt. 25.4.22**  
**2. Govt. Order No. FEE 01EAA 2022 dt. 29.6.22**

While drawing the attention of the above mentioned two references, the College of Fisheries, Mangalore was one of the committee members to review the status of sand removal in the rivers of Netravati and Gurupur and its impact on the fishermen communities. After a field visit and the interaction with the community and other stake holders, we feel that there must be a continuous study in the said area and initiate livelihood improvement activities while educating the primary stakeholders.

Hence, this service project "**Fishermen Community Development in the River Mouths of Netravati and Gurupur Rivers (Project River Mouth)**" is proposed for an year with estimated budget of **Rs. 11.50 lakhs**. This projects aims at development of scientific evidences and offer scientific management strategies which builds confidence among stakeholders and increased faith on the competent authorities. Kindly accept the proposal and oblige.

Thanking you

Yours faithfully

(Shivakumar M)  
**Dean (Fisheries)**  
**College of Fisheries**  
**Mangaluru - 575 002**

CWC to:

1. The Principal Secretary to the Government, Dept. of Forest, Ecology and Environment, GoK
2. The Deputy Commissioner, Dakshina Kannada Welfare, KVAFSU, Bidar
3. The Regional Director (Environment), Dept. of Forest, Ecology and Environment, DK

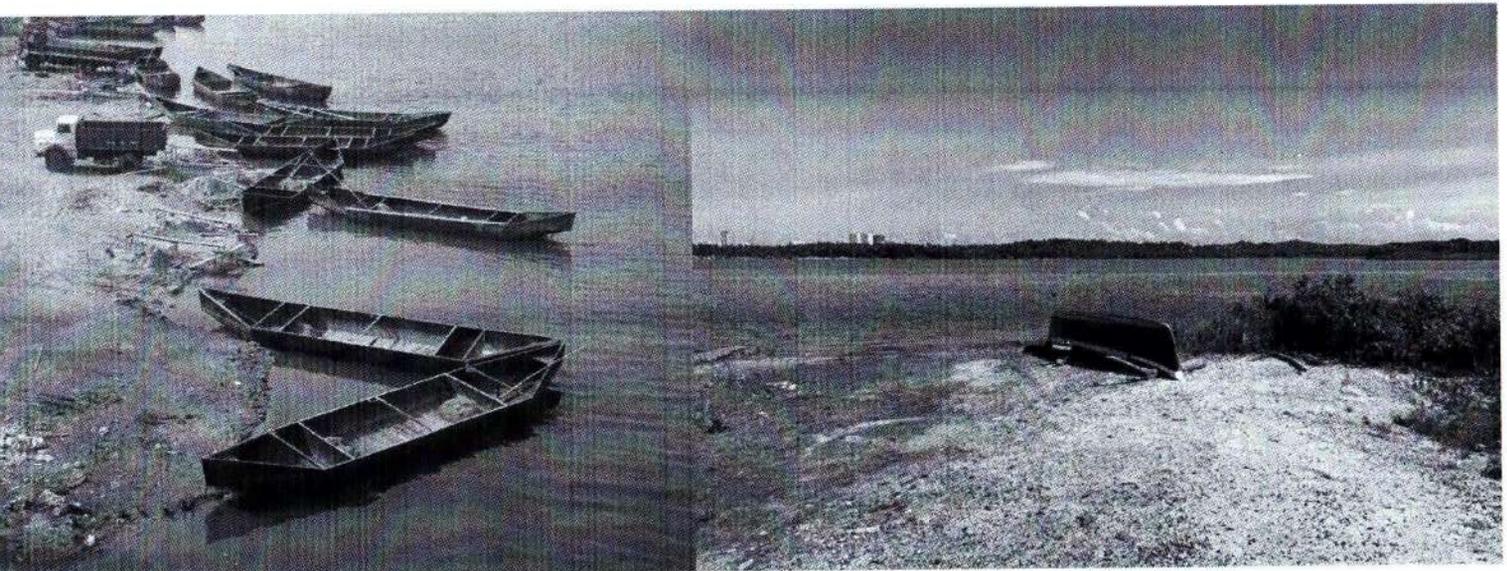
**Project on**

**Fishermen Community Development  
in the River Mouths of Netravati and Gurupur  
Rivers**

**-Project River Mouth-**

**Submitted to:**

Department of Mines and Geology  
Mangalore for **funding support**



**Dr Shivakumar Magada**

The Dean, College of Fisheries, Mangalore, India  
+91-99457 83906/deanfisheries@gmail.com

## Executive Summary

- Aquatic ecosystems are facing severe threat than the ever, because of the changes in the demography, pollution, sand removal, over exploitation, dumping and such other anthropogenic activities are impacting the ecosystem. And if this continues, they reach the irreversible point and the entire ecosystem becomes barren and dead.
- Sand removal in the rivers and river mouth is one such activities which has affected the ecosystem, livelihood and the environment significantly. This calls for an immediate attention of all the stakeholders and draw a road map for judicious exploitation of resources.
- In spite of knowing the impacts of sand removal on fish and fisheries and its effect on livelihoods, it calls for a seasonal bathymetric observation, continuous study of physico-chemical parameters, fish breeding zones, population dynamics of intertidal organisms, mussels and oysters and draw scientific and evidence-based correlation to draw a management strategy.
- Department of Aquatic Environment Management in association with Department of Fisheries Resources Management and Department of Fisheries Economics, Statistics and Extension, College of Fisheries, Mangalore will take the sponsor from the Development and Management departments and run the service project on a revolving fund mode.
- This project aims to take the bench mark status of the said ecosystems, and bathymetric studies will be carried out to identify the sand deposition pattern, identification of ecological sensitive zones and advise the competent authorities and stakeholders on right sites for sand removal and advises on the quantity of the sand that can be harvested each year.
- Along with the above said activities, marking of river bends, shallow waters, river ranching with brackishwater fish and shrimp, and community training on alternative livelihoods. This informed handholding will not only resolve the conflicts, it also builds the trust among government bodies and among stakeholders.
- The present study focuses on the investigation of river bed characteristics and quantification of suspended sediment contrition by surveying the riverbed, bottom topography and collection of water sediment samples respectively. It also aims at study of shallow and deep areas of the rivers to protect, preserve and conserve the riverine ecosystem and save the life of riverbank dwellers and to minimize the property damage. This study also provides the recommendations for long-term management of sand extraction and emphasize on the monitoring plans on the riverbed profile changes and sediment transport capacity to evaluate the long-term effect of mining activities both up and down stream of sand mining areas of the rivers.

# Fishermen Community Development in the River Mouths of Netravati and Gurupur Rivers

Rivers are vital part of the ecosystem and offers wide range of services to the mankind. Deforestation, construction of dams, anicuts, hydel projects, blocking of waterways, upstream pollution, sand mining, global warming, pollution and such other anthropogenic activities making the rivers vulnerable for death. Many rivers no longer reaches the sea.

The Netravati River or Netravathi Nadi has its origins at Bangrabalige valley, Yelaneeru Ghat in Kudremukh in Chikkamagalur district of Karnataka, India. This river flows through the famous pilgrimage place Dharmasthala and is considered one of the holy rivers of India. It merges with the Kumaradhara river at Uppinangadi before flowing to the Arabian Sea, south of Mangalore city. This river is the main source of water to Bantwal and Mangalore. The Netravati railway bridge is one of the known bridges which serve as the gateway to Mangalore.

Earlier in the last century it was known as the Bantwal River; the important town of Bantwal is seen on its banks. A reference to the river Netravati, as unfordable during the South-West Monsoon, can be seen in the *Gazetteer of Southern India*, published in 1855. It has an apparent breadth of about 200 yards with a bed encumbered by large rocky masses, chiefly of hornblende rock, containing spangles of mica and small garnets. Sienites also occur, as fragments of a beautiful pegmatite with flesh colored feldspar are seen in the beds of rivulets. The Netravati River is navigable by small country craft for many miles. The train Netravati Express, passing through Mangalore, is named after this river.

Often Bantwal has been submerged in bygone years during the monsoon by overflowing river Netravati. Many residents left the town, settled elsewhere, and prospered. The major floods remembered by the elders of the town occurred in 1928 and 1974.

## Course

Netravati river originates in the Western Ghats in Bangrabalike forest Valley in Yellaner Ghats of Kudremukha range in Karnataka State. The river drains an area of about 1,353 square miles.<sup>[1]</sup> The Kumaradhara River which originates in the Subramanya range of Western Ghats, meets the Netravati River at Uppinangadi. Every year nearly around more than 100 tmc of water flowing to Arabian sea.<sup>[2]</sup>

## **Agriculture and fishing**

The main occupations of the people who have settled on the bank of this river are agriculture and fishing. This river is the main source of water for agriculture during off monsoon. The river was rich in aquatic life. Majority of the people settling around the river have practiced fishing which provides sustenance to many families. People also trade fine sand which is used for construction. This sand is taken from the bed of the river by various means. The mechanised means of removal deepen the river up to 20 feet and destroyed the fauna and flora significantly.

## **Controversy**

Many mini hydroelectric projects and diversion project have been set up on this river, causing damage to environment of this ecologically sensitive region; and more projects are in the planning stages and some are implemented. A recent controversy has arisen, from a proposal to change the path of the river so that the dry land areas above the Western Ghats can be irrigated.<sup>[3]</sup> Changing the path of the river might lead to unforeseen environmental disasters according to some experts. For example, it might affect the marine life due to reduced outflow of freshwater and the subsequent decline of nutrients flowing into the sea. This apart from the loss in contiguity of rainforests in Western Ghats.<sup>[4]</sup> Also some opposition has arisen to the proposed hydroelectric projects on Netravati river.<sup>[5]</sup>

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## **Gurupur River**

The Gurupura River (also known as Pachamagaru River, Phalguni River or Kulur River<sup>[1]</sup>) is a river in the Karnataka state of India.<sup>[2]</sup> It originates in the Western Ghats and is a tributary of the Netravati River, which empties into the Arabian Sea, south of Mangalore. It gets its name from the town Gurupura, situated near Mangalore. The New Mangalore Port and Mangalore Chemicals and Fertilizers are situated on its northern banks. Once upon a time it formed northern boundary of Mangalore city along with Netravati River as southern boundary but currently it forms the boundary only for the central part of Mangalore due to the growth of the city beyond these river boundaries.

### **Confluence:**

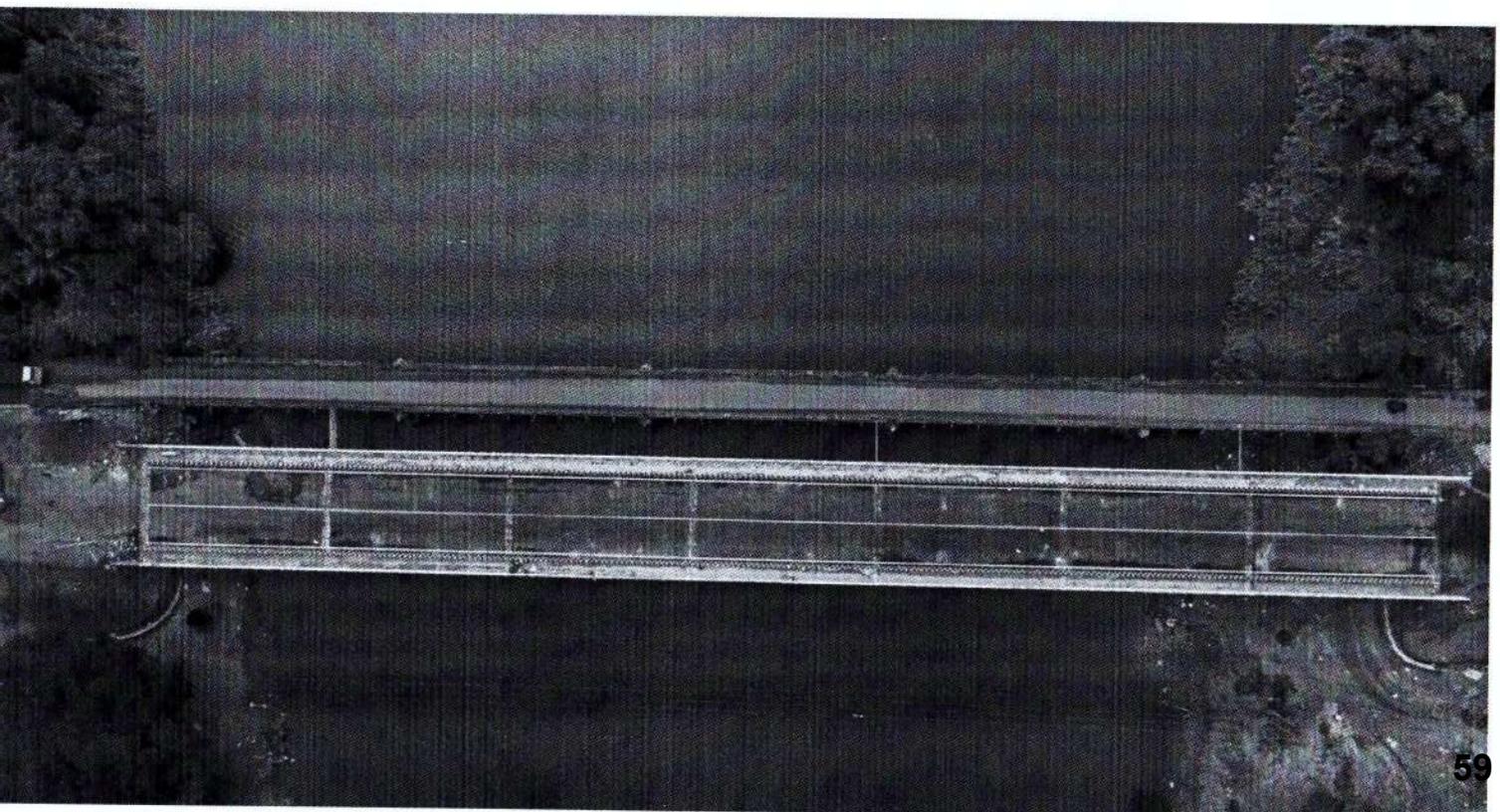
Both the rivers join the Arabian Sea at Bengre. Old Bunder-the fish landing centre is fully crowded with 1200+ boats. Up to Gurupur bridge along the Gurupur river and up to Tumbe dam in the Netravati River, there is an influence of sea water. Because of the compounding nutrient deposition at the tail end of the river, water is turbid, brackish and highly dynamic.

## Importance of River Mouth:

River mouth are important parts from the point of fisheries, particularly, if they are connected with the harbors and fish landing centre. many artisanal fishermen go for fish. The fishing vessels take entry to the sea through the bar mouth. All along the river course, the fishermen make their livelihood by catching the fish using local gears, collect clams, oysters and mussels and use it for their consumption and sell the surplus. The slow changes in the demography, pollution, sand removal, over exploitation and such other anthropogenic activities are impacting the ecosystem. And if this continues, they reach the irreversible point and the entire ecosystem becomes barren and dead.

## Facts:

- Based on the established knowledge base and the research evidences, it is a fact that sand removal and sand mining in any aquatic systems will have significant effect on aquatic organisms and water quality parameters.
- Removal of sand affects water quality, disturbs benthos, breeding grounds, feeding grounds and affects the settlement of mussel and oysters.
- Primarily, the removal of sand in the shallow waters of river bends and shores will affect the benthos which is the major source of nutrient for primary producers (Phytoplankton) and takes minimum of 2-3 years for re-establishment. When bottom of the food pyramid is affected, all trophic level will be affected and reduce the food production at all levels.
- However, some quantities of sand has to be removed judiciously, otherwise it will deposit at different points of river mouth and affect the movement of boats in the bar mouth.
- The community claim that the abundance of few fish species is reduced significantly.



## The Present Community Issues:

In the recent past, there is a shortage of sand and created huge demand across the country including the coastal districts. The enterprising investors started removing sand in the rivers in the tail end. Looking at the lucrateness, many started involving in this activity that led to the loss of biodiversity. Though there are scientific evidences, there are no systematic studies in the sites which are at stake. In this context, in order to have a status report and surveillance on the dynamic system, the present project is proposed with the following objectives:

### Objectives of the study:

- To have the bench mark study on the status of the selected river mouths
- Continuous monitoring of water quality, fauna and flora
- To promote management measures for rejuvenation of the sites
- Participatory livelihood promotion through ranching, training, alternative activities etc.

### Proposed Management strategies:

1. Bathymetric studies and assessment of sand deposition (position, area, quantity, time and space)
2. Estimation of sand quantity that can remove in a season (Quantification of effort, time and area)
3. Ban period for redeposition and recovery of biological activity
4. Marking of river bends and shallow waters as "**Protected Areas**" using floating buoys

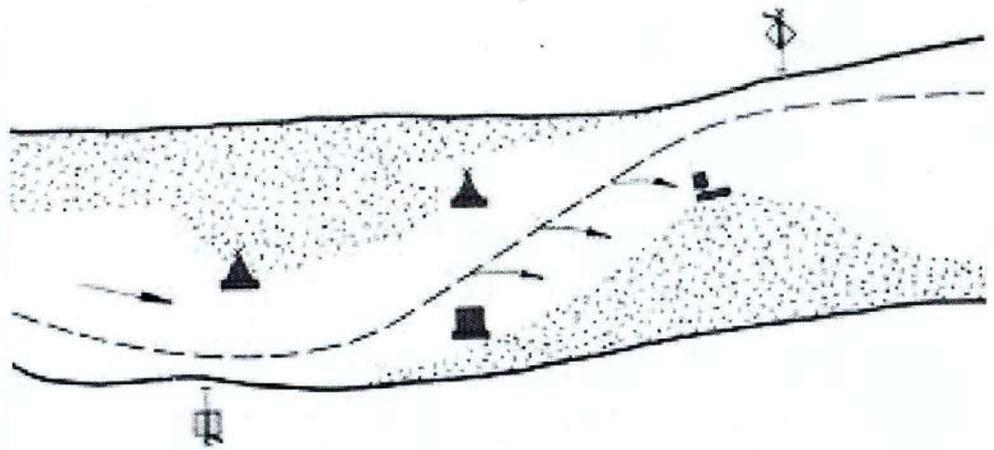
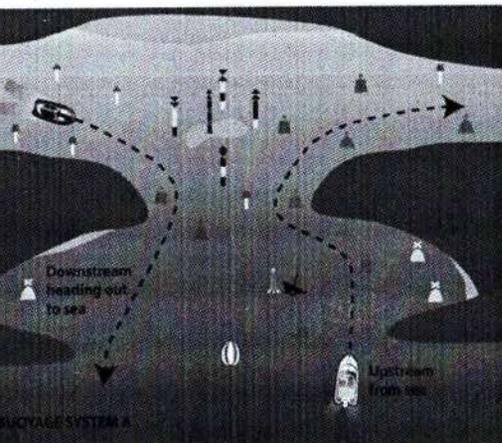
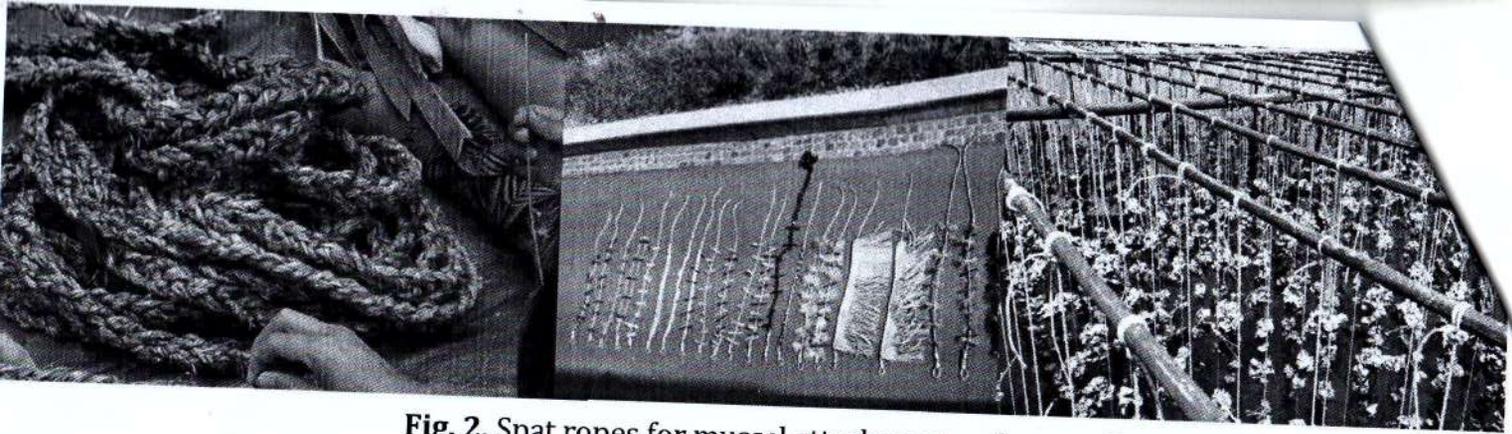


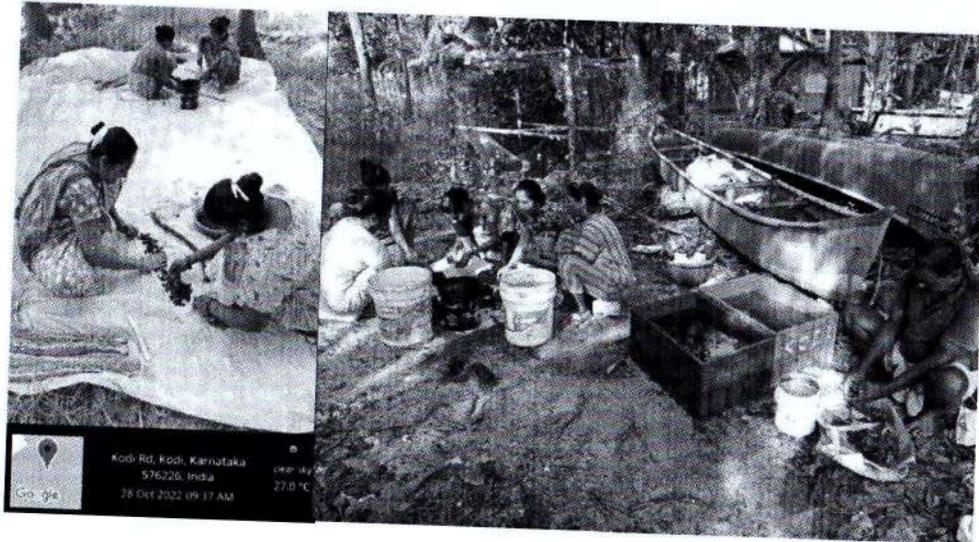
Fig. 1. Example of making by use of buoys

5. Ranching of brackishwater fishes like sea bass, Chanos, Etroplus, shrimp, spats mussel and oysters
6. Establishment of substrates like spat ladders, oyster web etc. in the protected areas.



**Fig. 2.** Spat ropes for mussel attachment and oyster Ropes

7. Creating awareness among all stakeholders and promotion of community farming as an alternative livelihood



**Fig. 3.** A team of women involved in mussel farming at Kundapur, Karnataka in the river mouth of Seethanadi river

8. Bench mark study on socio-economic conditions of the community dependant on these resources and continuous monitoring of environment.
9. Imposing **"Environment Social Responsibility (ESR)"** fund to the sand removers and allocation of such funds for research and monitoring.
10. In order to magnitude and establish evidence based and empirical based data on the consequences of sand removal on the biodiversity, a systematic study has to be undertaken.

### References:

- Minutes of proceedings of the Institution of Civil Engineers, Volume 174. Institution of Civil Engineers (Great Britain). p. 41.
- Sir William Wilson Hunter. The imperial gazetteer of India, Volume 5. p. 471.
- Minister promises help for Netravati scheme". The Hindu. Chennai, India. 20 July 2009. Archived from the original on 25 May 2010. Retrieved 1 February 2010.
- Sapping Lifelines. Deccan Herald. Bangalore, India. 20 July 2001. Retrieved 20 July 2001.
- Netravati diversion project opposed". The Hindu. Archived from the original on 25 January 2013. Retrieved 1 February 2010.

# Plan of Work

Deliverables	January 2023											
	1	2	3	4	5	6	7	8	9	10	11	12
Socio-economic Survey, bathymetric studies	■	■										
Community training, marking of river bends and shallows, marking of ecologically micro sensitive areas		■	■	■								
community training on alternative livelihood activities (Monsoon)					■	■	■	■				
River ranching, installation of artificial substrates, second bathymetric studies							■	■	■	■	■	■

- Monthly soil and water quality analysis from the selected stations will be carried out
- Fishing efforts and sand removal efforts will be documented.
- Fish catch composition of the artisanal fishermen will be documented

Photo Source: SAGE



## Estimated Budget

Sl No.	Particulars	Unit cost (₹)	Total (₹)
1.	Travel (Vehicle hire charges and traveling allowance for the collection of primary and secondary data, sampling) Monthly X 12 months	15,000	1,80,000
2.	River ranching with seabass, Etroplus, shrimp etc. ropes for spats and marking buoys	3,00,000	3,00,000
3.	Bathymetric studies Boat hire and Fishing charges (Twice a year)	1,50,000	3,00,000
4.	Cost of fish samples and Chemicals	1,00,000	1,00,000
5.	Contingencies (Stationeries, Postages, telephone and internet services)	50,000	50,000
6.	Work contract for 12 months	10,000	1,20,000
7.	Community training, stakeholders meeting (3-4 No.)	1,00,000	1,00,000
<b>Total (₹)</b>		<b>22,00,000</b>	<b>11,50,000</b>

(Rupees Eleven Lakhs and Fifty Thousand only)

Date: 04.12.2022

Place: Mangalore

  
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