



Bangladesh Inland Water Transport Authority (BIWTA)





Consultancy Services for Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

> Bangladesh Regional Waterway Transport Project-1 BRWTP-S1A







#### **EXECUTIVE SUMMARY**

## **Background**

The Government of Bangladesh has prioritized developing and maintaining the Dhaka-Chittagong corridor's Class I Route and connected Class II and III Routes. To support this effort, the "Bangladesh Regional Waterway Transport Project-1" (BRWTP-1) has been initiated with financial assistance from the World Bank. The project consists of three major components, with Component 1 focusing on dredging and maintaining river corridors and ferry routes through performance-based contracts.

The supervision and monitoring of the project, managed by the consulting firm JPZ-DEMAS-JCL (S1A), began in December 2022. The Bangladesh Inland Water Transport Authority (BIWTA), under the Ministry of Shipping (MoS), is responsible for implementation, with the World Bank financing the activities.

The dredging works are divided into two lots:

- Lot-2: Contractor GULF-COBLA KARNAFULY JV, covering Routes 3, 4, 5, 6, 7, 8, 9, 10, and 11.
- Lot-3: Contractor DHARTI-BANGA JV, covering Routes 12, 13, 13a, 15, 16, 17, and 21.

## **Progress Summary for November 2024:**

## **Lot-2 Contractor:**

No dredging work was carried out during this reporting period. Aids to Navigation progress:

- 100 P.C. Poles and 33 Lighted Buoys are installed.
- Preparations are ongoing to install 24 Lighted Tower Beacons.
- Remote Monitoring System setup is waiting for setting up SIM card.

#### **Lot-3 Contractor:**

Capital dredging for Phase-II started at Route 21 (Laharhat–Bhedhuriya) on 10-10-2024 and at Route 13 (Alubazar–Horina) on 25-11-2024. Three dredgers have been operating during this reporting period, achieving a dredging volume of approximately 153,686 m³ during the reporting period. Aids to Navigation progress:

- 75 P.C. Poles with accessories are installed.
- 6 Lighted Buoys and 5 Lighted Tower Beacons are installed.
- Remote Monitoring System setup is pending; contractor committed the completion of the work immediately.

## **S1A Consultant Activities:**

Conducted monitoring hydrographic surveys for Phase-II:

- Lot-2: Routes 05, 06, 7&8, and 09.
- Lot-3: Routes 13, 13a, and 21.

## **Environmental, Social, and Resettlement Aspects:**

- Monitoring was conducted at Route 09 (Lot-2) and Routes 16 & 21 (Lot-3).
- Environmental test parameters were within standard limits, with no significant pollution issues detected.
- Extensive fishing activities were observed on Routes 16 & 21 due to the peak Hilsa fishing season following the ban's lifting.
- In coordination with the PIU Safeguard Monitoring team, the S1A Consultant Team prepared documentation to assess social impacts on Lot-2 and Lot-3 sites post-Phase I. A report on the prepost dike status and practices at selected disposal areas is included in Annex-III.
- Contractors were instructed to ensure compliance with Environmental and Social obligations as
  per contractual terms and World Bank Guidelines. GRM implementation and proactive field
  visits addressed potential concerns effectively.

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#### **ABBREVIATION**

AILA Association of International Lighthouse Authorities
ASCII American Standard Code for Information Interchange
BIWTA Bangladesh Inland Water Transportation Authority

BM Bench Mark

BRWTP Bangladesh Regional Waterway Transport Project I

BWDB Bangladesh Water Development Board

CD Chart Datum

CEAP Contractor's Environmental Action Plan

CSD Cutter Suction Dredger
DC District Commissioner

EIA Environmental Impact Assessment
EMP Environment Management Plan

ESHS Environment, Social, Health and Safety
ESMP Environment and Social Management Plan

GBV Gender-Based Violence

GIS Geographic Information System
GPS Global Positioning System
GRC Grievance Redress Committee
GRM Grievance Redressal Mechanism

HSE Health and Safety Expert

IALA International Association of Marine Aids and Lighthouse Authorities

IBC Idle Berthing Centre

ID Identity

IHO International Hydrographic Organization

IWT Inland Water Transport

JPZ Jurutera Perunding Zaaba

JV Joint Venture

LAD Least Available Depth
LLW Lowest Low Water

MOEF Ministry of Environment, Forest and Climate Change.

MSL Mean Sea Level
NID National Identity

OPBC Output and Performance-Based Contract

PC Poles Pre-Stressed Concrete Poles
PIU Project Implementation Unit
RAP Resettlement Action Plan
RCC Reinforced Cement Concrete

RTK-GPS Real-Time Kinematic- Global Positioning System

SOB Survey of Bangladesh
TBM Temporary Bench Mark

UTM Universal Transverse Mercator

VSS Vessel Storm Shelter

WB World Bank

WGS World Geodetic System

## CHAPTER 01: PROJECT DESCRIPTION IN A BRIEF

#### 1.1 Basic Information

Project Title : Consultancy Services for Supervision and Monitoring of

Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational

Aids along the Navigational Routes under the Contract

Source of Funding : The World Bank

Contract No. : BRWTP-S1A

Employer : Bangladesh Inland Water Transport Authority (BIWTA)

Consultant : JPZ-DEMAS-JCL JV

Date of signing the contract : 21<sup>st</sup> November 2022; Duration of Contract 66 months

Date of Commencement : 6<sup>th</sup> December 2022; Duration 66 months

Total Routes : 12 (Twelve)

Phase I: 18 Months, Phase II: 12 Months, Phase III: 36

Months

Route Nos. under dredging activities : Lot-2: 3 & 4, 5, 6, 7 & 8, 9, 10, 11

Lot-3: 12, 13 & 13a, 15 & 16, 17, 21

## LOT-2

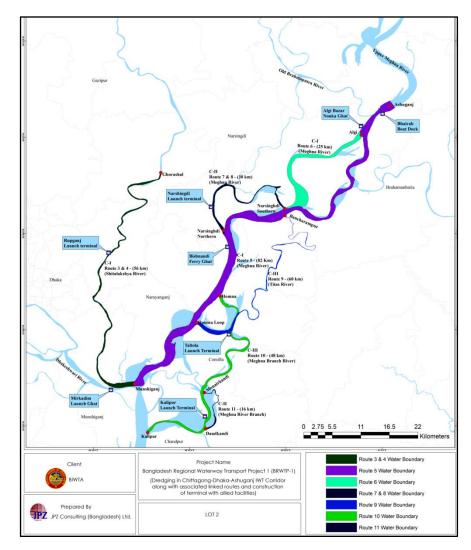


Figure 1: River Boundary Lot-2

**Table 1: River Routes Lot-2** 

Class	Route No	River/location	Length (Km)	Average width (m)	Shoal Length (km)
I	3 & 4	Shitalakshya (From Ghorashal to Munshiganj)	56	400	_
I	5	Meghna (From Ashuganj to Munshiganj)	82	1200	-
I	6	Meghna (Nabinagar Loop joining Route-5)	25	850	1.5
II	7 & 8	Meghna (Narsingdi Northern & Southern approaches)	30	450	5.8
III	III 9 Meghna (Bancharampur - Homna Loop)		60	180	19.5
III	10	Meghna (Hona-Doudkandi approach)	48	400	-
II	11	Gumti (Meghna loop approaching Dautkandi)	16	300	1.60
		Total	317		28.40

## LOT-3

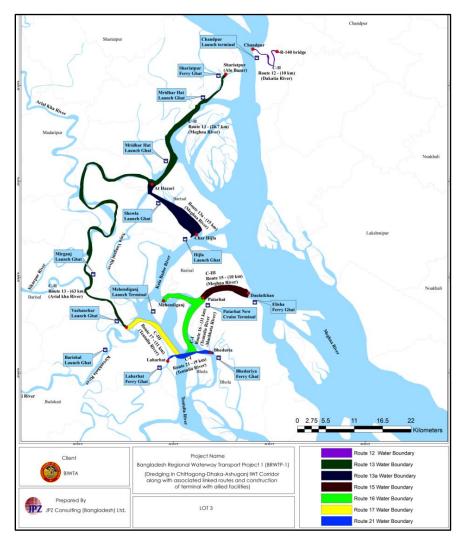


Figure 2: River Boundary, Lot-3

**Table 2: River Routes Lot-3** 

Class	Route No	River/location	Length (Km)	Average width (m)	Shoal Length (km)
II	12	Dakatia (Chandpur to Gastola Bridge)	10	400	-
II	13	Meghna and Arial Khan (Shariatpur-Bheduria)	89.7	1200	-
II	13a	Meghna (Looping root Inside Char Hisla)	15	850	-
III	15	Meghna/ Tentulia (Patarhat-Daulatkhan)	10	450	-
I	16	Meghna/Tentulia (Mehendiganj-Bheduria)	19.6	180	2.1
III	17	Tentulia (Bheduria -Bhashanchar)	11	400	-
I	21	Tentulia (Bheduria -Laharhat)	9	300	2.3
	·	Total	164.3		4.4

## CHAPTER 02: SALIENT FEATURES & MONTHLY PROGRESS

### 2.1 PROGRESS OF BRWTP-S1A:

## 2.1.1: Development and Maintenance Dredging Works and Monitoring Survey Records:

### 2.1.1.1 Lot-2:

No dredging work was carried out at the Lot-2 site in November 2024. The monitoring hydrographic survey (Multibeam) for Phase II was conducted by S1A Consultant. The following table provides details of all the survey work conducted by S1A Consultant during this period in November.

Table 3: Monitoring hydrographic survey (Multibeam) work for Phase-II done by S1A Consultant

Date	Route No	Location	Chainage	Remarks
30-October-14-	Route 05	Meghna(Ashuganj to	0+000 to 86+700	Monitoring
November 2024		Munshiganj)		hydrographic survey
				(Multibeam)
25-November to 29-	Route 09	Meghna (Bancharampur to	20+300 to 57+750	Joint Monitoring
November 2024		Homna Loop).		hydrographic survey
				work (singlebeam &
				multibeam)
29-November to 30-	Route 07&08	Meghna (Narsingdi	5+750 to 28+000	(Multibeam)
November 2024		Northern & Southern		
		approaches).		
30-November 2024	Route 06	Meghna (Nabinagar Loop	0+000 to 27+200	(Multibeam)
		joining route 5).		

### 2.1.1.2 Lot-3:

In November 2024 Survey work has done by BRWTP-S1A at River Route 13, 13a and 21 of Lot-3 Site. Following Table illustrated detail of the survey work.

Table 4: Survey work for Phase-II done by BRWTP-S1A- Lot-3

Date	Route No	Location	Chainage	Remarks
18 November 2024 &	Route 13	Meghna and Arial Khan	0+000 to 91+000	Monitoring survey
22 November 2024 to				work for phase-II
30 November, 2024				
25 November 2024	Route 13	Meghna and Arial Khan	0+250 to 0+800	Engineering survey
				work for phase-II
25 November 2024	Route 13A	Char Hizla looping	0+000 to 16+200	Monitoring survey
				work for phase-II
21 November 2024	Route 21	Tentulia (Laharhat to	0+000 to 0+600	Monitoring survey
		Bheduriya)		work for phase-II:
13 November 2024		Tentulia (Laharhat to	8+300 to 6+200	Engineering survey
		Bheduriya)		work for phase-II

Capital dredging for phase-II started at Route 21 (Laharhat – Bhedhuriya) on dated 10-10-2024 and at Route 13 (Alubazar – Horina) on dated 25-11-2024. During November 2024, three dredgers (Banga Jamuna, Banga Shitalakkhya, and Banga Padma) were operating on Route No. 21 and Route No. 13. The total Cumulative Dredging Volume up to 30<sup>th</sup> November **153,686 m³** (Approx.). Detail Table is in Annexure I.

## 2.1.1.3 Status Report on Navigational Aids Installation at Dredging Sites:

### Lot 02:

All 100 (One Hundred) numbers of P.C. Poles are installed with required top marks. Found to be satisfactory during a joint team comprising PIU, Superintendence Committee for Aids to Navigation & BRWTP-S1A visit along the designated routes under Lot-02 as per Contract BRWTP-W1A- Lot-02

All 33 Lighted Buoys of various sizes are installed with required Top Marks & required color of light along the designated routes under Lot-02 as per contract BEWTP-W1A 02.

Arrangements & preparations are being made to install 24 numbers of Lighted Tower Beacons along designated routes under Lot-02.

Arrangement to set up The Remote Monitoring System are made ready as reported by the contractor for Lot-02

### Lot-03:

All 75 (Seventy Five) numbers P.C. Poles with required accessory already installed. On joint inspection found to be satisfactory.

All 06 (Six) Lighted Buoys with necessary mountings & lights are anchored in places as required by the end users(C&P Department, BIWTA) & Superintendence Committee for Aids to Navigation & also as per contract BRWTP-W1A-Lot-03.

All 05(Five) numbers Lighted Tower Beacons are installed with lights.

Remote Monitoring System as in Contract Agreement not yet attended. The contractor for Lot-03 promised in writing to complete the job at the soonest

#### 2.1.2 Environmental Quality Assessment:

The S1A team reviewed the environmental data provided by the Contractors' monitoring team. For this month (November 2024), monthly monitoring was conducted at Route 09 Bancharampur/Homna Loop named Salimganj under Lot-2, as well as River Routes 16 & 21 under Lot-3. The details of the sample collection locations are presented in the table below:

**Table 5: Sample Collection Locations in this month (November 2024)** 

		Lot2	Lot-3	
Month	Environmental Variables.	River Name and Sample Collection	River Name and Sample	
		Location	Collection Location	
	Ambient air quality in and			
	around the dredging site			
	Noise level quality assessments			• River Route- 16:
November,	Underwater Noise Level	• River Route-09 (Bancharampur/Homna Loop named	Meghna/Tentulia (Mehendiganj-	
2024	Surface Water Quality	Salimganj)  Salimganj)  River Route	Bheduria)	
	Riverbed Sediment		River Route-21: Tentulia  (Phaduria Laborbat)	
	Dredged Material		(Bheduria -Laharhat)	
	Aquatic Fauna (Fish, Dolphin,			
	Turtle)			

No significant air, noise, water and soil pollution issues were noted and none of the test parameters deviated from the standard limits. Additional details can be found in annex- VII. During this reporting period no visible fish mortality observed within and around the dredging site location.

Fishing activities were observed in different locations of Route 09. A total of twenty-two (22) species of

fish and three (03) species of crustaceans were observed during the fisheries survey. However, discussions with residents and fishermen in these areas confirmed that Ganges River Dolphins (*Platanista gangetica*) were usually not observed along river route 09.

In this reporting month extensive fishing activities were observed compared to previous month in Route 16 & 21 due to peak season of Hilsa fishing and fishermen trying to increase their catch as Hilsa ban period just finished. Twenty-five (25) species of fish were observed to be caught in the river route 16 & 21. In addition, five (05) species of crustacean species (prawn) were also observed to catch in the river. Dolphins were not observed near Patarhat, Bheduria dredging site. No direct observation of freshwater turtles at the dredging site, dike area and nearby area but Indian roofed turtle sometimes seen in the household ponds of kajirchar.

## 2.1.3 Social and Resettlement Aspects:

## Social and Resettlement Status for Phase-II Capital Dredging Activities up to November 2024

On 27 November 2024, based on the decisions made during the meeting between the PIU Safeguard Monitoring Team and the S1A Consultant Team held in the S1A conference room, the following documents are Prepared for understanding the changes or impacts on social aspects of Lot-2 Site after completing Phase-I timeframe. Report on Pre-Post Status of Dikes and Good and Bad Practices of few Selected Disposal Areas is attached in Annex IIA.

## Lot-2 Progress Update (Up to 30<sup>th</sup> November 2024)

**Disposal Site Identification:** A total of 74 disposal sites have been identified in Lot-2 areas, of which 67 Good Faith Agreements (GFAs) have been successfully completed following the World Bank's safeguard policy for Routes 6, 7, 8, 9, and 11. Seven sites were selected on Route 9 and operated by the district administration of Brahmanbaria.

**Dike Location Management:** In May 2024, it was decided that the Government, in coordination with PIU, BIWTA, and BRWTP-S1A, would oversee dike location selection, eliminating the need for additional GFAs on Routes 6, 7, and 8.

**PIU Directives:** The PIU informed the S1A consultant that, since the Government now manages land selection and sand procurement (as of May 2, 2024), GFAs are no longer required.

**Documentation Challenges:** The S1A consultant faced difficulty obtaining contract documents from Government offices and landowners. The consultant recommends that the PIU confirm with the Government if these documents are necessary for record-keeping.

**Land Use and Impact Analysis:** The river course in Lot 2 predominantly flows through human settlements. Most of the dike locations are situated in agricultural areas or community-used spaces. The breakdown of land use is as follows:

## Lot-3 Progress Update (Up to 30<sup>th</sup> November 2024)

**Disposal Site Identification:** Within Lot-3, 23 disposal sites have been identified. However, six dikes have not yet received the lease payments from the PIU. The S1A consultant has requested the PIU to expedite these payments to prevent grievances among the affected parties.

**Issues with Lease Agreements:** In many cases, landowners have agreed to the use of their land without formal contracts, primarily due to delays in receiving payments in previous leases. One significant

challenge is that the disposal of dredged materials often renders the land unsuitable for cultivation, requiring a waiting period of 6-8 years before it becomes usable again.

**Mitigation Measures:** To address this, a key mitigation strategy is to preserve the topsoil before depositing dredged materials. Once disposal is completed, the preserved topsoil should be reapplied over the dredged material. This approach will considerably reduce the time needed for the land to recover and be ready for agricultural use.

#### **New Dike Information for Route 21**

One (Dike 22) additional dike has been developed along the Laharhat-Bheduria route (Route 21) in sreepur Union, Mehandiganj Upazila, Barisal District:

## 2.1.3.1 Land Acquisition/Requisition/Charity for Dike Location Selection:

Information about river dredging, dredged material disposal and land-related matters is being shared with the public through consultation meetings held in local bazaars, Union Councils, villages, and schools. According to observations from the S1A expert, dike management during the first phase was not satisfactory. Lessons learned from the management of dredged material and dikes should be addressed more carefully, especially considering environmental and social aspects. On the other hand, Private land utilization through GFA was more satisfactory. But for utilization of the Government fellow land PIU should start correspondence with the competent authority of The Government of Bangladesh.

#### 2.1.3.2 Communication and Public Consultation:

Meetings and Consultations were conducted within this period regarding the dredging with the the Government administrating, PIU, and local community people for solving local community problems. The social and safeguard team of S1A Consultant has communicated at the field level with local people, local administration, and local elites regularly.

Table 6: Interaction with Clients/Contractors and other Stakeholder (November, 2024)

SN	Date	Venue	Meeting Agenda	Participants
1.	04.11.2024	PIU Conference Room	Vedio Presntation and Lot-3 Issues	PIU, S1A Consultant and Lot- 3 Contractors Representatives
2.	06.11.2024	PIU Conference Room	Development of Dredging Work of Phase-II and Hydrographic Chart.	PIU, S1A Consultant and Lot- 2& Lot-3 Contractors Representatives
3.	17.11.2024	Conference Room of JPZ	Progress meeting on Safeguard issues.	Social safeguard Expert team of PIU and S1A Consultant
4.	17.11.2024	Online Meeting	Progress meeting before visit of WB Mission.	PIU, S1A Consultant and Lot-2 Contractors representatives.
5.	19.11.2024	PIU Conference Room	Development of Dredging Work of Phase-II and Completion of Phase-I, Submission of CEMP, DDMP, etc.	PIU and S1A Consultant representatives.
6.	20.11.2024	Conference Room of JPZ	In-house coordination meeting on Pre-Hydrographic Survey of Phase-II at Lot-2 site.	S1A Consultant Team.
7.	27.11.2024	Conference Room of JPZ	Safeguard and monitoring meeting with safeguard team of PIU	Safeguard team of PIU and S1A
8.	28.11.2024	PIU Conference Room	Regarding Fixation of Dredging Vollume of Route-21	PIU, S1A Consultant and Lot- 3 Contractors Representatives

SN	Date	Venue	Meeting Agenda	<b>Participants</b>
			ferry route of Lot-3	

## 2.1.3.3 Field activities, BRWTP-S1A expert (November 2024):

To monitor and supervise the field activities, BRWTP-S1A experts and field staff frequently visited sites when and where necessary. In this reporting period, preparatory work was done by both Contractors. Tables illustrate detailed field activities at Lot 2 and Lot 3 in Annex-III.

#### 2.1.4 Grievance Redressal Mechanism (GRM):

Two Grievance Redress Committees (GRC) have been formed in the Lot-2 and Lot-3 project areas respectively, with one committee addressing site/local level issues and the other focusing on Contractor-level gender-based violence (GBV) issues. Contractors, supported by S1A, conducted regular consultations to inform locals about reporting mechanisms. Grievance boxes were installed at project offices and dredging sites for people to submit their complaint letters and hotline numbers were provided for immediate contact.

Furthermore, the PIU, S1A, and senior project management of the Government administration, along with all project officials, maintained contact with the local people during the reporting period, including holidays, to solve different grievances.

Table 7: Monthly Progress of GRM Report, November, 2024 in Lot-02 & Lot-03

Sl.No.	Issues	Status	S1A Comments
1.	River Traffic	The reports are updated accordingly	No complaints have been received from local
	Management	if new complaints are lodged.	communities during this reporting period.
2.	Public Health and	The reports are updated accordingly	No complaints have been received from local
	Dredge Material	if new complaints arise.	communities during this reporting period.
	Disposal on Land		
3.	Fishermen and other	The reports are updated accordingly	No complaints have been received from local
	related Groups on	if any complaints are raised.	communities during this reporting period.
	Their Livelihoods		
4.	Dike Selection	The reports are updated accordingly	No complaints have been received from local
		if any complaints are raised.	communities during this reporting period.

## 2.1.4.1 GBV/SEA/SH by workers and enforcement of the CoC

The local people have reported that the dredging workers/ laborers have no congenial or illicit sexual relationship with local inhabitants. No sexual exploitation, sexual violence, or gender-based violence was reported at work sites.

## 2.1.5 ESHS, Worker Employment, and OHS Status:

The S1A team assessed the ESHS situation, Worker Employment, and Working conditions, Occupational Health and Safety (OHS) status during the reporting period. Considering the safety of workers and the public during the dredging process, data were collected through field observation during site visits and from the monitoring report of both Contractors. The collected data is shown in the table below.

Table 8: ESHS Status at a Glance in November 2024

ESHS Issues	Parameters	Lot-2	Lot-3
	Set up a first aid clinic room,	First aid facilities were	First aid facilities were
Occupational Health and	equipped with amedical treatment registration card for each	available at the project sites.	available at project sites.
Safety (OHS)	employee.		
	Kitchen sanitation and cleanliness	Satisfactory	Satisfactory

ESHS Issues	Parameters	Lot-2	Lot-3
	and food quality		
	Sewage and wastewater discharge	Good arrangements were	Good arrangements were
	and Solid Waste Management	kept in the Houseboat	kept in the Houseboat
	Gas cylinder storage and	Maintained	Maintained
	maintenance		
	Fire Extinguisher	Available	Available
	Safe Drinking Water	Accessible. Freshwater is	Accessible. Freshwater is
		collected daily from tube	collected daily from tube
	TF : 11 of Co : 11 of Co	wells of nearby villages	wells of nearby villages
	Total Francisco (Garage ) for all	Good	Good 60 (Sixty)
	Total Employment (person) for all routes	80 (Eighty)	60 (Sixty)
Workers'	Male Female Ratio	All employees are Male	No Female Employee
Conditionand	Wage Status	Good arrangements were	Good arrangements were
Employment	Wage Status	kept in the Houseboat	kept in the Houseboat
Situation	Force Labor/ Child Labor	Not Applicable in this	Not Applicable in this
		month	month
	Wearing appropriate PPE like	Safety helmet, Safety vest,	Available at site level but
Personal	helmets, safetygoggles, hand and	safety shoes, Hand gloves,	needs awareness and
Protection	arm protection, elbowprotection	etc., observed at the site.	monitoring for using PPEs
Equipment	gloves, safety shoes, life	But not adequate. All	
(PPE) for all	jacket/vestsfor protection while	workers were not using	
staff/workers	working in the river, use of	PPEs.	
working on	hearing protection in case of		
the site.	loud noise for all		
	officers/employees and laborers engaged in project work.		
	Provision for preventing accidents	River traffic-related	River traffic-related
	including nighttime.	signboards have already	signboards have already
	meruang mgmmu	been installed, checked and	been installed, checked and
		found in good condition.	found in good condition.
		Sign boards ensure safe	Sign boards ensure safe
		river traffic movement. The	river traffic movement.
Traffic		types of navigational aids	The types of navigational
management		installed (buoys, beacons,	aids installed (buoys,
management		lights, etc.) and locations	beacons, lights, etc.) and
		along the dredged routes.	locations along the dredged
	Dudi'a a'a a a da a a da a a da da da da da da da	A 1	routes.
	Dredging sites were demarcated	Adequate signs signals are	Working hands are found to be careful about their
	and protected to ensure community safety.	posted to avoid any unwanted endangered	personal safety and working
	Community Safety.	while working.	safety as well.
		wille working.	Safety as well.

Source: Field Information S1A Consultant Team and Contractors Environmental Monitoring Report.

## 2.2 PROGRESS OF LOT-2 (GULF COBLA-KARNAFULY JV) CONTRACTOR:

## 2.2.1 Development and Maintenance Dredging Works:

No survey or dredging activities during this reporting period. During the monitoring period on Route 09, no active dredger was observed; however, Karnafuly-5 (23.84746N 90.84470E) was stationed in Salimganj, Nabinagar, Brahmanbaria.

## 2.2.2 Environmental Quality Assessment of Lot-2 Sites:

In November 2024, environmental monitoring was conducted along Route 09 focusing on air quality, noise levels, and water quality. All measured parameters, including particulate matter, gaseous substances, and noise levels, were within national and international standards. Surface water sampling indicated no significant impact from ongoing dredging activities and no major pollution or safety issues were observed. Fisheries surveys identified with no fish mortality reported. During the reporting month, twenty-two (22) species of fish and three (03) species of crustaceans were observed. Additionally, no Ganges River Dolphins or freshwater turtles were observed along the surveyed routes, and no grievances were raised, indicating a harmonious work environment. Details are in Annexure IV.

## 2.2.3 Social and Resettlement Aspects at Lot-2 Site:

So far, 74 disposal sites have been identified within the Lot-2 areas, of which 67 Good Faith Agreements (GFAs) have been completed following the World Bank's safeguard policy for Routes 6, 7, 8, 9, and 11. The remaining seven sites on Route 9 are newly selected and operated by the district administration of Brahmanbaria District.

In May 2024, during a meeting at the office of the Deputy Commissioner of Brahmanbaria, it was decided that the selection of dike locations would be managed by the the Government administration in coordination with the Project Implementation Unit (PIU), the Bangladesh Inland Water Transport Authority (BIWTA), and the Consultant, BRWTP-S1A, as necessary. The same process will be followed for Routes 6 and 7 & 8, as agreed upon by the Deputy Commissioner of Narsingdi and PIU officials. Following this decision, no further Good Faith Agreements (GFAs) will be required between BRWTP-1 and landowners for the selection of dike locations. The locations of these dredged material disposal areas are provided in Annexure I.

## 2.3 PROGRESS OF LOT-3, (DHARTI-BANGA JV) CONTRACTOR:

### 2.3.1 Development and Maintenance Dredging Works:

Capital dredging for phase-II started at Route 21 (Laharhat – Bhedhuriya) on dated 10-10-2024 and at Route 13 (Alubazar – Horina) on dated 25-11-2024. During November 2024, three dredgers (Banga Jamuna, Banga Shitalakkhya, and Banga Padma) were operating on Route No. 21 and Route No. 13. The total Cumulative Dredging Volume up to 30<sup>th</sup> November **153,686 m³** (Approx.). Detail Table is in Annexure I.

## 2.3.2 Environmental Quality Assessment of Lot-3 Site:

In November 2024, environmental monitoring focused on air quality, noise levels, and water quality across Routes 16 and 21, with all assessed parameters found within national and international standards. No fish mortality, Ganges River Dolphins, or freshwater turtles were observed during this reporting period. Extensive fishing activities were observed compared to previous month in Route 16 & 21 due to peak season of Hilsa fishing and fishermen trying to increase their catch as Hilsa ban period just finished. Twenty-five (25) species of fish were observed to be caught in the river route 16 & 21. In addition, five (05) species of crustacean species (prawn) were also observed to catch in the river. There was no visible fish mortality; Dolphins were not observed near Patarhat, Bheduria dredging site. No direct observation of freshwater turtles at the dredging site, dike area and nearby area but Indian roofed turtle sometimes seen in the household ponds of kajirchar.

## 2.3.3 Social and Resettlement Aspects at Lot-3 Site:

At present 26 disposal areas are completed in this site. So far, six Lease Agreements have been established with landowners; however, these landowners have yet to receive the leased money from the Project Implementation Unit (PIU). The remaining 20 Good Faith Agreements (GFAs) are still pending for finalization. On the other hand, Private land utilization through GFA was more satisfactory. But for utilization of the Government fellow land PIU should start correspondence with the competent authority of The Government of Bangladesh (GoB).

In November 2024 dredged materials from active dredgers were disposed of at Dike-20 (22°42'43"N 90°33'5"E) and Dike-21 (22°42'35"N 90°33'48"E) in Route-21 adjacent to Bheduria Ferry ghat. The locations of these dredged material disposal areas are provided in Annexure I.

## CHAPTER 03: ACHIEVEMENT OF THIS MONTH'S AND NEXT MONTH'S PLAN

#### 3.1 ACHIEVEMENT OF THIS MONTH (NOVEMBER 2024):

#### S<sub>1</sub>A

- a) Monitoring hydrographic survey on Routes 05, 06, 7&8, and 09 have been carried out throughout the month of November 2024 under Lot-2.
- b) Monitoring hydrographic survey has been carried out between 13th to 30th November 2024 on Routes 13, 13a, and 21 covering various chainage under Lot 3.

#### LOT-2

- a) Monthly Environmental and Social Activities have been conducted.
- b) Field visits were carried out by the S1A-ESHS team.
- c) The World Bank safe guard team visited Lot-02 site to observe the work progress and inspected the completed dikes under Phase-I and found it satisfactory.

#### LOT-3

- a) Joint Pre-hydrographic Surveys were completed along the Routes 13, 16 and 21 for Phase-II under Lot-3.
- b) Monthly Environmental, Social, and GRM activities have been conducted the observations have been communicated to the contractor and PIU.
- c) Field visits were carried out by the S1A-ESHS team.

#### **3.2 NEXT MONTH PLAN:**

### S1A

- a) Ongoing intermittent monitoring hydrographic surveys will continue for Lot 2 and 3.
- b) Preparing hydrographic chart from monitoring survey to check the dredging quality and quantity after dredging for Phase-II of Lot-2 and 3.
- c) Supervising and monitoring dredging activities, environmental quality, ESHS, and GRM activities for Lot-2 and Lot-3.
- d) Field visits will be made to assess work progress and select disposal areas under Lots 2 and 3.
- e) Accelerating the Navigational Aid Installation work plan submitted by the Contractors for Lot 2 and Lot 3.

- f) Organizing meetings with the environmental teams of the Lot-2 and Lot-3 Contractors.
- g) Supervising activities for Phase-II of capital dredging in both Lots.
- h) Phase-II Environmental Work Plan will be prepared after submission of an updated CESMP (Contractor Environmental and Social Management Plan) by the Contractors.

#### LOT-2

- a) Submission of the completion report for Phase I, including as-built drawings, dredging volume, cross-section, etc.
- b) Submission of the Phase II work plan and resource allocation, including manpower deployment within the remaining timeframe for Phase II, Conducting a pre-hydrographic survey over the entire length of the contracted Lot-2 routes
- c) Updating the C-ESMP and DDMP.
- d) The Lot-2 Contractor will accelerate the installation of Aids to Navigation.
- e) The Lot-2 Contractor's ESHS team is advised to carry out the recommended field visits during the execution of dredging operations.
- f) Preparatory work for Phase-II of the capital dredging will be continuing.

#### LOT-3

- a) Submission of the Phase II work plan and resource allocation, including manpower deployment
- b) After completion of pre-hydrographic survey over the entire length of the contracted Lot-3 routes and check the alignment and volume that is required for dredging.
- c) Updating the C-ESMP and DDMP. e) The Lot-3 Contractor will continue hydrographic surveys for all routes, review relevant charts, and perform dredging work as necessary using standby dredgers.
- d) The Lot-3 Contractor will accelerate the installation of Aids to Navigation.
- e) The Lot-3 Contractor's ESHS team is advised to carry out the recommended field visits during the dredging operation.
- f) Preparatory work for Phase II of the capital dredging will be continuing.

## CHAPTER 04: CONCLUSION AND RECOMMENDATIONS

#### **Conclusion**

During November 2024, significant progress was made in the Phase-II capital dredging activities for Lot 3 including hydrographic chart submissions, the commencement of dredging operations, and the installation of navigational aids.

The contractors were informed to maintain the Environmental and Social compliances as per contractual obligations and The World Bank Guideline. Effective field visits and GRM implementation were carried out to address potential concerns.

The progress of Lot-2 in completing Phase I activities and preparing for Phase II is lagging behind. Proactive measures are required to avoid time pressure for completing Phase II. Despite repeated advices from the S1A Consultant, the Lot-2 contractor yet to take necessary initiatives during this reporting period.

Based on coordination with PIU Safeguard Monitoring team, the S1A Consultant Team prepared documents for understanding the changes or impacts on social aspects of Lot-2 and Lot-3 site after completing the Phase-I timeframe. A report on the Pre-Post Status of the Dikes and the Good and Bad Practices of a few Selected Disposal Areas are attached in Annex-III.

 and Monitoring of Performance-Based I nance of Navigational Aids along the Na	0 0	0 0

**CHAPTER 05: ANNEXURE** 

# ANNEX I: Photos of Project Activities (November 2024)

## Progress Meetings, Communication, Consultation, Field Visit, Survey, and Sample Collection:



































# **ANNEX II:** The Progress and Status of Dredging Activities

Table 9: Dredging Work November 2024 at Lot-3 Site at a glance:

Table 3. D	Table 9: Dredging Work November 2024 at Lot-3 Site at a glance:								
Dredger Name and Route No.	Operation Date	Reason for stand by and delaying	Time of Dredging Hour (Avg.)	Chainage (m)	Cutting Length (m)	Avg. Cutting Depth (m)	Volume (Cum) Approx.	Dike no	Dredged Area and soil Type
Banga Jamuna Route No. 21	Total 18 days the dredger was operational and Standby 11 days in this Reporting period.	Shipping, Mechanical Breakdown, Floating Pipeline, Anchor Change, Cutter Head Cleaning, Low Water Level, Disposal Area problem and Others	15 Hours Daily	8150 to 8500	350	2.5	36750	Dike No. 21	Ghagoria Union Mehandi ganj Upazilla Barisal district and Silty Soils
Banga Shitalakkh ya Route No. 21	Total 22 days the dredger was operational and 7 days Standby	Mechanical Breakdown, Floating Pipeline, Anchor Change, In this Reporting month dredging delayed due to Disposal Area Construction purposes approximatel y 40 hours.	14 Hours Daily	7400 to 6673	727	2.5	76335	Dike No. 20	Ghagoria Union Mehandi ganj Upazilla Barisal district and Silty Soils
Banga Padma Route No. 13	Total 18 days the dredger was operational (25 to 30 Noember 2024)	Mechanical Breakdown, Floating Pipeline, Anchor Change, and Others	20 Hours Daily	K0+250 to k0+600	350	2.9	40600	Dike No. 04	Lokkhir Char (Ibrahim pur), Sadar upazilla Chandpu r district and Silty Soils

Source: Monitoring Data Expert and Field support of S1A

# ANNEX III: The Progress and Status of Dike and Selected Disposal Areas

## Lot-2

Table 10: Status of Good Faith Agreements (GFA) for Phase-I Capital Dredging, Lot 2 (74 Dike)

Derle	Table 10: Status of Good Faith Agreements (GFA) for Phase-I Capital Dredging, Lot 2 (74 Dike)  Ook Route Land Owner Land  Good Faith Agreements (GFA) for Phase-I Capital Dredging, Lot 2 (74 Dike)					Good Faith	
е	No	Name and NID	Address	Description Land	Quantit	Quality of	Agreement
no.					y (Decim al)	Land	Status
D1	9	Md. Monir Hossain NID: 6447046241	Village: Joy Nagar Upazila: Bancharampur	Plot No: 1117.1118, 10, 65, 1016, Mouza: Jay Nagar	95	Agricultur e Land (Two Crops)	Done. Soft copy available
D2	9	Siblu Mia NID:1210488091 772	Village: Imam Nagar Upazila: Bancharampur	Plot No:158, 155, 166, 147. Mouza: Imam Nagar	270	Agricultur e Land (Two Crops)	Done. Soft copy available
D3	9	Md. Afzal Hossain NID:1210488092 232	Village: Joy Nagar Upazila: Bancharampur	Plot No: 461, 711, 712, 713, 714, 715 1016. Mouza: Jay Nagar	150	School and School Field	Done. Soft copy available
D4	9	Md. Monzur Mahabub NID: 1210488092428	Village: Imam Nagar Upazila: Bancharampur	Plot No:3473, 3474 Mouza: Imam Nagar	55	Agricultur e land (One crop)	Done. Soft copy available
D5	9	Jharna Begum NID:5546582981	Village: Barail Upazila: Nabinagar	Plot No: 316, 318, 397, 399, 314, 315, 401 Mouza: Borail.	132	Agricultur e land (Two Crops)	Done. Soft copy available
D6	9	Md. Dostogir NID:7813941536	Village: Barail Upazila: Nabinagar.	Plot No: 326, 353,314, 622, 312, 126, 319, 320, 321, 334 Mouza: Borail,	141	Agricultur e land (Two Crops)	Done. Soft copy available
D7	9	Monir Hossain NID:1210488092 1009	Village: Imam Nagar Upazila: Bancharampur	Plot No.127 Mouza: Imam Nagar.	40	Agricultur e land (Two	Done. Soft copy available
D8	9	Abdus Salam NID: 1210488089240	Village: Aka Nagar Upazila: Bancharampur	Plot No.6021, 5622, 5627, 6620, 3277 Mouza: Aka Nagar.	90	Agricultur e land (Two	Done. Soft copy available
D9	9	Md. Zakir Hossain NID: 2693016135957	Village: Aka Nagar Upazilla: Bancharampur	Plot No. 2611, 2612, 6036 Mouza: Aka Nagar.	139	Agricultur e land (Two Crops)	Done. Soft copy available
D10	9	Md. Alamgir Kabir. NID: 1218575059084	Village: Nilukhi Upazila: Nabinagar	Plot no. 455. Mouza: Borail	52	Agricultur e land	Done. Soft copy
D11	9	Md. Kabir Hossain. NID: 10488088336	Village: Aka Nagar Upazilla: Bancharampur	Plot no. 5972/ 5380/5984 Mouza: Aka Nagar, Bancharampur,	139	Agricultur e land (Two Crops)	Done. Soft copy available
D12	9	Md. Nazrul Islam. NID: 8705507518	Village: Aka Nagar Upazila: Bancharampur	Plot no. 3053, Mouza: Aka Nagar.	50	Agricultur e land (One Crop)	Soft copy available
D13	9	Md. Monirul Islam. NID: 8672153577	Village: Aka Nagar Upazila: Bancharampur		190	Agricultur e land (Two Crops)	Done. Soft copy available
D14	9	Md. Salek Mia. NID: 7385849111 Mbl:01985708570	Village:Akanagar Union: Salimganj Upazila:Banchara mpur District: Brahman Baria	Mouza: Akanagar, Plot no. 2948/2149/2150/ 2151/2152, BS-642 JL no. 13.	24	Agricultur e land (One Crop)	Done. Soft copy available

DI.	D4-	T J	0	Y J			Card Faidh
Dyk e	Route No	Name and NID	Owner Address	Land Description	Quantit	Quality of	Good Faith Agreement
no.	110				y (Decim al)	Land	Status
D15	9	Abdul Halim	Village:Akanagar	Mouza: Akanagar,	67	Agricultur	Done.
		NID: 2366199863	Union: Tezkhali	Plot no. 3395,3396		e land	Soft copy
		Mbl: 01819160113	Upazila:Banchara mpur District:	BS-khatian no. 496 JL no. 13.		(One Crop)	available
		01819100113	Brahman Baria	JL 110. 13.			
D16	9	Md. Riazul Islam	Village: Joykalipur	Plot no. CS 1370, BS 3002-3003, mouza: Borail	52	Agricultur	Done.
		NID: 5533130141	Upazila:			e land	Soft copy
			Bancharampur			(One Crop)	available
D17	9	1.Babul Mia	Village: Nilukhi	Plot no. CS/SA 1373/1374, BS 3007, Mouja: Borail		Agricultur	Done.
		NID:5546760314 2.Rakat Ali	Union: Solimgonj Upazila:Nabinagar		90	e land (One Crop)	Soft copy available
		NID:9132515710	District: Brahman		90	(One Crop)	avanable
		3.Nobi Mia	Baria				
		NID:5996942016					
D18	9	Kader Miah	Village:Akanagar	Mouza: Akanagar, Plot no. 2948/2149/2150/2151/2152, BS 650-	192	Agricultur	Done.
		NID:	Union: Tejkhali	JL no. 13.		e land	Soft copy
		1210488088731 Mbl:	Upazila:Banchara mpur District:			(One Crop)	available
		01712830171	Brahman Baria				
D19	9	Md. Kabir	Village:Akanagar	Mouza: Akanagar, Plot no. 2948/2149/2150/2151/2152, BS-642	32	Agricultur	Done.
		Hossain	Union: Tejkhali	JL no. 13.		e land	Soft copy
		NID:	Upazila:Banchara			(One Crop)	available
		1210488087685	mpur District:				
		Mbl: 01789160113	Brahman Baria				
D20	9	1.Jasim Uddin	Village:	Mouza: Bishnursmpur, SA Khatian: 11, Plot no:	59	Agricultur	Done.
D20		NID: 7798370685	Bishnursmpur	298,1428,1646,1655,1654 , JL No 43	37	e land	Soft copy
		Mbl:	Union:			(One Crop)	available
		01717531207	Bishnursmpur				
		2011.11	Upazila:Banchara mpur District:				
		2.Oli Mia NID: 9152173382	Brahman Baria				
		Mbl:					
		01720322353					
D21	9	Safar Ali	Village:Akanagar	Mouza: Akanagar,	75	Agricultur	Done.
		NID: 2398388328	Union: Tejkhali	SA Khatian: 3610,		e land	Soft copy
		Mbl: 0191438148	Upazila:Banchara mpur District:	Plot no: 3456,3460 JL No. 13		(One Crop)	available
			Brahman Baria	3L NO. 13			
D22	9	Md. Milon Mia	Village:Bahir char	Mouza: Bahir char	84	Agricultur	Done.
		NID: 7348365565	Union: Tejkhali	SA Khatian: 556,		e land	Soft copy
		Mbl:	Upazila:Banchara	Plot no: 613,857		(One Crop)	available
		01321822727	mpur District: Brahman Baria	JL No. 41			
D23	9	1.Alomgir	Village:	Mouza: Bahirchar	119	Agricultur	Done.
1023	,	Hossain	Bishnursmpur	SA Khatian: 860,380	117	e land	Soft copy
		NID:	Union: Tezkhali	Plot no: 821,621,711,622,624,810,1070,623,626,710,711,1179		(One Crop)	available
		19781210488000	Upazila:Banchara	JL No. 41			
		039	mpur District:				
		Mbl: 01741735087	Brahman Baria				
D24	9		Village:	Mouza: Bishnursmpur	120	Agricultur	Done.
D24	9	Aminul Islam	Village: Bishnursmpur	SA Khatian: 92	120	e land	Soft copy
		(Liton) NID: 9917405796	Union:	Plot no: 1209,1205,1439,1430		(One Crop)	available
		Mbl:	Bishnursmpur	JL No. 40		17	
		01310822838	Upazila:Banchara				
			mpur District: Brahman Baria				
D25	9	Ilias Miazi	Village:	Mouza: Bishnursmpur	174	Agricultur	Done.
1023	′	NID:	Bishnursmpur	SA Khatian: 172, Plot no: 1308,1497,1448,427,1105	1/7	e land	Soft copy
		19921216488000	Union: Tezkhali	JL No 43		(One Crop)	available
		130	Upazila:Banchara			*	
		Mbl:	mpur District:				
		01985728652	Brahman Baria				

Dyl	Route	Lond	Owner	Land			<b>Good Faith</b>
e no.	No	Name and NID	Address	Description Description	Quantit y (Decim al)	Quality of Land	Agreement Status
D26	9	1. Gazi Kawsar NID: 3298455597 Mbl: 01713685001 2.Gazi abdus Salam NID: 2398479119 Mbl: 01740956081 3.Md. Zakir Hossain NID: 7348561049	Village: Aka Nagar Union: Tezkhali Upazila:Banchara mpur District: Brahman	Mouza No: Aka Nagar SA Khatian: 3921,4096,3941 Plot No: 5760,5705,5707,5790,6370,6698,5744,5711,5384,5715 J L No 13	310	Agricultur e land (One Crop)	Done. Soft copy available
D27	9	Md. Hanif NID: 5501395304 Mbl: 01717531207	Village: Bishnurampur Union: Bishnurampur Upazilla: Bishnurampur District: Brahman Baria.	Mouza: Bishnurampur SA Khatian: 894, Plot no. 108,111 Khatian No. 860/380 JL No. 41	154	Agricultur e land (One Crop)	Done. Soft copy available
D28	9	Habib Ulla NID: 2398391876 Mbl: 01817506254	Village: Bahirchar Union: Bishnurampur Upazila:Banchara mpur	Mouza. Bahirchar Plot no. 603,714,1152,1545 Khatian No: 92 JL No: 41	79	Agricultur e land (One Crop)	Done. Soft copy available
D29	9	Abu Kalam NID: 1948451222 Mbl: 01985708523	Village: Bahirchar Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza. Bahirchar Plot no. 904, 608, 752, 1227 Khatian No: 617, 1487 JL No: 41	89	Agricultur e land (One Crop)	Done. Soft copy available
D3 0	9	1.Md. Farid Mia NID: 3298435581 Mbl: 01317622313 2.Abdul Wahab NID: 6894609699 Mbl: 01735786521	Village: Bahirchar Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza. Bahirchar Plot no. 119,1084,415 Khatian No: 551,61,108 JL No: 41	88	Agricultur e land (One Crop)	Done. Soft copy available
D3 1	9	Moin Uddin NID: 3748368614 Mbl: 01817506254	Village: Bahirchar Upazila:Banchara mpur District: Brahman Baria.	Mouza. Bahirchar Plot no. 1134,1138,1135,18,1052 Khatian No: 217,541 JL No: 41	85	Agricultur e land (One Crop)	Done. Soft copy available
D3 2	9	Ali Ahammad Sarker NID: 3747074718 Mbl: 01715046233	Village: Nilokhi Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza. Nilokhi Plot no. 1134,1138,1135,18,1052 Khatian No: 24/1, 106/1 JL No: 236	214	Agricultur e land (One Crop)	Done. Soft copy available
D3 3	9	1.Rasel Mia NID: 1947127799 Mbl: 01738424077 2.Parul Begum NID: 1210488095296 Mbl: 01735786521 3. Sova Akter NID: 8707793660 Mbl:	Village: Nilokhi Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza. Nilokhi Plot no. 1172,1208,1209,1199,1163,1198,1170,1200,1232 Khatian No: 950, 992 JL No: 05	170	Agricultur e land (One Crop)	Done. Soft copy available

Dvk	Route	Land	Owner	Land			Good Faith
e no.	No	Name and NID	Address	Description	Quantit y (Decim al)	Quality of Land	Agreement Status
		01735786521					
D 34	9	1. Md. Billal NID: 2398523114 Mbl: 01725835721 2. Arfat Ali NID:8257731771 Mbl: 01985789351	Village: Bahir Char Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza. Bahirchar Plot no. 25/400,217/652,268/418,628,708 Khatian No: 209,74 JL No: 41	84	Agricultur e land (One Crop)	Done. Soft copy available
D 35	9	1.Abdul Awal NID: 3746376999 Mbl: 01918578062 2.Abul Kalam NID: 8695983695 Mbl:01716592411 3.Abu Ishaq NID: 3712971580 Mbl: 01719834733 4.Nasir Uddin NID: 5546582717	Village: Barail Upazila:Nabinagar District: Brahman Baria.	Mouza. Barail Plot no. 1590,3267,3144,3274,3515,1802,1803 Khatian No: 544,163,1560 JL No: 04	113	Agricultur e land (One Crop)	Done. Soft copy available
D 36	9	1.Abdul Mannan NID: 8248455720 Mbl: 01738424077 2.Md. Jalal Mia NID: 4648465153 Mbl: 01735786521 3. Tazul Islam NID: 9173793036 Mbl: 01735786521	Village: Bahir Char Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza. Bahirchar Plot no. 1286,1351,1649,144,1563,127 Khatian No: 549,600,996 JL No: 41	140	Agricultur e land (One Crop)	Done. Soft copy available
D37	9	Md. Swapon Mia NID: 8248495528 Cel: 01753828096	Village: Bahirchar Union: Tezkhali Upazila:Banchara mpur, District: Brahman Baria.	Mouza No. Bahirchar Khatian No: 530/616/1464 Plot: 553/552/554 JL No:41	60	Agricultur e land (One Crop)	Done. Soft copy available
D38	9	1.Md. Nazim NID: 2421516085 Mbl: 01733123741 2. Apel Mahmud NID: 4201400373 Mbl: 01958705623 3. Aynal Hoque NID: 5554116691 Mbl: 01815237615 4. Abu Musa NID: 6448345691 Mbl: 01712578351 5. Mst. Razia khatun NID: 2848376618 Mbl: 01735892711 6. Marfot Ali NID:	Village: Bahirchar Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza No. Bahirchar Khatian No: 751/439/120/889/743/70 Plot: 1282/1284/1285/1283/957/1641/2221/955/1502/985/984 JL No:41	173	Agricultur e land (One Crop)	Done. Soft copy available

Dylz	Route	I and	Owner	Land			Good Faith
e no.	No	Name and NID	Address	Description Description	Quantit y (Decim al)	Quality of Land	Agreement Status
		19761210488000 018 Mbl: 01928705721 7. Abdul Mannan NID: 7812888217 Mbl: 01789256722			<b>u.</b> ,		
D 39	9	Abu Sayem NID: 6890355958 Mbl: 01712853510	Village: Kadoir Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Kadoir Khatian No: 591 Plot: 421 JL No:63	50	Agricultur e land (One Crop)	Done. Soft copy available
D 40	9	Md. Jalu Mia NID: 4155505789 Mbl: 01712892751	Village: Bahirchar Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza No. Bahirchar Khatian No: 709 Plot: 440 JL No:41	100	Agricultur e land (One Crop)	Done. Soft copy available
D 41	9	1.Md. Kamal Mia NID: 7347275260 Mbl: 01724532687 2.Abdul Karim NID: 2397556354 Mbl: 01716161185	Village: Kadoir Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza No. Bahirchar Khatian No: 706 Plot: 486/350/352 JL No:10	111	Agricultur e land (One Crop)	Done. Soft copy available
D 42	9	1.Mst. Jahanara NID: 1210488096760 Mbl: 01986218781	Village: Nilokhi Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Nilokhi Khatian No: 262 Plot: 1129/1 JL No:05	31	Agricultur e land (One Crop)	Done. Soft copy available
D 43	9	1.Shakel     Ahmed     NID:     2. Sazzad     Ahmed     NID:     3. Md. Alomgir     NID:     2397009727     4. Rezaul     Karim     NID:     6455341013     5. Ziaul Karim     NID:     5983496109     Mbl:     6. Fazlul Karim     NID:     9132487969	Village: Badda Dakkhin Para Union: Salimganj Upazila:Nabinag ar District: Brahman Baria.	Mouza No. Char Badda Khatian No: 1154/191/986 Plot: 486/350/352 JL No:14	197	Agricultu re land (One Crop)	Done. Soft copy availabl e
D 44	9	1. Md. Alomgir NID: 2397009727 2. Rezaul Karim NID: 6455341013 3. Ziaul Karim NID: 5983496109 Mbl: 01713018040 4. Fazlul Karim	Village: Badda Dakkhin Para Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Jolli Khatian No: 175/1453 Plot: 122/233/325/ JL No:16	140	Fallow Pond	Done. Soft copy available

Dyk	Route	L and	Owner	Land			Good Faith
e no.	No	Name and NID	Address	Description	Quantit y (Decim al)	Quality of Land	Agreement Status
		NID: 9132487969			•		
D 45	9	1. Md. Alomgir NID: 2397009727	Village: Badda Dakkhin Para Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Jolli Khatian No: 1657 Plot: 291 JL No:16	22	Agricultur e land (One Crop)	Done. Soft copy available
D 46	9	Md. Jalu Mia NID: 4155505789 Mbl: 01712892751	Village: Bahirchar Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza No. Bahirchar Khatian No: 111 Plot: 222/223/577/496 JL No:41	97	Agricultur e land (One Crop)	Done. Soft copy available
D 47	9	1. Md. Abu Hanif NID: 7305030772 Mbl: 01712892751 2. Sohrab Hossain NID: 1975871797 Mbl: 01728356911	Village: Kadoir Union: Salimganj Upazila:Nabi Nagar District: Brahman Baria.	Mouza No. Kadoir Khatian No: 342 Plot: 438 JL No:10	68	Agricultur e land (One Crop)	Done. Soft copy available
D 48	9	1. Kamrul Hasan NID: 19791218575000 030 Mbl: 01716161185 2. Jaman Uddin NID: 2361962059 Mbl: 01859278912 3.Moshen Mia NID: 5107234883 Mbl: 01713925813 4.Dulal Mia NID: 7347018397 Mbl: 01712830195 5.Baijid Hasan NID: 5107234883 Mbl: 01915830112 6.Abdul Motin NID: 1218588035697 Mbl: 01913592311 7.Hanif Mia NID: 19701218575000 009 Mbl: 01713925813	Village: Char Badda Union: Salimganj Upazila: Nabi Nagar District: Brahman Baria.	Mouza No.Char Badda Khatian No: 404/344/160/606/557/605 Plot: 1531/1502/1537/860/941/1282/1530/1531/1551/288/289/316/493/ 1567 JL No:14	200	Agricultur e land (One Crop)	Done. Soft copy available
D 49	9	01713925813 1.Kamal Uddin NID: 9148394498 Mbl: 01602208686 2.Forkan uddin NID: 1948433175 Mbl: 01711180780	Village: Bahir Char Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza No. Bahir Char Khatian No: 392/320/707/273/514/1071 Plot: 1105/617/1104/411/496/1111/1110 JL No:41	179	Agricultur e land (One Crop)	Done. Soft copy available

Dyk	Route	Land	Owner	Land			Good Faith
e no.	No	Name and NID	Address	<b>Description</b>	Quantit y (Decim al)	Quality of Land	Agreement Status
		3.Abdul Hashim NID: 824845555 Mbl: 01733113742 4.Parul Begum NID: 4201436906 Mbl: 01716497968 5.Ismail Mia NID: 1523786984 Mbl: 01913777071 6.Amir Hossain Passport:0538242 Mbl: 01712835771 7.Farid NID: 3322198205 Mbl: 01852892821					
D 50	9	1.Abul Kashem NID: 2398411542 Mbl: 01708665453 2.Humayun Kobir NID: 1210436157748 Mbl: 01983460221	Village: Moddho Nagar Union: Choyfullah Kandi Upazila:Nabinagar District: Brahman Baria.	Mouza No. Moddho Nagar Khatian No: 1054/1485 Plot: 1105/617/1104/411/496/1111/1110 JL No:38	193	Agricultur e land (One Crop)	Done. Soft copy available
D 51	9	1.Murshid Mia NID: 3296986155 Mbl: 01852897257 2.Dulal Mia NID: 1218575054223 Mbl: 01719835021 3.Lal Chand Passport: 0363728 Mbl: 01719478351	Village: Char Badda Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Char Badda Khatian No: 525/263/675 Plot: 210/211/39/68 JL No:68	130	Agricultur e land (One Crop)	Done. Soft copy available
D 52	9	Shahin NID: 19821218575000 021 Mbl: 01734532462	Village: Bandey Bahir char Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Char Badda Khatian No: 1118 Plot: 26 JL No:14	32	Agricultur e land (One Crop)	Done. Soft copy available
D 53	9	Md. Monirul Islam NID: 8672153577 Mbl: 01711175171	Village: Joy Nagar Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Joy Nagar Khatian No:1154 Plot: 2374 JL No:11	75	Agricultur e land (One Crop)	Done. Soft copy available
D 54	9	Abdur Razzak NID: 9574183696 Mbl: 01747343757	Village: Bishnurampur Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza No. Bishnurampur Khatian No:1154 Plot: 1594 JL No:01	86	Fallow Land	Done. Soft copy available

Dyk	Route	Land	Owner	Land			Good Faith
e no.	No	Name and NID	Address	Description	Quantit y (Decim al)	Quality of Land	Agreement Status
D 55	9	Shahjalal NID: 8242023813 Mbl: 01625888695	Village: Bishnurampur Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza No. Bishnurampur Khatian No:386 Plot: 1550 JL No:40	73	Fallow Land	Done. Soft copy available
D 56	9	1.Abul Kashem NID: 2398411542 Mbl: 01708665453 2.Humayun Kobir NID: 1210436157748 Mbl: 01983460221	Village: Moddho Nagar Union: Choyfullah Kandi	Mouza No. Moddho Nagar Khatian No: 1054/1485 Plot: 1105/617/1104/411/496/1111/1110 JL No:38	193	Agricultur e land (One Crop)	Agreement will be done by District administrati on
D 57	9	1.Murshid Mia NID: 3296986155 Mbl: 01852897257 2.Dulal Mia NID: 1218575054223 Mbl: 01719835021 3.Lal Chand Passport: 0363728 Mbl: 01719478351	Village: Char Badda Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Char Badda Khatian No: 525/263/675 Plot: 210/211/39/68 JL No:68	130	Agricultur e land (One Crop)	Agreement will be done by District administrati on
D 58	9	Md. Shahin NID: 19821218575000 021 Mbl: 01734532462	Village : Bandey Bahir char Union : Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Char Badda Khatian No: 1118 Plot: 26 JL No:14	32	Agricultur e land (One Crop)	Agreement will be done by District administrati on
D 59	9	Md. Monirul Islam NID: 8672153577 Mbl: 01711175171	Village: Joy Nagar Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Joy Nagar Khatian No:1154 Plot: 2374 JL No:11	75	Agricultur e land (One Crop)	Agreement will be done by District administrati
D 60	9	Abdur Razzak NID: 9574183696 Mbl: 01747343757	Village: Bishnurampur Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza No. Bishnurampur Khatian No:1154 Plot: 1594 JL No:01	86	Fallow Land	Agreement will be done by District administrati on
D 61	9	Shahjalal NID: 8242023813 Mbl: 01625888695	Village: Bishnurampur Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza No. Bishnurampur Khatian No:386 Plot: 1550 JL No:40	73	Fallow Land	Agreement will be done by District administrati on
D 62	9	Md. Aktar Hossain NID: 3725002590 Mbl: 01605208355	Village: Tezkhali Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza No. Tezkhali Khatian No: 1852 Plot: 430/688/960/972/482 JL No: 42	120	Agricultur e land (One Crop)	Awaiting PD's Approval. Soft copy available.

Dyk	Route	Land	Owner	Land			Good Faith
e	No	Name and NID	Address	Description Land	Quantit	Quality of	Agreement
no.					y (Decim	Land	Status
D 63	9	Md. Ashikul Islam NID: 3268311275 Mbl: 01855997070	Village: Tezkhali Union: Tezkhali Upazila:Banchara mpur District: Brahman Baria.	Mouza No. Tezkhali Khatian No: 1852 Plot: 430/688/960/972/482 JL No: 42	<b>al)</b> 120	Agricultur e land (One Crop)	Awaiting PD's Approval. Soft copy available.
D 64	9	Md. Masud NID: 4197522263 Mbl: 01625888695	Village: Noyar char Union: Salimganj Upazila: Nabinagar District: Brahman Baria.	Mouza No. Noyar char Khatian No: 689 Plot: 366/422/645/389 JL No: 67	62	Agricultur e land (One Crop)	Awaiting PD's Approval. Soft copy available.
D 65	9	Anowar Hossain Raza NID: 1948336233 Mbl: 01625888695	Village: Bishnurampur Union: Bishnurampur Upazila: Bancharampur District: Brahman Baria.	Mouza No. Bishnurampur Khatian No: 315 Plot: 365/254/423/546/259/121 JL No: 39	270	Agricultur e land (One Crop)	Awaiting PD's Approval. Soft copy available.
D 66	9	Md. Kawsar NID:	Village: Khalla Union: Choyfullakandi Upazila: Bancharampur District: Brahman Baria.	Mouza No. Khalla Khatian No: 1394 Plot: 4662 JL No: 1418	95	Agricultur e land (One Crop)	Agreement will be done by District administrati on
D 67	7&8	1.Hafiz Mia NID: 6816020733136 2.Abu Kashed Mia NID: 6816020432149 3.Abul Kashem NID: 5501734684 4.Nuru Mia NID: 8218914904 5.Sushil Chandra Sutradhar NID: 6816020732471 Mbl: 01794391918, 01712766109	Village: Birgaon Union: Alokbali Upazila:Narsingdi Sadar District: Narsingdi	Mouza: Char Madhobpur SA Khatian No: 425/2010/2051 CS Plot No: 4212, 4219, 4262, 4341, 10070, 10037, 13062, 10064, 10062, 10061, 10091, 10204, 9689, 9690, 9653, 10079, 10056, 10205, 9798, 10118, 10111, 10114 JL No: 73, 62, 52	677	About 70% Fallow Land and 30% Agricultur e land (One Crop)	Done. Soft copy available
D 68	7&8	Md. Delwar Hossain NID: 9550769062 Mbl: 01712766109	Village: Bakhor nagar Union: Alokbali Upazila:Narsingdi Sadar District: Narsingdi	Mouza: Char Madhobpur SA Khatian No: 8723/4356/4126/4247 SA Plot No: 7879,7915,7880,8793,7891,7960,7961,9730,9731,9732,8730,896, 7496,7494,9756, 9757, 9727,9730, 9731, 9732,8726, 8743, 7891, 8793,7886, JL No: 62	328	Fallow Land	Done. Soft copy available
D 69	7&8	Hazrat Ali NID: 7822420450 Mbl: 01935205783	Village: Birgaon Union: Alokbali Upazila:Narsingdi Sadar District: Narsingdi	Mouza: Char Madhobpur CS Khatian No: 122 SA Plot No: 12458/12466/12485 JL No: 52	91	Agricultur e land (One Crop)	Awaiting PD's Approval. Soft copy available.
D 70	7&8	1. Sukkur Ali NID: 4151539675 Mbl: 01987608661 2. Jahangir Alom NID: 2360551242 3. Md. Milon Kha	Village: Sat para Union: Alokbali Upazila:Narsingdi Sadar District: Narsingdi	Mouza: Char Madhobpur CS Khatian No: 3024/26/2068/98/4150 SA Plot No: 1841/7865/7877/7262/7869/7499/1815/1817/2089/7878/7885 JL No: 62	180	Agricultur e land (One Crop)	Awaiting PD's Approval. Soft copy available.

Dvk	Route	Land	Owner	Land			Good Faith
e no.	No	Name and NID	Address	Description	Quantit y (Decim al)	Quality of Land	Agreement Status
		NID: 4601748173					
D 71	7&8	1. Md. Sheikh Farid NID: 6816020734834 Mbl: 01765- 995824 2. Rezon Mia NID: 7358087984 Mbl: 01677556624	Village: Sat para Union: Alokbali Upazila:Narsingdi Sadar District: Narsingdi	Mouza: Char Madhobpur CS Khatian No: 121 SA Plot No: 6711/6512/6706/6727/6712/7364/7369/7794/7868 JL No: 62	170	Agricultur e land (One Crop)	Awaiting PD's Approval. Soft copy available.
D 72	6	2. Sahad Mia NID: 1481632832 Mbl: 01855992870 2. Md. Jalal Fakir NID: 5851625392 Mbl: 01759252667	Village: Char Modhua Union: Char Modhua Upazila:Roypura District: Narsingdi	Mouza: Char Modhua CS Khatian No: 637 SA Plot No: 1062/1011/894/1131/42/131/806/811/913/1042/1181/1188 JL No: 123	290	Agricultur e land (One Crop)	Awaiting PD's Approval. Soft copy available.
D 73	11	Abul Kasem NID: 1913621823408 Mbl: 01724340171	Village: Notun Hasnabad Union: Daud Kandi Upazila:Daud Kandi District: Cumilla	Mouza: Nando pur CS Khatian No: 44 Plot No: 158/44/41/150/67 JL No: 98	210	Agricultur e land (One Crop)	GFA done
D 74	11	Foyez Uddin NID: 1913621824175 Mbl: 01928932815	Village: Notun Hasnabad Union: Daud Kandi Upazila:Daud Kandi District: Cumilla	Mouza: Nando pur CS Khatian No: 39 Plot No: 160/39/151/155/44 JL No: 92	293	Agricultur e land (One Crop)	GFA done
74 dike s	04 River Route s				Total Land 9,669 (Decim al)		

## Lot-3

Table 11: Status of Good Faith Agreements (GFA), Lot 3 (23 Dike)

Dike no.	Route No	Land Owner		Land			an.
		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	GFA
D 01	21	Salam Fakir NID: 8223014047 Mbl # 01766-138946	Village: Ghagoria Union: Ghagoria Upazila: Mehendiganj District: Barishal	Mouza: Ghagoriya. Plot no. 1901/56	200	Agriculture land (One Crop)	Leased money yet to be paid to land owner by PIU
D 02	21	Mizan Fakir NID: 6860475422 Mbl # 01712-878285	Village: Bheduriya Union: Bhola Sadar Upazila: Bhola Sadar District: Bhola	Mouza: Bheduria Plot no. 1901/28	120	Agriculture land (One Crop)	Leased money yet to be paid to land owner by PIU
D 03	21	Salam Fakir NID: 8223014047 Mbl # 01766-138946	Village: Ghagoria Union: Ghagoria Upazila: Mehendiganj District: Barishal	Mouza: Ghagoriya. Plot no. 1901/56	224	Agriculture land (One Crop)	Leased money yet to be paid to land owner by PIU

Dike no.	Route No	Land Owner		Land			an.	
		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	GFA	
D 04	21	Jahangir Hossain NID: Mbl # 01620-487692	Village: Shreipur Union: Mehendiganj Upazila: Mehendiganj District: Barishal	Mouza: Ghagoriya. Plot no. 1501	80	Agriculture land (One Crop)	Leased money yet to be paid to land owner by PIU	
D 05	21	Mizanur Rahman NID: 6860475422 Mb1 # 01712-878285	Village: Ghagoria Union: Mehendiganj Upazila: Mehendiganj District: Barishal	Mouza: Ghagoriya. Plot no. 1107,1181,1182, 2123,2124,2119,2125	300	Agriculture land (One Crop)	Leased money yet to be paid to land owner by PIU	
D 06	21	Nur Nabi Vhuiya NID: 616213050970 Mbl # 01846-565388	Village: Ghagoria Union: Mehendiganj Upazila:Mehendiganj District: Barishal	Mouza: Ghagoriya. Plot no. 1468 (DP Khotiyan-385, DP Plot: 4662)	355	Agriculture land (One Crop)	Leased money yet to be paid to land owner by PIU	
D 07	21	Nur Nabi Vhuiya NID: 616213050970 Mbl # 01846-565388	Village: Ghagoria Union: Mehendiganj Upazila:Mehendiganj District: Barishal	Mouza: Ghagoriya. Plot no. 1479 (DP Khotiyan-385, DP Plot: 4662)	435	Agriculture land (One Crop)	yet to be done	
D 08	21	Zhariul Islam Nakib NID: 4192286039 Mbl # 01711-320785	Village: Bheduriya Union: Bhola Sadar Upazila: Bhola Sadar District: Bhola	Mouza No. Char Bheduriya Khatian No: 1319 JL No: 56	157	Agriculture land (One Crop)	yet to be done	
D 09	21	Kabi Hossain Mridha NID: 6878485082 Mbl # 01735-802399	Village: Ghagoria Union: Mehendiganj Upazila:Mehendiganj District: Barishal	Mouza No. Ghagoria Khatian No: 296 JL No: 118	1204	Agriculture land (One Crop)	yet to be done	
D 10	21	Md. Hakim uddain NID: 1928737947 Mbl # not given	Village: Bheduria Union: Bhola Sadar Upazila:Bhola Sadar District: Bhola	Did not collect yet	768	Agriculture land (One Crop)	yet to be done	
D 11	21	Ruhul amin NID: 0616213050968 Mbl # 01762-447287	Village: Shreipur Union: Mehendiganj Upazila: Mehendiganj District: Barishal	Mouza. Shreepur Survey no. 47 Khatian No: 502,525,526 JL No: 120	444	Agriculture land (One Crop)	yet to be done	
D 12	21	Harun chairman NID: Under processing Mobile # 01712-404378	Village: Shreipur Union: Mehendiganj Upazila: Mehendiganj District: Barishal	Did not collect yet	73	Agriculture land (One Crop)	yet to be done	
D 13	21	Harun chairman NID: Under processing Mobile # 01712-404378	Village: Shreipur Union: Mehendiganj Upazila: Mehendiganj District: Barishal	Did not collect yet	128	Agriculture land (One Crop)	yet to be done	
D 14	21	Mizanur Rahman Harun NID: 6860475422 Mobile # 01712-878285	Village: Shampur Union/post: Kalupur Upazila: Bhola Sadar	Did not collect yet	1017	Agriculture land (One Crop)	yet to be done	
D 15	21	Mizanur Rahman Harun NID: 6860475422 Mobile # 01712-878285	Village: Sreepur Union: Mehendiganj Upazila: Mehendiganj District: Barishal	Did not collect yet	1572	Agriculture land (One Crop)	yet to be done	
D 16	21	Kamal hossain (member) NID: Not given by contractor Mbl:	Village: Ghagoria Union: Bhola Sadar Upazila: Bhola Sadar District:Bhola	Did not collect yet	1000	Agriculture land (One Crop)	yet to be done	

Dike no.	Route No	Land Owner		Land			G-:
		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	GFA
D 17	21	Salam Fakir NID: 8223014047 Mbl # 01766-138946	Village: Ghagoria Union: Ghagoria Upazila: Mehendiganj District: Barishal	Did not collect yet	84	Agriculture land (One Crop)	yet to be done
D 18	21	Harun chairman NID: under process Mbl # under process	Village: Ghagoria Union: sreepur Upazila: Mehendiganj District: Barishal	Did not collect yet	171	Agriculture land (One Crop)	yet to be done
D 19	21	Monir, Yusuf,Salauddin, Kalam, Nasim, Nasir, Nur Islam, Junayed	Village: Ghagoria Union: sreepur Upazila: Mehendiganj District: Barishal	Did not collect yet	155	Fallow Land	Done
D 20	21	Ripon, Yasmin, Hasan, Swapon, Rafik, Alomgir, Sabuz, Rezwan, Saraz, Julhas	Village: Ghagoria Union: sreepur Upazila: Mehendiganj District: Barishal	Did not collect yet	300	Fallow Land, Fallow Pond	Done
D21	21	Md. Kalu, Md. Shahin	Village: Ghagoria Union: sreepur Upazila: Mehendiganj District: Barishal	Did not collect yet	70	Fallow Pond	Done
D22	R 21	Ali Hossain gong	Village: Ghagoria Union: sreepur Upazila: Mehendiganj District: Barishal	Khatian: 260, 493	900	Fallow land	Done
D 22	16	MD.Amir hossain Jomaddar NID: 8225574485 Mbl # 01718051191	Village: Sadequepur Union: Mehendiganj Upazila: Mehendiganj District: Barishal	Did not collect yet	1443	Agriculture land (One Crop)	yet to be done
D 23	16	1. Adv. Md Khorshed NID: 7328539411 2. Adv.Md Jakir Hossain NID: 0616213038313 Mbl # 01770198608	Village: Char Mitua Union: Alimabad Upazila: Mehandiganj District: Barishal	Mouza: Char mohisa. Plot no. 324, 325, 326, 344, 345, 346	1294	Agriculture land (One Crop)	yet to be done
D 24	13	Md. Ali Bapari NID: not given Mbl # 01739224610	Village: Narshinshopur Union: Shokhipur Upazila: Bhedorganj District: Shariotpur	Did not collect yet	574	Agriculture land (One Crop)	yet to be done
D 25	13	Government land	Village: Lokkhir char Union: Upazila: Chandpur sadar District: Chandpur	Did not collect yet	400	Fallow Land	N/A
D 26	13	1. Md. Dulal Khan NID: Not given by land owner Mbl # 01729-505858 2.Md. Monir Hossain NID: Not given by land owner Mbl # 01791-330411	Village: Narshinshopur Union: Shokhipur Upazila: Bhedorganj District: Shariotpur	Did not collect yet	446	Agriculture land (One Crop)	yet to be done
Total dyke=27	Total Roue = 03				Total Land (Decimal) = 13,914		

Note: This list will be updated from time to time including the dredged soil volume disposed in the dike and the amount of revenue deposited to the government treasury.

## ANNEX IV: Pre-Post Status of Dikes and Good and Bad Practices of few Selected Disposal Areas

On 27 November 2024, based on the decisions made during the meeting between the PIU Safeguard Monitoring Team and the S1A Consultant Team held in the S1A conference room, the following documents are Prepared for understanding the changes or impacts on social aspects of Lot-2 Site after completing Phase-I timeframe:

## Pre and Post-Images of Some DMDS (Dredged Material Disposal Sites) and description of the land:



Pre-Status: Poor Management Graveyard Post-Status: Proper Mangement Garveyard

•	Route	Lar	nd Owner	Land			GFA
e no.	No	Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	Status
D 54	9	Abdur Razzak NID: 9574183696 Mbl: 01747343757	Village: Bishnurampur Union: Tezkhali Upazila:Bancharampur District: Brahman Baria.	Mouza No. Bishnurampur Khatian No:1154 Plot: 1594 JL No:01	86	Grave Yard	Done.



Pre-Status: Low Land

Post-Status: High Land for Agricultural Acitivity Practice

•	Route No	Land Owner		Land			GFA States
e no.		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	Status
D19	9	Md. Kabir Hossain NID: 1210488087685 Mbl: 01789160113	Village:Akanagar Union: Tejkhali Upazila:Bancharampur District: Brahman Baria	Mouza: Akanagar, Plot no. 2948/2149/2150/2151/2152, BS-642 JL no. 13.	32	Agriculture land (One Crop)	Done.



Pre-Status: Low Land

Post-Status: Land Transformation for House Construction.

	Route	Lan	nd Owner	Land		GFA Status	
no.	e No	Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	Status
D4	9	Md. Monzur Mahabub NID: 1210488092428	Village: Imam Nagar Upazila: Bancharampur	Plot No:3473, 3474 Mouza: Imam Nagar	55	Agriculture land (One crop)	Done.



Route-09, Dyke: 05

Pre-Status: One Crop Land (Rice Cultivation)

Post-Status: Two Crops Land (Rice, Vegetable Cultivation)

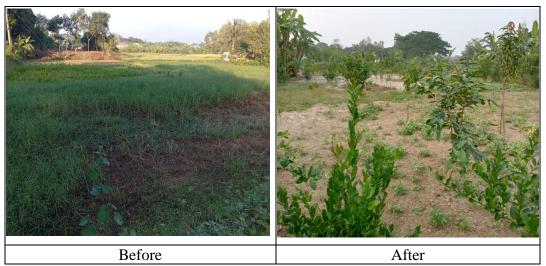
	Route No	Land Owner		Land	Land		
e no.		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	Status
D5	9	Jharna Begum NID:5546582981	Village: Barail Upazila: Nabinagar	Plot No: 316, 318, 397, 399, 314, 315, 401 Mouza: Borail.	132	Agriculture land (One Crops)	Done.



Route: 09, Dyke: 03
Pre-Status: Low Land

Post-Status: High Land for Agricultural Practices.

	Route	Laı	nd Owner	Land		GFA	
e no.	No	Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	Status
D3	9	Md. Afzal Hossain NID:1210488092232	Village: Joy Nagar Upazila: Bancharampur	Plot No: 461, 711, 712, 713, 714, 715 1016. Mouza: Jay Nagar	150	Fallow Land	Done.



Route-09, Dyke: 32

Pre-Status: Low Land (One Crop: Rice)

Post-Status: High Land (Two Crops Cultivation)

Dyke	Ro	Lar	nd Owner	Land			GFA States
no.	No	Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	Status
D32	9	Ali Ahammad Sarker NID: 3747074718 Mbl: 01715046233	Village: Nilokhi Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza. Nilokhi Plot no. 1134,1138,1135,18,1052 Khatian No: 24/1, 106/1 JL No: 236	214	Agriculture land (One Crop)	Done.



Route; 09, Dyke: 34

Pre-Status: Low Land (One Crop: Rice)

Post-Status: High Land (Two Crops Cultivation)

	Route No	Land Owner		Land			GFA
e no.		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	Status
D 34	9	1. Md. Billal NID: 2398523114 Mbl: 01725835721 2. Arfat Ali NID:8257731771 Mbl: 01985789351	Village: Bahir Char Union: Tezkhali Upazila:Bancharampur District: Brahman Baria.	Mouza. Bahirchar Plot no. 25/400,217/652,268/418,628,708 Khatian No: 209,74 JL No: 41	84	Agriculture land (One Crop)	Done.



Route-09, Dyke: 31

Pre-Status: Low Land (One Crop: Rice)

Post-Status: High Land (Two Crops Cultivation)

	Route No	Land Owner		Land			GFA Status
e no.	No	Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	Status
D 31	9	Moin Uddin NID: 3748368614 Mbl: 01817506254	Village: Bahirchar Upazila:Bancharampur District: Brahman Baria.	Mouza. Bahirchar Plot no. 1134,1138,1135,18,1052 Khatian No: 217,541 JL No: 41	85	Agriculture land (One Crop)	Done.



Route; 9, Dyke: 16

Pre-Status: Low Land (One Crop: Rice)

Post-Status: High Land (Two Crops Cultivation)

	Route No	Land Owner		Land	Land		
e no.		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	Status
D16	9	Md. Riazul Islam NID: 5533130141	Village: Joykalipur Upazila: Bancharampur	Plot no. CS 1370, BS 3002-3003, mouza: Borail	52	Agriculture land (One Crop)	Done.



Pre-Status: Low Land (One Crop: Rice)

Post-Status: High Land (Agricultural Practices for Two Crops, Pasture Land etc.)

Dyke	Route	L	and Owner	Land			
no.	No	Name and NID	Address	Description	Quantity	Quality of Land	
					(Decimal)		

D26	9	1. Gazi Kawsar NID: 3298455597 Mbl: 01713685001 2.Gazi abdus Salam NID: 2398479119 Mbl: 01740956081 3.Md. Zakir Hossain NID: 7348561049 Mbl: 01713585112 4. Chandra Kumar Das NID: 1210488090007 Mbl: 01740968121		Mouza No: Aka Nagar SA Khatian: 3921,4096,3941 Plot No: 5760,5705,5707,5790,6370,6698,5744, 5711,5384,5715 J L No 13	310	Agriculture land (One Crop)
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## **Bad Practice-1:**



Fig: Poorly Managed Dredged Material Disposal Site.

## Route: 09, Dyke:19.

The disposal site for dredged materials exhibits several potential environmental issues due to bad practices:

## 1. Plastic Sheeting Usage:

The blue plastic sheets around the site appear to prevent soil erosion or water leakage. However, if not properly managed, these plastics can degrade over time, causing microplastic pollution in the surrounding environment.

## 2. Lack of Proper Containment:

The embankments around the site seem temporary and not structurally sound, which could lead to leakage or breach, allowing the dredged material to contaminate nearby water bodies or land.

## 3. Lack of Monitoring and Maintenance:

The site does not appear to have adequate signs of systematic maintenance, such as drainage systems or monitoring equipment, to manage environmental impacts effectively.

## **Bad Practice-2:**



Fig: Plastic and Waste Dumped along the bank of Titas River.

### **Route-09 (Titas River)**

Despite the dredging of the Titas River (Lot 2), local residents continue to dispose of plastic and garbage irresponsibly, which contributes to several negative environmental impacts:

### 1. River Pollution:

The disposed plastic and waste materials end up in the river, leading to severe water contamination. This pollution harms aquatic ecosystems, affects fish populations, and degrades water quality.

### 2. Loss of Biodiversity:

Plastics and other non-biodegradable materials can harm local flora and fauna. Aquatic animals often ingest plastic, mistaking it for food, which can lead to death or severe health problems.

## 3. Blockage of Water Flow:

Accumulated garbage near the riverbank can obstruct natural water flow, increasing the risk of flooding and reducing the efficiency of the dredging process.

### 4. Health Hazards for Humans:

Decomposing waste produces foul odors and serves as a breeding ground for mosquitoes and other disease-carrying insects, increasing the risk of diseases like dengue and malaria among local residents.

To address these issues, community education, strict enforcement of anti-littering laws, and the establishment of proper waste disposal and recycling systems are essential.

## **Bad Practice-3:**



Fig: Unregulated Construction Activity along The Titas River.

### **Route-09 (Titas River):**

Titas River (Lot 2) shows several environmental concerns that can arise due to such activities. Here are the potential negative environmental impacts:

### 1. Riverbank Erosion:

Construction activities on or near the riverbank can destabilize the soil, leading to erosion. This weakens the riverbank and increases the risk of collapse, which can alter the river's flow and cause flooding in nearby areas.

### 2. Water Pollution:

Dust, debris, and construction materials, such as bricks and cement, can easily get washed into the river during rainfall or water runoff. This pollutes the water and affects aquatic ecosystems.

## 3. Disturbance to Aquatic Life:

Noise and vibration from construction machinery can disturb the aquatic ecosystem. Sediments and pollutants entering the river can harm fish and other aquatic organisms.

To minimize these environmental impacts, it is essential to implement sustainable construction practices, such as proper waste management, stabilization of riverbanks, replanting vegetation, and regular monitoring of construction sites for compliance with environmental regulations.

## **Bad Practice-4:**

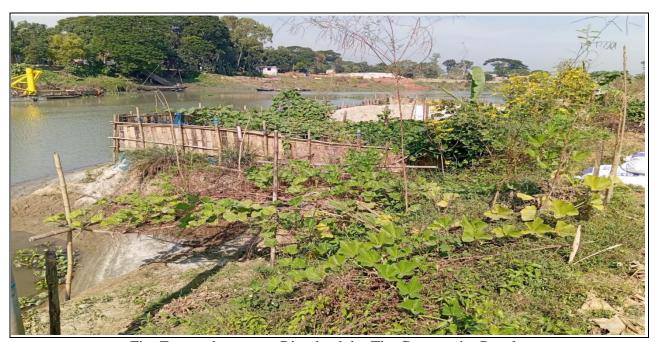


Fig: Encroachment on Riverbank by The Community People.

## **Route-09 ( Titas River)**

### 1. Riverbank Instability:

The construction or modifications along the riverbank can weaken the soil structure, making it prone to erosion. This not only disrupts the natural landscape but also increases the likelihood of sedimentation in the river.

## 2. Encroachment on River Ecosystem:

The setup of structures and barriers near the river reduces the natural space available for vegetation and wildlife, potentially harming the local ecosystem and biodiversity.

To mitigate this impact, minimizing construction near the river bank and implementing strict environmental regulations.

Achievement-1
"From Barren to Bountiful: Shiblu Mia's Journey of Transformation."





## **Land Description:**

Dy ke no.	Rou te No	Lan Name and NID	d Owner Address	La Description	Quantity (Decimal)	Quality of Land	Good Faith Agreement Status
D2		Siblu Mia NID:12104880 91772	Nagar Upazila: Bancharampur	Khatian: 106 Plot No:158, 155, 166, 147. Mouza:Imam Nagar	270	Agricultur e Land (One Crop)	Done

I, Md. Shiblu Mia, son of Md. Basirul Alam, hail from the village of Imamnogor, a serene rural area surrounded by the lush wetlands of the haor region. Despite the beauty of the landscape, life

was challenging. The low-lying nature of our land meant that we could cultivate only rice-crop once a year, leaving us with limited resources to sustain our family.

Adding to our struggles, our growing family faced a severe housing crisis. My father, though hardworking, lacked the financial means to fill the land and build a house that could accommodate everyone. It seemed like our dreams of a better life were out of reach.

One day, however, everything changed. We received the incredible news that BIWTA, a government office, was planning an official river dredging project for the Titas River, financed by the World Bank. Shortly afterward, around 11 AM, two officers from the dredging project visited our house and spoke with my father. They explained an exciting opportunity: we could fill the low-lying riverbank land adjacent to our property. Although my father was interested, he hesitated, worried about the cost. The officers reassured him that the project would be completely free of charge for us. They only required photocopies of the land documents, his NID card, and a simple Good Faith Agreement with the BRWTP-1 office.

Inspired and hopeful, my father readily agreed. The process was seamless, thanks to the government's initiative and the support of the visiting officers.

## **Benefits of the Low-Lying Landscape Transformation**

This project brought about a remarkable transformation in our lives. The previously barren and unproductive land is now a hub of opportunity:

- ♦ Agriculture Year-Round: Earlier, we could only cultivate one crop annually. Now, the fertile filled land allows us to grow vegetables and other crops throughout the year, providing both sustenance and income for our family.
- ♦ Building a Home: The filled land gave us the opportunity to build a spacious and durable home, ending years of overcrowding and discomfort.
- ♦ Orchard Development: We planted a variety of fruit trees, turning our property into a thriving orchard that adds to our income.
- ♦ Increased Land Value: The once-neglected land has become highly sought after, with people from neighboring areas frequently visiting to express their interest in purchasing it. What was once considered uninhabitable is now prime real estate.

### **Conclusion: Gratitude and Recognition**

This initiative has transformed not just our land but also our lives. We are eternally grateful to the government for their foresight and generosity in launching this project. A special thanks to the officers who visited our home and guided us through the process with such care and clarity.

Our family's journey from struggle to stability is a testament to how effective government programs can empower ordinary citizens. Today, we stand proud, knowing that our land and efforts contribute to the betterment of the community, and we look forward to building an even brighter future.

This is not just a story of success—it is a story of hope, resilience, and the power of collective action.

Achievement-2
"Transforming Challenges into Opportunities: A Farmer's Journey to Prosperity".





## **Land Description:**

Dy ke	Rou te	L	and Owner		Land			
no.	No	Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	Status	
D1 7		Babul Mia NID:554676 0314	Village: Nilukhi Union: Solimgonj Upazila:Nabinagar District: Brahman Baria	Plot no. CS/SA 1373/1374, BS 3007, Mouja: Borail	90	Agricultur e land (One Crop)	Done	

### **Introduction:**

In the heart of Nilukhi village, nestled within the fertile plains of Bancharampur Upazila, Babul Mia, a determined yet struggling farmer, once faced an unyielding challenge: his ninety decimal of farmland, perpetually waterlogged and unproductive. The monsoon transformed his fields into lakes, while the dry season left them cracked and barren. For years, his hope withered alongside his dreams of a stable livelihood. However, destiny took a dramatic turn when the Bangladesh Inland Water Transport Authority (BIWTA), with the financial muscle of the World Bank, launched a trans-formative river dredging project. This initiative did not just move soil; it moved mountains for Babul Mia.

## **Implementation of the Project:**

The BIWTA's ambitious river dredging project in Nilukhi village aimed to revitalize the local ecosystem and breathe life into struggling farmland like Babul's.

Silt dredged from the river was meticulously deposited onto Babul's low-lying land, raising its elevation and freeing it from the clutches of water-logging.

This fertile, nutrient-rich riverbed soil revitalized the land, turning what was once an agricultural wasteland into a haven of possibilities.

### **Transformation in Livelihoods:**

The project didn't merely alter the topography of Babul's land; it redefined his destiny.

### 1. A Bountiful Harvest:

Once limited to a single crop annually, Babul now cultivates three cycles of rice, mustard, and vibrant vegetables each year.

His fields, once a symbol of despair, now bloom with hope and prosperity.

## 2. From Waterlogged to Wealthy:

Elevated and fortified, his land no longer succumbs to monsoon floods or dry-season droughts.

Improved irrigation systems have slashed farming costs, allowing him to maximize both yield and profits.

## 3. A Beacon of Economic Independence:

Babul's annual income has tripled, enabling him to invest in modern farming techniques and his children's education.

His success story has inspired neighboring farmers to dream bigger and believe in the power of

transformation.

## **Babul Mia's Perspective:**

When I learned about the dredging project on the Titas River, I approached the officials involved and expressed my interest in having my low-lying land filled. They requested copies of my land documents and national ID card. Following this, a two-year agreement was formalized with the project director on a 100-taka stamp paper. Within days, the dredger filled my land.

Babul Mia speaks of the project with heartfelt gratitude:

"There was a time when I thought my land was cursed—either submerged in water or parched in drought. Today, I stand on the same soil, and it feels like a miracle. My land now nourishes not just my family but my dreams. This project has restored my hope, dignity, and the ability to inspire others."

## The Ripple Effect of Change:

The impact of the river dredging project has echoed far beyond Babul's personal story:

Agricultural Renaissance: The region has witnessed a surge in crop production, boosting the local economy.

Community Resilience: Farmers now view their land as an asset, not a liability, fostering a spirit of collective progress.

Environmental Revival: The dredging has enhanced the river's natural flow, reducing the risk of floods and promoting ecological balance.

### **Conclusion:**

The BIWTA's river dredging project stands as a testament to the profound change that can arise from visionary initiatives. Babul Mia's story is not just one of personal triumph but a symbol of how strategic interventions can turn despair into determination, wastelands into wonderlands, and forgotten farmers into flourishing community leaders. As we reflect on this journey, it is clear: when rivers are nurtured, lives are elevated.

This is more than a case study; it is a call to action—a reminder that with the right resources and resolve, no challenge is insurmountable.

# ANNEX V: Field activities Records of BRWTP-S1A for the month of November, 2024

Table 12: Field Activities of BRWRP-S1A at Lot-2 Site

	Table 12: Field Activities of BRWRP-S1A at Lot-2 Site								
Serial No	Date	Activity	Route name & Route number	Remarks					
01	01.11.2024	Monitoring Hydrographic Multibeam Survey. Place:Baidyer Bazar	Meghna (Ashuganj to Munshiganj). Route-05 Lot_2	BIWTA team and BRWTP-S1A					
02	02.11.2024	Continued Monitoring Hydrographic Survey Place:Baidyer Bazar	Meghna (Ashuganj to Munshiganj). Route-05 Lot_2	BIWTA team and BRWTP-S1A					
02	06.11.2024	Monitoring Hydrographic Multibeam Survey Place:Baidyer Bazar to Morichakandi	Meghna (Ashuganj to Munshiganj). Route-05 Lot_2	BIWTA team and BRWTP-S1A					
03	07.11.2024	Monitoring Hydrographic Multibeam Survey. Place:Bishnondi ferighat to Morichakandi	Meghna(Ashuganj to Munshiganj). Route-05 Lot_2	BIWTA team and BRWTP-S1A					
04	08.11.2024	Monitoring Hydrographic Multibeam Survey Place: Morichakandi to Ashuganj	Meghna(Ashuganj to Munshiganj). Route-05 Lot_2	BIWTA team and BRWTP-S1A					
05	09.11.2024	Monitoring Multibeam Hydrographic Survey Place: Ashuganj	Meghna (Ashuganj to Munshiganj). Route-05 Lot_2	BIWTA team and BRWTP-S1A					
06	10.11.2024	Monitoring Hydrographic Multibeam Survey. Place:Ashuganj	Meghna (Ashuganj to Munshiganj). Route-05 Lot_2	BIWTA team and BRWTP-S1A					
07	11.11.2024	Monitoring Hydrographic Survey (Multibeam Survey) ongoing. Chainage:82+200~84+400 Length:2200m	Meghna (Ashuganj to Munshiganj). BRWTP-S1A, Route-05 Lot_2 Place: Bhairab Bazar	BIWTA team and BRWTP-S1A					
08	12.11.2024 and 13.11.2024	Sample collection for environmental monitoring like as: Air, noise, water, Soil from dredging areas, disposal areas and the river bed for lab test.	Route-09, Lot_2	LOT-2 Contractors environmental team and BRWTP-S1A team					
09	12.11.2024	Monitoring Hydrographic Survey (Multibeam Survey) Place: Bhairab Bazar	Meghna (Ashuganj to Munshiganj). Route-05 Lot_2	BIWTA team and BRWTP-S1A					
10	13.11.2024	Monitoring Hydrographic Survey (Multibeam Survey) Place: Ashuganj to Maniknagar	Meghna(Ashuganj to Munshiganj). Route-05 Lot_2	BIWTA team and BRWTP-S1A					
11	14.11.2024	Monitoring Hydrographic Multibeam Survey Place: Maniknagar to Morichakandi	Meghna(Ashuganj to Munshiganj). Route-05 Lot_2	Survey (Completed) BIWTA team and BRWTP-S1A					
12	18.11.2024	Dyke location and status observation and feedback of local people	Meghna (Bancharampur- Homna Loop). Route-09 Lot_2	The World Bank's Safeguard team, PIU and S1A consultant Lot-2 representatives.					
13	24.11.2024	Water Level Gauge Connection at Lot_02, Route_3&4	Shitalakshya (Ghorashal to Munshiganj)	BIWTA team and BRWTP-S1A					
14	25.11.2024	Joint Monitoring Hydrographic Survey (Singlebeam & Multibeam Survey) Place:Homna to Ramchnadrapur	Meghna(Bancharampur- Homna Loop). Route-09 Lot_2	Contractor team with BIWTA team and BRWTP-S1A					
15	26.11.2024	Joint Monitoring Hydrographic Survey (Singlebeam & Multibeam	Meghna(Bancharampur- Homna Loop).	Contractor team with BIWTA team and					

Serial No	Date	Activity	Route name & Route number	Remarks
		Survey) Place: Ramchandrapur to Bancharampur	Route-09 Lot_2	BRWTP-S1A
16	27.11.2024	Joint Monitoring Hydrographic Survey (Singlebeam & Multibeam Survey) Place: Madhonagar area and Banchararampur area	Meghna(Bancharampur- Homna Loop). Route-09 Lot_2	Contractor team with BIWTA team and BRWTP-S1A
17	28.11.2024	Joint Monitoring Hydrographic Survey (Singlebeam & Multibeam Survey) Place: Bancharampur to Modhonagar	Meghna(Bancharampur- Homna Loop). Route-09 Lot_2	Contractor team with BIWTA team and BRWTP-S1A
18	29.11.2024	Joint Monitoring Hydrographic Survey (Singlebeam & Multibeam Survey) Place: Homna to moishar char	Meghna(Bancharampur- Homna Loop). Route-09 Lot_2	Contractor team with BIWTA team and BRWTP-S1A
19	29.11.2024	Joint Monitoring Hydrographic Survey (Multibeam Survey) Place: Homna to moishar char	Meghna(Narsingdi Northern & Southern approaches). Route-07&8 Lot_2	Contractor team with BIWTA team and BRWTP-S1A
20	29.11.2024	Joint Monitoring Hydrographic Survey (Multibeam Survey) Place: Bala pukurer char to Norshindi launch Terminal	Meghna (Narsingdi Northern & Southern approaches). Route-07&8 Lot_2	Contractor team with BIWTA team and BRWTP-S1A
21	30.11.2024	Joint Monitoring Hydrographic Survey (Multibeam Survey) Place: Narshindi launch Terminal to Monipura ghat	Meghna(Narsingdi Northern & Southern approaches). Route-07&8 Lot_2	Contractor team with BIWTA team and BRWTP-S1A
22	30.11.2024	Joint Monitoring Hydrographic Survey (Multibeam Survey) Place: Charmodhuya to Tulatoli	Meghna (Nabinagar loop joining route 5). Route-06 Lot_2	Contractor team with BIWTA team and BRWTP-S1A

Table 33: Field Activities of BRWRP-S1A at Lot-3 Site

		BRWRP-SIA at Lot-3 Site		
Serial	Date	Activity	Route name & Route	Remarks
No			number	
1.	05.11.2024	Monitoring of dredging work	Route no. 21 at (Laharhat	Dredger Banga jamuna and
			to Bheduriya); Lot-3	Shitalakkhya
2.	07.11.2024	Field Visits at Route-16 &21, Dyke	Lot-3 (Route-16 &21)	S1A consultant Team
	***************************************	location and status observation and		
		feedback of local people		
3.	13.11.2024	Engineering survey of Laharhat to	Lot-3, Route-21 (Laharhat	
3.	13.11.2024	Bhedhuriya route no.21	to Bhedhuriya)	
4	16.11.2024	, , , , , , , , , , , , , , , , , , ,	• /	
4.	10.11.2024	Now the dredging will start at the	Lot -03, Route -13	
		mouth of river Chandpur, for this		
		the old dyke No. 3 will be used, later		
		when the dredging of Alubazar will		
		start, a dyke has been collected, the		
		picture of which is given below,		
5.	17.11.2024	Lot -03, Route -13, The previous	Lot -03, Route -13	
		dyke No. 3 flood has been reworked		
		to merge with the soil and this is		
		where the sand will now be dumped.		
6.	18.11.2024	Hydrographic monitoring survey.	Lot_3. Route 13 (Athazar-	
		,	Alubazar-Horina)	
_	24.44.202		,	DATE OF THE OWNER
7.	21.11.2024	Visit and hydragraphy survey	Lot 3 route 21 (Laharhat	BIWTA, PIU, S1A
			to Bheduriya)	Consultant, BIWTC and
				Contractor team.

ANNEX-VI: Laboratory Test Results of Environmental Parameters, November, 2024

**Laboratory Test Result of Lot-2:** 



### Ref: ELRC/Air Quality/2024307266

Project Name	:	BRWTP-1, LOT-2: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 3 & 4, 5, 6, 7 & 8, 9,10, and 11				
Monitoring Activity	:	Ambient Air Quality				
Location	: AQ1: Near Salimganj Bridge; Route-9 (23.822248°N 90.836560°E)					
		AQ2: Near Bishnurampur Eidgah; Route-9 (23.847770°N 90.843869°E)				
Monitoring Date	:	13.11.2024				
Reporting Date		02.12.2024				

### Description of Analysis:

Location	Compling Date	Ambi	ent Air Pol	lutants' Con	centration in	μg/m3	СО
	Sampling Date	SPM	PM10	PM2.5	SO2	NO2	mg/m3
AQ1		163.84	80.26	40.48	28.19	37.49	0.7
AQ 2	13.11.2024	137.11	74.87	35.55	21.33	36.69	0.7
Air Pollution (control) rules, 2022*		-	150	65	80	80	5
Method of Analysis Instrument Use: Haz-Scanner TM (HIM, 6000)			rticulates Se attering Ne		High Sens	itivity Electr	ochemical

Note: \* Air Pollution (Control) Rules, 2022

Legend:  $PM_{10}$ -Particulate Matter of a diameter of 10 microns or less.  $PM_{25}$ -Particulate Matter of a diameter of 2.5 microns or less,  $SO_2$ -Sulphur Dioxide;  $NO_2$ -Nitrogen-Dioxide; CO-Carbon Monoxide



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### Ref: ELRC/Noise Level/2024307267

Project Name	:	BRWTP-1, LOT-2: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 3 & 4, 5, 6, 7 & 8, 9, 10, and 11.
Monitoring Activity	:	Noise Level
Location	1:	NL1: Near Salimganj Bridge; Route-9 (23.821930°N 90.837140°E)
		NL2: Near Bishnurampur Eidgah; Route-9 (23.847875°N 90.843852°E)
Monitoring Date	:	13.11.2024
Reporting Date	:	02.12.2024

### Description of Analysis:

ation	Noise level (dB(A))		Bangladesh Standard (dB(A)) *	IFC EHS Guideline (2007)	Location setting	
Loc	Leq <sub>day</sub>	Lmax	$\mathbf{L}_{\mathbf{min}}$	Day	Day	NC 1
NL1	56.8	64.7	40.2	60	70	Mixed area
NL2	58.3	65.9	41.5	60	70	

Note:

A-weighted decibel, abbreviated dB(A), is an expression of the relative loudness of sounds in air as perceived by the human ear. In the A-weighted system, the decibel values of sounds at low frequencies are reduced, as the ear is less sensitive to low audio frequencies, especially below 1000 Hz, than to high audio frequencies.



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<sup>\*</sup>Ministry of Environment, Forest, and Climate Change. (2006). Noise Pollution (Control) Rules, 2006 (S.R.O. No. 212-Law/2006). The People's Republic of Bangladesh.



### Ref: ELRC/Underwater Noise Level/2024307268

Project Name		BRWTP-1, LOT-2: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 3 & 4, 5, 6, 7 & 8, 9, 10, and 11.
Monitoring Activity	:	Noise Level
Location	:	UWNL1: Titas River; Route-9 (23.840470°N 90.844710°E)
Monitoring Date		13.11.2024
Reporting Date	1:	02.12.2024

### Description of Analysis:

Code	Location	LAvg [dB (A)]	*Standard
UWNL1	Titas River; Route-9	47.8	No International/ GoB Standard



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### Ref: ELRC/Surface Water Quality/2024307269

Project Name :		BRWTP-1, LOT-2: OPBC Works of Development Dredging with	
		maintenance and Aids to Navigation with installation along inland	
		waterway Routes- 3 & 4, 5, 6, 7 & 8, 9,10, and 11.	
Description of Sample		Surface Water – Lot 2	
Location	:	SW1: Titas River; Route-9 (23.846190°N 90.844430°E)	
		SW2: Titas River; Route-9 (23.830764°N 90.851638°E)	
Sampling Date		Amit kumar Saha	
Reporting Date		13.11.2024	

**Description of Analysis:** 

<b>T</b> 4	TT 14	Concentratio	n Present	D 11164 1
Parameters	Unit	SW1	SW2	Bangladesh Standard
Temperature	°C	25.8	26.1	150
EC	μS/cm	330	317	7=1
Turbidity	NTU	4.8	5.1	-
pH		7.66	7.73	6-9
TDS	ppm	164	154	1000
DO	mg/L	5.8	5.6	5 of more
Potassium	mg/L	36	29	-
Calcium	mg/L	24	27	(15)
Magnesium	mg/L	28	21	-
Phosphate	mg/L	1.7	1.4	-
Chloride	mg/L	38	34	-
Fluoride	ppm	0.7	0.9	-
Nitrate	mg/L	0.4	0.6	7
BOD5 (at 20°C)	mg/L	4.1	4.2	6 of less
Sulfate	mg/L	26	30	
TSS	mg/L	180	188	-

Note: Bangladesh Environment Conservation Rules, 1997- Schedule 3 (Standards for Inland Surface Water). DO: Dissolved Oxygen; BOD: Biological Oxygen Demand; EC: Electric Conductivity, TDS: Total Dissolved Solids; TSS: Total Suspended Solids



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### Ref: ELRC/Surface Water Quality/2024307269

Project Name		BRWTP-1, LOT-2: OPBC Works of Development Dredging with	
		maintenance and Aids to Navigation with installation along inland	
		waterway Routes- 3 & 4, 5, 6, 7 & 8, 9,10, and 11.	
Description of Sample	1:	Surface Water – Lot 2	
Location	:	SW1: Titas River; Route-9 (23.846190°N 90.844430°E)	
		SW2: Titas River; Route-9 (23.830764°N 90.851638°E)	
Sampling Date		Amit kumar Saha	
Reporting Date	- 1	13.11.2024	

Description of Analysis:

<b>5</b>	** **	Concentration	n Present	D 1110/ 1 1
Parameters	Unit	SW1	SW2	Bangladesh Standard
Temperature	°C	25.8	26.1	
EC	μS/cm	330	317	
Turbidity	NTU	4.8	5.1	1-
pH	-	7.66	7.73	6-9
TDS	ppm	164	154	1000
DO	mg/L	5.8	5.6	5 of more
Potassium	mg/L	36	29	-
Calcium	mg/L	24	27	15
Magnesium	mg/L	28	21	-
Phosphate	mg/L	1.7	1.4	-
Chloride	mg/L	38	34	1=
Fluoride	ppm	0.7	0.9	
Nitrate	mg/L	0.4	0.6	7
BOD5 (at 20°C)	mg/L	4.1	4.2	6 of less
Sulfate	mg/L	26	30	-
TSS	mg/L	180	188	1=1

Note: Bangladesh Environment Conservation Rules, 1997- Schedule 3 (Standards for Inland Surface Water). DO: Dissolved Oxygen; BOD: Biological Oxygen Demand; EC: Electric Conductivity, TDS: Total Dissolved Solids; TSS: Total Suspended Solids



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## **Laboratory Test Result of Lot-3:**



#### Ref: ELRC/Air Quality/ AQMM2024-06

	_	
Project Name		BIWTP -1, LOT-3: OPBC Works of Development Dredging with
	:	maintenance and Aids to Navigation with installation along inland
		waterway Routes- 12,13,13a, 15 &16, 17 and 21
Monitoring Activity	:	Ambient Air Quality
Monitoring Date	:	20.11.2024
Monitoring Location		Route 16; (AQ-1)- 22°47'21.39"N 90°31'28.84"E
	:	Route 21; (AQ-2)- 22°42'19.91"N 90°33'46.05"E
		Route 21; (AQ-3)- 22°41'59.69"N 90°33'19.83"E

#### **Description of Analysis:**

Location	Sampling	Ambient Air Pollutants' Concentration in µg/m³						
Location	Date	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	mg/m3	
AQ-1 Route 16	20/11/2024	62.99	39.04	17.43	13.69	17.33	0.5	
AQ-2 Route 21	20/11/2024	69.30	44.29	19.11	11.81	16.58	0.9	
AQ-3 Route 21	20/11/2024	66.74	41.58	20.44	17.06	19.13	0.7	
Air Pollution (control) rules, 2022*		-	150	65	80	80	5	
Method of Analysis Instrument Use: Haz-Scanner TM (HIM, 6000)			iculates Ser tering Neph			igh Sensitivectrochem	,	

Note: \* Air Pollution (Control) Rules, 2022

Legend: PM<sub>0</sub>-Particulate Matter of a diameter of 10 microns or less. PM<sub>2.5</sub>-Particulate Matter of a diameter of 2.5 microns or less, SO<sub>2</sub>-Sulphur Dioxide; NO<sub>2</sub>-Nitrogen-Dioxide; CO-Carbon Monoxide

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#### Ref: ELRC/Noise Level/ NLMM2024-06

Project Name	:	BIWTP -1, LOT-3: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 12,13,13a, 15 &16, 17 and 21
Monitoring Activity	:	Noise Level
Location	:	NL1 22°47'23.30"N 90°31'25.42"E, (Route 16) NL2 22°42'27.95"N 90°33'16.76"E, (Route 21) NL3 22°41'59.92"N 90°33'25.69"E, (Route 21)
Monitoring Date	:	20.11.2024

### **Description of Analysis:**

Location	No	ise level (dB(A	A)))¹	Bangladesh Standard (dB(A)) <sup>2</sup>	IFC EHS Guideline (2007) <sup>3</sup>	Location setting
으	Leq <sub>day</sub> L <sub>max</sub> L <sub>min</sub>		Day	Day		
NL1	55.67	72.09	36.77	-	-	-
NL2	69.52	82.44	38.02	-	-	-
NL3	67.26	80.09	35.22	-	-	-

#### Note:

\*Ministry of Environment, Forest, and Climate Change. (2006). Noise Pollution (Control) Rules, 2006 (S.R.O. No. 212-Law/2006). The People's Republic of Bangladesh.

A-weighted decibel, abbreviated dB(A), is an expression of the relative loudness of sounds in air as perceived by the human ear. In the A-weighted system, the decibel values of sounds at low frequencies are reduced, as the ear is less sensitive to low audio frequencies, especially below 1000 Hz, than to high audio frequencies.

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<sup>&</sup>lt;sup>1</sup> A-weighted decibel, abbreviated dB(A), is an expression of the relative loudness of sounds in air as perceived by the human ear. In the A-weighted system, the decibel values of sounds at low frequencies are reduced, as the ear is less sensitive to low audio frequencies, especially below 1000 Hz, than to high audio frequencies.

<sup>&</sup>lt;sup>2</sup>Ministry of Environment, Forest, and Climate Change. (2006). Noise Pollution (Control) Rules, 2006 (S.R.O. No. 212-Law/2006). The People's Republic of Bangladesh.

<sup>&</sup>lt;sup>3</sup> Guidelines values are for noise levels measured out of doors. Source: Guidelines for Community Noise, World Health Organization (WHO), 1999



### Ref: ELRC/ Underwater Noise Level/ UWNL2024-06

Project Name	:	BIWTP -1, LOT-3: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 12,13,13a, 15 &16, 17 and 21
Monitoring Activity	:	Underwater Noise Level
Location	:	UWNL1 22°47'29.16"N 90°31'23.82"E, Route 16 UWNL2 22°42'17.13"N 90°33'38.81"E, Route 21 UWNL3 22°42'2.87"N 90°33'22.89"E, Route 21
Monitoring Date	:	20.11.2024

### **Description of Analysis:**

Code	Location	L <sub>Avg</sub> [dB (A)]	*Standard
Code	Location	[dB (A)]	
UWNL1	Route 16	54.4	
UWNL2	Route 21	63.5	No standard of International / GoB
UWNL3	Route 21	68.1	

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### Ref: ELRC/Surface Water Quality/ SWMM2024-06

Project Name	:	BIWTP -1, LOT-3: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 12,13,13a, 15 &16, 17 and 21
Description of Sample	:	Surface Water
Location	:	Route- 16 & 21.
		SW1 - 22°47'19.62"N 90°31'40.88"E, Route 16
		SW2 - 22°42'14.95"N 90°33'45.21"E, Route 21
		SW3 - 22°42'23.65"N 90°33'17.36"E, Route 21
Sampling Date	:	20.11.2024

### **Description of Analysis:**

D	11	Concentration	n Present (Route –	16 & 21)	Bangladesh
Parameters	Unit	SW1	SW2	SW3	Standard
Temperature	°C	26.4	27.3	27.9	-
EC	μ\$/cm	291	314	312	-
Turbidity	NTU	6.5	6.4	7.2	-
рН	-	7.48	7.88	7.90	6 - 9
TDS	ppm	142	155	152	1000
DO	mg/L	7.9	7.2	7.6	5 or more
Potassium	mg/L	8.4	9.3	9.7	-
Calcium	mg/L	<0.01	<0.01	<0.01	-
Magnesium	mg/L	15	21	19	-
Phosphate	mg/L	<0.01	<0.01	<0.01	0.05
Chloride	mg/L	6.9	7.5	7.8	-
Fluoride	ppm	0.7	1.3	1.8	-
Nitrate	mg/L	0.9	1.2	1.0	7.0
BOD5 (at 20°C)	mg/L	1.4	1.9	1.6	6 or less
Sulfate	mg/L	17	24	21	-
TSS	mg/L	84	89	92	-

Note: \*Bangladesh Environment Conservation Rules-2023, Schedule 2(Ka) (Water Usable for Fisheries). DO: Dissolved Oxygen; BOD: Biological Oxygen Demand; EC: Electric Conductivity, TDS: Total Dissolved Solids; TSS: Total Suspended Solids

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### Ref: ELRC/ Riverbed sediment / SDMM2024-06

Project Name	:	BIWTP -1, LOT-3: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 12,13,13a, 15 &16, 17 and 21
Description of Sample	:	Riverbed sediment – Lot 3
Sampling Date	:	20.11.2024

### **Location Details:**

Code	Route No.	GPS Location
SedQ1	Route 16	22°47'24.77"N 90°31'30.86"E
SedQ2	Route 21	22°42'16.22"N 90°33'42.04"E
SedQ3	Route 21	22°42'3.86"N 90°33'19.48"E

**Description of Analysis:** 

	Riverb	ed sediment -	- Lot 3		Dutch	
Parameter	Unit	SedQ1	SedQ2	SedQ3	Methodology	Environmental standard (mg/kg)
Lead	mg/kg	9.55	11.05	12.88	ICPMS	85
Cadmium	mg/kg	0.062	0.068	0.065	ICPMS	0.8
Chromium	mg/kg	12.94	13.74	14.89	ICPMS	100
Zinc	mg/kg	20.55	23.99	25.48	ICPMS	140
Arsenic	mg/kg	1.57	1.95	1.99	ICPMS	29

Note: ICPMS - Inductively coupled plasma mass spectrometry

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### Ref: ELRC/ Dredge Material / SDMM2024-06

Project Name	:	BIWTP -1, LOT-3: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 12,13,13a, 15 &16, 17 and 21
Description of Sample	:	Dredge Material – Lot 3
Sampling Date	:	20.11.2024

### **Location Details:**

SI. No.	Sampling Station	Station Code	Sampling Date	GPS Coordinates
1.	Route 21	DM-20 aa	20/11/2024	22°42'49.55"N 90°33'4.38"E
2.	Route 21	DM-20 bb	20/11/2024	22°42'50.06"N 90°33'3.84"E
3.	Route 21	DM-20 cc	20/11/2024	22°42'50.57"N 90°33'3.58"E
4.	Route 21	DM-21 aa	20/11/2024	22°42'32.84"N 90°33'49.51"E
5.	Route 21	DM-21 bb	20/11/2024	22°42'30.34"N 90°33'50.38"E
6.	Route 21	DM-21 cc	20/11/2024	22°42'31.73"N 90°33'49.44"E

**Description of Analysis:** 

	Unit		D	redge Mate		Dutch			
Parameter		DM20aa	DM20bb	DM20cc	DM21aa	DM21bb	DM21cc	Methodology	Environmental standard (mg/kg)
Lead	mg/kg	13.32	13.88	14.87	13.89	14.05	13.70	ICPMS	85
Cadmium	mg/kg	0.070	0.075	0.072	0.077	0.073	0.079	ICPMS	0.8
Chromium	mg/kg	14.98	15.32	15.12	14.96	15.75	15.43	ICPMS	100
Zinc	mg/kg	25.76	26.89	26.80	26.88	25.97	27.79	ICPMS	140
Arsenic	mg/kg	2.15	2.05	2.25	2.35	2.10	2.07	ICPMS	29

Note: ICPMS - Inductively coupled plasma mass spectrometry

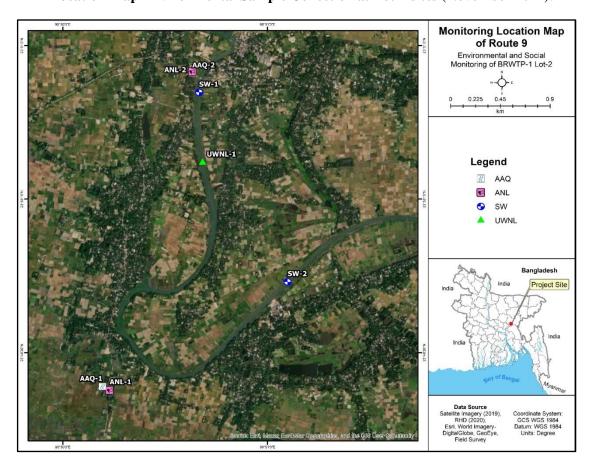
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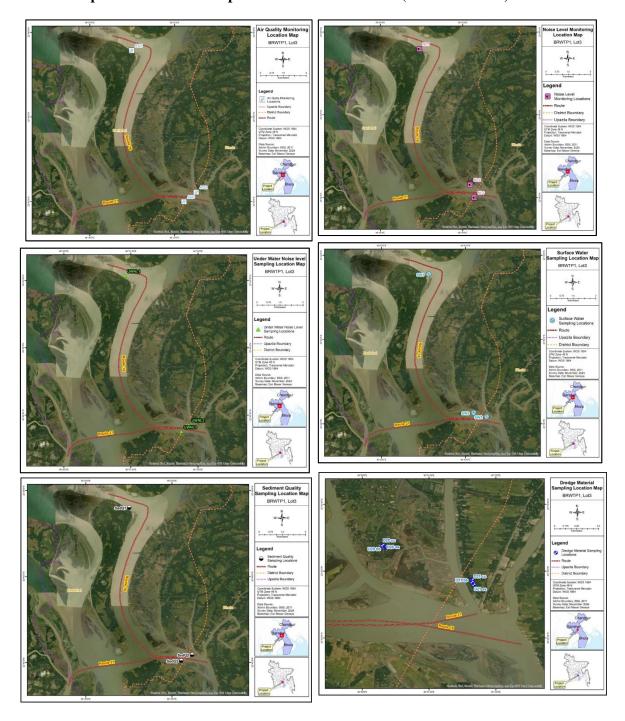


# ANNEX VII: Location of Environmental Sample Collection, November 2024

## **Location Map Environmental Sample Collection at Lot-2 sites (November 2024):**



## **Location Map Environmental Sample Collection at Lot-3 sites (November 2024):**



# ANNEX VIII: Environmental Quality Assessment and Compliance Status for November 2024

Table 14: Environmental Quality Assessment for November 2024 for Lot-2

Sl No.	Item	Parameters	Baseline Data of Route 09	Route-9	S1A Remarks August
			January 2023	November 2024	2024
		SPM	140.34	163.84	*WAL
		PM10	58.34	80.26	WAL
1	Air Quality	PM2.5	31.43	40.48	WAL
1	All Quality	SO2	15.29	28.19	WAL
		NO2	12.75	37.49	WAL
		CO	1.3	0.7	WAL
		LEQ day	61.6	56.8	WAL
2	Noise Level	Lmax	76	64.7	WAL
		Lmin	42.8	40.2	WAL
3	Underwater Noise Level	LAvg [dB (A)]	-	47.8	WAL
		Temperature	22.1	25.8	WAL
		EC	170	330	WAL
		pН	7.20	7.66	WAL
4	Surface Water Quality	TDS	160	164	WAL
		DO	4.5	5.8	WAL
		BOD5	10	4.1	WAL
		TSS	83	180	WAL
		Lead (Pb)	9.79	-	WAL
		Cadmium (Cd)	0.054	-	WAL
5	Riverbed Sediment	Chromium(Cr)	15.94	-	WAL
		Zinc (Zn)	26.32	-	WAL
		Arsenic (As)	1.96	-	WAL

<sup>\*</sup>WAL=Within Approved Limit; - = Sample was not collected.

Table 15: Compliance Status for November 2024 for Lot-2

1 abic 15. C	Visual Monitoring Compliance								
Potential	Description	EMP	Measures	Compl	iance	Status	Remarks/	Recommended	
Aspects		Measures (Proposed in the EIA)	Already Implemente d	С	P	N	Recommendation	deadline for implementing the corrective measures	
Aquatic Flora & Fauna including Plankton, Benthos, fish, dolphin	During the reporting month twenty two (22) species of fish and three (03) species of crustaceans were observed in the surveyed routes with no fish mortality recorded	Mitigation measures not required	No mitigation measure was suggested by the Lot 2 monitoring team.	-	P	-	Lo2 and Lot 3 ESHS staffs were advised to be physically present while dredging is ongoing to give more effort and to spend more time on regular monitoring of the habitat and biodiversity		
Sediment Dispersion	Not measured	-	-	-	-	N	Contractors were notified to measure sediment plume on the 1st of March 2023, followed by verbal instruction and reminder emails	No action taken or data provided by the contractors yet. Will be reminded again.	
Riverbank Erosion	There were no issues regarding riverbank erosion or flooding.	Dredger stopped and relocated	Dredger stopped and relocated some protection measures taken	С	-	-	Stop dredging and relocate	Recommended reporting to the authorities and stop dredging	

			Visual Monitor	ring Comp	liance	9		
Potential	Description	EMP	Measures	Compl			Remarks/	Recommended
Aspects		Measures (Proposed in the EIA)	Already Implemente d	С	P	N	Recommendation	deadline for implementing the corrective measures
Hydrologica lConditions	Surveyed before dredging			С				
Drainage Congestion	No remarkable congestion was observed at the dredged material disposal sites.			-	P	-	No reports of any drainage congestion. Regular monitoring	Keep clear all drainage channels. Regular monitoring
River Traffic/ Transport	River traffic-related signboards have already been fixed to ensure a safe river traffic movement		No mitigation measure is required		P	-	Install river traffic and navigation- related signboards	Urged to expedite the installation of the remaining Aids to Navigation items immediately to ensure timely completion.
Accidental Spillage	No reports yet	Oil spill emergency plan. 24/7 ready plan	-		P	-	Logbook to be maintained, in case, of any incident, report to the authority	No action taken yet
Sediment leakages frompipes and sediment disposal	No significant leakages were observed with the floater and/or delivery pipe	Maintain pipes	Pipes regularly checked	-	Р	-	Stop dredging, fix the problem before resumption; and report to the authority	
Drinking water& sanitation	Safe drinking water is being supplied	Source to be mentioned	-	-	С	-	-	Source of drinking water to be mentioned
Safety of workers	Occupational safety		PPEs provided	-	-	P	Monitor the use of PPEs	Regular monitoring, punitive measures for not using PPEs, or Awareness programs for using PPEs. Besides, need to provide an adequate number of PPEs.
Waste management	Waste bins have been placed on the houseboat as well as in the dredger and maintained		-	-	С	-	Colored collection bins for organic and non-organic solid wastes; no wastes in the river	Mention later stages, what happens after collection from waste bins
Cultural and archeologic alSites	Preservation of such sites		Х	-	х	х	Stop dredging, report to the authorities	-
Wastewater	Drained properly		-	-	-	P	-	-

Note: The table was prepared based on observations from the field visit.

Table 16: Environmental Quality Assessment for November 2024 for Lot 3

Sl No.	: Environmental Q	Parameters	Baseline	Route 16	BaselineData	Route 21	S1A Remarks
2-1,01			Data of Route 16	November 2024	of Route 21	November 2024	November 2024
		SPM	170.65	62.99	165.12	69.30	WAL
	Ambient Air	PM10	81.24	39.04	72.15	44.29	WAL
1	Polluants' Concentration in	PM2.5	42.85	17.43	47.28	19.11	WAL
	μg/m <sup>3</sup>	SO2	16.44	13.69	13.69	11.81	WAL
	μg/III	NO2	21.40	17.33	22.18	16.58	WAL
		CO	1.1	0.5	0.6	0.9	WAL
		LEQ day	53.5	55.67	62.35	82.44	WAL
2	Noise Level	Lmax	75.7	72.09	82.53	69.52	Mixed Area.
		Lmin	32.8	36.77	39.76	38.02	WAL
3	Under Water Noise Level	LAvg [dB (A)]	-	54.4	-	63.5	WAL
		Temperature	22.0	26.4	24.8	27.3	WAL
	G 6 VVV	EC	280	291	290	314	WAL
4	Surface Water Quality	pН	7.91	7.48	7.77	7.88	WAL
-		TDS	140	142	137	155	WAL
		DO	6.3	7.9	7.0	7.2	WAL
		BOD5	0.6	1.4	1.5	1.9	WAL
		TSS	29	84	86	89	WAL
		Lead	12.01	9.55	10.17	11.05	WAL
	Riverbed Sediment	Cadmium	0.058	0.062	0.054	0.068	WAL
5		Chromium	17.14	12.94	12.76	13.74	WAL
		Zinc	38.65	20.55	23.48	23.99	WAL
		Arsenic	2.01	1.57	1.57	1.95	WAL
		Lead	-				WAL
		Cadmium	-				WAL
6	Dredge Material	Chromium	-	ĺ			WAL
		Zinc	-				WAL
1		Arsenic	-				WAL

<sup>\*</sup>WAL=Within Approved Limit.

**Table 17: Compliance Status for November 2024 for Lot-3** 

	Visual Monitoring Compliance									
Potential	Description	EMP	Measures Already	Comp	plianceSt	atus	Remarks/	Recommended		
Aspects		Measures (Proposed in the EIA)	Implemented	C	P	N	Recommendation	deadline for implementing the corrective measures		
Aquatic Floraand Fauna including Plankton, Benthos, fish, dolphin	During the reporting month twenty five (25) species of fish and five (05) species of crustaceans were observed in the surveyed routes with no fish mortality recorded	Mitigation measures not required	No mitigation measure is required in the reporting period	-	P	-	Lo2 and Lot 3 ESHS staffs were advised to be physically present while dredging is ongoing to give more effort and to spend more time on regular monitoring of the habitat and biodiversity.	To be practiced every month		
Sediment Dispersion	Not measured	х	No mitigation measure is required in the reporting period	-	-	N		No action taken or data provided by the contractors yet. Will be reminded again		

			Visual Monitoring	Compli	ance			
Potential	Description	EMP	Measures Already		plianceSt	tatus	Remarks/	Recommended
Aspects	2000.100	Measures (Proposed in the EIA)	Implemented	С	P	N	Recommendation	deadline for implementing the corrective measures
Riverbank Erosion	No reports of riverbank erosion or flooding occurred during the reporting month.	Regular monitoring		-	P	-		Regular monitoring
Hydrological Conditions	Surveyed before dredging							
Drainage Congestion	No drainage congestion was observed during this month.				P	-	No reports of any drainage congestion	To be monitored regularly, early mornings and evenings
River Traffic/Transport	No traffic-related problems were identified	Appropriate aids to navigation to be installed	to navigation under	-	P	-	River traffic-related sign boards observed	Appropriate aids to navigation to be installed soon, some.
Accidental Spillage	No reports yet	Monitoring and preparedness to handle any accidental spillage	No spills from chemical storage	-	P	-	Emergency oil spill management plan	Emergency Plan in place, to be updated ifnecessary
Sediment leakages from pipes and sediment disposal	No reports of any leakage	Maintain pipes, regular checking	During this reporting month, no leakage was found in the dredge pipe. Pipes regularly checked	-	P	-	No reports ofleakage	Stop dredging, fix the problem before resumption; and report to the authority
Drinking water& sanitation	beingsupplied			С	-	-		Drinking water source to be mentioned
Safety ofworkers	Occupational safety		PPEs provided	-	-	N	Awareness of using PPEs	Give warning notice to workers
Waste management	Waste bins have been placedon the houseboat as well as in the dredger and maintained		-	С	-	-	Colored collection bins for organic and non-organic solid wastes; no wastes in the river	Mention the end process where does the waste go from the bins?
Cultural and archeological Sites	Preservation of such sites		x	-	х	х	Stop dredging,report to the authorities	-
Wastewater	From houseboats, dikes, etc.	Treated, release after settling	Not described	-	-	N	To be treated before release	-

# ANNEX IX: Checklist of Dredging and ESHS Activities Lot-2 & Lot-3, November 2024, BRWTP-S1A

Lot-2
Table 4: Checklist of Dredging Activities Lot-2, November 2024, BRWTP-S1A

	<u> </u>	lecklist of Dredging Acti		redging Activit		
	•	Checklist Items	Daily	Monthly	When and As Required	Comments/Compliance
1	Gauge re	ading & Water level (WL)	020	0	0	Average water level is 1.433 m
2	Connecti	vity with BM & TBM	0	0	OØ□	
3	Study Hy	drographic Chart	0	0	O⊠□	
4		utting Depth respect to WL as per design depth	0	0	OØ	
5	Checking	Dredging Alignment	0	0	OØ	
6	Checking	Dredged Activities as below;				No Dredger runing in this period
	a	Dredging Hours	0	0	OØ	
	b	Cutting Length	0	0	02	
	с	Cutting Depth	0	0	02	
	d	Cutting Width	0	0	02	
	e	Dredged Volume	0	0	OØ	
7	Disposal	ng Dredged Material Area whether the Dykes are as per Design	0	0	02	
8	Disposal	ng Dredged Material Area whether the Dykes are o resist the pressure of materials	0	0	012	
9	Checking	outlet of the compartment	0	0	OØ□	
10		nether the dykes are being ed at safe distance from river	0	0	012	
11	whether t	nstruction of the pipe line here is any leakage in the Floating Pipe/Shore pipe lines	0	0	02	
12	Keeping	nether dredging work exacting Safety distance of River side ons like Road/houses/buiding.	0	0	02	
13	Check Su	rvey Activities	0	0	0🛛	

Table 19: Checklist of Environmental and ESHS Activities Lot-2, November 2024, BRWTP-S1A

Table 17. Checklist		GI IVIII		Dredging A		Commental Committee
Factors		Checklist Items	Daily	Monthly	Quarterly	Comments/Compliance
	1	EIA and Environmental Permits	0	0	02	
1. Permits and Explanation	2	Explanation to the Local Stakeholders	0	0	OØ	
	3	Signboards, Notice Boards	0	0	O <b>Z</b> □	
	1	Air Quality	0	OØ	0	Supervised in 12 November and 13 November at salimgonj site.
	2	Surface Water Quality	0	020	0	Supervised in 12 November and 13 November at salimgonj site.
	3	Solid Wastes	0	OØ	0	Supervised in 12 November and 13 November at salimgonj site.
	4	Liquid Wastes	0	OØ	0	Supervised in 12 November and 13 November at salimgonj site.
2. Physical	5	Soil Contamination	0	OØ	0	Supervised in 12 November and 13 November at salimgonj site.
Environmental Parameters Monitoring	6	Noise and Vibration	0	OØ	0	Supervised in 12 November and 13 November at salimgonj site.
	7	Underwater Noise	0	OØ	0	Supervised in 12 November and 13 November at salimgonj site.
	8	Odor	0	020	0	Supervised in 12 November and 13 November at salimgonj site.
	9	Riverbed Sediment	0	OØ	0	Supervised in 12 November and 13 November at salimgonj site.
	10	Groundwater	0	OØ	0	Supervised in 12 November and 13 November at salimgonj site.
	1	Protected Areas	0	OØ	0	Route no. 09
	2	Habitat Type	0	OØ	0	Route no. 09
	3	Hydrology	0	OØ	0	Route no. 09
	4	Topography and Geology	0	OØ	0	Route no. 09
Natural Environment	5	Dolphin Observation	0	OØ	0	Route no. 09
	6	Fish Catch Examination	0	020	0	Route no. 09
	7	Flora (Aquatic & Terrestrial)	0	O⊠□	0	Route no. 09
	8	Benthos (Micro & Macro)	0	020	0	Route no. 09
	9	Phyto- & Zoo- planktons	0	OØ	0	Route no. 09
	1	Resettlement	0	0	O₽□	
	2	Living and Livelihood	0	0	020	
4. Social Environment	3	Heritage	0	0	OØ	
	4	Landscape	0	0	O <b>Z</b> □	
	5	Ethnic Minorities and Indigenous Peoples	0	0	O <b>⊠</b> □	
5. Occupational Health	1	Work Permit/Contract	0	0	O <b>⊠</b> □	
Safety	2	Daily Toolbox Meeting - OHS	0	0	O <b></b> Z□	

T		CL IV.	]	Dredging Ac	etivity	aa "
Factors		Checklist Items	Daily	Monthly	Quarterly	Comments/Compliance
	3	Working Conditions		<b>☑</b> □		Fair
	4	Impact/Precaution during Dredging	0	0	OØ	Not any major issue observed
	5	Accident Prevention Measures	0	OØ	0	Contractors ESHS team visiting site and concerning all the Manpower
	6	Working Condition	<b>0</b>	0	0	Fair
	7	Accommodation	02	0	0	House Boat
	8	Personal Protection Equipment	<b>0</b> ☑	0	0	Safety helmet, Safety vest, safety shoes, Hand gloves etc observed at site.
	9	Drinking Water	O <b>Ø</b> □	0	0	Freshwater daily collect from tube well
	10	Sanitary Condition	<b>0</b> ☑	0	0	Good arrangement kept in House boat
	1	Agreement with Land Owner	0	0	020	
	2	Land Use Type	0	020	0	
	3	Dyke Design Approval	0	OØ□	0	
6. Dredged Material Disposal Area	4	Dyke Setback Distance	0	O <b>Z</b> □	0	
	5	Disposal Area Dyke Height	0	020	0	
	6	Dyke Strengthened/Material Used*	0	0	020	When required then used.
	1	Carbon Emission	0	0	020	
	2	Leakage	0	0	OØ	
7. Dredger	3	Oil Spill	0	0	O⊠□	Not found/observed at site for all route in lot-2
, Dieagei	4	Onboard Waste Management	0	0	O <b></b> Z□	The Foundation of the for the found in 100-2
	5	Noise and Vibration	0	0	☑□	

Table 20: Checklist of Environmental and Social Activities Lot-2, November 2024, BRWTP-S1A

Category	Environmental Item	Main Check Items	Yes: Y No: N		
		(a) Have EIA reports been already prepared in official process?	Y		
		(b) Have EIA reports been approved by authorities of the host country's government?			
	(1) EIA and Environmental Permits	(c) Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied?	Y		
1. Permits and Explanation		(d) In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	Y		
	(2) Explanation to the Local Stakeholders	(a) Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure? Is understanding obtained from the Local stakeholders?	Y		
	(3) Examination of Alternatives	(a) Have alternative plans of the project been examined with social and environmental considerations?	Y		
	(1) Air Quality	(a) Do air pollutants, such as sulfur oxides (SOx), nitrogen oxides (NOx), soot and dust emitted from the ships, vehicles and the facilities like docs comply with the country's emission standards? Are any mitigating measures taken?	Y		
	(2) Water Quality	(a) Do pollutants, such as Suspended Soils (SS), oils/fats and other toxicants contained in effluents comply with the country's effluent standards (BOD, COD, ph, etc)? Is there a possibility that the effluents from the project will cause areas not to comply with the country's ambient water quality standards?			
		(b) Are adequate measures taken to prevent contamination of surface water, groundwater and soil by the effluents from storage areas, including raw materials, chemicals, and wastes?	N		
2. Physical Environmental	(3) Wastes	(a) Are wastes (including hazardous wastes and other industrial wastes) generated from the project facilities properly treated and disposed of in accordance with the country's regulations?	N		
Parameters Monitoring	(5) Wastes	(b) Are adequate measures taken to prevent contamination of soil and groundwater by leachates from the waste storage/disposal sites?	N		
	(4) Noise and Vibration	(a) Do noise and vibrations comply with the country's standards?	N		
	(5) Subsidence	(a) In the case of extraction of a large volume of groundwater, is there a possibility that the extraction of groundwater will cause subsidence?	N		
	(6) Odor	(a) Are there any odor sources? Are adequate odor control measures taken?	N		
		(a) Sediment collection in presence of S1A team members/staff?	Y		
	(7) Riverbed Sediment	(b) Samples sent to the laboratory within 12 hours?	Y		
		(c) If sample results showed presence of heavy metal, treatment measures like separate compartment for disposal of dredged material taken by the Contractor	N		

Category	Environmental Item	Main Check Items	Yes: Y No: N
	(8) Groundwater	Samples collected and analyzed	N
	(1) Protected Areas	(a) Is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?	N
		(a) Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., Char land, reedland, mangroves, or tidal flats)?	N
		(b) Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions?	N
	(2) Ecosystem/Habitat Type	(c) If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem?	N
		(d) Is there a possibility that the amount of water (e.g., surface water, groundwater) used by the project will adversely affect aquatic environments?	N
Natural Environment		(e) Are adequate measures taken to reduce the impacts on aquatic environments, such as aquatic organisms?	N
		(a) Is the stability of the existing topographic conditions adequately considered for alteration of topographic features, such as cut and fill operations?	N
	(3) Topography and Geology	(b) Is there a possibility that soil runoffs will result from cut and fill areas, waste soil disposal sites, and borrow sites?	N
		(c) Are adequate mitigation measures taken to prevent soil runoffs?	N
		(d) Is there any possibility that the project will erode natural river bank, forshore area, beaches?	N
	(4) Dolphin Observation	(a) Exclusive time spent for observing dolphins?	N
	(5) Fish Catch Examination	(a) Fishermen upstream and downstream of dredging site interviewed and catch examined? Types of gears used?	Y
	(6) Flora (Aquatic & Terrestrial)	(a) Flora surveyed around the dredging and dredged material disposal sites	N
	(7) Benthos (Micro and Macro)	(a) Sampling done and analyzed, report submitted	Y
	(8) Phyto- & Zoo- Planktons	(a) Sampling done and analyzed, report submitted	Y
		(a) Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement?	N
4. Social Environment	(1) Resettlement	(b) Is adequate explanation on compensation and resettlement assistance given to affected people prior to resettlement?	N
		(c) Is the resettlement plan, including compensation with full replacement costs, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement?	N

Category	Environmental Item	Main Check Items	Yes: Y No: N
		(d) Are the compensations going to be paid prior to the resettlement?	N
		(e) Are the compensation policies prepared in document?	N
		(f) Does the resettlement plan pay particular attention to vulnerable groups or people, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples?	N
		(g) Are agreements with the affected people obtained prior to resettlement?	N
		(h) Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan?	N
		(i) Are any plans developed to monitor the impacts of resettlement?	N
		(j) Is the grievance redress mechanism established?	N
		(a) Is there a possibility that the project will adversely affect the living conditions of inhabitants? Are adequate measures considered to reduce the impacts, if necessary?	N
	(2) Living and Livelihood	(b) Is sufficient infrastructure (e.g., hospitals, schools, and roads) available for the project implementation? If the existing infrastructure is insufficient, are any plans developed to construct new infrastructure or improve the existing infrastructure?	N
		(c) Is there a possibility that large vehicles traffic for transportation of materials, such as raw materials and products will have impacts on traffic in the surrounding areas, impede the movement of inhabitants, and cause any risks to pedestrians?	N
		(d) Is there a possibility that diseases, including infectious diseases, such as HIV, will be brought due to the immigration of workers associated with the project? Are adequate considerations given to public health, if necessary?	N
	(3) Heritage	(a) Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage sites? Are adequate measures considered to protect these sites in accordance with the country's laws?	N
	(4) Landscape	(a) Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?	N
	(5) Ethnic Minorities and	(a) Are considerations given to reduce impacts on the culture and lifestyle of ethnic minorities and indigenous peoples?	N
	Indigenous Peoples	(b) Are all of the rights of ethnic minorities and indigenous peoples in relation to land and resources respected?	N
	(6) Working Conditions	(a) Is the project proponent not violating any laws and ordinances associated with the working conditions of the country which the project proponent should observe in the project?	N

Category	Environmental Item	Main Check Items	Yes: Y No: N
		(b) Are tangible safety considerations in place for individuals involved in the project, such as the installation of safety equipment which prevents industrial accidents, and management of hazardous materials?	N
		(c) Are intangible measures being planned and implemented for individuals involved in the project, such as the establishment of a safety and health program, and safety training (including traffic safety and public sanitation) for workers etc.?	N
		(d) Are appropriate measures being taken to ensure that security guards involved in the project do not violate safety of other individuals involved, or local residents?	N
	(1) Impacts during	(a) Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)?	N
	dredging/construction	(b) If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce the impacts?	N
	(2) Accident Prevention Measures	(a) Does the project have any accident prevention equipment and scheme to store, emit and transport toxic and hazardous materials?	N
5. Others		(a) Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts?	N
		(b) What are the items, methods and frequencies of the monitoring program?	N
	(3) Monitoring	(c) Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)?	N
		(d) Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the proponent to the regulatory authorities?	N

Table 21: Table 18: GRM Checklist, Lot-2, November 2024, BRWTP-S1A

SI	SI no. Factors		Checklist Items		Dredgi			
					Weekly	Monthly	Quarterly	Comments/Compliance
1	Legal and Regulatory	1	The contractors communicate to all the stakeholders regarding GRM processing and lodging complaints.	0	0	0	020	There is a GRM committee with 5 persons here.
	Compliance	2	Contact details for lodging grievance easily accessible.	0	0	0	0	
2	Community Engagement	1	Consultations/ FGD have been conducted with local communities, dredging contractors to collect their input on the GRM design.		0	0	O 🗷 🗆	

Sl			~		Dredg	ing Activity		
no.	Factors		Checklist Items	Daily	Weekly	Monthly	Quarterly	Comments/Compliance
3	Grievance Channels	1	The multiple accessible channels available for the stakeholders to submit their grievances. (e.g., toll-free hotline, online platform, drop box, post, landline/mobile phone and e-mail).	02	0	0	0	
		1	Dyke/Land selection survey.	0	OØ	0	0	Survey in every week.
	Processing of GFA (Good	2	Opinion meeting with land owner along with inform to the contractor and S1A team for justifying land as dyke.	0	OØ	0	0	Survey in 15 days a month.
4	Faith Agreement)	3	GFA documentation collection.	0	OØ	0	0	Collection the document 15 days a month.
		4	GFA will be submitted to S1A.	0	OØ	0	0	
		5	FGD on GFA with the Locals	0	0	020	0	
5	Constitution of GRM Protocol	1	Preparation of GRM Protocol and Greivance Redres Committee (GRC) will be Constituted by the Contractors.	0	020	0	0	
6	Establish a Complaint Box	1	For receive feedback, suggestions and complain letters.	0	O <b>⊠</b> □	0	0	There are 3 complain box in site. One box is in office, one box in houseboat and onther is open road site.
7	Establish a Signboard	1	The size of Bill board will be 5/15. The bill board should contain: name, mobile number and email of the focal person.	0	020	0	0	There is a signboard in front of office.
		1	Local level GRC (Committee members 05, quorum fullfill at least 03) -Project related issues.	0	OØ0	0	0	
8	3 (three) tyers of the GRM Comittee will be formed	2	Contractor level GRC (Committee members 03, quorum fullfill at least 03)- GBV, CoC, Contractors workers occurance etc. related issues.	0	0	0	02	
		3	Project level GRC (Committee members 03, quorum fullfill at least 03)	0	0	0	020	
9	Capacity Building	1	Project staffs and local institutions have received training on the GRM, GBV related issues and its operation.	0	ON/A	0	0	
10	Leaflet/ Brochure	1	The Leaflet/ Brochure will be published for dissemination to all the stakeholders.	0	ON/A	0	0	There is no leaf let in the site.
11	Monitoring, Reporting & documentation	1	The regular reports generated to document the number, nature, and resolution of grievances (Registration Book, Resolution book / Decision book & Closing book)	0	OØ	0	0	
	g : 1	1	Local Community	0	020	0	0	
12	Social Consultation	2	Land Owner	0	020	0	0	
		3	Local Government Authority	0	OØ	0	0	
		1	Sex Violence by an intimate partner	0	0	OØ	0	
13	Gender-Based Violence	2	Sexual violence by a non-peer	0	0	OØ	0	
	(GBV)	3	Child sexual abuse & forced marriage	0	0	020	0	
		4	Sexual exploitation & abuse	0	0	OØ	0	

SI	SI T				Dredgi			
no	Factors	Checklist Items		Daily	Weekly	Monthly	Quarterly	Comments/Compliance
		5	Sexual harassment	020	0	0	0	
		6	In case of emergency, the local level GRC will address the matter within 04 -12 hours.	0 🛛	0	0	0	

## Lot-3

Table 22: Checklist of Dredging Activities Lot-3, November 2024, BRWTP-S1A

Ta	Table 22: Checklist of Dredging Activities Lot-3, November 2024, BRWTP-S1A										
				Dredging A	ctivity						
		Checklist Items	Daily	Monthly	When and As Required	Comments/Compliance					
1	Gauge rea	ading & Water level (WL)	0	0	$\checkmark$						
2	Connecti	vity with BM & TBM	0	0	<b>V</b>						
3	Study Hy	drographic Chart	0	0	$\checkmark$						
4		utting Depth respect to existing er design depth	0	0	$\sqrt{}$						
5	Checking	Dredging Alignment	0	0	√						
6	Checking	g Dredged Activities as below;				Dredged Activities for the month of November, 2024					
	a	Dredging Hours	0	$\checkmark$	0	Total Dredging Hours 410hrs (Route 21 is 330hrs, Route 16 is 00 hrs & Route 13 is 80hrs)					
	b	b Cutting Length		V	0	Total length is 2165m Route 21 length 1815m Route 13 length 350 m Route 16 length 0.00m					
	с	Cutting Depth	0	√	0	Average Cutting Depth for Route 21 is 3.00m,route 13 is 2.9m and route 16 is 0.00m					
	d	Cutting Width	0	$\checkmark$	0	Cutting Width Route 21 ,13 is 76m					
	e	Dredged Volume	0	<b>V</b>	0	Total Dredged Volume 166900.00 cum (Route 21 is 144500.00cum, Route 13 is 22400.00cum & Route 16 is 0.00 cum)					
7		ing Dredged Material Disposal ether the Dykes are designed as	0	<b>V</b>	0	Supervised together with dredging experts durning the new dyke construction and it is observed that Dykes are maintained as per Design					
8	Area whe	ing Dredged Material Disposal ether the Dykes are capable to pressure of disposed materials	0	<b>V</b>	0	Its observed that new dyke boundary wall maintained proper design thickness, slope, layer of compaction, 20m/30m safe distance from river bank.					
9	Checking	g outlet of the compartment	0	√	0	Using 5rs/4nrs of outlet of this compartment					
10	Check whether the dykes are being constructed at safe distance from river bank			√	0	644m, 1067m, 1343m and 762m ,500m safe distance from the river bank					
11	Check construction of the pipe line whether there is any leakage in the Joints of Floating Pipe/Shore pipe lines			<b>√</b>	0	No leakage observed in the Joints of Floating Pipe/Shore pipe lines					
12	Keeping	hether dredging work exacting Safety distance of River side ons like Road/houses/buiding.	0	<b>V</b>	0	It is observed that contractor maintained 100m from safe distance from Road/Houses/building and 20m-30m safe distance maintained from river Bank					

		]	Dredging A	etivity		
Checklist Items			Monthly	When and As Required	Comments/Compliance	
13	Check Survey Activities	0	V	0	1.Engineering survey work done for lot 3 Route number 21(Laharhat-Bheduria) on dated 13.11.2024 2.Monitoring Survey work for Route no 13 (North Athazar-Alubazar-Horina) on dated 18-11-2024 to 30-11-2024 3.Engineering survey work done for lot 3 Route number 21(Laharhat-Bheduria) on dated 25.11.2024	

Table 23: Checklist of Environmental and ESHS Activities Lot-3, November 2024, BRWTP-S1A

P. (		OL INCI		Dredging Ac	tivity	Commental Compliance	
Factors		Checklist Items	Daily	Monthly	Quarterly	Comments/ Compliance	
	1	EIA and Environmental Permits	0	0	√		
Permits and     Explanation	2	Explanation to the Local Stakeholders	0	0	√	Not found/observed at site for all route in lot_3	
	3	Signboards, Notice Boards	0	0	√		
	1	Air Quality	0	√	0		
	2	Surface Water Quality	0	$\checkmark$	0		
	3	Solid Wastes	0	√	0	7	
	4	Liquid Wastes	0	√	0	7	
2. Physical	5	Soil Contamination	0	$\sqrt{}$	0		
Environmental Parameters Monitoring	6	Noise and Vibration	0	√	0	1	
	7	Underwater Noise	0	V	0	1	
	8	Odor	0	√	0		
	9	Riverbed Sediment	0	√	0	T (1 C D (	
	10	Groundwater	0	V	0	Test done for Route no. 21 only on dated	
	1	Protected Areas	0	√	0	19.11.2024 to 21-11-2024	
	2	Habitat Type	0	$\sqrt{}$	0	1	
	3	Hydrology	0	V	0	1	
	4	Topography and Geology	0	V	0	1	
3. Natural Environment	5	Dolphin Observation	0	V	0	1	
Environment	6	Fish Catch Examination	0		0	1	
	7	Flora (Aquatic & Terrestrial)	0	√	0		
	8	Benthos (Micro & Macro)	0	<b>√</b>	0		
	9	Phyto- & Zoo-planktons	0	√	0	=	
	1	Resettlement	0	0	√		
	2	Living and Livelihood	0	0	√		
	3	Heritage	0	0	$\checkmark$		
4. Social Environment	4	Landscape	0	0	√		
	5	Ethnic Minorities and Indigenous Peoples	0	0	√		
	1	Work Permit/Contract	0	0	√		
	2	Daily Toolbox Meeting - OHS	0	0	<b>√</b>		
	3	Working Conditions	0	$\checkmark$	0	Fair	
	4	Impact/Precaution during Dredging	0	0	√	Not any major issue observed	
	5	Accident Prevention Measures	0	$\checkmark$	0	not found	
	6	Working Condition	√	0	0	Fair	
5. Occupational Health	7	Accommodation	√	0	0	House Boat	
Safety	8	Personal Protection Equipment	<b>V</b>	0	0	Safety helmet, Safety vest, safety shoes, Hand gloves etc store at site but do not wear or maintain properly	
	9	Drinking Water	V	0	0	Freshwater daily collect from tube well of nearby village	
	10	Sanitary Condition	$\sqrt{}$	0	0	Good arrangement kept in House boat	
6. Dredged Material	1	Agreement with Land Owner	0	0	V	Process ongoing	

Disposal Area	2	Land Use Type	0	<b>√</b>	0	Once or twice cultivated land in a year and also some non-cultivated fellow land
	3	Dyke Design Approval	0	$\checkmark$	0	Dyke no.02 (extension) Dyek no. 21 for route 21 construction ongoing.
	4	Dyke Setback Distance	0	<b>V</b>	0	640m, 1067m, 1632m and 1343m safe distance from the river bank
	5	Disposal Area Dyke Height	0	V	0	Height 1.875m (avg) for Route no.21, Height 2.0m for Route no.16 and Height 1.8m for Route no.13
	6	Dyke Strengthened/Material Used*	0	0	$\checkmark$	When required then used
	1	Carbon Emission	0	0	√	Very low by dredgers
	2	Leakage	0	0	V	Not observed or not found in lot 3
7. Dredger	3	Oil Spill	0	0	<b>V</b>	Visibly very less observed from dredgers and oil tanker
	4	Onboard Waste Management	0	0	V	Not satisfactory or poor management
	5	Noise and Vibration	0	0	V	Very low by dredgers

Table 24: Checklist of Environmental and Social Activities Lot-3, November 2024, BRWTP-S1A

Category Environmental Item		Main Check Items	Yes: Y No: N
		(a) Have EIA reports been already prepared in official process?	Y
		(b) Have EIA reports been approved by authorities of the host country's government?	Y
	(1) EIA and Environmental Permits	(c) Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied?	Y
1. Permits and Explanation		(d) In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	Y
	(2) Explanation to the Local Stakeholders	(a) Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure? Is understanding obtained from the Local stakeholders?	Y
	(3) Examination of Alternatives	(a) Have alternative plans of the project been examined with social and environmental considerations?	Y
	(1) Air Quality	(a) Do air pollutants, such as sulfur oxides (SOx), nitrogen oxides (NOx), soot and dust emitted from the ships, vehicles and the facilities like docs comply with the country's emission standards? Are any mitigating measures taken?	Y
2. Physical Environmental Parameters Monitoring	(2) Water Quality	(a) Do pollutants, such as Suspended Soils (SS), oils/fats and other toxicants contained in effluents comply with the country's effluent standards (BOD, COD, ph, etc)? Is there a possibility that the effluents from the project will cause areas not to comply with the country's ambient water quality standards?	Y
		(b) Are adequate measures taken to prevent contamination of surface water, groundwater and soil by the effluents from storage areas, including raw materials, chemicals, and wastes?	N

Category	Environmental Item						
	(3) Wastes	(a) Are wastes (including hazardous wastes and other industrial wastes) generated from the project facilities properly treated and disposed of in accordance with the country's regulations?	N				
		(b) Are adequate measures taken to prevent contamination of soil and groundwater by leachates from the waste storage/disposal sites?	N				
	(4) Noise and Vibration	(a) Do noise and vibrations comply with the country's standards?	Y				
	(5) Subsidence	(a) In the case of extraction of a large volume of groundwater, is there a possibility that the extraction of groundwater will cause subsidence?	N				
	(6) Odor	(a) Are there any odor sources? Are adequate odor control measures taken?	N				
		(a) Sediment collection in presence of S1A team members/staff?	Y				
	(7) Riverbed Sediment	(b) Samples sent to the laboratory within 12 hours?	Y				
	(-)	(c) If sample results showed presence of heavy metal, treatment measures like separate compartment for disposal of dredged material taken by the Contractor	N				
	(8) Groundwater	Samples collected and analyzed	N				
	(1) Protected Areas	<ul><li>(a) Is the project site located in protected areas designated by the country's laws or international treaties and conventions?</li><li>Is there a possibility that the project will affect the protected areas?</li></ul>	N				
	(2) Ecosystem/Habitat Type	(a) Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., Char land, reedland, mangroves, or tidal flats)?	N				
		(b) Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions?	N				
		(c) If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem?	N				
		(d) Is there a possibility that the amount of water (e.g., surface water, groundwater) used by the project will adversely affect aquatic environments?	N				
		(e) Are adequate measures taken to reduce the impacts on aquatic environments, such as aquatic organisms?	N				
3. Natural Environment	(3) Topography and Geology	(a) Is the stability of the existing topographic conditions adequately considered for alteration of topographic features, such as cut and fill operations?	N				
		(b) Is there a possibility that soil runoffs will result from cut and fill areas, waste soil disposal sites, and borrow sites?	N				
		(c) Are adequate mitigation measures taken to prevent soil runoffs?	N				
		(d) Is there any possibility that the project will erode natural river bank, forshore area, beaches?	N				
	(4) Dolphin Observation	(a) Exclusive time spent for observing dolphins?	Y				
	(5) Fish Catch Examination	(a) Fishermen upstream and downstream of dredging site interviewed and catch examined? Types of gears used?	Y				
	(6) Flora (Aquatic & Terrestrial)	(a) Flora surveyed around the dredging and dredged material disposal sites	N				
	(7) Benthos (Micro and Macro)	(a) Sampling done and analyzed, report submitted	Y				
	(8) Phyto- & Zoo- Planktons	(a) Sampling done and analyzed, report submitted	Y				
4. Social Environment	(1) Resettlement	(a) Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement?	N				
		(b) Is adequate explanation on compensation and resettlement assistance given to affected people prior to resettlement?	N				

Category	Main Check Items	Yes: Y No: N	
		(c) Is the resettlement plan, including compensation with full replacement costs, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement?	N
		(d) Are the compensations going to be paid prior to the resettlement?	N
		(e) Are the compensation policies prepared in document?	N
		(f) Does the resettlement plan pay particular attention to vulnerable groups or people, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples?	N
		(g) Are agreements with the affected people obtained prior to resettlement?	N
		(h) Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan?	N
		(i) Are any plans developed to monitor the impacts of resettlement?	N
		(j) Is the grievance redress mechanism established?	N
		(a) Is there a possibility that the project will adversely affect the living conditions of inhabitants? Are adequate measures considered to reduce the impacts, if necessary?	N
		(b) Is sufficient infrastructure (e.g., hospitals, schools, and roads) available for the project implementation? If the existing infrastructure is insufficient, are any plans developed to construct new infrastructure or improve the existing infrastructure?	N
	(2) Living and Livelihood	(c) Is there a possibility that large vehicles traffic for transportation of materials, such as raw materials and products will have impacts on traffic in the surrounding areas, impede the movement of inhabitants, and cause any risks to pedestrians?	N
		(d) Is there a possibility that diseases, including infectious diseases, such as HIV, will be brought due to the immigration of workers associated with the project? Are adequate considerations given to public health, if necessary?	N
	(3) Heritage	(a) Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage sites? Are adequate measures considered to protect these sites in accordance with the country's laws?	N
	(4) Landscape	(a) Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?	N
	(5) Ethnic Minorities and	(a) Are considerations given to reduce impacts on the culture and lifestyle of ethnic minorities and indigenous peoples?	N
	Indigenous Peoples	(b) Are all of the rights of ethnic minorities and indigenous peoples in relation to land and resources respected?	N
		(a) Is the project proponent not violating any laws and ordinances associated with the working conditions of the country which the project proponent should observe in the project?	N
	(6) Working Conditions	(b) Are tangible safety considerations in place for individuals involved in the project, such as the installation of safety equipment which prevents industrial accidents, and management of hazardous materials?	N
		(c) Are intangible measures being planned and implemented for individuals involved in the project, such as the establishment of a safety and health program, and safety training (including traffic safety and public sanitation) for workers etc.?	N
		(d) Are appropriate measures being taken to ensure that security guards involved in the project do not violate safety of other individuals involved, or local residents?	N

Category	Environmental Item	Main Check Items	Yes: Y No: N
	(1) Impacts during	(a) Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)?	N
	dredging/construction	(b) If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce the impacts?	N
	(2) Accident Prevention Measures  (a) Does the project have any accident prevention and scheme to store, emit and transport toxic materials?  (a) Does the proponent develop and impleme program for the environmental items that are	(a) Does the project have any accident prevention equipment and scheme to store, emit and transport toxic and hazardous materials?	N
5. Others		(a) Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts?	N
		(a) Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts?  (b) What are the items, methods and frequencies of the monitoring program?  (c) Does the proponent establish an adequate monitoring	N
	(3) Monitoring	(c) Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)?	N
		(d) Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the proponent to the regulatory authorities?	N

Table 25: GRM Checklist, Lot-3, November 2024, BRWTP-S1A

Sl		Checklist, Lot-3, November 2024, BR  Checklist Items		Dredging Activity				
no.	Factors			Daily	Weekly	Monthly	Quarterly	Comments/Compliance
1	Legal and Regulatory Compliance	1	The contractors communicate to all the stakeholders regarding GRM processing and lodging complaints.	0	0	0	V	
		2	Contact details for lodging grievance easily accessible.	0	0	0	$\sqrt{}$	
2	Community Engagement	1	Consultations have been conducted with local communities, dredging contractors to collect their input on the GRM design.	0	0	0	√	
		2	The preferences of social customs and cultural sensitivities of the project affected communities taken into consideration.	0	0	0	V	
		3	FGD on GRM with the Project Affected Persons (PAPs)	0	0	0	V	
3	Grievance Channels	1	The multiple accessible channels available for the stakeholders to submit their grievances. (e.g., toll-free hotline, online platform, drop box, post, landline/mobile phone and e-mail).	0	0	0	V	
4	Processing of	1	Dyke/Land selection survey.	0	0	V	0	Route no.21 & Route 13
	GFA (Good Faith Agreement)	2	Opinion meeting with land owner along with inform to the contractor and S1A team for justifying land as dyke.	0	0	V	0	
		3	GFA documentation collection.	0	0	√	0	
		4	GFA will be submitted to S1A.	0	0	√	0	
		5	FGD on GFA with the Locals	0	0	0	√	
5	Constitution of GRM Committee	1	Preparation of GRM Committee Constituion by the Contractors.	0	0	0	V	
6	Establish a Complaint Box	1	Nos. of Feedback, concerned, suggestions and complain letters.	0	0	V	0	Not found/observed at site for all route in lot_3
7	Establish a Signboard	1	The size (5/15) of Bill board will according the BOQ	0	0	V	0	Not found/observed at site for all route in lot_3

Sl	T	Checklist Items		Dredging Activity				
no.	Factors			Daily	Weekly	Monthly	Quarterly	Comments/Compliance
		2	Name, Mobile number and email of the focal person will be included in the Bill board.	0	0	V	0	Not found/observed at site for all route in lot_3
8	3 (three) tiers of the GRM Comittee will be formed	1	Local level GRC [ In a five (5) members committee meeting Three (3) members participation will be the quorum ]	0	0	0	V	Local level GRC committee formed by Banga contractor on dated 15th November,2024
		2	Contractor level GRC [ In a five (3) members committee meeting Three (3) members participation will be the quorum ]	0	0	0	V	Local level GRC committee formed by Banga contractor on dated 15th November,2024
		3	Project level GRC [ In a five (3) members committee meeting Three (3) members participation will be the quorum ]	0	0	0	V	Local level GRC committee formed by Banga contractor on dated 15th November,2024
9	Capacity Building	1	Project staffs and local institutions have received training on the GRM and its operation.	0	0	0	V	
10	Leaflet/ Brochure	1	The Leaflet/ Brochure will be published for dissemination to all the stakeholders.	0	0	0	V	
11	Monitoring, Reporting & documentation	1	The regular reports generated to document the number, nature, and resolution of grievances (Registration Book, Resolution book or Decision book & Closing book)	0	0	1	0	Route no.21, 16 & 13
12	Social	1	Local Community	0	0	<b>√</b>	0	Route no.21, 16 & 13
	Consultation	2	Land Owner	0	0	√	0	Route no.21, 16 & 13
		3	Local Government Authority	0	0	0	√ 	no
13	Gender-Based	1	Sex Violence by an intimate partner	0	0	0	√	None of these has been
	Violence (GBV)	2	Sexual violence by a non-peer	0	0	0	√ 	found/observed for the month of November,
	(OD V)	3	Child sexual abuse& forced marriage	0	0	0	√ 	2024
		4	Sexual exploitation & abuse	0	0	0	√ 	
		5	Sexual harassment	0	0	0	√ 	****
		6	In case of emergency, the local level GRC will address the matter within 4 - 12 hours.	0	0	0	V	When required