

অসম বিধান সভা
২০২৬ চনৰ ২৯ জুলাইত উত্তৰ দিবলগীয়া
মৌখিক প্ৰশ্ন নং - ২৬১

বিষয়ঃ ধুবুৰী জিলাত গৰাখহনীয়া প্ৰতিৰোধ আঁচনি।

শ্ৰীমতী বেবী বেগম, বিধায়ক

মাননীয় জলসম্পদ বিভাগৰ মন্ত্ৰী মহোদয়ে অনুগ্ৰহ কৰি জনাবনেঃ

-প্ৰশ্ন-

- (ক) ধুবুৰী জিলাত ধুবুৰী সমষ্টিৰ অন্তৰ্গত বিভিন্ন এলেকাত ব্ৰহ্মপুত্ৰ, গদাধৰ, গঙ্গাধৰ নদীৰ গৰাখহনীয়াই চলিত বৰ্ষৰ প্ৰথমৰে পৰা ব্যাপক তাণ্ডৱলীলা আৰম্ভ কৰাৰ বিষয়ে চৰকাৰ অৱগত নে ? যদি হয়, সম্প্ৰতি ধুবুৰী সমষ্টিৰ কোন কোন ঠাইত গৰাখহনীয়াই তীব্ৰ ৰূপ ধাৰণ কৰিছে ? বিস্তৃত তথ্যসহ দিব।
- (খ) এই খহনীয়া প্ৰতিৰোধৰ বাবে বিভাগীয়ভাৱে কি কি পদক্ষেপ গ্ৰহণ কৰা হৈছে ? বিস্তৃত তথ্যসহ দিব।
- (গ) ধুবুৰী জিলাৰ গৰাখহনীয়া প্ৰতিৰোধৰ বাবে কিমানটা প্ৰস্তাৱ (Proposal) সম্প্ৰতি চৰকাৰী অনুমোদনৰ বাবে ৰৈ আছে ? এই জৰুৰী প্ৰস্তাৱসমূহ অনুমোদন নোহোৱাৰ কাৰণ ৰাজ্য চৰকাৰৰ বিত্তীয় নাটনি নেকি ? (বিভাগীয়ভাৱে দাখিল প্ৰস্তাৱসমূহৰ প্ৰতিলিপিৰ লগতে তথ্যসহ দিব)।
- (ঘ) যদি নহয়, এই প্ৰস্তাৱসমূহ কিমান দিনৰ ভিতৰত অনুমোদন কৰাই গৰাখহনীয়া প্ৰতিৰোধৰ কাম আৰম্ভ কৰিব ?
- (ঙ) ধুবুৰী সমষ্টিৰ বিভিন্ন এলেকাত প্ৰবল খহনীয়াই ভয়াৱহ ৰূপ ধাৰণ কৰা এলেকাবোৰত অতি ক্ষীপ্ৰতাৰে অস্থায়ীভাৱে হ'লেও কিছু খহনীয়া প্ৰতিৰোধৰ কাম আৰম্ভ কৰা হ'ব নে ? বিস্তৃত তথ্যসহ দিব।

মাননীয় জলসম্পদ বিভাগৰ মন্ত্ৰী শ্ৰীযুত সুশান্ত বৰগোহাঁই দেৱে উত্তৰ দিবঃ

-উত্তৰ-

- (ক) হয় অৱগত। ধুবুৰী বিধান সভা সমষ্টিৰ খহনীয়া হোৱা এলেকা বোৰৰ নাম নদী ভিত্তিত “Annexure-A” ত উল্লেখ কৰা হ'ল।

(খ) ধুবুৰী জিলাৰ ধুবুৰী সমষ্টিত জলসম্পদ বিভাগে বিগত চাৰিটা বৰ্ষত (২০২২ ৰ পৰা ২০২৬ লৈ) ৩৩.৫৬ কোটি টকা ব্যয় সাপেক্ষে পাঁচখন আঁচনিৰ কাম ৰূপায়ণ কৰিছে। আঁচনিসমূহৰ বিতং তথ্য “Annexure-B” ত দাখিল কৰা হ’ল।

ধুবুৰী সমষ্টিৰ অন্তৰ্গত ব্ৰহ্মপুত্ৰ নদীৰ উত্তৰ পাৰৰ শিলঘাগৰী ১ম খণ্ড অঞ্চলৰ খহনীয়া প্ৰতিৰোধৰ বাবে 15th Finance ৰ অধীনত ১৯.০৭ কোটি টকা আৰু গংগাধৰ নদীৰ সোঁপাৰৰ চেংটি মাৰি অঞ্চলৰ খহনীয়া প্ৰতিৰোধৰ বাবে ২৪.৫৪ কোটি টকাৰ আঁচনি দুখনৰ নিবিদা আহ্বান কৰা হৈছে। আঁচনিৰ সবিশেষ তথ্য “Annexure-C” ত দাখিল কৰা হ’ল।

ইয়াৰ উপৰিও ব্ৰহ্মপুত্ৰ নদীৰ খহনীয়া অব্যাহত থকা মাজেৰচৰ, কাতলামাৰি, ১১ নং বিভাৰ ব্লক (11 no. river block), পাটামাৰী আদি অঞ্চলৰ খহনীয়া তাৎক্ষণিক ভাবে নিয়ন্ত্ৰণ কৰাৰ বাবে Bamboo screen ৰ কাম কৰি থকা হৈছে আৰু খহনীয়াৰ হাৰ কমি যোৱা পৰিলক্ষিত হৈছে।

আনহাতেদি ধুবুৰী জিলাৰ সীমান্ত এলেকাত থকা বৰ্মন পাৰা BOP ৰ ওচৰত খহনীয়া ৰোধৰ বাবে Geo-textile sheet পাৰি দি আৰু geo-bag launching ৰ জৰিয়তে তাৎক্ষণিক ভাবে খহনীয়া ৰোধৰ চেষ্টা কৰি থকা হৈছে আৰু খহনীয়াৰ হাৰ বহু পৰিমাণে কমা পৰিলক্ষিত হৈছে।

ব্ৰহ্মপুত্ৰ নদীৰ খহনীয়াৰ কবলৰ পৰা হাওৰাৰ পাৰ, শিলঘাগৰী, কায়েম ভাষাগী, ভোগডহৰ, ভাষাগীৰ চৰ, আমিনেৰ চৰ, আয়ৰণ জংলা, বৰবিলা, চলাকুৰা চতুৰ্থ খণ্ড ইত্যাদি অঞ্চলত হোৱা খহনীয়া পৰ্যবেক্ষণ কৰি থকা হৈছে আৰু প্ৰয়োজন সাপেক্ষে খহনীয়া প্ৰতিৰোধৰ কাম হাতত লোৱা হ’ব।

ধুবুৰী বিধান সভা সমষ্টিৰ টিপকাই নদীৰ দ্বাৰা খহনীয়াৰ কবলত পৰা অঞ্চল সমূহ যেনে কুস্তিৰ চৰ ১ম খণ্ড, কুস্তিৰ চৰ ২য় খণ্ড অঞ্চলত তাৎক্ষণিক ভাবে Bamboo Screen ৰ কাম কৰি থকা হৈছে আৰু খহনীয়াৰ হাৰ বহু পৰিমাণে কমিছে। অৱশ্যে পূৱ কুস্তিৰ চৰৰ খহনীয়া নিৰীক্ষণ কৰি থকা হৈছে আৰু প্ৰয়োজন সাপেক্ষে খহনীয়া প্ৰতিৰোধৰ কাম হাতত লোৱা হ’ব।

গংগাধৰ নদীৰ দ্বাৰা খহনীয়া হোৱা বিনাচৰা ১ম খণ্ড, ছালনডাঙা, চৰ দুৰাহাটী, টেকামাৰি, সম্ভৰঘাট আদি অঞ্চলত তাৎক্ষণিক ভাবে PSC porcupine, Megabag আৰু Bamboo Screen ৰ কাম কৰি থকা হৈছে আৰু খহনীয়াৰ প্ৰৱণতা হ্ৰাস পোৱা পৰিলক্ষিত হৈছে।

বালাডোবা, তিস্তাৰ পাৰ, BSF-BOP ৰ ওচৰত চেংটিমাৰি অঞ্চলত খহনীয়া পৰ্যবেক্ষণ কৰি থকা হৈছে আৰু প্ৰয়োজন বোধে খহনীয়া প্ৰতিৰোধৰ কাম হাতত লোৱা হ’ব।

গদাধৰ নদীৰ দ্বাৰা অব্যাহত হৈ থকা মৃদু খহনীয়া অঞ্চল বোৰ যেনে ফলিমাৰি ১ম খণ্ড, ঘোৰামাৰা, কলবাৰী আদি অঞ্চলৰ খহনীয়া পৰ্যবেক্ষণ কৰি থকা হৈছে আৰু প্ৰয়োজন বোধে খহনীয়া প্ৰতিৰোধৰ কাম হাতত লোৱা হ'ব।

- (গ) ধুবুৰী জিলাৰ গৰাখহনীয়া প্ৰতিৰোধৰ বাবে 15th Finance ৰ অধীনত ক্ৰমে ১৯.০৭ কোটি আৰু ২৪.৫৪ কোটি টকা মূল্যৰ ২ খন আঁচনিৰ নিবিদা আহ্বান কৰা হৈছে। আঁচনি ২ খন বৰ্তমান কেন্দ্ৰীয় চৰকাৰৰ NDMA ৰ অনুমোদনৰ বাবে অপেক্ষাৰত। আঁচনিৰ প্ৰতিলিপি **“Annexure-D”** ত দাখিল কৰা হ'ল।

ইয়াৰ উপৰিও ধুবুৰী জিলাৰ ব্ৰহ্মপুত্ৰ, গংগাধৰ, টিপকাই, গৌৰাং, চম্পাৱতী আদি নদীৰ বিভিন্ন এলেকাত হৈ থকা খহনীয়া প্ৰতিৰোধৰ বাবে বিভাগীয় ভাবে প্ৰস্তুত কৰা আঁচনিৰ তালিকা **“Annexure-E”** ত দাখিল কৰা হ'ল।

- (ঘ) উক্ত আঁচনিসমূহৰ ভিতৰত 15th Finance ৰ অধীনৰ আঁচনি দুখন কেন্দ্ৰীয় চৰকাৰ NDMA ৰ অনুমোদনৰ পাছত কাৰ্য্যকৰী কৰা হ'ব। আন আঁচনিসমূহ যাৱতীয় পুঁজিৰ উপলব্ধতা সাপেক্ষে ৰূপায়ণ কৰাৰ ব্যৱস্থা গ্ৰহণ কৰা হ'ব।

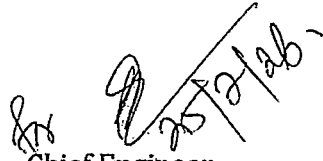
- (ঙ) ইতিমধ্যে ধুবুৰী সমষ্টিৰ বিভিন্ন এলেকাত এই বিভাগে ক্ষিপ্ৰভাৱে অস্থায়ী খহনীয়া প্ৰতিৰোধৰ বাবে কাম অব্যাহত ৰাখিছে। অঞ্চল বোৰৰ তালিকা **“Annexure-F”** ত দিয়া হ'ল।

(উত্তৰসমূহ **“Annexure-A”, “Annexure-B” “Annexure-C”, “Annexure-D”, “Annexure-E”** আৰু **“Annexure-F”**ৰ সৈতে অনলাইন যোগে NeVA পৰ্টেলত দাখিল কৰা হৈছে)

Annexure-A

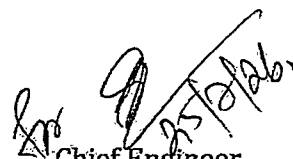
Erosion prone areas under Dhubri LAC

Sl No.	River	Most Affected Erosion Prone Areas
1	Brahmaputra	Aironjongla, Borbilla , Howrarpar, Silghagri pt 1,, Pub Kuntirchar, Majerchar, Katlamari , 11 NC River Block, Kaim Bhashani, Bhogdohar , Barmanpara BSF BOP , Patamari, Chalakura Pt IV
2	Gangadhar	Binnachar pt I, IV; Chengtimari, Salondanga (Berbhangti pt III) Dimakuri , Baladoba, Char Durahati ,Tistarpar , Tekkamari BOP, Swasterghat pt II
3	Tipkai	Kuntirchar pt I, II , Majerchar
4	Gadadhar	Falimari , Kalabari , Ghoramara


Chief Engineer
Water Resources Department
Basistha, Ghy-29

Annexure-B**Schemes taken up in Dhubri LAC****(Rs. In Lakh)**

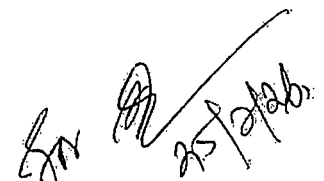
Sl. No.	Year	Name of Scheme	Estimated Amount	Head	Overall Progress
1	2022-23	Pro-siltation measures to protect Padmernalga and its adjoining areas from the erosion of river Brahmaputra	199.34	SOPD-G	100%
2	2022-23	Restoration of damages of Kanuri Binnachara PWD and Indo Bangla Border Road at Binnacharra Pt II Village and its adjoining areas from the erosion of river Gangadhar	1249.87	RIDF-XXVIII	100%
3	2023-24	Anti-erosion measures to protect Binnachara Pt-III areas from the erosion of river Gangadhar on its R/B	1000.00	RIDF-XXIX	100%
4	2025-26	Restoration of damages of different embankments of Dhubri WR Division under PDNA 2022 [Procurement of Geo Tubes]	727.78	PDNA	100%
5	2025-26	Restoration of Dhubri-Patamari road cum bund from the flood damages of river Brahmaputra on its R/B. (From Ch. 4th km to 7.3 th km)	179.35	PDNA	95%
Total			3356.34		


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Water Resources Department
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Annexure-C

Schemes proposed under funding of 15th Finance Commission

Sl.No	Name of River	Proposed Schemes	Estimated Amount
1	Brahmaputra	A/E measures to protect B/dyke at Silghagri Pt-I village and its adjoining areas from the erosion of river Brahmaputra on its R/B. (under 15th Finance)	19.07 Cr
2	Gangadhar	Anti-erosion measures to protect most vulnerable reaches of river Gangadhar on its both banks under Dhubri district (proposed under 15th Finance)	24.54


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Water Resources Department
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GOVT. OF ASSAM



**WATER RESOURCES DEPARTMENT
AWC, BASISTHA, GUWAHATI- 29**

**DETAILED ESTIMATE (STRUCTURAL & NON-
STRUCTURAL)**

FOR THE SCHEME

**Anti-erosion measures to protect most
vulnerable reaches of river Gangadhar on its
both bank under Dhubri District**

Estimated Amount: Rs. 24.54 Crore

SUBMITTED BY

**EXECUTIVE ENGINEER
DHUBRI W.R. DIVISION
DHUBRI**

Name of scheme:- Anti-erosion measures to protect most vulnerable reaches of river Gangadhar on its both banks under Dhubri district.

Name of Division: - Dhubri W.R. Division, Dhubri.

Estimated Cost: - Rs. 24,54,00,000.00

REPORT

INTRODUCTION:

The river Gangadhar is one of the largest tributaries of river Brahmaputra on its right bank. It originates from great Himalayas and then pass through the hills of Bhutan and after crossing Bhutan border at Kalikhowa it enters into Assam as river Sankosh and flows through the border of Assam and west Bengal. The river Sankosh or Mochu known as Punakha in its upper reaches is the second biggest river system in Bhutan having total length 1810km including all its tributaries, record speak the river drain a basin of 9,900 Sq km. The river crosses NH-31(C) at Srirampur and from its downstream it is known as river Gangadhar and after passing through some important towns like Tamarhat, Agomoni, Kumarganj Golokganj etc, it crosses the Assam border and ultimately merges with the river Brahmaputra(padma) at Binnachara pt-IV village in the neighboring country Bangladesh. It is a perennial river with large catchment area. In the first lap of journey in Bhutan and Assam the river flows in a very steep gradient. It is flashy in nature. It carries huge silt load during flood season which gets deposited in its meandering course resulting raising of the bed level and accommodate the discharge the river erodes its bank on opposite side of silt deposition throughout its entire course.

LOCATION:

The proposed work site at different locations such as, Uttar Moragodadhar and Chengtimari area on the right bank and Boro choraikhola area on the left bank of river Gangadhar which are at an average distance of about 40km from district headquarter town of Dhubri.

PROBLEM:

Many reaches on both banks of river Gangadhar have been under the grip of active erosion for last several years and as a result huge quantity of Govt. and public utilities have been eroded away and the erosion scenario is continued till date but the villages of Moragodadhar, Chengtimari etc. on the right bank and, Boro choraikhola area on the left bank

of river Gangadhar have been badly affected due to acute erosion by the river Gangadhar for last few years which primarily caused due to formation of huge sand char on opposite bank as well as middle of the river causing the flow hitting the areas obliquely. As a result a huge area of valuable homestead and cultivated land has already been eroded away. The erosion has taken serious turn in the last flood period of 2024 also and a huge chunk of land with many Govt and public properties have been eroded away. Uttar Moragodadhar, Singimari areas have been badly affected under Agomani Revenue Circle erosion due to active erosion the offset to the Golakganj Bisondoi embankment at Borochoiraikhola village has been reduced to 10m only for reach length of about 300.00m. Due to flood and continuous erosion, about 800.00 hectare of land has been eroded away and about 50 thousands population have been affected.

Therefore the scheme on execution will boost up the Socio Economic status of the people of these area pre dominantly inhabited by poor backwards community living on both banks of river Gangadhar under Dhubri district by ensuring safety in regards to their dwelling houses, valuable homestead and cultivable land, National Highway, IBB roads, PWD roads, bridge and other valuable Govt. and Public utilities.

Considering the above facts, the Memo Estimates was submitted before the 89th TAC Meeting held in Guwahati on 29th and 30th May, 2024 and also recommended by the same as per Detailed Project Report has also been prepared as per instruction to protect the most vulnerable reaches of river Gangadhar on its both banks with the following major provisions of works and specification.

- Reach length = 2300.00m
- Construction of apron of size 14m x 0.75m with 400 GSM A-type Geo bags
- Bank revetment works (slope pitching) of thickness = 0.45m with 400GSM A type Geo bags
- Providing 300 GSM Geo Fabric Sheet in slopes as filter media
- Toe key of size 1.50m x 1.50m x 0.90m with A type Geo bags in W.N box
- Earthwork in bank trimming
- PSC porcupine bars in 3 over 4 pattern of varied length as per site requirement.

BC Ratio – 2.21:1

Area Benefitted - 800.00 hectare approx.

Population Benefitted – 50,000 nos approx.

Rates adopted in this estimate :

The rates adopted in this estimate are as per SOR of WRD'2022-23. All works will be carried out as per general specification and norms of W.R. Department, Assam. While preparing the DPR additional 20% of FR to be deposited in the MMDRRF and DMFT has been considered using multiplication factor 1.018 for Geo Bags and other related works respectively vide. CE's letter WR(ED)Tech/7728/2021/19 Date.12/05/2023.



Executive Engineer

Dhubri W. R. Division, Dhubri

Abstract of Cost for Structural and Non-structural components

Name of Work: Anti-erosion measures to protect most vulnerable reaches of river Gangadhar on its both bank under Dhubri District

	Item	Cost (in Cr)	Remarks
A	Direct Charges		
1	I-Works		
1	A-Preliminary	0.20	
2	B-Land	0	
3	C-Works	20.95	
4	K-Buildings	0.20	
5	M-Plantation		
6	O-Miscellaneous	0	
7	P-Maintenance	0	0
8	R-Communication - 2% of C-Works		
9	Y-Losses	0	0
10	Contingency - 1% of C-Works		
	I-Works	21.35	
	II-Establishment		
	III-T&P		
	IV-Suspense		
	V-Receipt of Recoveries		
	Total Direct Charges	21.35	
B	Indirect Charges		
1	(i) Audit & Accounts charges	0	
	Direct and Indirect Charges (A+B)	21.35	
C	Non-Structural Measures (10% of A+B)	3.19	
	Total Cost including Direct, Indirect Charges & Non-Structural Measures (A+B+C)	24.54	

Executive Engineer

Dhubri W.R Division

Dhubri

Name of scheme : Anti erosion measures to protect most vulnerable reaches of river Gangadhar on its both banks under Dhubri District.

Name of Division :- Dhubri W. R. Division, Dhubri

DETAILED ESTIMATE						
Sl.	Item of work	Unit	Basic rate as per SOR, WRD 2022-23	Basic Rate x CP10% x (FR 1.5%+20% Cess) x GST 18% x Labour Cess 1% Col 4 x (1.10 x 1.018 x 1.18 x 1.01)	Quantity	Amount in Rs (A) including all Taxes Col 5 x Col 6
1	2	3	4	5	6	7
A	Preliminary (1%) (As per sub-estimate 1)					₹ 21,14,292.97
B	Land					₹ 0.00
C	Works-					
1	Medium Jungles: Clearing medium jungles and trees up to 15 cm. girth including cutting, uprooting roots and stumps, removing them from the site of the work, etc. complete as directed. (When 30% to 60 % of the area is covered by shrubs, trees etc.)	sqm	11.92	15.91	13,800.00	₹ 2,19,558.00
	Quantity from statement-2					
	Rate is as per SI no 1.02 of SOR'2022-23 of WRD					
2	Felling trees including uprooting roots and stumps up to 50 cm. below ground, cutting into pieces and removing the same from the site of work etc. complete as directed. Trees above 1.0 m and up to 2.0 m girth:					
	Quantity from statement-2					
	Rate is as per SI no 1.04.2 of SOR'2022-23 of WRD	nos	423.98	565.83	170.00	₹ 96,191.10
3	Cutting bamboo, uprooting roots & stumps including removing them from the site of work, etc. complete as directed.					
	Quantity from statement-2					
	Rate is as per SI no 1.05 of SOR'2022-23 of WRD	sqm	463.44	618.50	1,082.00	₹ 6,69,217.00
4	Earthwork in bank trimming to the designed section /slope by mechanical means including removing the trimmed soils to a minimum distance of 30 m, complete as directed.	cum	87.68	117.02	31,600.00	₹ 36,97,832.00
	Quantity from Staement-3 (Rate is as per SI no 2.11 of SOR'2022-23 of WRD)					

Sl.	Item of work	Unit	Basic rate as per SOR, WRD 2022-23	Basic Rate x CP10% x (FR 1.5%+20% Cess) x GST 18% x Labour Cess 1% Col 4 x (1.10 x 1.018 x 1.18 x 1.01)	Quantity	Amount in Rs (A) Including all Taxes
				Col 5 x Col 6		
5	Supply of Geo-textile bags of type-A (1.03 x 0.70 m) inner to inner made of Geo-textile non-woven fabric sheets of 400 GSM manufactured from 100% virgin Polypropylene (PP) fibre with minimum properties as per IS 16653:2017 i. Wide Tensile strength (MD) ≥ 20KN/m & Wide Tensile strength(CD) ≥20 KN/m ii. Elongation (MD) ≥50% & Elongation (CD) ≥ 50% iii. Abrasion ≥ 95% iv. Trapezoidal Tear Strength (MD) ≥ 450N & Trapezoidal Tear Strength (CD) ≥ 450N v. CBR Puncture strength ≥ 4000N vi. Permittivity ≥ 1.10s – 1 vii. Permeability ≥ 40l/m2/sec viii. AOS ≤ 75 micron ix. UV Resistance @ 500 hours retained Tensile strength (MD) & (CD) ≥ 80% x. Mass ≥ 400 gm/m² xi. Thickness at 2KPa ≥ 3 mm xii. Seam strength ≥ 80 % of actual fabric strength. Stitching of Bags should be Ring Spun Yarn stitches with 2500-3000 denier double line chain stitch with overlap with stitches along the edge @ minimum 15 stitches per 100 mm. (Bags are to be supplied of 100 number in a (Quantity from statement-(2 & 4) (Rate is as per SI no 10.1 of SOR'2022-23 of WRD)	Each	159.73	213.17	4,92,517	₹ 10,49,89,848.89
6	Construction and supply of Wire -netting box of size 1.50 m x 1.50 m x 0.45 m made with mechanically woven, double twisted, hexagonal shaped wire mesh with wire made of low carbon, high ductile MS wire with heavy class of galvanization with an additional layer of PVC coating with mesh type of 10 x 12 as per EN 10223 & ASTM A975, mesh wire of 2.70 mm (I.D) /3.70 mm (OD) tensile strength of 450-500/mm2, edge wire selvedge around it at least 2.5 times, lacing wire (Zinc PVC coated) of 2.20 mm (I.D)/3.20 mm (OD), VC coating thickness of 0.50 mm nominal, 0.38 mm minimum, Mesh opening size 150 mm x 150 mm and with average weight per unit being 12 Kg with additional 3% of the weight of box for lacing wire supplied separately, supporting the facing of the box with zinc coated steel wire of required length as directed, complying with ASTM and European norms. (Quantity from Statement- 2) (Rate is as per SI no 10.14 of SOR'2022-23 of WRD)	Nos	1928.76	2574.08	3,072	₹ 79,07,573.76

Sl.	Item of work	Unit	Basic rate as per SOR, WRD 2022-23	Basic Rate x CP10% x (FR 1.5%+20% Cess) x GST 18% x Labour	Quantity	Amount in Rs (A) including all Taxes
				Case 1% Col 4 x (1.10 x 1.018 x 1.18 x 1.01)		Col 5 x Col 6
7	Supply of non-woven Geo-textile fabric sheets of 300 GSM manufactured from 100% virgin Polypropylene (PP) fibre with minimum properties as per IS 16653: 2017 • Wide Tensile strength (MD) $\geq 15\text{kN/m}$ & Wide Tensile strength (CD) $\geq 15\text{kN/m}$ • Elongation (MD) $\geq 50\%$ & Elongation (CD) $\geq 50\%$ • Abrasion $\geq 95\%$ • Trapezoidal Tear Strength (MD) $\geq 340\text{ N}$ & Trapezoidal Tear Strength (CD) $\geq 340\text{ N}$ • CBR Puncture strength $\geq 3000\text{ N}$ • Permittivity $\geq 1.25\text{ s-l}$ • Permeability $\geq 60\text{l/m}^2\text{/sec}$ • AOS $\leq 75\text{micron}$ • UV Resistance @ 500 hours retained Tensile strength (MD) & (CD) $\geq 80\%$ • Mass $\geq 300\text{gm/m}^2$ • Thickness at 2KPa $\geq 3\text{ mm}$. (Each Roll of Geo Fabric Sheet should be supplied in properly packed Bundles and should be marked with the Name of Manufacturer, Batch Number & its dimensions clearly on each roll with (Quantity from Statement-4) (Rate is as per SI no 10.5 of SOR'2022-23 of WRD)	sqm	80.37	107.26	39,763.50	₹ 42,65,033.01
8	Carriage of Geo Bags of size 1.03 x 0.70 m including loading & unloading , Stacking cost of P.O.L. ,etc. complete and including hire charge of truck with driver and handyman completed as directed.(Distance to be calculated with respect to Site store to work site) (Quantity from Statement-2) (Rate is as per SI no 3.08 of SOR'2022-23 of WRD) . Distance from divisional store to work site = 50.00 km x 0.014 = Rs. 0.7	nos	0.70	0.93	4,92,517	₹ 4,58,040.81
9	Carriage of 300 gsm Geo sheet of including loading & unloading , Stacking cost of P.O.L. ,etc. complete and including hire charge of truck with driver and handyman completed as directed.(Distance to be calculated with respect to site store to work site) (Quantity from Statement-4) (Rate is as per SI no 3.09 of SOR'2022-23 of WRD) . Distance from divisional store to work site = 50.00 km x 0.013= Rs.0.07	nos	0.65	0.87	39,763.50	₹ 34,594.25

Sl.	Item of work	Unit	Basic rate as per SOR, WRD 2022-23	Basic Rate x CP10% x (FR 1.5%+20% Cess) x GST 18% x Labour Cess 1%	Quantity	Amount in Rs (A) including all Taxes
				Col 4 x (1.10 x 1.018 x 1.18 x 1.01)		Col 5 x Col 6
10	Supply of Sewing Thread/Yarn PPMF Stitching Thread (2000 Den. Kaplon) i/c payment of taxes	Rm	0.10	0.13	54,17,687.00	₹ 7,04,299.31
	(Quantity from Statement-2) (Rate is as per SI no 10.19 of SOR 2022-23 of WRD)					
11	Earth work in excavation of drainage channel by mechanical means to the proper grade and slopes as required including disposing the excavated					
	(Quantity from Statement-2)					
	(Rate is as per SI no 2.08.1 of SOR 2022-23 of WRD)	Cum	87.24	116.43	575.00	₹ 66,947.25
12	Collection and supply of River silt by truck carriage free from debries and other foreign material, etc. complete as directed. By mechanical Means For initial up to 1.00 Km & for all lifts.					
	For A-Type					
	Quantity as per statement no.2					
	(Rate is as per SI no 2.23.1 of SOR 2022-23 of WRD)	Cum	228.61	305.10	41,371.43	₹ 1,26,22,422.68
13	Filling and laying in cage with sand/silt filled Geo bags of size 1.03 m x 0.70 m excluding excavation of specified sand/silt from flood plain or adjacent chars within a distance of 90 m of the work site, filling geo bags with sand having minimum weighing 126.00 Kg and minimum volume 0.084 Cum after filling, double locking chain stitching the mouth of the filled bags with polypropylene thread by power driven double needle machine, stacking the same in batches of 100, carrying the Without boat (Quantity from Statement-2) (Rate is as per SI no 8.02A 1 of SOR 2022-23 of WRD)	nos	40.84	54.50	36,864	₹ 20,09,088.00

Sl.	Item of work	Unit	Basic rate as per SOR, WRD 2022-23	Basic Rate x CP10% x (FR 1.5%+20% Cess) x GST 18% x Labour	Quantity	Amount in Rs (A) including all Taxes
				Case 1% Col 4 x (1.10 x 1.018 x 1.18 x 1.01)		Col 5 x Col 6
14	Filling and laying of Geo bags of size 1.03 m x 0.70 m excluding excavation of sand/silt from flood plain or adjacent chars within a distance of 90 m of the work site, filling geo bags with sand/silt having minimum weighing 126.00 Kg and minimum volume 0.084 Cum after filling , double locking chain stitching the mouth of the filled bags with polypropylene thread by power driven double needle double stitched machine, stacking the same in batches of 100, carrying the same to the dumping site including all handling charges and local carriage within a distance of 150 m and laying properly as directed. (Sand/silt, Geo Bag and Polypropylene thread will be supplied by the department free of cost)					
	With out Boat					
	Quantity as per statement no:- 2					
	(Rate is as per SI no 8.01A 1 of SOR '2022-23 of WRD)	nos	35.83	47.82	1,67,123.00	₹ 79,91,821.86
15	Filling and laying of Geo bags of size 1.03 m x 0.70 m excluding excavation of sand/silt from flood plain or adjacent chars within a distance of 90 m of the work site, filling geo bags with sand/silt having minimum weighing 126.00 Kg and minimum volume 0.084 Cum after filling , double locking chain stitching the mouth of the filled bags with polypropylene thread by power driven double needle double stitched machine, stacking the same in batches of 100, carrying the same to the dumping site including all handling charges and local carriage within a distance of 150 m and laying properly as directed. (Sand/silt, Geo Bag and Polypropylene thread will be supplied by the department free of cost) With Engine boat	nos	56.74	75.72	2,88,530	₹ 2,18,47,491.60
	(Quantity from Statement-2)					
	(Rate is as per SI no8.01A.2 of SOR '2022-23 of WRD)					

Sl.	Item of work	Unit	Basic rate as per SOR, WRD 2022-23	Basic Rate x CP10% x (FR 1.5%+20% Cess) x GST 18% x Labour Cess 1% Col 4 x (1.10 x 1.018 x 1.18 x 1.01)	Quantity	Amount in Rs (A) including all Taxes
						Col 5 x Col 6
16	Labour charge for laying Geo fabric sheet as filter bellow pitching including carrying, lapping, wrapping & stitching as directed by the Engineer-in-Charge.	sqm	9.58	12.79	37,870.00	₹ 4,84,357.30
	(Quantity from Statement-4) (Rate is as per SI no 8.07 of SOR '2022-23 of WRD)					
17	Supply of Pre stressed Cement Concrete (PSC) Porcupine members of size 0.10 m × 0.10 m × 3.00 m with M - 30 grade of cement concrete conforming to IS 1343:2012 using super-plasticizer @1.2 lit/bag of cement with graded broken coarse aggregates up to 20 mm size down conforming to IS 10262:2009 & IS 456:2000 and reinforced with 4 nos. of 4 mm dia. high tensile steel wire cable/strand with necessary cover and 4 mm high tensile stirrups at 250 mm C/C, in conformity with IS-6403:R2002 and stressed to required strength not exceeding 9.18 N/mm, holes of 16 mm dia. at 50 cm inside from both ends in the same face and in either face of post another 2 nos. of holes of size 16 mm dia. at 65 mm inside from both ends including properly curing for 21 (Twenty one) days and carriage of porcupine members from factory to the stack yard within a distance up to 50 Km including loading, unloading & stacking complete as directed.	mem	838.69	1119.30	32,620	₹ 3,65,11,566.00
	Quantity from statement-5 (Rate is as per SI no 7.01 of SOR '2022-23 of WRD)					
18	Carriage of PSC porcupine members of size 0.10 m × 0.10 m × 3.00 m from Stack yard to Work Site including loading, unloading & stacking	mem	10.20	13.61	32,620	₹ 4,43,958.20
	Quantity from statement-5 (Rate is as per SI no 7.02 of SOR '2022-23 of WRD) =Rs 2.04/mem/Km. stack yard to work site= 5.00 km x 2.04 = Rs. 10.20					

Sl.	Item of work	Unit	Basic rate as per SOR, WRD 2022-23	Basic Rate x CP10% x (FR 1.5%+20% Cess) x GST 18% x Labour	Quantity	Amount in Rs (A) including all Taxes
				Col 4 x (1.10 x 1.018 x 1.18 x 1.01)		Col 5 x Col 6
19	Labour charge for launching of PSC Porcupine including carriage of PSC porcupine members of size 0.10 m x 0.10 m x 3.00 m from the stack yard to the place of launching, erection of the Porcupine with 6 (Six) members properly, supply & fitting/fixing with 12 mm dia. 25 Cm long M.S. Nuts and bolts and launching the porcupine properly as directed. (Lead up to 150 m)					
	(Quantity from Statement-5)					
	(Rate is as per SI no 7.03.1&2 of SOR 2022-23 of WRD)					
	Without Boat	nos	533.17	711.56	900	₹ 6,40,404.00
	With Boat	nos	952.85	1271.65	4,537	₹ 57,69,052.17
18	Earth work in exavation of tranche	m ³			575.00	
	Total					₹ 21,14,29,297.18
	Contingency 1%					₹ 21,14,292.97
	Sub-Total					₹ 21,35,43,590.15
	K-Building (2 %)					₹ 42,28,585.94
	M- Plantation (0 %)					₹ 0.00
	O- Miscellaneous (0%)					₹ 0.00
	P- Maitanance (0%)					₹ 0.00
	Q- Special T&P (0%)					₹ 0.00
	R- Communication (2 %)					₹ 42,28,585.94
	Y-Losses on Stock (0 %)					₹ 0.00
	Total					₹ 22,20,00,762.04

Say= ₹ 22,20,00,000.00

Rupees Twenty two crores twenty lakhs only


Executive Engineer
Dhubri W.R. Division
Dhubri

GOVT. OF ASSAM



WATER RESOURCES DEPARTMENT
AWC, BASISTHA, GUWAHATI- 29

DETAILED ESTIMATE (STRUCTURAL & NON-
STRUCTURAL)

FOR THE SCHEME

A/E measures to protect B/dyke at Silghagri Pt. I
village and its adjoining area from the erosion of
river Brahmaputra on its R/B

Estimated Amount: Rs. 19.07 Crore

SUBMITTED BY

EXECUTIVE ENGINEER
DHUBRI W.R. DIVISION
DHUBRI

Name of Scheme :- A/E measures to protect B/dyke at Silghagri pt.I village and its adjoining areas from the erosion of river Brahmaputra on its R/B.

Estimated Amount:- Rs. 19,07,00,000.00

Name of Division:- Dhubri W.R. Division, Dhubri.

REPORT OF EXECUTIVE ENGINEER

This estimate amounting to Rs. . 19,07,00,000.00 (Rupees Nineteen Crore Seven Lakh) only has been framed to show the most probable cost for the scheme" A/E measures to protect B/dyke at Silghagri pt.I village and its adjoining areas from the erosion of river Brahmaputra on its R/B ".

Introduction:

The river Brahmaputra is the largest river in the Indian Sub-Continent and is the largest river in the world from the point of view of discharge. The river originates from Manas Sarovar in Tibet and outfalls in Bay of Bengal in Bangladesh after traveling a total distance of about 2830 km. in Assam .The length of river is around 715 km. The river enters into Assam near Passighat and exist to flow into Bangladesh after leaving the western most town Dhubri in Assam.

Location:

The Proposed work sites are located at about 10.00 km downstream from Dhubri District headquarters on R/B of river Brahmaputra.

History of problem:

The Proposed work site i.e. Silghagri Part-I Village is located at about 8th km of Dhubri-Patamari Road-cum-bund which was constructed in the year 1954-55 along the right bank of river Brahmaputra to protect a vast area behind from the flood inundation. This road cum bund is the only means of road communication of the surrounding village Motirchar, Palashkandi, Howrarpar, Khodarchar, Gaspara, Velargaon, Silghagri and Dharmasala etc. including char areas of opposite bank of river Brahmaputra. The erosion problem at Silghagri Pt-I village has been continuing for last 2 years and many Govt. and Public Utilities had been eroded away and unlike previous years, during the onset of flood season of this year/2024 severe bank erosion has been continuing and several families had to shift their establishment and valuable homestead and cultivable land with standing crops has been eroded away. As the area is very vicinity to the Dhubri Patamari road cum bund and if present rate of erosion is allowed to continue besides damaging remaining handsome number of population it will threat to the Dhubri Patamari road cum bund and presently the local people urging immediate protective measures and panic like situation is prevailing in this area due to erosion.

Remedial measures Proposed:-

Accordingly, under the above Circumstances and to get rid of the present severe erosion problem, the above Detailed Project Report has been prepared as per instruction with the following major provisions . The proposed scheme has also been recommended in 90th TAC meeting held on 04/11/2024 at Assam Water Centre , Basisthsa , Guwahati

1. Contionus Bank revetment for a reach length of 1000.00 m
Specifications:-
 - a. Apron Width : 36 m width and 0.90 m thick with A-Type Geo-bags
 - b. Slope Pitching: With Type-A Geo bags of 0.45 m thick at 2:1 Bank slope for a Avg slope length of 10.50 m.
 - c. Toe Key (1.50mX0.90m) to be provided at transition portion of Slope pitching and apron in cage.
2. Launching PSC porcupine: (Reach length = 300.00 M)
 - a. 4 nos of P.S.C Porcupine bars of length 90.00 m at U/S of Geo Bag Revetment Works in 3 over 4 rows.
 - b. 3 nos of P.S.C Porcupine bars of length 63.00 m D/S of Geo Bag Revetment Works in 3 over 4 rows.
3. Bamboo works (Reach length = 700.00 M)
 - (a) 16 Nos of Bamboo screen with varied length.

Benefited Area :

The area benefitted will be about 1400 hectare and population about 40000 nos, would be benefitted by the implementation of this schéme.

BC Ratio: 1.74:1

Rates adopted in this estimate :

The rates adopted in this estimate are as per SOR of WRD'2022-23. All works will be carried out as per general specification and norms of W.R. Department, Assam. While preparing the DPR additional 20% of FR to be deposited in the MMDRRF and DMFT has been considered, using multiplication factor 1.018 for Geo bag protection vide. CE's letter WR(ED)Tech/7728/2021/19 Date.12/05/2023.


Executive Engineer
Dhubri, W.R. Division
Dhubri

Abstract of Cost for Structural and Non-structural components

Name of Work: A/E. measures to protect B/dyke at Silghagri Pt. I village and its adjoining area from the erosion of river Brahmaputra on its R/B

	Item	Cost (in Rs. Cr)	Remarks
A	Direct Charges		
I	I-Works		
1	A-Preliminary		
2	B-Land	0	
3	C-Works	16.20	
4	Contingency	0.17	
5	K-Buildings		
6	M-Plantation		
7	O-Miscellaneous	0	
8	P-Maintenance	0	
9	R-Communication		
10	Y-Losses	0	
	I-Works	16.37	
	II-Establishment		
	III-T&P		
	IV-Suspense		
	V-Receipt of Recoveries		
	Total Direct Charges	16.37	
B	Indirect Charges		
I	(i) Audit & Accounts charges	0	
	Direct and Indirect Charges (A+B)	16.37	
C	Non-Structural Measures (10% of A+B)	2.70	
	Total Cost including Direct, Indirect Charges & Non- Structural Measures (A+B+C)	19.07	


Executive Engineer

Dhubri W.R Division

 Dhubri circle

Name of scheme:- A/E measures to protect B/dyke at Silghagri pt.l village and its adjoining areas from the erosion of river Brahmaputra on its R/B.

Name of Division :- Dhubri W. R. Division, Dhubri

DETAILED ESTIMATE

A	Preliminary 1 % (as per sub estimate 1)					₹ 16,20,399.00
B	Land					₹ 0.00
C	Works-					
Sl.	Item of work	Unit	Basic rate as per SOR, WRD 2022-23	Basic Rate x CP10% x (FR 1.5%+20% Cess) x GST 18% x Labour Cess 1%	Quantity	Amount in Rs (A) including all Taxes
				Col 4 x (1.10 x 1.018 x 1.18 x 1.01)		Col 5 x Col 6
1	2	3	4	5	6	7
1	Earthwork in bank trimming to the designed section /slope by mechanical Quantity from Staement I (Rate is as per SI no 2.11 of SOR'2022-23 of WRD)	cum	87.68	117.02	29,697.51	₹ 34,75,202.62
2	Supply of Geo-textile bags of type-A (1.03 x 0.70 m) inner to inner made of Geo-textile non-woven fabric sheets of 400 GSM manufactured from 100% virgin Polypropylene (PP) fibre with minimum properties as per IS 16653:2017 (Quantity from statement-(1) (Rate is as per SI no 10.1 of SOR'2022-23 of WRD)	Each	159.73	213.17	4,57,960	₹ 9,76,23,333.20
3	Construction and supply of Wire -netting box of size 1.50 m x 1.50 m x 0.45 m made with mechanically woven, double twisted, hexagonal shaped wire mesh with wire made of low carbon (Quantity from Statement- 1) (Rate is as per SI no 10.14 of SOR'2022-23 of WRD)	Nos	1928.76	2574.08	1,333	₹ 34,31,248.64
4	Supply of non-woven Geo-textile fabric sheets of 300 GSM manufactured from 100% virgin Polypropylene (PP) fibre with minimum properties as per IS 16653: 2017 (Quantity from Statement-3) (Rate is as per SI no 10.5 of SOR'2022-23 of WRD)	sqm	80.37	107.26	15,172.50	₹ 16,27,402.35
5	Carriage of Geo Bags of size 1.03 x 0.70 m including loading & (Quantity from Statement-1) (Rate is as per SI no 3.08 of SOR'2022-23 of WRD) . Distance from divisional store to work site = 30.00 km x 0.014 = Rs. 0.42	nos	0.42	0.56	4,57,960	₹ 2,56,457.60

6	Carriage of 300 gsm Geo sheet of including loading & unloading ,	sqm	0.039	0.05	15,172.50	₹ 758.63
	(Quantity from Statement-1)					
	(Rate is as per SI no 3.09 of SOR'2022-23 of WRD) . Distance from divisional store to work site = 30.00 km x 0.013= Rs.0.039					
7	Supply of Sewing Thread/Yarn PPMF Stitching Thread (2000 Den. Kaplon) i/c payment of taxes	Rm	0.10	0.13	50,37,560.00	₹ 6,54,882.80
	(Quantity from Statement-1)					
	(Rate is as per SI no 10.19 of SOR'2022-23 of WRD)					
8	Earth work in excavation of drainage channel by mechanical means to the	Cum	87.24	116.43	250.00	₹ 29,107.50
	(Quantity from Statement-1)					
	(Rate is as per SI no 2.08.1 of SOR'2022-23 of WRD)					
9	Collection and supply of River silt by truck carriage free	Cum	228.61	305.10	38,468.64	₹ 1,17,36,782.06
	Quantity as per statement no.1					
	(Rate is as per SI no 2.23.1 of SOR'2022-23 of WRD)					
10	Filling and laying in cage with sand/silt filled Geo bags of size 1.03 m x 0.70 m excluding	nos	40.84	54.50	15,996	₹ 8,71,782.00
	Without boat					
	(Quantity from Statement-1)					
11	(Rate is as per SI no 8.02A 1 of SOR '2022-23 of WRD)	nos	35.83	47.82	56,250	₹ 26,89,875.00
	Filling and laying of Geo bags of size 1.03 m x 0.70 m excluding excavation of sand/silt from flood plain or adjacent chars					
	With out Boat					
12	Quantity from statement no:- 1	nos	56.74	75.72	3,85,714	₹ 2,92,06,264.08
	(Rate is as per SI no 8.01A 1 of SOR '2022-23 of WRD)					
	Filling and laying of Geo bags of size 1.03 m x 0.70 m excluding excavation of sand/silt from flood plain or adjacent chars within a distance of 90 m of the work site, With Engine Boat					
13	(Quantity from Statement-1)	sqm	9.58	12.79	14,450.00	₹ 1,84,815.50
	(Rate is as per SI no 8.01 A.2 of SOR '2022-23 of WRD)					
	Labour charge for laying Geo fabric sheet as filter bellow pitching including carrying, lapping, wrapping & stitching as directed by the Engineer-in-Charge.					

14	Supply of Pre stressed Cement Concrete (PSC) Porcupine members of size 0.10 m × 0.10 m × 3.00 m with M - 30 grade of cement concrete conforming to IS	mem	838.69	1119.30	7,056	₹ 78,97,780.80
	Quantity from statement-1					
	(Rate is as per SI no 7.01 of SOR '2022-23 of WRD)					
15	Carriage of PSC porcupine members of size 0.10 m × 0.10 m × 3.00 m	mem	10.20	13.61	7,056	₹ 96,032.16
	Quantity from statement-1					
	(Rate is as per SI no 7.02 of SOR '2022-23 of WRD) =Rs 2.04/mem/Km. stack yard to work site= 5.00 km × 2.04 = Rs. 10.20					
16	Labour charge for launching of PSC Porcupine including carriage of PSC porcupine members of size 0.10 m × 0.10 m × 3.00 m					
	(Quantity from Statement-1)					
	(Rate is as per SI no 7.03.1&2 of SOR '2022-23 of WRD)					
	Without Boat	nos	533.17	711.56	140	₹ 99,618.40
	With Boat	nos	952.85	1271.65	1,036	₹ 13,17,429.40
17	Construction of whole Bholuka Bamboo double Screen with matured Bholuka Bamboo stacks 75 mm to 100 mm dia., placed at 30 cm clear apart (i.e. 40 cm C/C)					
	(Quantity from Statement-1)					
	(Rate is as per SI no 6.23 of SOR '2022-23 of WRD)	Rm	984.89	1314.41	640	₹ 8,41,222.40
	Sub Total					₹ 16,20,39,995.14
	contingency 1 %					₹ 16,20,399.95
	I-Works					₹ 16,36,60,395.09
	K- Building 2%					₹ 32,40,799.90
	O- Miscellaneous 0%					₹ 0.00
	P- Maintenance 0 %					₹ 0.00
	Q- Special T and P 0%					₹ 0.00
	R- Communication 2%					₹ 32,40,799.90
	X- Environment and ecology					₹ 0.00
	Y- Losses on Stocks 0%					₹ 0.00
	Grand Total					₹ 17,17,62,393.89
	say					₹ 17,17,62,000.00

(Seventeen Crore Seventeen Lakh Sixty two Thousand) only


 Executive Engineer
 Dhubri W.R. Division
 Dhubri

Annexure-E

Proposals prepared for erosion protection in Dhubri District

Sl.No	Proposed Schemes	Estimated Amount
River Brahmaputra		
1	Climate Resilient Brahmaputra Integrated Flood and Riverbank Erosion Risk Management Project In Dhubri district – Phase II (additional financing)	89.8173 Cr
2	A/E measures to protect B/dyke at Silghagri pt.I village and its adjoining areas from the erosion of river Brahmaputra on its R/B. (under 15th Finance)	19.07 Cr
3	Anti erosion measures to protect Barmanpara BOP and it's adjoining areas from the erosion of river Brahmaputra on its L/B	8.00 Cr
4	Bank protection measures to protect Bura Buri Than and its U/S and D/S reaches on L/B of river Brahmaputra	26.7241 Cr.
5	Anti-erosion measures to protect Suwapata Pt-III and it's adjoining areas from the erosion of river Brahmaputra on its R/B.	2.95 Cr
6	Anti-erosion measures to protect Boyjer Alga Pt-IV, V and it's adjoining areas from the erosion of river Brahmaputra on its L/B.	4.00 Cr
River Gangadhar		
7	Anti-erosion measures to protect most vulnerable reaches of river Gangadhar on its both banks under Dhubri district (proposed under 15th Finance)	24.54
8	Anti erosion measures to protect Pub Gaikhowa pt II and its adjoining area from the erosion of river Gangadhar on its L/B	8.00 Cr
9	Anti erosion measures to protect Golakganj town and its adjoining areas from the erosion of river Gangadhar on its L/B	8.00 Cr
10	Anti erosion measures to protect Bhangaduli village and Its adjoining areas from the erosion of river Gangadhar on its R/B	5.55 Cr.
11	Anti erosion measures to protect Bagdokra embankment and its adjoining areas from the erosion of river Gangadhar on its L/B	4.495 Cr
12	Anti erosion measures to protect Takamari BOP and its adjoining areas from the erosion of river Gangadhar on its R/B.	10.00 Cr
13	Anti erosion measures to protect Tistarpar BOP and border fencing from the erosion of river Gangadhar on its L/B.	8.00 Cr.
14	Flood mitigation and Resilience Approach for Stabilization of River Bank at Kumarganj area from the flooding of river Gangadhar on its R/B under SDMF for the year 2026-27	20.00 Cr
15	Flood Mitigation and Resilience Approach for Stabilization of River Bank at Binnachara Pt - I village near IBB road from flooding of river Gangadhar on its R/B under SDMF for the year 2026-27	8.00 Cr
16	Flood Mitigation and Resilience Approach for Stabilization of River Bank at Bhangaduli area village from the flooding of river Gangadhar on its R/B under SDMF for the year 2026-27	8.50 Cr
17	Flood mitigation and Resilience Approach for Stabilization of River Bank at Berbhangi pt III area from the flooding of river Gangadhar on its R/B under SDMF for the year 2026-27	10.00 Cr
18	Flood Mitigation and Resilience Approach for Stabilization of River Bank at Binnachara Pt - IV, IBB road and border fencing from flooding of river Gangadhar on its R/B under SDMF for the year 2026-27	8.00 Cr
19	Pro-siltation measures to protect North Tokkrerchara and its adjoining areas from erosion of river Gangadhar under SDMF for the year 2026-27.	6.00 Cr

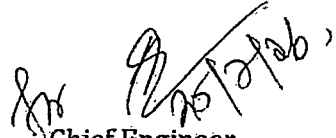
Sl.No	Proposed Schemes	Estimated Amount
20	A/E measures to protect Lakhimari village and its adjoining areas from the erosion of river Gangadhar on its R/B	7.50Cr
21	Pro-siltation measures to protect Palpara and its adjoining areas from the erosion of River Gangadhar on its R/B	2.50 Cr
River Tipkai		
22	Flood Mitigation and Resilience Approach for Stabilization of River Bank at Boraibari pt V village from flooding of river Tipkai on its R/B under SDMF for the year 2026-27	9.00 Cr
23	Pro siltation measures to protect Baghmara village and its adjoining areas from the erosion of river Tipkai	2.1454 Cr
24	Anti-erosion measures to protect Sapatgram Town and its adjoining areas from the erosion of river Tipkai on its L/B.	5.50 Cr
25	Anti-erosion measures to protect Ghogabalapara and its adjoining areas from the erosion of river Tipkai on its R/B.	1.00 Cr
River Gaurang		
26	Anti erosion measures to protect Futkibari village and its adjoining areas from the erosion of river Gaurang on its R/B	9.35 Cr
27	Anti-erosion measures to protect Udmari Kamkhya Mandir and its adjoining areas from the erosion of river Gaurang on its R/B.	3.00 Cr
River Champabati		
28	Anti-erosion measures to protect Jalikura Village and its adjoining areas from the erosion of river Champabati on its R/B	4.50 Cr


 Chief Engineer
 Water Resources Department
 Basistha, Ghy-29

Annexure-F

Temporary works taken up in Dhubri LAC

Sl No	River	Affected area	Item of work in progress	Remarks
1	Brahmaputra	Majerchar, Katlamari, 11 Nc river Block, Patamari, Pub Kuntirchar and Barmanpara BSF BOP	Bamboo Screening works and laying of geo textile sheet	Rate of erosion is under control as of now
2	Gangadhar	Binnachara Pt-1, Salondanga (Berbhangi pt-III), Tekkamari BOP, Swasterghat Pt-II and Char Durahati	Bamboo Screening works and laying of geo textile sheet, Launching of Mega Geo Bag	Rate of erosion is under control as of now
3	Tipkai	Kuntirchar Pt-I, pt-II and Binpatty	Bamboo Screening works and Launching of Mega Geo Bag	Rate of erosion is under control as of now


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Water Resources Department
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