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BEFORE THE NATIONAL GREEN TRIBUNAL
(EASTERN ZONE BENCH, KOLKATA)
ORIGINAL APPLICATION NO. 70/2024/EZ

NEWS ITEM TITLED "RISING SEA, SHRINKING SANDS ERODE
VIBRANCY OF GANGA SAGAR MELA" APPEARING IN THE HINDU
DATED 15.01.2024,Applicant(s)

-Versus

WEST BENGAL STATE COASTAL ZONE MANAGEMENT AUTHORITY &



.....Respondent(s)

STATUS REPORT IN THE FORM OF AFFIDAVIT BY THE ADDITIONAL
CHIEF SECRETARY, ENVIRONMENT DEPARTMENT, GOVERNMENT OF
WEST BENGAL IN PURSUANT OF THE ORDER OF THE HON'BLE
NATIONAL GREEN TRIBUNAL, EASTERN ZONAL BENCH DATED
13.05.2025

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Filed by

Sibajyoti Chakrobarti
(Advocate.
STATE OF WEST BENGAL)

Advocate

Calcutta High Court

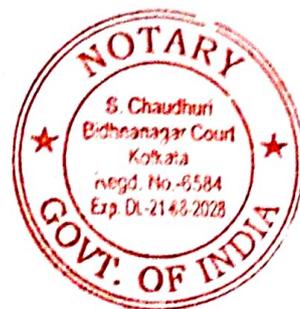
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SL. NO. 241/2025

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BEFORE THE NATIONAL GREEN TRIBUNAL
(EASTERN ZONE BENCH, KOLKATA)
ORIGINAL APPLICATION NO. 70/2024/EZ



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VIBRANCY OF GANGA SAGAR MELA" APPEARING IN THE HINDU
DATED 15.01.2024

.....Applicant(s)

-Versus

WEST BENGAL STATE COASTAL ZONE MANAGEMENT AUTHORITY &
ORS.

BEFORE THE NOTARY PUBLIC
AT BIDHANNAGAR
DIST.-NORTH 24 PARGANAS

.....Respondent(s)

STATUS REPORT IN THE FORM OF AFFIDAVIT BY THE ADDITIONAL
CHIEF SECRETARY, ENVIRONMENT DEPARTMENT, GOVERNMENT OF
WEST BENGAL IN PURSUANT OF THE ORDER OF THE HON'BLE
NATIONAL GREEN TRIBUNAL, EASTERN ZONAL BENCH DATED
13.05.2025

Most Respectfully Sheweth

I, Smt. Roshni Sen, D/o- Late Saibal Kanti Sen , aged about 58 years, by
occupation service, having office at Prani Sampad Bhawan, 5th Floor, LB-2,
Sector III, Salt Lake, Kolkata- 700106, do hereby solemnly affirm and declare as
follows:-

1. That, I am holding the post of Additional Chief Secretary, Environment
Department, Government of West Bengal and I have made myself well acquainted
with the facts and circumstances of instant case and have gone through the
documents and reports pertaining to the subject matter of the instant Original

12 AUG 2025

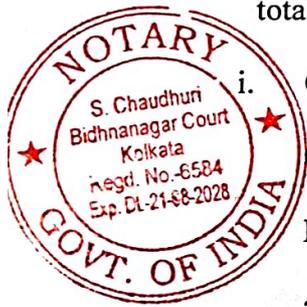
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Application 70/2024/EZ. Hence, I am competent to affirm the instant affidavit before the Hon'ble Tribunal.

2. That, this affidavit is being affirmed in pursuant to the solemn Order passed by this Hon'ble Tribunal, Eastern Zonal Bench dated 13.05.2025 and 30.07.2025 wherein there is direction upon the Additional Chief Secretary, Department of Environment to file personal affidavit stating the actions /steps taken by the State Government for protection of the coast-line from erosion.

3. That the Irrigation & Waterways Department has send an action taken report to protect the coast line from soil erosion at Sagar Island which is stated as follows:

I. Total five (5) numbers of works are ongoing for a length of 4.68 Km with total cost of about Rs. 6184.10 Lakh.



- i. Construction of Sundarban Embankment for a length of 620.00 m from Ch. 22.50 to Ch. 23.125 km at Mouza - Chemaguri facing Bay of Bengal in Block and P.S-Sagar, District - South 24 Parganas with approved cost of Rs. 2020.48 Lakh.
- ii. Construction of Embankment along right bank of river Muriganga from 15.950 Km to 16.950 Km (length-1000m) within Mouza- Bankimnagar, Block and P.S.- Sagar, District- South 24 Parganas with approved cost of Rs. 2767.66 lakh.
- iii. Anti-erosion work with dumping of porcupine cages and circular sausage in between Ch. 0.85 Km to Ch. 2.12 Km for a length of 600 m along the left bank of river Hooghly at Mouza- Sapkhali, Block and P.S.- Sagar, District- South 24 Parganas with approved cost of Rs. 363.85 lakh.
- iv. Sea shore protection work by Nature Based Solution (NBS) from sand dunes beside Sankaracharya Ashram towards Tapoban to wooden cottage at PR-5 in front of Kapil Muni Ashram (Length-1190 m) at

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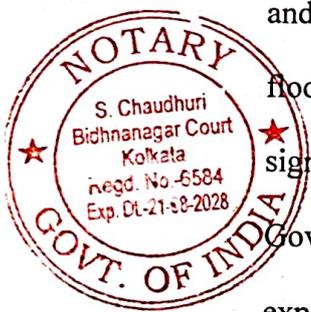


Gangasagar within Block and P.S. -Sagar, District- South 24 Parganas with approved cost of Rs. 430.75 lakh.

- v. Anti-erosion work with dumping of porcupine cages and circular sausage in between Ch. 0.85 Km to Ch. 2.12 Km for a length of 1270 m along the left bank of river Hooghly at Mouza - Sapkhali, Block and P.S.- Sagar, District- South 24 Parganas with approved cost of Rs. 601.36 lakh.(under tender process).

II. As a part of technical collaboration between Government of West Bengal and the Government of Netherlands for embankment strengthening and flood mitigation in Sundarbans in West Bengal, a letter of Intent was signed on 20.04.2022 between the Government of West Bengal and the Government of Netherlands. On the strength of that agreement, river experts of the Netherlands have conducted studies on vulnerable islands of the Sunderbans including Sagar Islands to review the technical specifications of Sundarban embankments, particularly the applicability of Nature Based Solutions. As per their suggestions, a sea shore protection work by Nature Based Solutions of length of 1190 m is ongoing at a cost of Rs 4.31 crore, aiming at attenuation of wave before it strikes the shore.

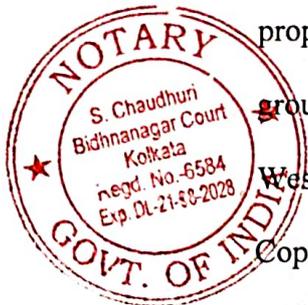
III. The State of West Bengal has planned to implement a flood management project namely “ Lower Sundarban- Sustainably Harnessing Ocean Resources and Economy (SHORE) Program” at 39 vulnerable islands in Sundarbans, including Sagar Island. The State Cabinet has approved the project on 05.03.2024 at a cost of Rs. 4100 Crore for implementation in 5 years period. The 50 percent of the project cost earmarked for embankment /sea dyke construction will be implemented by the Irrigation & Waterways Department. The vulnerability assessment of the existing embankment and erosion prone zones of the said 39 islands including Sagar Island is



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ongoing. The appraisal of the Preliminary Project Report (PPR) at Department of Economic Affairs, Ministry of Finance, Government of India and at other Central Ministries is also ongoing. The project is proposed to be implemented with loan from the World Bank and can be grounded only after signing of loan agreement between Government of West Bengal and the World Bank.



Copy of the report of the Irrigation & Waterways Department, Government of West Bengal is marked and annexed herewith as **Annexure R/1**.

4. That the reply is true to the best of my knowledge and belief, which I derived from the office record.

That it is therefore respectfully prayed that the Hon'ble Tribunal may pass such order/orders as it deems fit and proper in the interest of justice.

Identified by me
Sibojyoti Chakrabarti
Advocate.
STATE OF WEST BENGAL 12.08.2025

Roshni Sen
DEPONENT



VERIFICATION

I, Smt. Roshni Sen, Additional Chief Secretary, Government of West Bengal do hereby solemnly affirm and declare that the contents of the report in the form of affidavit are true to the best of my knowledge and belief. No part of the Report is false and nothing has been concealed.

Verified at Kolkata this 12th day of August, 2025.

S. CHAUDHURI
★ NOTARY ★
GOVT. OF INDIA
Regd. No.-6584/08
Bidhannagar Court
Dist.-North 24 Pgs

Identified by me
Sibojyoti Chakrabarti
Advocate.
STATE OF WEST BENGAL 12.08.2025

Roshni Sen
DEPONENT

12 AUG 2025

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Irrigation & Waterways Department
Jalasampad Bhaban, 3rd Floor, Western Block
Bidhannagar, Salt Lake City 700091

Memo No.2389 – IE-2L-04/2024

Dated, 5th August, 2025

From: Joint Secretary to the
Government of West Bengal

To: Additional Chief Secretary
Environment Department
Government of West Bengal
Prani Sampad Bhawan, 5th floor
LB-2, Sector III, Salt Lake – 700 106

Sub: *Submission of Action Taken Report in connection with OA No.70/2024/EZ (News item titled "Rising Sea, shrinking sands erodes vibrancy of Ganga Sagar Mela" appearing in the Hindu dated 15.01.2024).*

Ref: Your Letter No.1316/ENV/15016/3/2024 dated 03.07.2025.

Madam,

With reference to the subject captioned above and reference, I am directed to submit an Action Taken Report, which covers the actions taken to protect the coast line from erosion at Sagar Island by the Irrigation & Waterways Department, which is relevant to the subject matter of OA No.70/2024/EZ before the Hon'ble National Green Tribunal, Eastern Zone Bench, Kolkata, as stated below:

I. Works which are ongoing: (Total no. of ongoing works: 5, Total length of work: 4.68 Km, Total cost: Rs.6184.10 Lakh)

1.1. Construction of Sundarban embankment for a length of 620.00 m from Ch.22.50 to Ch.23.125 Km at Mouza: Chemaguri facing Bay of Bengal in Block & P.S. Sagar, District: South 24 Parganas. Approved Cost Rs.2020.48 Lakh.



1.2. Construction of Embankment along right bank of river Muriganga from 15.950 Km to 16.950 Km (length – 1000 m) within Mouza: Bankimnagar, Block & P.S. Sagar, District: South 24 Parganas. Approved Cost Rs.2767.66 Lakh.

1.3. Anti-erosion work with dumping of porcupine cages and circular sausage in between Ch.0.85 Km to Ch.2.12 Km for a length of 600 m along the left bank of river Hooghly at Mouza: Sapkhali, Block & P.S. Sagar, District: South 24 Parganas. Approved Cost Rs.363.85 Lakh.

1.4. Sea shore protection work by Nature Based Solution (NBS) from sand dunes beside Sankaracharya Ashram towards Tapoban to wooden cottage at PR-5 in front of Kapil Muni Ashram (length – 1190 m) at Gangasagar within Block & P.S. Sagar, District: South 24 Parganas. Approved Cost Rs.430.75 Lakh.

1.5. Anti-erosion work with dumping of porcupine cages and circular sausage in between Ch.0.85 Km to Ch.2.12 Km for a length of 1270 m along the left bank of river Hooghly at Mouza: Sapkhali, Block & P.S. Sagar, District: South 24 Parganas. Approved Cost Rs.601.36 Lakh (under tender process).

II. As a part of technical collaboration between Government of West Bengal and the Government of the Netherlands for embankment strengthening and flood mitigation in Sundarbans in West Bengal a Letter of Intent was signed on 20.04.2022 (enclosed as Annexure I) between Government of West Bengal and the Government of the Netherlands. On the strength of that agreement river experts of the Netherlands have conducted studies on vulnerable islands of the Sundarbans including Sagar Island to review the technical specifications of Sundarban embankments, particularly the applicability of Nature Based Solutions. As per their suggestions, a sea shore protection work by Nature Based Solutions of length 1190 m is ongoing at a cost of Rs.4.31 Crore, aiming at attenuation of wave before it strikes the shore, as mentioned at Sl.1.4 above.

III, The State Government has planned to implement a flood management project, namely, “Lower Sundarban – Sustainably Harnessing Ocean Resources and Economy (SHORE) Program” at 39 vulnerable islands in Sundarbans, including Sagar Island. The State Cabinet has approved the project on 05.03.2024 at a cost of Rs.4100 Crore for implementation in 5 years period. The 50% of the project cost is earmarked for embankment/ sea dyke construction, which will be implemented by Irrigation & Waterways Department. The vulnerability assessment of the existing embankment and erosion prone zones of the said 39 islands, including Sagar Island, is going on. The appraisal of the Preliminary Project Report (PPR) at Department of Economic Affairs, Ministry of Finance, Government of India and at other Central Ministries, is also going on. The project is proposed to be implemented with loan from World Bank (70% of the project cost) and

can be grounded only after signing of loan agreement between Government of West Bengal and World Bank.

This is for your kind information and necessary action.

Yours faithfully,

Enclo: As stated

(B. Mukhopadhyay)
Joint Secretary to the
Government of West Bengal

Memo No.2389/1/(2) – IE

Dated, 5th August, 2025

Copy forwarded for information to the:

1. Pr. P.S. to Additional Chief Secretary
Irrigation & Waterways Department
Government of West Bengal
Jalasampad Bhavan, 1st Floor, Salt Lake - 700 091
 2. Sr. P.A. to Secretary
Irrigation & Waterways Department
Government of West Bengal
Jalasampad Bhavan, 1st Floor, Salt Lake - 700 091
- Additional Chief Secretary and Secretary may please be kept apprised.

(B. Mukhopadhyay)
Joint Secretary to the
Government of West Bengal

Prabhat Kumar Mishra, IAS
Principal Secretary



Government of West Bengal
Department of Irrigation & Waterways

No.53-PS

Date: 9th March, 2022

To,
Mr. Joost Geijer,
Head: Economic Affairs
Government of The Netherlands

Dear sir,

Kindly recall our discussion regarding possible technical collaboration between Government of the Netherlands and Government of West Bengal for embankment strengthening and flood mitigation in Sundarban in West Bengal.

Sundarban is spread over 9630 sq. km. in India with over 4.5 million residents. The area has been reclaimed by construction of mostly earthen embankments on the tidal rivers flowing into the Bay of Bengal. Due to the meteorological changes and the sea level rise due to global warming, there have been coastal erosions and breaches in the embankments in Sundarban. The area has faced mass scale devastation due to repeated cyclones in the past. The area also suffers from high level of salinity due to tidal rivers which has an adverse impact on agriculture and related livelihood opportunities. As a result, people in Sundarban live in a high state of vulnerability.

In this context, there have been several interventions by Government of West Bengal to strengthen the embankments and stop saline water ingress. However, it appears that a collaboration of Government of West Bengal with Government of the Netherlands will be helpful in bridging the knowledge gap in the arena of sea dyke and embankment design. Scientific literature in this domain is limited and we are very keen to learn from the Netherlands experience. Government of West Bengal has made provision of adequate funds for such works in the State budget. However, such interventions have resulted into limited success in the past. Construction of resilient embankments will help in expanding the overall availability of fresh water in Sundarban and reduce salinity. The Netherlands also has long experience in the field of agriculture and aquaculture which will be very

JALSAMPAD BHAWAN, Block DF, Bidhan Nagar, Kolkata - 700 091
Telephone: +91 23215616 / 23340251 (F). e-mail : iwd.prsecy@gmail.com

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helpful in developing an integrated water management plan for the area as the next step.

I would like to also bring to your kind notice that we have had two visits of Mr. Pieter-Paul Van Meel under the PUM mission in the past. His insights into rainwater harvesting through re-excavation of creeks in the area has helped us in scaling up such work in Sundarban. We have so far re-excavated more than 500 km of old silted creeks in the area. This is changing the landscape in Sundarban. However, the risk of breach of embankments continues which is a source of big worry. The proposed collaboration is the logical step forward which will strengthen the embankments, further improve freshwater availability, help in flood mitigation and together with re-excavation of creeks will unlock incredible opportunity of livelihood generation in the area.

I look forward to hearing from you in this regard. If you so wish, we can have a discussion to finalise the contours of the collaboration.

Yours sincerely,

Prabhat Kumar Mishra
Principal Secretary
Government of West Bengal

Copy:

Mr. Marten Van den Burg
H.E. the Ambassador of The Netherlands to India
New Delhi

Principal Secretary
Government of West Bengal



LETTER OF INTENT

BETWEEN THE

Irrigation and Waterways Department of the Government of West Bengal, India

AND

The Embassy of the Kingdom of The Netherlands to India

ON CO-OPERATION

IN THE FIELD OF INTEGRATED WATER SECURITY FOR SUSTAINABLE DEVELOPMENT OF THE WEST BENGAL SUNDARBANS DELTA AND COASTAL AREA OF DIGHA

PREAMBLE

The Government of West Bengal of The Republic of India represented by Principal Secretary, Irrigation and Waterways Department

and the Embassy of the Kingdom of The Netherlands in New Delhi, India

(hereinafter jointly referred to as the "Signatories" and

separately as a "Signatory");

AIMING to further strengthen the friendly relationship between the Signatories on the basis of equality, mutual benefits and mutual respect;

CONSIDERING (1) that Government of West Bengal has requested technical assistance from the Government of the Netherlands to provide Dutch and International expertise on improving dike design and construction, understanding of morphological processes in the West Bengal Sundarbans delta and coastal areas of Digha, coastal protection measures and eco-engineering (i.e. mangrove restoration and regeneration) and (2) the signatories have agreed on a joint technical mission, Flood Mitigation and Water Security DRR mission Sundarbans and Digha, to West Bengal taking place from April 17th till April 28th 2022;

ACKNOWLEDGING that this will also require long term research related to river morphology and siltation pattern in Sunderban and Digha areas;

EXPRESSING joint interest in investigating opportunities for further development of a long-term co-operation in the field of Integrated Delta Management and Development of the Indian Sundarbans (hereinafter referred to as Sundarbans Delta Development (SDD)) and Digha, and its sustainable implementation through cooperation in the fields of water security, flood mitigation, water resilience, coastal protection, delta morphology, agriculture, aquaculture, bio-diversity, cost recovery, inclusiveness, and damage prevention techniques;

UNDERSTANDING of the urgent need for the Indian Sundarbans and coastal areas of Digha for a coherent, sustainable, collaborative and holistic approach for its water security, environmental and socio-economic development based on a rational economic thinking and innovative solutions with inclusiveness in order to achieve tangible and sustainable outcomes;

STATING THEIR WILLINGNESS to enter discussions on formulating a realistic framework as follow up of the Flood Mitigation and Water Security DRR mission Sundarbans and Digha(DRR-mission) and thus to work towards enhanced integrated water safety and sustainability in the State of West Bengal of the Republic of India and the Indian Sundarbans and Digha in particular including facilitating a collaboration of a Dutch university of repute with the River Research Institute (RRI) under the Irrigation and Waterways department:

Have expressed to cooperate to take steps to pursue follow-up with the drafting of a two year program for technical cooperation starting from April, 2022 based on the recommendations of the DRR-mission.

This letter of Intent entails no financial commitment on either signatory. Unless the Signatories mutually decide otherwise, each Signatory will finance its own expenses arising from the cooperation activities.

The foregoing record represents the understandings reached between the Signatories on matters referred to here above.

Signed at Kolkata, State of West Bengal, India Republic on Wednesday, April 20th in the year 2022.

Representative of the Embassy of the Kingdom of The Netherlands in India

Principal Secretary, Irrigation and Waterways Department

On behalf of the State of West Bengal

Prabhat Kumar Mishra, IAS
Principal Secretary
Irrigation & Waterways Department
Govt. of West Bengal



LETTER OF INTENT

BETWEEN THE

Irrigation and Waterways Department of the Government of West Bengal, India

AND

The Embassy of the Kingdom of The Netherlands to India

ON CO-OPERATION

IN THE FIELD OF INTEGRATED WATER SECURITY FOR SUSTAINABLE DEVELOPMENT OF THE WEST BENGAL SUNDARBANS DELTA AND COASTAL AREA OF DIGHA

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Signed at Kolkata, State of West Bengal, India Republic on Thursday April 21st in the year 2022.

Representative of the Embassy of the Kingdom of The Netherlands in India

Representative of the State of West Bengal