

BANGLADESH WATER DEVELOPMENT BOARD



PROJECT COMPLETION REPORT: IMED-04/2024

**Name of the
Project:**

**Detailed Feasibility Study for Char Stabilization and
Livelihood Development Project in the Jamuna River
(Pilot Study: Kawakhola Char)**

PROJECT PERIOD: July 2022- June 2024

**OFFICE : Office of the Superintending Engineer (Civil)
Directorate of Planning-3, BWDB
Pani Bhaban, Dhaka**

Government of the People's Republic of Bangladesh
Ministry of planning
Implementation Monitoring and Evaluation Division

PROJECT COMPLETION REPORT (PCR): IMED 04/2024 (Revised)

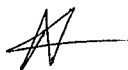
A. PROJECT DESCRIPTION

01.	Name of the Project	:	Detailed Feasibility Study for Char Stabilization and Livelihood Development Project in the Jamuna River (Pilot Study: Kawakhola Char)
02.	Administrative Ministry/Division	:	Ministry of Water Resources (MoWR)
03.	Executing Agency	:	Bangladesh Water Development Board (BWDB)
04.	Planning Commission Sector/Division	:	Sector : 09-Environment, Climate change and Water Resources Division: Agriculture, Water Resources and Rural Institutions Division
05.	Type of Project (Investment/Technical/Feasibility Study): Feasibility Study		
06.	Location of the Project (As per Project Document):		
Sl. No	Division	District	Upazila
1	Rajshahi	Sirajganj	Kazipur and Sirajganj Sadar
2	Dhaka	Tangail	Bhuapur
		Jamalpur	Sarishabari

07. Estimated Cost, Implementation Period and Approval:

(In Lakh Taka)

Subject	Approved Estimated Cost				Implementation Period	Date of Approval	Approved by
	Total	GOB (Foreign Exchange)	PA (RPA)	Self-finance			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Original	490.00	490.00	-	-	July 2022-September 2023	04/08/2022	MoWR
1 st No Cost Extension (If Applicable)	490.00	490.00	-	-	July 2022-June 2024	12/09/2023	MoWR



08. Objective of the Project

Overall objective:

The overall objective of this study is to assess the char dynamics of the Jamuna River and to stabilize the potential chars for development such as Kawakhola Char through engineering and biological/nature-based interventions and propose the detailed land-use plan for land development as well as prepare the Development of Project Proforma (DPP).

Specific Objectives :

The specific objectives (component-wise) of the study are:

Hydrological and Morphological Model Study (Component-1)

- Assess dynamics and prioritize chars in the Jamuna River for stabilization;
- Assess the stability of the accreted char through hydro-morphological assessment;
- Identify the governing factors affecting the char stability;
- Identify the suitable structural and biological/nature-based interventions;
- Design structural and biological/nature-based interventions to stabilize the char;
- Prepare of land-use plan for char area development;
- Assess the requirement of dredging and prepare a dredged material management plan and efficient use of dredged material;
- Manage the drainage and flooding problems considering climate change scenario and future land-use;
- Analyse factor for climate resilient and sustainable development and devise adaptation plan;
- Assess disaster impact and prepare mitigation plan;
- Develop community based early warning system;
- Prepare the Implementation Plan including DPP.

Physical Modeling (Component-2)

- Potential flood risk/ effect;
- Afflux effects on hydraulic structures;
- Calibrate and verify mathematical models;
- Provide assessment of hydraulic adequacy of structures;
- Provide detailed calibration of pertinent hydraulic structures;
- Assess the scour/deposition characteristics and mechanism;
- Identify internal river, khal and channel network within the char area and future possible impacts;

Environmental and Social Impact Assessment Study (Component-3)

- To prepare Environmental and Social baseline;
- To conduct an Environment and Social Impact Assessment (ESIA) considering proposed interventions;



- Prepare a habitat map for the entire Jamuna River;
- Develop framework for adapting changing socio-economic condition;
- To prepare Resettlement Action Plan (RAP);
- To develop Environmental Management and Monitoring Plan (EMMP) including biodiversity conservation plan for conservation of aquatic resources, fisheries resources, bird sanctuaries etc.

09. Background of the Project:

Bangladesh is a developing country. The country needs suitable lands for building industrial park, township, and inland river port. Main constraint is to obtain the land at the cost of displacement and resettlement of huge number of people. To override this constraint, land reclamation could be a very promising option from the Jamuna River.

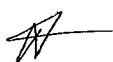
There are number of studies which outlined the river training and channelization aspects of the Jamuna River. These includes: China-Bangladesh Joint Expert Study (CBJES) in 1990, Flood Action Plan 1 (FAP-1) study in 1993, Klaassen (2009) and Capital Dredging Study in 2012. FAP-24 discussed about the training of the Jamuna River in a single channel, width requirement is only 4 km at its bankfull stage where it is assumed that the bank material is non-cohesive. In case of cohesive bank materials or protected banks, the required width would be less.

The CBJES suggested training the river into a stable bifurcated channel by utilizing natural nodes together with the harnessing work on the mid-islands. They offer two schemes of controlling bend and node. They suggested to regulate the river by nodes and by the combination of protection of the banklines and regulation of mid-islands' stability. They also suggested for combining all the engineering works on bank protection, branch blocking, and ditch filling together for raising the surface of islands through siltation. Considering the cost of the training works, CBJES recommended bend controlling approach for the Jamuna River.

Based on the planform analysis conducted in the early 1990s, FAP-1 also proposed similar two options for a tentative planform for long-term river training works in the Brahmaputra-Jamuna River. In Option 1, the Brahmaputra-Jamuna River was proposed to be a multi-threaded river. Some hard points at the right bank along with islands protection structures were proposed in this option. In Option 2, the Brahmaputra-Jamuna was proposed to be a single threaded river, i.e. a meandering river. There were some common structures for both options. However, Option 2 showed more reduced width than Option 1.

Based on the technological development such as reduced cost in bank protection techniques using geo-bag, Klaassen (2009) proposed a channelized meandering river which will protect the river bank as well as reclaim land from riverbed.

Capital dredging study by BWDB in 2012 also suggested the minimizing of the width of the Jamuna River for the reduction of the flood, erosion as well as the improvement of the navigation through dredging and river training works. This study recommended the Jamuna River into a single channel river.



The past studies contributed significantly towards developing understanding of the complex physical processes of the Jamuna River. These studies have also indicated the need for training of the Brahmaputra-Jamuna River and outlined the needed river training works. Based on the knowledge gained from all these researches and studies, it suggests the feasibility of channelizing the Jamuna River in a single with appropriate river training works and recent morphological development is favorable for such work.

10. Major Activities:

- Hydro-morphological Analysis
- Prioritize chars in the Jamuna River for stabilization
- Assessment of sediment transport and deposition at the u/s and d/s of the char based on available sediment data (secondary sources) using Mathematical modelling (2-D);
- Identification & Designing Engineering and Biological Interventions and Layout Plan
- Land-use plan for char area development
- Environmental and Social Impact Assessment Study
- Preparation of Habitat Suitability Map
- Preparation of Environmental Management Plan (EMP), Resettlement Action Plan (RAP);
- Implementation Plan and DPP Preparation

11. Reasons for Revision (if applicable): Not Applicable

11.1 Reasons for No-Cost Time Extension: Data collection of monsoon season and survey work at field level to incorporate hydrological and morphological modeling as well as Environmental and Social Impact Assessment of the project took more time than planned. As a result, to complete the project successfully, No-Cost Time Extension was needed.

11.2 2nd time No-Cost Time Extension : Not Applicable

12. Financing Arrangement (Source-wise):

12.1 Status of Loan/Grant

a) Foreign Financing: Not Applicable

Source (s)	Currency as per Agreement	Amount in US\$ (million)	Nature (Loan/Grant /supplier's credit)	Date of Agreement	Date of Effectiveness	Date of Closing	
						Original	Revised
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

b) GOB:

Total amount	Loan	Grant	Cash Foreign Exchange
(1)	(2)	(3)	(4)
490.00	-	490.00	-

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c) Self-finance/Equity: **Not Applicable**

Total amount	Self-finance	Equity	Cash Foreign Exchange
(1)	(2)	(3)	(4)

12.2 Utilization of Project Aid (Source wise): **Not Applicable**

Source (s)	Total Amount		Actual Expenditure		Unutilized Amount	
	In Us\$	In Local Currency	In Us\$	In Local Currency	In Us\$	In Local Currency
(1)	(2)	(3)	(4)	(5)	(6)	(7)

12.3 Reimbursable project Aid (RPA): **Not Applicable**

Source (s)	RPA Amount		Amount	Amount	Amount	Remarks
	As per Project Document	As per Agreement	Spent	Claimed	Re-imbrued	
(1)	(2)	(3)	(4)	(5)	(6)	(7)

B. IMPLEMENTATION POSITION

13. Implementation Period:

Implementation Period as per Project Document		Actual implementation	Time Over-run (% of original implementation period)	Remarks
Original	Latest Revised			
(1)	(2)	(3)	(4)	(5)
July 2022-September 2023 (15 months)	July 2022-June 2024 (24 months)	July 2022-June 2024 (24 months)	+ 60%	Data collection of monsoon season and survey work at field level to incorporate hydrological and morphological modeling as well as Environmental and Social Impact Assessment of the project took more time than planned. As a result, to complete the project successfully, No-Cost Time Extension was needed.

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14. Cost of the Project:

Description	Estimated Cost		Actual expenditure	Cost over-run (% of original cost)	Remarks
	Original	Latest revised			
(1)	(2)	(3)	(4)	(5)	(6)
TOTAL	490.00	-	378.21	(-22.81%)	The actual expenditure was less than the estimated cost.
TAKA	490.00	-	378.21		
PA	-	-	-		

15. Information regarding Project Director (s):

Name, Main Designation & Grade. Mobile Number (From Beginning)	Full time (Yes/No)	Part time (Yes/No)	Responsible for more than one project	Period		Remarks
				Joining	Transfer	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Nasrin Akter Khan Executive Engineer (Civil), Directorate of Planning-3, BWDB, Dhaka. Grade-5; 01715012524	Yes	No	No	27 September 2022	Till date	-

16. Personnel:

16.1 Personnel of Project implementation Unit (PIU): Existing manpower of Directorate of Planning-3, BWDB were engaged with implementation of the project.

Sl. No.	Name of Post (Grade)	Approved Strength	Employed during Implementation
(1)	(2)	(3)	(4)
Total=			

16.2 Personnel Required after the Project Completion: **Not Applicable**

Sl. No.	As Proposed in Project Document (PD)		Recruited (Yes/No)	If not recruited explain reason and latest status
	Name of Post	Number		
(1)	(2)	(3)	(4)	(5)
Total=				

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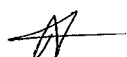
17. Training (Foreign/Local): **Local**

Category	Sl No.	No. of Days/Weeks/Months (D/W/M), Batch & Participants					
		As in Project Document			Achievement		
		No. of Days	Batch (s)	Participants(s)	No. of Days	Batch (s)	Participants(s)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Local Training	1	--	1	--	2	1	12
	2	--	1	--	2	1	12
Sub Total=			2		4	2	24
Foreign Training	--	--	--	--	--	--	--
Sub Total=	--	--	--	--	--	--	--
Total=			2		4	2	24

(PD= Project Document)

18. Component-wise Progress (As per latest approved Project Document):

Name of Component	Unit	Quant ity	Estimated Cost (Taka in Lac)					Actual Progress (Taka in Lac)				
			Total	GOB	P A	Self- finance	Othe rs	Total	GOB	PA	Self- finan ce	Other s
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(a) Revenue:												
Hydrological and Morphological Model Study	LS	LS	251.55	251.55	-	-	-	229.76	229.76	-	-	-
Physical Modelling	LS	LS	68.61	68.61	-	-	-	0.00	0.00	-	-	-
Environmental and Social Impact (ESIA) Study	LS	LS	160.83	160.83	-	-	-	146.61	146.61	-	-	-
Printing & Binding	LS	LS	0.50	0.50	-	-	-	0.49	0.49	-	-	-
Other stationery	LS	LS	0.51	0.51	-	-	-	0.25	0.25	-	-	-
Domestic travel expenses	LS	LS	2.00	2.00	-	-	-	0.14	0.14	-	-	-
Fuel and Gas	LS	LS	1.00	1.00	-	-	-	0.00	0.00	-	-	-
Petrol, Oil and Lubricants	LS	LS	1.00	1.00	-	-	-	0.00	0.00	-	-	-
Entertainment Expenses	LS	LS	1.00	1.00	-	-	-	0.00	0.00	-	-	-
Sub-total (Revenue)			487.00	487.00	-	-	-	377.25	377.25	-	-	-
(b) Capital												
Furniture	LS	LS	3.00	3.00	-	-	-	0.96	0.96	-	-	-
Sub-total (Capital)			3.00	3.00	-	-	-	0.96	0.96	-	-	-
Total a+b (Revenue+ Capital)			490.00	490.00	-	-	-	378.21	378.21	-	-	-



19. Procurement of Transport (in Nos.) : **Not Applicable**

Type of transport	Number as per Project Document	Number Procured with date	Transferred to Transport Pool with date	Transferred to O & M with date	Condemned/damaged with date	Returned or transferred to following project	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Car							
Jeep							
Microbus							
Minibus							
Bus							
Pick-up							
Truck							
Motor - Cycle							
By-cycle							
Speed Boat							
Launch							
Others with name							

20. Project Consultant (s) (Local/Foreign):

Name of the Field	Approved man month		Actual man month utilized	Number of Deliverables		Remarks
	As per Project Document	As per contract		As per Project Document	Actual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
a) Local:	Hydrological and Morphological Model Study Component: 39 man month	Hydrological and Morphological Model Study Component: 39 man month	Hydrological and Morphological Model Study Component: 39 man month	Inception Report, Interim Report, Progress Report, Draft Final Report, Final Report.	Inception Report, Interim Report, Progress Report, Draft Final Report, Final Report.	Hydrological and Morphological Model Study Component was conducted by IWM and Environmental and Social Impact Assessment Study Component was conducted by CEGIS. As per decision of PSC, the project was completed without

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Name of the Field	Approved man month		Actual man month utilized	Number of Deliverables		Remarks
	As per Project Document	As per contract		As per Project Document	Actual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Physical Modelling Component: 34 man month	----	----			Physical Modelling component.
	Environmental and Social Impact Assessment Study Component: 29 man month	Environmental and Social Impact Assessment Study Component: 29 man month	Environmental and Social Impact Assessment Study Component: 29 man month	Inception Report, Interim Report, Progress Report, Draft Final Report, Final Report.	Inception Report, Interim Report, Progress Report, Draft Final Report, Final Report.	
b) Foreign						

21. Infrastructure/Erection/Installation Tools & Equipment: **Not Applicable**

Description	Quantity (as per project document)	Quantity Procured with date	Transferred to O & M with date	Disposed-off as per rule with date	Balance	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)

22. Procurement of Goods, Works and Services:

22.1 Information on packages:

a) Total number of packages as per Project Document: 5 (Goods- 2, Works-0, Services- 3)

b) Total number of packages procured: 4 (Goods- 2, Works-0, Services- 2)

c) Reason for not procuring (if any): The physical modeling component of the project, submitted by the consulting firm RRI, was recommended non-responsive by PEC. Then the issue was raised in the meeting of PSC held on 11.07.2023 and the PSC decided to complete the project without the physical modeling component. As a result physical modeling component was not procured.

d) Number of packages for which the estimated cost is more than 1% of the estimated cost of the project: 0 (Goods- 0, Works- 0, Services- 0)

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22.2 Detailed Package-wise information of Goods, Works and Services:

Information Related to Procurement of Goods:

As per Project Document Package No	Description of Package	Estimated Cost (Taka in Lac)	Procurement Method	Approving Authority	Date of Tender Invitation	Name of Newspaper	Date of Opening	Date of Approval	Date of NOA	Contract Price & Date	Actual Payment	Date of Completion As per Contract	Date of Completion Actual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
GD/01	Other	0.51	RFQ	PD	04.06.2023		07.06.2023	07.06.2023	08.06.2023	24,500/-	24,500/-	13.06.2023	14.06.2023
	Stationery	0.247	RFQ	PD	04.06.2023		07.06.2023	08.06.2023	08.06.2023	(08.06.2023)			
	Deviation				0		0	1	0				
GD/02	Furniture	3.00	RFQ	PD	04.06.2023		07.06.2023	07.06.2023	08.06.2023	96,600/-	96,600/-	15.06.2023	18.06.2023
		0.997	RFQ	PD	04.06.2023		07.06.2023	08.06.2023	08.06.2023	(08.06.2023)			
	Deviation				0		0	1	0				

* Deviation in days (difference between plan and actual)

* Plan as per procurement plan described in project document

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Information Related to Procurement of Services:

As per Project Document Package No	Description of Pack age	Estimated Cost (Taka in Lac)	Procurement Method	Approving Authority	Date of Tender Invitation	Name of Newspaper	Date of Opening	Date of Approval	Date of NOA	Contract Price (Tk) & Date	Actual Payment (Tk)	Date of Completion As per Contract	Date of Completion Actual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
SR/01	Hydrological and Morphological Model Study for Detailed Feasibility Study for Char Stabilization and Livelihood Development in the Jamuna River (Pilot Study: Kawakhola Char)	251.55	SSS	ADG (Planning, Design and Research)	01.08.22		29.08.22	04.09.22	05.09.22	2,34,98,085/- (20.12.22)	2,29,75,905/-	30.06.2024	27.06.2024
	Actual	237.63	SSS	ADG (Planning, Design and Research)	24.10.22		24.11.22	15.11.22	18.12.22				
	Deviation												
SR/02	Physical Modelling for Detailed Feasibility Study for Char Stabilization and Livelihood Development in the Jamuna River (Pilot Study: Kawakhola Char)	68.61	SSS	ADG (Planning, Design and Research)	01.08.22		29.08.22	04.09.22	05.09.22			30.09.2023	
	Actual	67.82			05.01.2023								
	Deviation												
SR/03	Environmental and Social Impact Assessment Study for Detailed Feasibility Study for Char Stabilization and Livelihood Development in the Jamuna River (Pilot Study: Kawakhola Char)	160.83	SSS	ADG (Planning, Design and Research)	01.08.22		29.08.22	04.09.22	05.09.22	1,49,94,374/- (27.12.22)	1,46,61,165/-	30.06.2024	27.06.2024
	Actual	154.63	SSS	ADG (Planning, Design and Research)	24.10.22		24.11.22	15.11.22					
	Deviation												

* Deviation in days (difference between plan and actual)

*Plan as per procurement plan described in project document

C. FINANCIAL AND PHYSICAL TARGET AND PROGRESS

23. Original and Revised Financial Provision and physical Target (as per Project Document):

Financial Year	Financial provision & physical target as per original Project Document						Financial provision & physical target as per latest revised Project Document					
	Total	GOB	P.A.	Self-finance	Others	Physical %	Total	GOB	P.A.	Self-finance	Others	Physical %
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2022-23 and 2023-24	490.00	490.00	-	-	-	100%	-	-	-	-	-	-
TOTAL	490.00	490.00	-	-	-	100%	-	-	-	-	-	-

24. Revised ADP allocation and progress:

Financial Year	Revised Allocation & target						GOB Release	Expenditure & physical progress						Unspent* GoB Released
	Total	GOB	P.A.	Self-Finance	Others	Physical %		Total	GOB	P.A.	Self-Finance	Others	Physical %	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15) = (8)-(10)
2022-23	124.00	124.00	-	-	-	55%	120.04	114.61	114.61	-	-	-	55%	-
2023-24	271.00	271.00	-	-	-	30%	270.75	263.60	263.60	-	-	-	30%	7.15
Total=	395.00	395.00	-	-	-	85%	390.79	378.21	378.21	-	-	-	85%	7.15

* Attach the Proof for Reconciliation of Unspent GOB Released

**To determine the physical quantity, use the formula as in the circular of Planning Division

D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT

25. Project objective, Actual achievement and Reason for shortfall (if any):

Hydrological and Morphological Model Study (Component-1):

Objectives as per Project Document	Actual achievement	Reasons for shortfall (if any)
Assess dynamics and prioritize chars in the Jamuna River for stabilization.	Assessment of dynamics and prioritization of chars in the Jamuna River for stabilization are described and incorporated in Chapter 4, section 4.1, page no. 4-1 to 4-10 and section 4.3, page no. 4-27 to 4-35 of the Final Report.	
Assess the stability of the accreted char through hydro-morphological assessment.	Assessment of the stability of the accreted char through hydro-morphological assessment is described and incorporated in Chapter 4, section 4.3.1, page no. 4-36 to 4-39 and section 4.6.1 pages 4-51 to 4-56 of the Final Report.	
Identify the governing factors affecting the char stability.	The governing factors of char stabilization are identified in Chapter 4 (pages 4-1 to 4-10, pages 4-27 to 4-28, pages 4-36 to 4-48 of Volume I) of the Final Report.	
Identify the suitable structural and biological/nature-based interventions.	Identification of the suitable structural and biological/nature-based interventions are incorporated in Chapter 4, section 4.7, page no. 4-60 to 4-62 of Volume I and Appendix-C, page no. C-1 to C-10 of Volume II the Final Report.	
Design structural and biological/nature-based interventions to stabilize the char.	Design of structural and biological/nature-based interventions to stabilize the char is incorporated in Chapter 4, section 4.10, page no. 4-69 to 4-73 of Volume I and Appendix-G; Volume: II of the Final Report.	
Prepare of land-use plan for char area development.	Preparation of land-use plan for char area development is incorporated in Chapter 4, section 4.9, page no. 4-64 to 4-67 of the Final Report.	



Objectives as per Project Document	Actual achievement	Reasons for shortfall (if any)
Assess the requirement of dredging and prepare a dredged material management plan and efficient use of dredged material.	Description of dredging work with cost estimation is given in Chapter 4, section 4.10, page no. 4-73 to 4-75 of the Final Report. The study assessed multiple options including the requirement for dredging and concluded that dredging will not be a sustainable option for this project. This is detailed in Chapter 10 (page 10-3 to 10-10 of Volume I) of the Final Report	
Manage the drainage and flooding problems considering climate change scenario and future land-use.	Management of the drainage and flooding problems considering climate change scenario and future land-use is incorporated in Chapter 5 (Page 5-1 to 5-8 of Volume I) and Appendix G of the Final Report.	
Analyse factor for climate resilient and sustainable development and devise adaptation plan.	The study emphasized climate resilience through nature-based interventions and sustainable infrastructure design. This is detailed in Chapter 4, Chapter 5, Appendix C and Appendix G (pages 4-60 to 4-67, pages 4-69 to 4-70, page 4-75, Page 5-1 to 5-8 of Volume I) of the Final Report,	
Assess disaster impact and prepare mitigation plan.	Assessment of disaster impact and prepare mitigation plan are incorporated in Chapter 5, Table 5.1, page no. 5-1 to 5-2 of the Final Report.	
Develop community based early warning system.	Development of community based early warning system is in Chapter 4, section 4.8, page no. 4-63 of the Final Report.	
Prepare the Implementation Plan including DPP.	A Development Project Proforma (DPP) is prepared and attached in the Final Report.	
Physical Modeling (component-2)		
Potential flood risk/ effect.	--	Physical Modeling component
Afflux effects on hydraulic structures.	--	

Objectives as per Project Document	Actual achievement	Reasons for shortfall (if any)
Calibrate and verify mathematical models.	--	was not procured.
Provide assessment of hydraulic adequacy of structures.	--	
Provide detailed calibration of pertinent hydraulic structures.	--	
Assess the scour/deposition characteristics and mechanism.	--	
Identify internal river, khal and channel network within the char area and future possible impacts.	--	
Environmental and Social Impact Assessment Study (Component-3)		
To prepare Environmental and Social baseline.	Environmental and social baseline are described and incorporated in chapter 5, page 55-157 of the final report.	
To conduct an Environment and Social Impact Assessment (ESIA) considering proposed interventions;.	Environment and Social Impact Assessment (ESIA) are described and incorporated in chapter 10, page no. 225-250 of the final report.	
Prepare a habitat map for the entire Jamuna River.	Habitat suitability map for the entire Jamuna River are described and incorporated in chapter 6, page no. 159-179 of the final report. Detailed methodology, analysis and results of habitat suitability are presented in Appendix A.	
Develop framework for adapting changing socio-economic condition.	Development of framework for adapting changing socio-economic condition are described and incorporated in chapter 7, section 7.4 page no. 210-213 of the final report. Detailed methodology, analysis and results of the framework are presented in Appendix H.	
To prepare Resettlement Action Plan (RAP).	Resettlement Action Plan (RAP) was not required considering the proposed interventions.	
To develop Environmental Management and Monitoring Plan (EMMP) including biodiversity conservation plan for conservation of aquatic resources, fisheries resources, bird sanctuaries etc.	Environmental Management and Monitoring Plan (EMMP) are described and incorporated in chapter 11, page no. 251-267 of the final report. Detailed sectorial development plan such as biodiversity conservation plan, afforestation plan, agricultural development plan, fisheries	

Objectives as per Project Document	Actual achievement	Reasons for shortfall (if any)
	conservation and development plan, livestock development plan and tourism potentially plan are described in appendix B, C, D, E, F and G respectively.	

E. BENEFIT ANALYSIS

26. Annual Out-put: **Not Applicable for the Study Project.**

Items of out-put	Unit	Estimated quantity expected at full capacity	Actual quantity of out-put during the 1 st year of operation at full capacity (or during, real production for newly completed project)
a)			
b)			
c)			
d)			
e)			
f)			

27. Cost/Benefit: **Not Applicable for the Study Project.**

Item	Estimated	Actual
(1) Benefit cost ratio of the project:		
(i) Financial		
(ii) Economic		
(2) Internal Rate of Return:		
(i) Financial		
(ii) Economic		

28. Please give reasons for shortfall, if any, between the estimated and actual benefit:

Handwritten signature

F. MONITORING AND AUDITING

29. Monitoring: **Nil.**

Name & Designation of the inspecting official	Date	Identified Problems	Recommendations
1	2	3	4
a) IMED:			
b) Ministry/Agency:			
c) Others: (Please specify)			

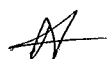
30. Auditing during and after Implementation:

30.1 Internal Audit: **Not conducted yet.**

Period of Audit	Date of submission of Audit Report	Sl. No.	Major findings/objections and Money involved	Whether objections resolved or not (if not, mention status)
1	2	3	4	5
Total findings/objections and Money involved=				

30.2 External Audit: **Not conducted yet.**

Period of Audit	Date of submission of Audit Report	Sl. No.	Major findings/objections and Money involved	Whether objections resolved or not (if not, mention status)
1	2	3	4	5
Total findings/objections and Money involved=				



G. POST-PROJECT REMARKS

31. General Observations/Remarks on the Project

31.1 Background:

Bangladesh Government has the goal/vision to be a developed country by 2041. For achieving the goal, country needs suitable lands for building industrial park, township, and inland river port. Main constraint is to obtain the land at the cost of displacement and resettlement of huge number of people. To override this constraint, land reclamation could be a very promising option from the Jamuna River.

There are number of studies which outlined the river training and channelization aspects of the Jamuna River. These includes: China-Bangladesh Joint Expert Study (CBJES) in 1990, Flood Action Plan 1 (FAP-1) study in 1993, Klaassen (2009) and Capital Dredging Study in 2012. FAP-24 discussed about the training of the Jamuna River in a single channel, width requirement is only 4 km at its bankfull stage where it is assumed that the bank material is non-cohesive. In case of cohesive bank materials or protected banks, the required width would be less.

The CBJES suggested training the river into a stable bifurcated channel by utilizing natural nodes together with the harnessing work on the mid-islands. They offer two schemes of controlling bend and node. They suggested to regulate the river by nodes and by the combination of protection of the banklines and regulation of mid-islands' stability. They also suggested for combining all the engineering works on bank protection, branch blocking, and ditch filling together for raising the surface of islands through siltation. Considering the cost of the training works, CBJES recommended bend controlling approach for the Jamuna River.

Based on the planform analysis conducted in the early 1990s, FAP-1 also proposed similar two options for a tentative planform for long-term river training works in the Brahmaputra-Jamuna River. In Option 1, the Brahmaputra-Jamuna River was proposed to be a multi-threaded river. Some hard points at the right bank along with islands protection structures were proposed in this option. In Option 2, the Brahmaputra-Jamuna was proposed to be a single threaded river, i.e. a meandering river. There were some common structures for both options. However, Option 2 showed more reduced width than Option 1.

Based on the technological development such as reduced cost in bank protection techniques using geo-bag, Klaassen (2009) proposed a channelized meandering river which will protect the river bank as well as reclaim land from riverbed.

Capital dredging study by BWDB in 2012 also suggested the minimizing of the width of the Jamuna River for the reduction of the flood, erosion as well as the improvement of the navigation through dredging and river training works. This study recommended the Jamuna River into a single channel river.

The past studies contributed significantly towards developing understanding of the complex physical processes of the Jamuna River. These studies have also indicated the need for



training of the Brahmaputra-Jamuna River and outlined the needed river training works. Based on the knowledge gained from all these researches and studies, it suggests the feasibility of channelizing the Jamuna River in a single with appropriate river training works and recent morphological development is favorable for such work.

31.2 Justification/Adequacy:

The project is relevant in terms of compliance of the project with the national master plan(s), national development goals, compliance of the project with the missions and visions of the existing government and the relevance of the project with the visions of the executing agencies. Key documents which contextualized and guided the overall design of this project, are:

- **Perspective Plan of Bangladesh 2021-2041:** This Plan addresses governance, human development, industry and trade, agriculture, power and energy, climate change and environment. The Plan presents a path to shift Bangladesh from a rural agrarian economy to a primarily industrial and digital economy.
- **Bangladesh Delta Plan 2100:** The Plan focuses primarily on the delta agenda through 2050 while reflecting the longer-term challenges of sustainably managing water, ecology, environment, and land resources in the context of natural disaster and climate change risk. The Delta Plan addresses flood control, sea level rise, water logging, river-bank erosion, irrigation, urban and rural water supply, water pollution, land reclamation, river dredging for inland water traffic, environmental protection, fisheries, and preservation of biodiversity.
- **8th Five Year Plan, FY2021 to FY2025:** The 8th FY Plan initiates the transition to the goals of the Perspective Plan and is built around six themes: (i) rapid recovery from COVID; (ii) GDP growth acceleration; employment generation, and rapid poverty reduction, (iii) a broad-based strategy of inclusiveness; (iv) a sustainable development pathway that is resilient to disaster and climate change; (v) improvement of critical institutions; and (vi) achieving the United Nations 17 sustainable development goals.

Linkage with 8th Five Year Plan:

The impact (goal) of the project is aligned with these documents, and particularly the 8th Five Year Plan for “sustainable, inclusive development resilient to disaster and climate change generating employment and leading to rapid poverty reduction”.

The project implementation will ensure safety from bank erosion and climate change related disaster. Implementation of this project will protect many government, non-government & socially important establishments situated at Kawakhola Char. In addition, this project will improve livelihood of the people of Kawakhola Char.



Linkage with Sustainable Development Goal (SDG):

The following goals of SDGs are related to the present study:

- Goal-3: Ensure healthy lives and promote wellbeing for all at all ages'
- Goal-6: Ensure availability and sustainable management of Water and Sanitation for All

Linkage with Bangladesh Delta Plan 2100:

Bangladesh Delta Plan (BDP) 2100 is a water centric, multi sectoral techno-economic long term adaptive plan. Delta Vision and Goals show a broader scope (water, food, economy) leading to a holistic approach with 19 themes. Among those themes first two themes are directly related to Water resources. Those themes are-

- i) Morphological Dynamics & River Management
- ii) Water Resources

At these circumstances, a holistic approach is required to alleviate poverty and develop economic growth so that the goal of Bangladesh Delta Plan can be achieved.

31.3 Objectives:

(a) Overall Objectives:

The Overall objective of this study is to assess the char dynamics of the Jamuna River and to stabilize the potential chars for development such as Kawakhola Char through engineering and biological/nature-based interventions and propose the detailed land-use plan for land development as well as prepare the Development of Project Proforma (DPP).

(b) Specific Objectives:

The specific objectives (component-wise) of the study are:

Hydrological and Morphological Model Study (Component-1)

- Assess dynamics and prioritize chars in the Jamuna River for stabilization;
- Assess the stability of the accreted char through hydro-morphological assessment;
- Identify the governing factors affecting the char stability;
- Identify the suitable structural and biological/nature-based interventions;
- Design structural and biological/nature-based interventions to stabilize the char;
- Prepare of land-use plan for char area development;
- Assess the requirement of dredging and prepare a dredged material management plan and efficient use of dredged material;
- Manage the drainage and flooding problems considering climate change scenario and future land-use;
- Analyse factor for climate resilient and sustainable development and devise adaptation plan;
- Assess disaster impact and prepare mitigation plan;



- Develop community based early warning system;
- Prepare the Implementation Plan including DPP.

Physical Modeling as component-2

- Potential flood risk/ effect;
- Afflux effects on hydraulic structures;
- Calibrate and verify mathematical models;
- Provide assessment of hydraulic adequacy of structures;
- Provide detailed calibration of pertinent hydraulic structures;
- Assess the scour/deposition characteristics and mechanism;
- Identify internal river, khal and channel network within the char area and future possible impacts;

Environmental and Social Impact Assessment Study (Component-3)

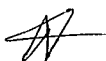
- To prepare Environmental and Social baseline;
- To conduct an Environment and Social Impact Assessment (ESIA) considering proposed interventions;
- Prepare a habitat map for the entire Jamuna River;
- Develop framework for adapting changing socio-economic condition;
- To prepare Resettlement Action Plan (RAP);
- To develop Environmental Management and Monitoring Plan (EMMP) including biodiversity conservation plan for conservation of aquatic resources, fisheries resources, bird sanctuaries etc.

31.4 Project revision with reasons: **Not Applicable**

32. Rationale of the project (Consider the Concept , Design, Location and Timing):

As the land mass of Bangladesh is composed of recent deltaic deposits. The Himalayas produces huge amount of sediment and the rivers of Bangladesh have to transport it up to the sea, which results a dynamic system of river network. Most of the rivers in the delta are un-intervened or untrained. Therefore, they occupy a very large area of the densely populated country, which is not required for transporting water and sediment imposed on the rivers from the upstream. The bank line movements are very rapid causing millions of people to suffer. It restricts the development of cities and commercial centers along their banks and thereby jeopardize the country's economic development. Most of the large rivers in the world are trained and different nations are benefiting through exploiting river resources. Due to poor economy, lack of proper understanding on the river system, and unavailability of cheaper construction materials as well as lack of attention of policy makers, a very potential arena has remained unexplored in this country.

During the last 240 years, the morphology of the Jamuna River has been heavily affected by natural events in the fluvial system. During the last few decades, the Jamuna River has changed its planform which is mainly braided and multi-threaded. The planform changing



process includes changes in width, braiding intensity and extent of annual bank erosion. Presently, the length averaged width of the river is about 12 km.

The Jamuna River is one of the largest rivers in Bangladesh, covered a huge space which may not be required for the river to transport water and sediment imposed on it without substantially changing its dimensions. The people of the country do not have a very favorable experience with the river as it is responsible for severe events of erosion. However, the situation can be improved and the country can be benefited much if the river and the chars within the river could be well-managed. In such case, protection of riverbank erosion and reclamation of land will facilitate to develop new commercial centers, Eco Park, industrial parks and cities along both its banks the Jamuna as well as in the stabilized char. It is imperative to manage the Jamuna and utilize its char to alleviate poverty and develop economic growth for meeting the targets of Vision 2041.

33. Brief description on planning and financing of the project and its applicability (Consider the following issues):

33.1 Project Identification:

The Jamuna River is one of the three main rivers of riverine Bangladesh. The planform of the Jamuna River has changed over the last few decades. The average width of the river is about 12 km. Along with the huge water flow, this river also carries a large amount of silt. As a result, numerous chars have developed in most places along the river. River erosion has also increased due to this change. People are losing their houses and crop lands due to river erosion. Farmers, fishermen and other people are all losing their traditional occupations and ancestral homes.

These displaced people who have lost everything are forced to migrate elsewhere in order to survive. From the emerging situation, riverbank protection, reclaimed land and char stabilization are absolutely necessary to provide security to people's lives and property. Char Stabilization of the Jamuna River will enable construction of industrial parks, new commercial centers, Eco parks and thereby improve poverty and economic growth.

In view of the above, BWDB has decided to conduct a detailed feasibility study to assess the char dynamics of the Jamuna River and to stabilize the potential chars for development such as Kawakhola Char.

33.2 Project Preparation:

In view of the above, BWDB prepared a PFS to execute the feasibility study project.

33.3 Appraisal:

The DPEC meeting was held on 10/04/2022.

33.4 Credit Negotiation

33.5 Credit Agreement

33.6 Credit Effectiveness

33.7 Loan Disbursement

33.8 Loan Conditions

33.9 Project Approval:

The project was approved by honorable state minister, MoWR on 04/08/2022.



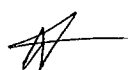
33.10 Others(specify)

34. Analysis of the post- implementation situation and result of the project (Consider following issues): **Not Applicable**

- 34.1 Whether the beneficiaries of the project have clear knowledge about the Target/Objectives of the project.
- 34.2 Programme for use of created-facilities of the project
- 34.3 O & M Program of the project.
- 34.4 Impact of the project (Direct & Indirect)
- 34.5 Transfer of Technology and Institutional Building through the project.
- 34.6 Employment generation through the project.
- 34.7 Possibility of Self employment.
- 34.8 Possibility of Women-employment opportunity.
- 34.9 Women's participation in development.
- 34.10 Probable Impact on Socio-Economic activity.
- 34.11 Impact on environment.
- 34.12 Sustainability of the project.
- 34.13 Contribution to poverty alleviation/reduction.
- 34.14 Opinion of the public representatives, local elite, local administration, teachers, religious leaders, women's representatives etc.
- 34.15 Contribution of Micro-credit programs and Comments on overlapping with any NGO activities.

35. Problems encountered during Implementation (with duration & steps taken to resolve those) (Consider following issues): **Not Applicable**

- 35.1 Project management:
- 35.2 Project Director:
- 35.3 Land Acquisition:
- 35.4 Procurement:
- 35.5 Consultancy:
- 35.6 Contractor:
- 35.7 Manpower:
- 35.8 Law & Order:
- 35.9 Natural calamity:
- 35.10 Project financing:
- 35.11 Allocation and release:
- 35.12 Design formulation/approval:
- 35.13 Project aid disbursement and re-imbursement:
- 35.14 Mission of the development partners:
- 35.15 Time & Cost Over-run:
- 35.16 Project Monitoring:
- 35.17 Delay in Decision:
- 35.18 Transport, Training:
- 35.19 Approval and Others:



36. Remarks & Recommendations of the Project Director:

This Study Project was approved by the Ministry of Water Resources (MoWR) vide memo number: 42.00.0000.039.14.013.21-146, dated: 04 August 2022. The project was accomplished in June 2024.

The overall objective of this study is to assess the char dynamics of the Jamuna River and to stabilize the potential chars for development and Kawakhola Char as piloting through engineering and biological/nature-based interventions and propose a detailed land-use plan for land development as well as prepare the Development of Project Proforma (DPP).

Mainly, the study area will focus on the whole Jamuna River covering about 231 km along the Brahmaputra-Jamuna River system within Bangladesh starting from the border, from which potential areas for char development will be identified and prioritized. However, the existence of the char observed from the satellite images analysis and proximity to the nearest city along with the communication facility, Kawakhola Char was selected for piloting which could be stabilized through engineering and biological interventions. The area covers the probable potential Kawakhola char area just upstream of the Bangabandhu Bridge which is approximately 150 km². It lies in the Kazipur and Sirajganj Sadar Upazila under Sirajganj District, Bhuapur Upazila of Tangail District, and Sarishabari Upazila of Jamalpur District as well.

The study has been framed to attain its objectives through some scope of the works. Various data collection was initiated, which encompassed a range of parameters including Bathymetric Data, Bankline Survey/ Structural information, Water Level Data, Discharge Data, Suspended Sediment Data, Hydrometric Data, Cross-section Analysis, as well as Map Collection and Processing. This study focused on geospatial analysis and mathematical modeling to assess char land stabilization in the Brahmaputra-Jamuna River aiming to provide insights into stabilization measures and livelihood development projects. Two mathematical models were developed for this study: one encompassing the entire Jamuna River, which has assisted in affirming the adequate stability of the seven char clusters targeted for stabilization initiatives and establishing their prioritization ranking. The second model has aided in delineating stabilization strategies and evaluating their efficacy for the pilot project. Detailed Environmental and Social Impact Assessment (ESIA), Disaster Impact Assessment (DIA), Habitat suitability map for the entire Jamuna River, Development of a framework for adapting to changing socio-economic conditions, Environmental Management and Monitoring Plan (EMMP) were accomplished to analyze the impact of the proposed interventions on the environment and the society of the project area.

The study area has been divided into three reaches to understand the spatial variations of the presented geospatial information. Analysis in the study shows that the braiding index diminishes with distance towards downstream. An increasing trend in the value of the braiding index for all three Reaches of the river over the study duration (1989-2022) has been observed. Upstream Channelization is found comparatively higher than downstream and channelization in the overall Jamuna River is increasing. Noticeably significant increases in both erosion and accretion occurred in the Char lands in recent years. A weighted age index has been devised for determining the age of the Chars belonging to the study area for the first time. Accumulation of higher age Chars at the downstream is noticed more than at the upstream. Study analysis further indicates that during high-magnitude floods, chars with higher weighted ages exhibit greater resilience to morphological dynamics, particularly if situated within the main channel, which is a critical observation for future planning and management strategies. This study concluded that the braiding



characteristic of the Brahmaputra-Jamuna River is increasing, bank stability has improved over the years, and char dynamics have intensified.

A database of 315 chars has been created, categorized into seven clusters based on location and stability. The chars have been classified into three Char clusters based on their potential for stabilization. In determining the possible interventions for the protection of Char Kawakhola (pilot project area) in the present study, the base model has been simulated for two different floods (1 in 100 years and 1 in 2.33 years). The base model gave an idea for selecting possible interventions which are:

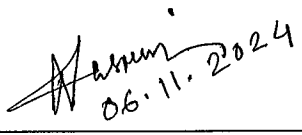
1. **Option 1:** BPW at sides of char.
2. **Option 2:** BPW at sides of char + Char head protection.
3. **Option 3:** BPW at sides of char + Char head protection + Dredging.

Option 2 has been selected as the best consideration, providing significant erosion vulnerability reduction without the high costs and short-term benefits of dredging.

The recommendation for this study project is to protect 33 km of the Kawakhola Char with geobags only to stabilize Kawakhola Char. Establish flood shelters and community-based flood authorities for early warnings and emergency management. A community-based early warning system framework is proposed. Construction of additional schools, health complexes, mosques, and markets to improve local livelihoods. Expansion of road networks, establishment of resorts, and creation of river ghats to boost tourism and transportation infrastructure. A canal is proposed through the Char to facilitate navigation from the river to the countryside bank of the Char.

In conclusion, the study provides a comprehensive analysis of char stabilization in the Brahmaputra-Jamuna River, with specific recommendations for Kawakhola Char. These findings and recommendations are aimed at promoting sustainable land development and enhancing the livelihoods of local communities.

Date.....


06.11.2024

Signature and seal of the Project
Director (Nasrin Akter Khan)
Executive Engineer
Directorate of Planning-III
BWDB, Dhaka

37. Remarks/Comments of Agency Head:

The study project aims to assess the char dynamics of the Jamuna River and to stabilize the potential chars for development. It also aims to stabilize Kawakhola Char as piloting through engineering and biological/nature-based interventions and to propose a detailed land-use plan for land development. After field investigation, satellite image analysis, and analysis of model outputs, this study recommended a database of 315 chars, categorized into seven clusters based on location and their potential for stabilization. In determining the possible interventions for the protection of Kawakhola Char (pilot project area), this study proposed 33 km of temporary bank protection work with geobags only to stabilize Kawakhola Char. This study also proposed a community-based early warning system for emergency flood management of Kawakhola Char. Construction of additional schools, health complexes, mosques, and markets are also recommended to improve the livelihoods of the communities of Kawakhola Char. A canal is proposed through Kawakhola Char to facilitate communication from the left channel to the right channel of the river. It is expected that the implementation of the proposed interventions will promote sustainable land development and enhance the livelihoods of the local communities of Kawakhola Char.

Date.....03.12.24.....


Signature and seal of Agency
Head (Muhammad Amirul Haq Bhuiya)
ID No. 660118001
Director General
BWDB, Dhaka.

38. Remarks/Comments of the Secretary/Senior Secretary of the Ministry/Division:

The project has been done successfully and subsequent investment project will be taken as per recommendations of the study.

Date.....

Signature and seal of
Secretary

ব্যাংকের কপি

টি.আর.ফরম নং-৬ (৪)
(এস আর অনুচ্ছেদ ৩৭ প্রটেক্ট)

চালান ফরম



জনতা ব্যাংক লিমিটেড, গ্রীনরোড কর্পোরেট শাখা শাখায় টাকা জমা দেওয়ার চালান

যে সরকারি প্রতিষ্ঠানের অনুকূলে অর্থ জমা হচ্ছে	যার মাধ্যমে টাকা প্রদত্ত হলো তার নাম, সনাক্তকরণ নম্বর ও ঠিকানা	যে ব্যক্তির/প্রতিষ্ঠানের পক্ষ হতে টাকা প্রদত্ত হলো তার নাম, সনাক্তকরণ নম্বর ও ঠিকানা	চালান নং	কি বাবদ জমা দেওয়া হলো তার বিবরণ	জমার পরিমাণ
সচিবালয়, পানি সম্পদ মন্ত্রণালয়	মোঃ জাকিরুল ইসলাম ২৩৯৬০৭৭৯৮০ বাসা/হোমিং: মৌসুমী সি ৪/৬, বাপাউরো অফিসার্স কোয়ার্টার, গ্রাম/রাস্তা: ১১, ডাকঘর: বনানী-১২১৩, উপজেলা: বনানী, জেলা: ঢাকা, বিভাগ: ঢাকা	131016000-বাংলাদেশ পানি উন্নয়ন বোর্ড, 131016000-BANGLADESH WATER DEVELOPMENT BOARD ***Identity not shown***	২৪২৫-০০০৫২৫৬৮০১১	১৪৪১২০২-পূর্ববর্তী অর্থবছরের অতিরিক্ত গৃহীত অর্থ ফেরত	৭১৫,২৩৮.০০

নতুন কোড: ১৪৭০১০১১৩০২১৭-১১০০০০০০০০-১১০০১০০০-১৪৪১২০২ অন্যান্য বিবরণ/মন্তব্য (যদি থাকে):
JOMUNA NODIR CHORER SHTISHILOTA O JIBIKAYON PROKOLPER BISTARITO
SOMVABBOTA SOMIKKHA(PILOT STUDY:KAUAKHALI CHAR),PROJECT CODE
NO:২২৪৩৬২৩০০,RECURRING UNSPENT TK.:৭১৫২৩৮,CAPITAL UNSPENT TK.:০.০০,TOTAL
UNSPENT TK.:৭১৫২৩৮ FOR THE FY ২০২৩ - ২৪

মোট (অংকে) = ৭১৫,২৩৮.০০
টাকা (কথায়): সাত লক্ষ পনের হাজার দুই শত আটত্রিশ টাকা
তারিখ: ২২/০৮/২০২৪ খ্রি.
এটি একটি সিস্টেম জেনারেটেড চালান, কোন স্বাক্ষর প্রয়োজন নেই।



গ্রাহকের কপি

টি.আর.ফরম নং-৬ (৪)
(এস আর অনুচ্ছেদ ৩৭ প্রটেক্ট)

চালান ফরম



জনতা ব্যাংক লিমিটেড, গ্রীনরোড কর্পোরেট শাখা শাখায় টাকা জমা দেওয়ার চালান

যে সরকারি প্রতিষ্ঠানের অনুকূলে অর্থ জমা হচ্ছে	যার মাধ্যমে টাকা প্রদত্ত হলো তার নাম, সনাক্তকরণ নম্বর ও ঠিকানা	যে ব্যক্তির/প্রতিষ্ঠানের পক্ষ হতে টাকা প্রদত্ত হলো তার নাম, সনাক্তকরণ নম্বর ও ঠিকানা	চালান নং	কি বাবদ জমা দেওয়া হলো তার বিবরণ	জমার পরিমাণ
সচিবালয়, পানি সম্পদ মন্ত্রণালয়	মোঃ জাকিরুল ইসলাম ২৩৯৬০৭৭৯৮০ বাসা/হোমিং: মৌসুমী সি ৪/৬, বাপাউরো অফিসার্স কোয়ার্টার, গ্রাম/রাস্তা: ১১, ডাকঘর: বনানী-১২১৩, উপজেলা: বনানী, জেলা: ঢাকা, বিভাগ: ঢাকা	131016000-বাংলাদেশ পানি উন্নয়ন বোর্ড, 131016000-BANGLADESH WATER DEVELOPMENT BOARD ***Identity not shown***	২৪২৫-০০০৫২৫৬৮০১১	১৪৪১২০২-পূর্ববর্তী অর্থবছরের অতিরিক্ত গৃহীত অর্থ ফেরত	৭১৫,২৩৮.০০

নতুন কোড: ১৪৭০১০১১৩০২১৭-১১০০০০০০০০-১১০০১০০০-১৪৪১২০২ অন্যান্য বিবরণ/মন্তব্য (যদি থাকে):
JOMUNA NODIR CHORER SHTISHILOTA O JIBIKAYON PROKOLPER BISTARITO
SOMVABBOTA SOMIKKHA(PILOT STUDY:KAUAKHALI CHAR),PROJECT CODE
NO:২২৪৩৬২৩০০,RECURRING UNSPENT TK.:৭১৫২৩৮,CAPITAL UNSPENT TK.:০.০০,TOTAL
UNSPENT TK.:৭১৫২৩৮ FOR THE FY ২০২৩ - ২৪

মোট (অংকে) = ৭১৫,২৩৮.০০
টাকা (কথায়): সাত লক্ষ পনের হাজার দুই শত আটত্রিশ টাকা
তারিখ: ২২/০৮/২০২৪ খ্রি.
এটি একটি সিস্টেম জেনারেটেড চালান, কোন স্বাক্ষর প্রয়োজন নেই।



সচিবালয়, পানি সম্পদ মন্ত্রণালয় -এর
কপি

টি.আর.ফরম নং-৬ (৪)
(এস আর অনুচ্ছেদ ৩৭ প্রটেক্ট)

চালান ফরম



জনতা ব্যাংক লিমিটেড, গ্রীনরোড কর্পোরেট শাখা শাখায় টাকা জমা দেওয়ার চালান

যে সরকারি প্রতিষ্ঠানের অনুকূলে অর্থ জমা হচ্ছে	যার মাধ্যমে টাকা প্রদত্ত হলো তার নাম, সনাক্তকরণ নম্বর ও ঠিকানা	যে ব্যক্তির/প্রতিষ্ঠানের পক্ষ হতে টাকা প্রদত্ত হলো তার নাম, সনাক্তকরণ নম্বর ও ঠিকানা	চালান নং	কি বাবদ জমা দেওয়া হলো তার বিবরণ	জমার পরিমাণ
সচিবালয়, পানি সম্পদ মন্ত্রণালয়	মোঃ জাকিরুল ইসলাম ২৩৯৬০৭৭৯৮০ বাসা/হোমিং: মৌসুমী সি ৪/৬, বাপাউরো অফিসার্স কোয়ার্টার, গ্রাম/রাস্তা: ১১, ডাকঘর: বনানী-১২১৩, উপজেলা: বনানী, জেলা: ঢাকা, বিভাগ: ঢাকা	131016000-বাংলাদেশ পানি উন্নয়ন বোর্ড, 131016000-BANGLADESH WATER DEVELOPMENT BOARD ***Identity not shown***	২৪২৫-০০০৫২৫৬৮০১১	১৪৪১২০২-পূর্ববর্তী অর্থবছরের অতিরিক্ত গৃহীত অর্থ ফেরত	৭১৫,২৩৮.০০

নতুন কোড: ১৪৭০১০১১৩০২১৭-১১০০০০০০০০-১১০০১০০০-১৪৪১২০২ অন্যান্য বিবরণ/মন্তব্য (যদি থাকে):
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UNSPENT TK.:৭১৫২৩৮ FOR THE FY ২০২৩ - ২৪

মোট (অংকে) = ৭১৫,২৩৮.০০
টাকা (কথায়): সাত লক্ষ পনের হাজার দুই শত আটত্রিশ টাকা
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এটি একটি সিস্টেম জেনারেটেড চালান, কোন স্বাক্ষর প্রয়োজন নেই।



