

E-Procurement Notice

REQUEST FOR QUOTATION (RFQ)

(NON-CONSULTING SERVICES)

Name of Project: Climate Resilient Brahmaputra Integrated Flood and Riverbank Erosion Risk Management Project (CRBIFRERMP) in Assam

E-Tender reference no: FREMAA(P)/PROJ/ADB/1/2022/3847

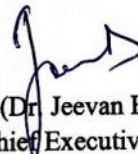
Date .08.12.2022

Assignment Title: **Data Collection for Assessment of Economic Benefits.**

The Government of India has applied for financing from Asian Development Bank (ADB) towards cost of the **Climate Resilient Brahmaputra Integrated Flood and Riverbank Erosion Risk Management Project (CRBIFRESMP) in Assam.** Under the project, Chief Executive Officer, Flood & River Erosion Management Agency of Assam (FREMAA), Govt. of Assam invites Request for Quotation (RFQ) through Open Competitive process from eligible Firm/Agency. Complete documents of the RFQ shall be available on website <https://assamtenders.gov.in> and www.fremaa.assam.gov.in Intending Services Providers are required to register at e-tender portal of the Assam Govt. <https://assamtenders.gov.in> and participate through e-tender portal only.

A pre-bid meeting is scheduled to be held on 12.12.2022 at 1 pm (13:00 hours (IST)) in the Conference Hall of FREMAA, 4th Floor, Assam Water Center, Near Basistha Chariali, NH 27, Guwahati, Assam-781029.

The deadline for the online submission of the Quotation is on 23. /12 /2022 at 14:00 hours (IST).



(Dr. Jeevan B, IAS)

Chief Executive Officer

Flood & River Erosion Management Agency of Assam
Guwahati-781029

Memo No. : FREMAA(P)/PROJ/ADB/1/2022/3847

Dated 08.12.2022. Guwahati

Copy forwarded for favor of kind information to: -

1. The Director of Information and Public Relation, Government of Assam, Dispur, Guwahati-6 for arranging publication of the above notification in leading English local Daily & one Assamese Daily.
2. PA to Additional Chief Secretary, Water Resource Department, GoA for kind appraisal of the Addl. Chief Secretary.
3. For uploading in e-portal of Govt. of Assam viz. www.assamtenders.gov.in, & FREMAA website www.fremaa.assam.gov.in
4. The Office Notice Board.



Chief Executive Officer
Flood & River Erosion Management Agency of Assam

REQUEST FOR QUOTATION - SERVICES (RFQS)

(Through E Procurement using Single Envelope)

Project Title: Climate Resilient Brahmaputra Integrated Flood and Riverbank Erosion Risk Management Project in Assam

Source of Funding: Asian Development Bank (ADB)

Contract Ref: FREMAA(P)/PROJ/ADB/1/2022/ Date of Issue of Request: 08.12.2022

1. The Chief Executive Officer, FREMAA (Client) hereby requests you to submit price quotations for the performance of the services described in the **Scope of Services** attached as **Appendix A** in these documents. If you, however, have been associated with the preparation of this **Scope of Services** that is the subject of this request, you shall be disqualified.

To assist you in the preparation of your price quotation we enclose, in addition to the **Scope of Services**, the **Form of Quotation** and form of **Contract** are also attached, **a pre-bid meeting is scheduled on 15/12/2022 at 1pm in the Conference Hall of FREMAA, 4th Floor of Assam Water Centre (AWC), Near Basistha Chariali, Guwahati-781029. Link will be shared to the intending bidders who would like to attend virtually. The bidder should send email request to the FREMAA by 14/12/2022 at 5pm.**

2. If you/your firm, however, falls under any of the following conditions, your proposal shall not be considered:
 - (a) you/your firm are/is not a citizen/national of an ADB member country, or
 - (b) you/your firm have/has been associated with the firm that prepared the terms of reference or engaged in the preparation of the Project for which the contract that is subject of this request for quotations was identified, or
 - (c) you/your firm are/is owned by the Client, or
 - (d) you/your firm are/is currently sanctioned or temporarily suspended by the Asian Development Bank for a violation of its Anticorruption Policy (1998, as amended to date) or
 - (e) the contracting of services from your country or any payment to persons or entities in your country is prohibited in compliance with a decision of the United Nations Security Council under Chapter VII of the Charter of the United Nations.

3. To be qualified, you must have qualification and experience as a Service Provider of the Services covered by this **Request for Quotation** as follows:

- a) **Qualifications of the Service Provider.** The Service Provider needs to demonstrate that it has successfully carried out at least 2 socio-economic surveys of same nature and complexity

as this Scope of Services in Assam or Northeast region of India during the last 5 years (preceding the day this Request for Quotation is advertised).

As evidence, you must attach a document of your experience as Service Provider in

At least two contracts in the last 5 years of nature similar to the requirements of this contract.

Similar nature means experience in successful completion of Economic Benefit surveys related to flood river erosion, agriculture and crop production etc. enumeration field survey/data collection, consolidated and analysis as a service provider in a government funded infrastructure project or externally-aided infrastructure-based projects funded by the Asian Development Bank, World Bank, New Development Bank, etc. in Assam or Northeastern region of India.

Documentary Evidence: Work order, Contract copy containing scope of services of the assignment & Completion certificate/100% payment receipt certificate in case of completed contract & minimum 90% payment receipt certificate (in case of ongoing contracts) issued by the authorized representative of the client shall be submitted to demonstrate the similar nature of services successfully executed.

b) The Curriculum Vitae (CV) of the following experts is to be submitted complying with the minimum education qualification & experience as stated in the Scope of Services in Appendix-A. Only CV of the key expert will be evaluated by the Client during the evaluation process. The format of CV to be followed is in Appendix-E.

Position	Qty (No)
Key Expert	
Senior Economist/Team Leader	1
Non-key Expert	
Survey Enumerator/Data Analyst	1

4. Clarifications & Amendments

If FREMAA receives any request for clarification up to 5 days prior to the deadline of the submission of the quotations, FREMAA's response together with any amendment to this document will be uploaded on the e-procurement portal for information of all prospective services providers. Interested services providers should check regularly the e-procurement system for any clarifications or amendments related to this RFQ.

Your quotation/(s) should be submitted in accordance with the following instructions, procedures, and the terms and conditions of the **Contract**.

5. Preparation of Quotations

- Your price quotation /shall be for all the items as described in the **Scope of Services**, and submitted only in the attached **Form of Quotation**. The currency of quoted prices and payment shall be Indian Rupees (INR)
- You shall submit only one set of quotation for the above items. Your quotation must be typed or written in indelible ink and shall be signed by you or your authorized representative. Without a signature on your **Form of Quotation**, your quotation will not be considered further.

- (c) You shall submit the **Form of Quotation** through e-procurement portal of Government of Assam viz. www.assamtenders.gov.in .
- (d) Your quotation should be valid for 30 days from the deadline for submission of the quotation as indicated below. If you withdraw your quotation during the validity period and/or refuse to accept the award of a contract when and if awarded, then you will be excluded from the list of Service Providers for the Project for two years.

6. Submission and Opening

Your **Form of Quotation** with the required documents shall be submitted electronically through www.assamtenders.gov.in only.

Quotations shall be opened online through e-procurement portal of Government of Assam, in public in the presence of participating Service Providers' representatives who choose to attend, on 23rd December 2022 at 16.00 hours and at the following address.

Flood and River Erosion Management Agency of Assam

4th Floor of Assam Water Centre (AWC), Near Basistha Chariali, Guwahati-781029

7. Evaluation and Comparison

Quotations determined to be substantially responsive to this **Request for Quotation** will be evaluated by the Client by comparison of their offer prices. A quotation is not substantially responsive if it contains material deviations or reservations to the terms, conditions, and specifications in this **Request for Quotation**.

In evaluating the quotations, the Client will adjust for any arithmetical errors as follows:

- (i) where there is a discrepancy between amounts in figures and in words, the amount in words will govern; and
- (ii) where there is a discrepancy between the unit rate (where applicable) and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern; and

If you refuse to accept the correction/(s), your quotation will be rejected.

8. Award of Contract

The Client shall award the contract to the Service Provider whose quotation has been determined to be substantially responsive to this **Request for Quotation** and who has offered the lowest price quotation.

The Service Provider whose quotation has been accepted will be notified by the Client within 15 days from the date of submission of quotation through the return of a copy of the **Form of Quotation** with **Acceptance** signed by the authorized representative of the Client.

The successful Service Provider shall sign the **Contract** governed by the annexed

Contract Terms and Conditions. In addition to the quoted price, the contract price shall include Goods & Services Tax (GST) in India.

9. Further information till 5 days prior to proposal submission can be obtained from:

Deputy Chief Executive Officer

4th Floor of Assam Water Center (AWC) Near Basistha Chariali, Guwahati-781029

Telephone (+91)7086056499

E-mail : ceo-fremaa@assam.gov.in, eont-fremaa@assam.gov.in

10. The Client intends to apply funds from the **Asian Development Bank (ADB)** for eligible payments under the **Contract** resulting from this **Request for Quotation**.

11. Under **ADB's Anticorruption Policy** (1998, as amended to date) Service Providers shall observe the highest standard of ethics during the procurement and execution of such contracts. ADB may reject a proposal for award, and may impose sanctions or other remedial actions on parties involved, if it determines that the Service Provider recommended for award or any other party, directly or through an agent, has engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations in competing for, or in executing, the Contract. At the time of submission of your quotation, you should not be in ADB's sanctions list. A firm/individual shall not be eligible to participate in any procurement activities under an ADB-financed, -administered, or -supported project while under temporary suspension or debarment by ADB pursuant to its Anticorruption Policy, whether such debarment was directly imposed by ADB, or enforced by ADB pursuant to the Agreement for Mutual Enforcement of Debarment Decisions.

12. You/your firm, joint venture partners, associates, parent company, affiliates or subsidiaries, including any subcontractors or suppliers for any part of the Contract, are not, or have never been, temporarily suspended, debarred, declared ineligible, or blacklisted by the Client's country, any international organization, and other donor agency.

If so debarred, declared ineligible, temporarily suspended, or blacklisted, please state details (as applicable to each joint venture partner, associate, parent company, affiliate, subsidiaries, subcontractors, and/or suppliers):

(a) Name of Institution: _____

(b) Period of debarment, ineligibility, or blacklisting (start and end date):

(c) Reason for the debarment, ineligibility, or blacklisting:

13. You/your firm's, joint venture partners', associates', parent company's affiliates or subsidiaries', including any subcontractors' or suppliers', key officers and directors have not been [charged or convicted] of any criminal offense (including felonies and misdemeanors) or infractions/violations of ordinance which carry the penalty of imprisonment.

If so charged or convicted, please state details:

(a) Nature of the offense/violation: _____

(b) Court/Area of jurisdiction: _____

(c) Resolution (i.e. dismissed; settled; convicted/duration of penalty):

(d) Other relevant details:

14. You/your firm understands that it is your obligation to notify FREMAA and ADB should you/your firm, joint venture partners, associates, parent company, affiliates or subsidiaries, including any Subcontractors or Suppliers, be temporarily suspended, debarred or become ineligible to work with ADB or any other multilateral development banks, the client's country, international organizations, and other donor agencies, or any of your key officers and directors be charged or convicted of any criminal offense or infractions/violations of ordinance which carry the penalty of imprisonment.
15. Any misrepresentation that knowingly or recklessly misleads, or attempts to mislead may lead to the automatic rejection of the quotation/bid or cancellation of the contract, if awarded, and may result in remedial actions, in accordance with ADB's Anticorruption Policy (1998, as amended to date) and Integrity Principles and Guidelines (2015 as amended from time to time).
16. A bidder shall not have a conflict of interest. All bidders found to have a conflict of interest shall be disqualified.

Faithfully,


(Dr. Jeevan B, IAS)
Chief Executive Officer-FREMAA

**FORM OF QUOTATION
(Services)**

_____ [date]

To: _____ [Client's Name]
_____ [Client's Address]

We offer to execute the _____ [name and number of Contract] in accordance with the **Contract Terms and Conditions** and the **Scope of Services** accompanying this Quotation for the Contract Price of _____ [amount in words and numbers] (_____) [name of currency] _____.

We propose to complete the performance of the services described in the **Contract** within the Completion Period indicated in the priced **Scope of Services**.

This Quotation and your written acceptance will constitute a binding Contract between us. We understand that you are not bound to accept the lowest or any Quotation you receive.

We hereby confirm that this Quotation complies with the Validity of the Offer condition imposed by the **Request for Quotation** document.

We: (a) are a national of an ADB member country; (b) have not been associated with the firm that prepared the terms of reference or engaged in the preparation of the Project for which the contract that is subject of this request for quotations was identified; (c) are not owned by the Client; (d) are not currently sanctioned or temporarily suspended by the Asian Development Bank; and (e) to the best of our knowledge, is not prohibited from being contracted in compliance with a decision of the United Nations Security Council.

Name of Service Provider: _____
Authorized Signature: _____
Name of Signatory : _____
Title of Signatory : _____
Address : _____
Telephone Number : _____
Fax Number, if any : _____
Email address (optional) : _____

183

ACCEPTANCE

The Client accepts the Service Provider's offer to provide the service.

Name of Client : Flood and River Erosion Management Agency of Assam
Authorized Signature : _____
Name of Signatory : (Dr. Jeevan B, IAS)
Title of Signatory : _____
Date : _____

CONTRACT

Name of Country:

Project Name:

Name of Contract: _____

Contract Number _____

This Contracts entered in to on _____ [date] day of _____ [month], _____ [year], between _____ [name of Client] (hereinafter called "the Client") on the one part, and _____ [name of Service Provider] (hereinafter called "the Service Provider") on the other part.

:Whereas the Client has requested a quotation for **Data Collection for Assessment of Economic Benefits** to be performed by the Service Provider in accordance with the **Contract**, and has accepted the Quotation by the Service Provider in the amount of _____ [amount in words] _____ [amount in figures] hereinafter called "the Contract Price".

The Client and the Service Provider agree as follows:

1. The following documents shall be deemed to form and be read and construed as part of this Contract, viz:
 - a) **Form of Quotation, with Scope of Services and Appendix and**
 - b) **Contract Terms and Conditions;**
2. Taking into account payments to be made by the Client to the Service Provider as hereinafter mentioned, the Service Provider hereby enters into this Agreement with the Client to execute and complete the performance of services under the Contract.
3. The Client hereby agrees to pay, in consideration of the successful performance of the services, the **Contract Price** as indicated and accepted in the **Form of Quotation**, under payment terms stipulated in the **Contract Terms and Conditions**

IN WITNESS whereof the parties hereto have executed the **Contract** under the laws of India on the date indicated above.

Signature and seal of the Client:
For and on behalf of

Signature and seal of the Service Provider:
For and on behalf of

Name of Authorized Representative

Name of Authorized Representative

CONTRACT TERMS AND CONDITIONS

Project Name: Climate Resilient Brahmaputra Integrated Flood and Riverbank Erosion Risk Management Project in Assam

Client: Flood & River Erosion Management Agency of Assam

Contract No. _____

1. Definitions

- (a) "Contract" means the agreement entered into between the Client and the Service Provider, together with the Contract Documents referred to therein, including all attachments, appendixes, and all documents incorporated by reference therein.
- (b) "Contract Documents" means the documents listed in the Contract, including any amendments thereto.
- (c) "Contract Price" means the price payable to the Service Provider as specified in the Contract, subject to such additions and adjustments thereto pursuant to the Contract.
- (d) "Completion" means the fulfilment of the committed services by the Service Provider in accordance with the terms and conditions set forth in the Contract.
- (e) "Client" means the entity purchasing the Services.
- (f) "Services" means the services the Service Provider will perform as specified in the Scope of Services in Appendix A.
- (g) "Service Provider" means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Client and is named as such in the Contract.
- (h) "ADB" is the Asian Development Bank.

2. Applicable Law

The Contract shall be interpreted in accordance with the laws of the Client's country.

3. Language

All communications and documents related to the Contract shall be in English.

4. Assignment

Any assignment of this Contract or of any rights hereunder, in whole or in part without the prior written consent of the Client shall be void.

5. Fraud and Corruption

This Contract shall be covered by the provisions of ADB's Anticorruption Policy(1998, as amended to date) and Integrity Principles and Guidelines (2015, as amended from time to time) that requires Borrowers (including beneficiaries of ADB-financed activity), as well as Service Providers and Contractors under ADB-financed contracts, to observe the highest standard of ethics during the procurement and execution of such contracts.

6. Performance of the Services

The Service Provider shall carry out the Services with due diligence and efficiency and shall furnish to the Client such information related to the Services as the Client may from time-to-time reasonably request. The Service Provider shall at all times cooperate and coordinate with the Client with respect to the performance of the Services.

7. Required Performance Standards (with attachments as necessary to be prescribed by Client.)

- (a) General Description attached as Appendix-B
- (b) Specific Standards attached as Appendix-C
- (c) PerformanceParameters attached as Appendix-D

The Service Provider confirms compliance with above standards and parameters.

8. Service Completion Schedule

The Services should be completed as per schedule indicated in the **Scope of Services** but not exceeding 4 (four) months from the date of signing of contract.

9. Fixed Contract Price

The prices indicated in the **Form of Quotation** are firm and fixed and not subject to any adjustment during contract performance, subject to Clause 11 [Payment] below.

10. Taxes and Duties

The Service Provider shall be entirely responsible for all taxes, duties, license fees, etc., incurred until completion of the Services.

11. Payment

Upon submission by the Service Provider of claim and subsequent verification of the claim by the Client, payment of the contract price shall be made in the following manner:

- (a) Advance payment of 10% within 14 days of signing the contract, upon evidence of mobilization of the Service Provider upon submission of the Bank Guarantee of equal amount.
- (b) 10% on submission of the Inception Report accepted by the Client.
- (c) 25% on submission of the draft final report accepted by the Client.
- (d) 30 % upon submission of the final report accepted by the Client.
- (e) 25% upon finalisation of Economic Benefit analysis documents by the ADB.

12. Resolution of Disputes

The Client and the Service Provider shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute between them under or in connection with the Contract. In the case of an unresolved dispute, the dispute shall be settled in accordance with the provisions of the Arbitration and Reconciliation act 1991.

13. Independent Service Provider

Nothing contained in this Contract shall be construed as establishing or creating the relationship of master and servant, employer and employee or principal and agent between the Client and the Service Provider, or his employees or agents or other persons engaged by the Service Provider to perform any of the services.

14. Intellectual Property Rights

Intellectual Property Rights: (a) The Service Provider shall indemnify the Client from and against any and all claims, liabilities, obligations, losses, damages, penalties, actions, judgments, suits, proceedings, demands, costs, expenses and disbursements of whatsoever nature that may be imposed on, incurred by or asserted against, the Client during or in connection with the Services by reason of: (i) infringement or alleged infringement by the Service provider of any patent or other protected right, or (ii) plagiarism or alleged plagiarism by the Service provider.

15. Failure to Perform

The Client may terminate the Contract if the Service Provider fails to perform the services, in accordance with the above terms and conditions, in spite of a 14-day notice given by the Client, without incurring any liability to the Service Provider. In the event of such termination, the amount due under the Contract shall be subject to equitable adjustment.

16. Termination Due to Integrity Violation

The Client may terminate this Contract, in whole or in part, if the Service Provider, in the judgment of the Client has engaged in integrity violations in accordance with Clause 5 [Fraud and Corruption], in competing for or in executing this Contract.

17. Other Grounds for Termination

The Client may also terminate this Contract, in whole or in part, if the Service Provider becomes insolvent, bankrupt or gives the Client reasonable evidence of its inability to complete the Services as specified, or fails to correct any non-conformity in the Services or performs in bad faith by willfully not observing the terms and conditions of this Contract.

18. Force Majeure

The Service Provider shall not be liable for penalties or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

(a) For purposes of this Clause, "Force Majeure" means an events beyond the control of the Service Provider and not involving the Service Provider's fault or negligence and not foreseeable. Such events may include, but not restricted to, act of Client in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

(b) If a Force Majeure situation arises, the Service Provider shall promptly notify the Client in writing of such condition and the cause thereof. Unless otherwise directed by the Client in writing, the Service Provider shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by Force Majeure event.

(178)

19. Accounts and Records

- (a) The Service Provider shall keep accurate and systematic accounts and records in respect of the Services in such form and detail as are customary in its profession and are sufficient to establish accurately that the costs have been duly incurred.
- (b) Notwithstanding anything to the contrary stated herein, the Service Provider shall maintain accounts and records, including original receipts, invoices and other supporting documents evidencing payments made by the Service Provider under this Contract, for the period of the Services and for a period no less than 3 years after the expiration or termination of this Contract.
- (c) The Service Provider shall permit ADB to inspect the accounts, records, and other documents relating to the submission of bids and contract performance of the Service Provider and to have them audited by auditors appointed by ADB.

20. Suspension of ADB Loan or Credit.

In the event that ADB suspends the Loan or Credit to the Client, from which part of the payments to the Service Provider are being made, the Client is obligated to notify the Service Provider, with copy to the Client's representative, of such suspension within 7 days of having received ADB's suspension notice.

21. Termination Notice Due to Non-payment

If the Service Provider has not received payments due within the 28 days as provided for in Clause 11[Payment], the Service Provider may immediately issue a 14-day termination notice.

Appendix-A

Scope of Services

A. Project Background

1. Since the early years of the 21st century, the Government of India has given high priority to develop effective flood and river erosion management systems along major rivers. In Assam, the State Government of Assam (SGoA) is committed to manage floods and protect riverbanks from erosion in the Brahmaputra river valley with its strategic partner in this sector, the Asian Development Bank (ADB).
2. The proposed Climate Resilient Brahmaputra Integrated Flood and Riverbank Erosion Risk Management Project in Assam (CRBIFRERMP) of a total cost estimated around \$250 million is in preparation. The project is planned to be financed through a ADB loan of about \$200 million and SGoA's counterpart funds. The project is anticipated to start to be implemented before the end of 2023.
3. CRBIFRERMP will build upon the experience from the recently completed ADB-financed Assam Integrated Flood and Riverbank Erosion Risk Management Investment Program (2010-2020) (AIFRERMIP).¹ It will focus on the Main Stem of the Brahmaputra River in Assam and follow a climate-resilient holistic, integrated, systematic, and reach-wise approach to flood and riverbank erosion risk management.
4. Incorporating structural and nonstructural measures in selected river reaches in Assam, the proposed project aims to (i) reduce economic vulnerability and social disruption induced by flood and riverbank erosion in four selected flood-prone subproject areas along the main stem; (ii) strengthen the institutional capacity for climate change-oriented flood and erosion management; (iii) develop further the knowledge base for informed decision-making on preventive measures and preparation of river stabilization guidelines and plans; (iv) stabilize selected river reaches by integrating climate-resilient riverbank erosion and flood protection works to ultimately enhance navigation and recover lost floodplain land ('land and/or charland reclamation'); and (v) enhance the livelihoods of the most vulnerable of the riverine population.
5. In particular, the project will build cost-effective long-guiding geotextile sand-filled bag riverbank revetments in a climate-resilient adaptive way to cope with the dynamic riverbank erosion, contributing to a more significant river stabilization enabling ultimately navigation. Also, climate-resilient modern flood embankments will be built and/or rehabilitated and will have openings (ie: sluice gates with fish passes) to enable river-floodplain interconnectivity and enhance biodiversity.
6. It is anticipated that CRBIFRERMP will have the following three broad outputs:
 - (i) **Output 1. Climate resilient flood and riverbank erosion risk mitigation measures in four subproject areas implemented and maintained.** The project will combine structural and nonstructural measures in four subproject areas to stabilize their respective river reaches by applying the integrated river stabilization approach initiated under AIFRERMIP. Specifically, the structural measures will include about (i) 90 km of long-guiding riverbank protection with innovative technologies, (ii) 50 km of pro-siltation measures (porcupines), and (iii) 5 km of climate-resilient flood embankment,² including sluice gates and fish passes

¹ The multitranche financing facility to India for the Assam Integrated Flood and Riverbank Erosion Risk Management Investment Program was approved by ADB in 2010 to increase the reliability and effectiveness of flood and riverbank erosion risk management systems in three priority flood-prone subproject areas in Assam, through structural and nonstructural interventions, policy strengthening, and institutional and knowledge bases. FREMAA was the executing agency of this investment program whose second and final project was physically completed in October 2020.

² The new or rehabilitated embankments will be designed to accommodate: (i) multi-purpose use, (ii) a 100-year

to facilitate drainage and maintain river-floodplain interconnectivity, thus enhancing biodiversity. Nature-based solutions will be pilot-tested, including possible involvement of private sector. As a lesson from previous investments, monitoring, adaptive maintenance, and emergency works for five years after construction will be included to cope with the highly dynamic river system.

- (ii) **Output 2. Flood and riverbank erosion knowledge base strengthened.** This output will enhance the various decision support tools initiated under AIFRERMIP. In particular: (i) the flood forecasting and warning system will be strengthened; (ii) flood mapping will quantify inundation extents, depths, and durations, enabling a determination of people and critical assets at risk of flooding; (iii) erosion prediction and embankment breach models will be enhanced; (iv) the asset management system will be improved to ensure operation and maintenance is financed and implemented according to a risk-based approach. Data will be systematically collected, including: (i) river surveys (bathymetry, gauging, and sediment measurements); (ii) topographic surveys to derive digital elevation models; and (iii) asset condition surveys.³ Existing guidelines for design of flood and riverbank protections will be expanded to address climate impacts and resiliency, river stabilization principles, and successfully piloted nature-based solutions. This output will also include capacity building to enhance FRERM and disaster resilience of the state and riverine communities.
- (iii) **Output 3. Vulnerable people's livelihoods supported.** This output will address people living on the embankments or chars in the subproject areas who are poor and destitute and negatively affected by river erosion or floods. It will also specifically target women in these locations. Support will include: (i) training female headed households and female self-help groups on spinning, weaving, marketing the silk, establishing weaving centers with modern handlooms and sewing machines; (ii) increasing vegetable production by providing climate-resilient seeds, promoting improved agricultural practices, and extending marketing support; and (iii) providing vocational training for unemployed youth. Subsistence and small farmers will be supported with: (i) assistance in creating businesses around agriculture and fisheries; (ii) help in identifying opportunities associated with nature-based solution;⁴ and (iii) improved roadside markets. Furthermore, complementing the various state-led initiatives, the graduation approach will be piloted to strengthen beneficiaries' wellbeing in a sustainable manner by providing livelihood assistance through agriculture, livestock, fisheries, industries, and vocational training activities.⁵

7. CRBIFRERMIP will be implemented within four priority subprojects, namely Dibrugarh, Palasbari-Gumi/Guwahati West, Morigaon and Goalpara (Appendix 1). The main project benefits comprise: (i) reduced riverbank erosion; (ii) mitigation of flood damage; (iii) increased agricultural production; (iv) land reclamation and development; and (v) improved access to ferry ghats.
8. Similarly to the recently completed ADB-financed AIFRERMIP (2010-2020), the Flood and River Erosion Management Agency of Assam (FREMAA) will be the executing agency of the proposed project. FREMAA is the Client for these nonconsulting services.

B. Objectives of the Services

9. The main objective of the services is to provide the information and data required to evaluate the economic benefits of the proposed project interventions under CRBIFRERMIP which will be implemented within four priority subprojects, namely Dibrugarh, Palasbari-Gumi/Guwahati West, Morigaon and Goalpara. The main project benefits comprise: (i) reduced riverbank erosion; (ii)

water level, and (iii) sufficient freeboard for potential climate change related increases in flood discharges.

³ FREMAA will share data as appropriate with stakeholders such as Assam Inland Water Transport Development Society (to support construction of ferry-crossing ghats and navigation) and the Brahmaputra Board.

⁴ New livelihood opportunities will arise from nature-based solutions along embankment slopes and reed plantations on charlands as well as from the revival of beels resulting in new fishing opportunities and planting.

⁵ Graduation combines cash transfers with an asset transfer, financial inclusion, tailored skills training, livelihood development, social inclusion, and life-skills coaching and psychosocial support. Robust evidence worldwide confirms the sustainability of impacts of this approach to promote economic development for the alleviation of poverty.

mitigation of flood damage; (iii) increased agricultural production; (iv) land reclamation and development; and (v) improved access to ferry ghats.

10. The Service Provider will gather information from: (i) certified data in the Detailed Project Reports (DPRs) to be provided by FREMAA at the start of the Services, and (ii) data to be collected during a field survey within each of the four subproject areas.⁶

11. Then, FREMAA will share with ADB the study findings for ADB to undertake a detailed assessment of economic benefits of the proposed project interventions and an economic cost benefit analysis to determine the economic viability of each subproject as well as the overall project.

C. Scope of the Services

Preparatory Tasks

12. In close consultation with FREMAA and WRD staff, the Service Provider will undertake the following preparatory tasks:

- Review the proposed project interventions with respect to: (i) riverbank protection, (ii) flood embankment strengthening, (iii) land reclamation via channel closure; and (iv) ancillary intake structures;
- Acquire an understanding of the nature and scale of the likely economic benefits associated with each project intervention;
- Collect and compile all relevant certified DPR data;
- Prepare questionnaires and checklists for use in the field survey;
- Select a group of representative villages to be included in the field survey within each subproject area; and
- Contact local leaders within each of the selected villages and develop a schedule for the Service Provider to visit the villages during the field survey.

Field Survey and Data Analysis

13. The Service Provider will conduct the field survey which will cover a minimum of 40 villages (i.e.: approximately 10 villages within each of the four subproject areas). In each subproject area, the field survey will include both protected and unprotected villages⁷. It should, however, be noted that there could be significantly more interventions in some subprojects, so the number of villages included in the field survey for each subproject should be adjusted accordingly with a higher number of villages selected in subprojects with major riverbank protection works. In addition, to collect data on the present and future value of charland to be reclaimed through the proposed project interventions, at least two villages located in the areas adjacent to each charland area will also be included field survey.

14. To collect relevant information/data, the Service Provider will use rapid rural appraisal techniques (e.g. focus group discussions (FGDs) and participatory mapping⁸). FGDs will be held with selected villagers representing a wide range of local households. Village leaders will assist with the selection of villagers and, for each village, about 15 to 20 household heads should be selected to participate in the FGDs. Selected villagers will be drawn from households which have been vulnerable to damages and losses due to riverbank erosion and flooding in recent years and should also include

⁶ As charland reclamation will require river channel closure and/or riverbank protection works, the Service Provider will also conduct the field survey in the selected villages adjacent to charland and the group discussions there will include both the impact of the riverbank protection works and the potential for charland reclamation.

⁷ An unprotected village is a village without any existing riverbank protection works and so is vulnerable to riverbank erosion and breaches in the flood embankment. A protected village is a village with recently constructed riverbank protection works and so is protected from riverbank erosion and embankment breaches.

⁸ Participatory mapping is a widely used survey technique in which participants are encouraged to draw a simple map to show key features of the local area. For example, area of land and buildings likely to be eroded over the next five year, or area of crops and buildings damaged by floods. The mapping is then used to facilitate discussion of the issues related to riverbank erosion and flooding.

representatives from below poverty line (BPL) households as well as women headed households.

15. The Service Provider will collect, analyze and assemble, as a minimum, the following information and data (to be then used separately by ADB to assess the economic benefits of proposed interventions):

Riverbank Protection

- Area of land (in hectares), as well as number of houses and buildings, lost to riverbank erosion in recent years within each subproject area. The location and extent of the areas vulnerable to riverbank erosion (over the next five years) along river reaches to be protected under the proposed project by revetment works within each of the four subprojects. Maps of the areas vulnerable to riverbank erosion should also be provided;
- Current land use, i.e. areas (in hectares) of agricultural and grazing land, forests, settlements, and commercial/industrial land in the locations vulnerable to riverbank erosion within each of the four subprojects as well as in areas protected by riverbank protection works, based on an analysis of recent satellite imagery (e.g. Google Earth). This analysis should be undertaken over a 3 to 5 year period to identify significant trends in land use, e.g. expansion of commercial/industrial land, during this period. These trends would also be confirmed during the field survey;
- Prices of agricultural, settlement and commercial land, as well as the annual rental values for agricultural land, houses and shops, in areas vulnerable to riverbank erosion within each of the four subprojects; and
- Prices of agricultural, settlement, and commercial/industrial land, as well as the annual rental values for agricultural land, house and shops, in adjacent areas protected from riverbank erosion. For protected areas in Palasbari-Gumi and Dibrugarh subprojects under the recently completed ADB-financed AIFRERMIP Tranche 1 project and Tranche 2 project, refer to AIFRERMIP Benefit Monitoring and Evaluation, End Term Evaluation Final Report⁹).

Mitigation of Flood Damage

- Extent of flooded areas (in hectares) due to flood embankment breaches and overtopping in locations vulnerable to flooding within each of the four subproject areas;
- Month and year of the flood events during which the embankment breaches and overtopping occurred and these areas were flooded;
- Types and areas of land affected by flooding (e.g. agricultural, settlement, and commercial/industrial land);
- Value of flood damages, with respect to crops, houses, public buildings and infrastructure, for each flood event;
- Value of other flood losses (e.g. livestock and fisheries) for each flood event; and
- Frequency of flooding due embankment breaches and overtopping and, for each subproject, sufficient data should be collected to estimate the flood damages for at least five flood events with return periods ranging from 1 in 2 years to 1 in 50 years (or 1 in 100 years if applicable);

Land Reclamation and Development

The location and size of potential areas of charland to be reclaimed through project interventions will be identified and estimated by FREMAA and provided to the Service Provider at the start of the Services. To estimate the increase in the value of charland following reclamation and development, the Service Provider will conduct a field survey

⁹ AIFRERMIP Benefit Monitoring and Evaluation, End Term Evaluation Final Report, Chapter VI: Resilience to Flood and Riverbank Erosion Risk. Sutra Consulting (July 2022).

in at least two villages located in the areas adjacent and/or close to each charland area and provide data on:

- Current prices, as well as rental values, in charland areas; and
- Prices of agricultural land, as well as annual rental values, in villages adjacent and/or close to the charlands that the proposed project anticipates will be reclaimed from the river.

Increased Crop Production

To estimate the increase in the value of crop production that will be induced by improved riverbank erosion and flood mitigation measures that the proposed project will construct, the Service Provider will conduct field surveys in both protected and unprotected villages within each subproject area and will provide data on:

- Cropping patterns, cropping intensity, crop yields and crop prices in: (i) areas vulnerable to riverbank erosion and flooding, and (ii) adjacent areas protected from riverbank erosion and flooding (e.g. areas protected under the recently completed ADB-financed AIFRERMIP Tranche 1 project and Tranche 2 project).

Improved Access to Ferry Ghats

The estimated reduction in dredging costs at one ferry crossing ghat in Goalpara subproject area resulting from riverbank and channel stabilization, together with improved access to the ferry ghat, will be determined by the Service Provider in close consultation with Assam Inland Water Transport Development Society (AIWTDS) staff.

D. Minimum Required Qualifications and Experience and Staff Inputs

16. **Qualifications of the Service Provider.** The Service Provider needs to demonstrate that it has successfully carried out at least 2 socio-economic surveys of same nature and complexity as this Scope of Work in Assam or Northeast region of India during the last 5 years (starting from the day this Request for Quotation is received).

17. Six person-months are estimated to be required to undertake these Services. Details of inputs are provided in Table 1.

Table 1: Summary of Staff Inputs (National experts)

Position	Person-Months
Key Expert	
Senior Economist/ Team leader	3
Non-key Expert	
Survey Enumerator/Data Analyst	3
Total person-months	6

18. The CV of the key expert will be rated in the evaluation while the CV of the non-key expert will be assessed on a pass-or-fail basis. Qualifications and experience required for each position are outlined in Table 2

Table 2: List of Positions and Minimum Qualifications and Experience

Position (National)	Minimum Qualifications and Experience
Senior Economist /Team leader	<ul style="list-style-type: none"> • Master's degree in natural resources economics or closely related field; • 10 years of relevant professional experience in economic analysis of development projects, including water resources, flood and erosion control, and agricultural development projects in Assam; • Extensive proven experience as a team leader conducting economic surveys using rapid rural appraisal techniques including focus group discussions and participatory mapping.

Survey Enumerator/ Data Analyst	<ul style="list-style-type: none"> • Bachelor's degree in social sciences or closely related field; • 5 years of relevant professional experience in conducting socio-economic surveys; • Experienced in survey data collection, analysis and reporting.
------------------------------------	---

E. Implementation Arrangements

19. FREMAA will administer the contract and supervise the Service Provider's outputs. The Service Provider will be based in Guwahati with field work being conducted within the four priority subprojects areas. Over the whole duration of the Services, the Service Provider will work closely on a daily basis with Deputy Chief Executive Officer (Dy. CEO) of FREMAA, FREMAA staff as well as with the implementation and partner agencies involved in the preparation of the proposed project. The Senior Economist/Team leader of the Service Provider will report to the CEO of FREMAA.

20. **Completion schedule.** The Services are expected to start on the 2nd week of 2023 and will be implemented over a 4 month period.

21. The Service Provider is expected to implement a methodology and workplan that will enable all expected tasks of this Scope of Services to be accomplished within the completion schedule.

22. Subcontracting any part of this Scope of Work to a third party is not allowed.

F. Outputs (Deliverables)

23. **Deliverables.** The Service Provider will submit to FREMAA the following reports:

- Inception Report (0.5 month after contract signing date) which will include survey questionnaires/checklists, list of at least 40 villages selected for inclusion in the field survey, the survey schedule, and overall workplan;
- Draft Final Report (3 months after the contract signing date); and
- Final Report (3.5 months after the contract signing date) incorporating all comments received from FREMAA and ADB.

The Draft Final and Final Reports will comprise: (i) study objectives, (ii) survey method and approach, (iii) tabulated survey results, (iv) main study findings with respect to the economic benefits of project interventions, and (v) summary and conclusions.

24. In addition, the Service Provider will provide survey questionnaires/checklists, data analysis tables (including Excel spreadsheets) and any other relevant information related to the Services.

25. Also, the Service Provider will provide FREMAA with fortnightly, short (2 pages maximum) progress reports of the Services, including (i) work completed in the previous 2 weeks, (ii) work planned in the next 2 weeks, (iii) potential issues and recommendations, and (iv) any other relevant information related to the Services.

26. The report and other results should be submitted to FREMAA in hard copy as well as electronic form (*.docx, *.xlsx, *.pptx, and *.pdf or other formats accepted by FREMAA). The Service Provider will be accountable to FREMAA for all the tasks and deliverables stated above. All reports will be prepared in English and will cover all the tasks of this Scope of Services.

171

Appendix 1. List of proposed subproject sites with details on locations and length.
Appendix 2. Location Maps

Appendix 1

Appendix-A

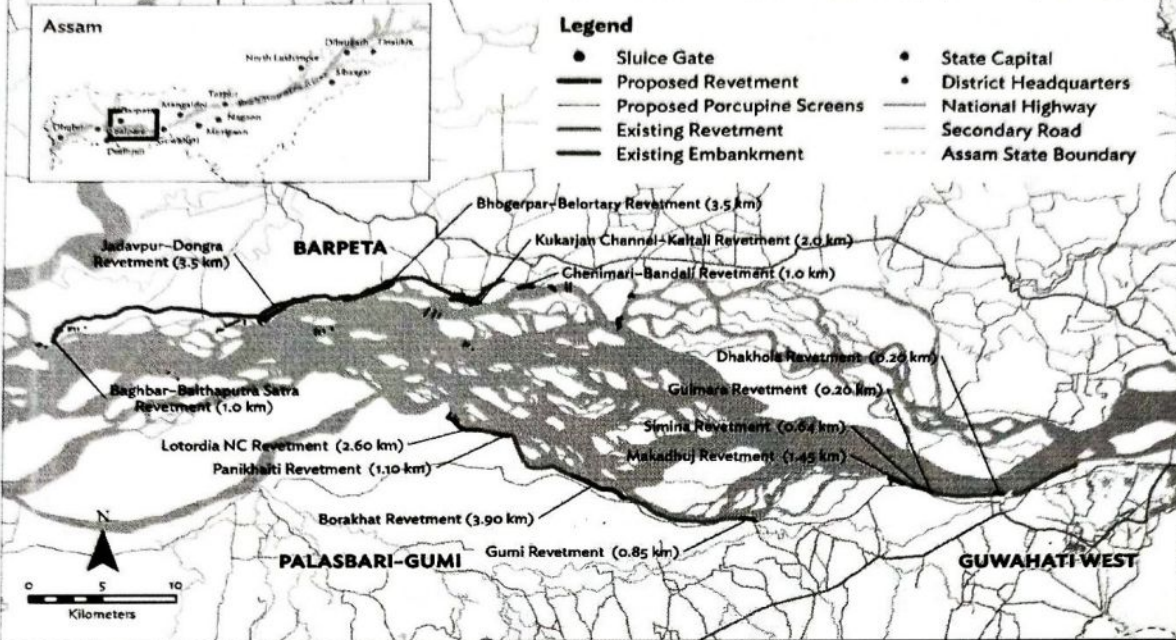
SL. NO	NAME OF SUB PROJECT	NAME OF DIVISION	Name	DISTRICT	LAC	REVENUE CIRCLE	FROM		TO		LENGTH OF RIVER BANK PROTECTION IN M	LENGTH OF FLOOD EMBANKMENT IN M	LENGTH OF FLOOD EMBANKMENT TO BE REHABILITATED IN M	NO OF SLUICE GATES (WITH FISH PASS ETC.)	OTHERS	
							Lat	Long	Lat	Long						
1	CLIMATE RESILIENCE BRAHMAPUTRA INTEGRATED FLOOD AND RIVERBANK EROSION RISK MANAGEMENT PROJECT IN ASSAM- TINSUKIA, AND DHEMAJI SUB PROJECT (ZONE-A)	DIBRUGARH	ADB T-1L-D1	DIBRUGARH	LAHOWAL	DIBRUGARH EAST	27 32 5.58 N	95 3 35.81 E	27 32 5.58 N	95 3 1.01 E	1000				ADAPTION WORKS	
			ADB T-1-MOTHOLA	DIBRUGARH	LAHOWAL	DIBRUGARH EAST	27 31 52.62 N	95 2 6.42 E	27 31 33.22 N	95 0 42.29 E	2400				ADAPTION WORKS	
			NAGAGHULI TO 7400 FT SPUR	DIBRUGARH	LAHOWAL	DIBRUGARH EAST	27 31 33.22 N	95 0 42.29 E	27 30 45.07 N	94 57 54.68 E	5100					
			DTP DYKE (DIBRUGARH TOWN AREA)	DIBRUGARH	DIBRUGARH	DIBRUGARH EAST	27 30 24.30 N	94 57 7.84 E	27 29 32.94 N	94 55 6.29 E	3925					
			ADB T-1H3	DIBRUGARH	DIBRUGARH	DIBRUGARH EAST	27 29 9.33 N	94 54 13.27 E	27 28 54.23 N	94 53 42.41 E	1000					
			DTP DYKE (MORAGURD)	DIBRUGARH	DIBRUGARH	DIBRUGARH EAST	27 28 48.73 N	94 53 34.94 E	27 28 42.67 N	94 53 28.23 E	265					
			MOHANAGHAT	DIBRUGARH	DIBRUGARH	DIBRUGARH EAST	27 28 28.43 N	94 53 8.96 E	27 28 10.29 N	94 52 50.64 E	780					
			NAGAKHELIA	DIBRUGARH	DIBRUGARH	DIBRUGARH EAST	27 27 45.98 N	94 52 16.06 E	27 27 37.22 N	94 51 56.87 E	600					
			AULKHOWA AT D'S OF BOGIBEE BRID	DIBRUGARH	MORAN	DIBRUGARH WEST	27 23 14.86 N	94 46 21.85 E	27 21 8.46 N	94 45 52.93 E	4300					
			REACH 1 OAKLAND	DIBRUGARH	LAHOWAL	DIBRUGARH EAST	27 30 58.52 N	94 59 50.77 E	27 30 46.51 N	94 59 7.77 E	1300					
			REACH 2 MAIJAN	DIBRUGARH	LAHOWAL/DIBRUGARH	DIBRUGARH EAST	27 30 37.60 N	94 57 51.68 E	27 30 26.04 N	94 57 12.67 E	1200					
			MILANPUR TO HATIGHULI	DIBRUGARH	DOOMDOOMA	DIBRUGARH EAST	27 30 37.60 N	95 33 50.15 E	27 45 26.90 N	95 32 49.86 E	1800					
			PHELAI TO NAKOTA	DIBRUGARH	DOOMDOOMA	DOOMDOOMA	27 45 16.73 N	95 32 13.43 E	27 44 45.44 N	95 30 57.67 E	2500					
			GARIATING GAON	DIBRUGARH	DOOMDOOMA	DOOMDOOMA	27 39 29.64 N	95 27 34.50 E	27 39 22.15 N	95 27 23.41 E	400					
			SIMALGURI SARA	DIBRUGARH	DOOMDOOMA	DOOMDOOMA	27 39 9.11 N	95 27 8.71 E	27 38 59.37 N	95 26 55.99 E	500					
			BAGHAN TO NOTUN GAON	DIBRUGARH	DOOMDOOMA	DOOMDOOMA/TINSUKIA	27 36 21.94 N	95 23 9.01 E	27 35 12.21 N	95 21 37.47 E	3000					
			U/S OF GUJAM ONGOING WORKS	DIBRUGARH	CHABUA	TINSUKIA	27 34 34.44 N	95 20 10.15 E	27 34 51.20 N	95 19 56.34 E	400					
			RONGAGORAH TO DINJAN	DIBRUGARH	CHABUA	TINSUKIA	27 24 33.28 N	95 19 9.72 E	27 33 55.28 N	95 16 16.64 E	4600					
			DIVERSION CHANNEL OF DIBANG TO LG	DIBRUGARH	SADIA	TINSUKIA	27 50 50.86 N	95 36 34.87 E	27 48 16.70 N	95 34 1.66 E	2600					
			NAOKATA AREA	DIBRUGARH	DOOMDOOMA	DOOMDOOMA	27 44 29.63 N	95 40 37.87 E	27 41 5.20 N	95 28 36.66 E	7500					
			KOSUONI	DIBRUGARH	LAHOWAL	DIBRUGARH EAST	27 32 7.11 N	95 3 40.71 E	27 32 9.94 N	95 2 56.31 E						
AT NAGAGHULI	DIBRUGARH	LAHOWAL	DIBRUGARH EAST	27 21 35.92 N	95 0 53.51 E	27 30 32.35 N	94 57 21.74 E									
AT DTP DYKE	DIBRUGARH	DIBRUGARH	DIBRUGARH EAST	27 30 19.84 N	94 57 1.88 E	27 28 9.15 N	94 52 49.93 E									
AT MOHPUWALMORA	DIBRUGARH	DIBRUGARH	DIBRUGARH WEST	27 27 22.54 N	94 51 13.48 E	27 26 47.04 N	94 50 34.12 E									
U/S OF BOGIBEE	DIBRUGARH	MORAN	DIBRUGARH WEST	27 24 41.97 N	94 48 20.33 E	27 24 27.42 N	94 48 9.45 E									
GAGALMARI-GARUBANDHA AREA	MORIGAOON	JAGIROAD	MAYONG	26 18 24.96 N	92 8 22.9 E	26 17 19.64 N	92 4 40.56 E	7000								
BALDUNGA-KUPTIMARI-BHURAGAON-BARALMARI	MORIGAOON	LAHARIGHAT	BHURAGAON	26 24 41.12 N	92 15 16.60 E	26 20 15.79 N	92 9 33.39 E	12850								
MUKIRGAON-KATHANI-TENGAGURIN	MORIGAOON	LAHARIGHAT	LAHARIGHAT/BHURAGAON	26 26 21.70 N	92 19 46.07 E	26 24 47.63 N	92 15 44.74 E	8000								
2	CLIMATE RESILIENCE BRAHMAPUTRA INTEGRATED FLOOD AND RIVERBANK EROSION RISK MANAGEMENT PROJECT IN ASSAM- MORGON, TEZPUR SUB PROJECT (ZONE-B)	NAGAON	SILGHAT	NAGAON	KALLIABOR	KALLIABOR	26 37 6.23 N	92 56 29.70 E	26 35 49.40 N	92 53 9.75 E	6000	NIL	NIL	NIL	LAND RECLAMATION WORK REACH LENGTH 1900 M USING PSC PROCUPINE	
			PAKEN	BISANATH	GOHPUR	HELEM	26 48 0.23 N	93 37 53.08 E	26 47 48.97 N	93 37 31.86 E	1100	NIL	NIL	NIL		
			KALIBARI	SONITPUR	TEZPUR	TEZPUR	26 36 53.46 N	92 49 0.04 E	26 36 31.48 N	92 48 49.79 E	300	NIL	NIL	NIL		
			ZAHAZ GHAT	SONITPUR	TEZPUR	TEZPUR	26 36 57.60 N	92 17 33.97 E	26 37 2.18 N	92 47 14.21 E	550	NIL	NIL	NIL		
			BERACHUBURI	SONITPUR	TEZPUR	TEZPUR	26 36 58.91 N	92 45 40.11 E	26 37 32.00 N	92 45 6.09 E	NIL	NIL	NIL	NIL	CLOSING OF SPILL CHANNEL WITH GRE TRAP AND PORCUPINE SCREEN (1EM)	
			JARANI	SONITPUR	TEZPUR, BARCHALLA	TEZPUR/THELAMARA	26 38 32.20 N	92 43 30.93 E	26 38 15.05 N	92 38 20.55 E	NIL	10000	NIL	2 NOS	CLOSING OF SPILL CHANNEL WITH GRE TRAP BAGS	
			BHARASINGRI	SONITPUR	BARCHALLA	THELAMARA	26 37 35.10 N	92 32 48.24 E	26 37 9.64 N	92 31 49.61 E	1500	NIL	NIL	NIL		
			Guni	Kannup	Chuyyoon	Chuyyoon	26 5 55.4 N	91 20 26.1 E	26 5 56.5 N	91 20 18.7 E	850					
			Borakhat	Kannup	Chuyyoon	Chuyyoon	26 6 45.31 N	91 15 6.97 E	26 7 40.31 N	91 2 57.75 E	3900					
			Panitabity	Kannup	Boiko	Channaria	26 9 15.87 N	91 10 25.72 E	26 9 22.19 N	91 9 40.51 E	1100					
3	Climate Resilient Brahmaputra Integrated Flood and River Erosion Risk Management Project in Assam Guwahati West PGP Sub Project (Zone-C)	PGP	Londaia NC	Kannup	Boiko	Channaria	26 9 28.28 N	91 9 10.73 E	26 9 59.59 N		2600				P.S.C procupine: 8 Nos of screen over 3 layer from Ch 40800m to 40800m to 40800m to 40800m	
			AI Dakhala (Kalligpara Area)	Kannup	Palashbari	Palashbari	26 07 03.11 N	91 30 49.7 E	26 07 01.08 N	91 30 24.82	800	NIL	NIL	NIL	Horizontal Mixed Flow Centrifugal pump set including construction of pump house & staff quarter at Kanbhog sluice	
			AI Guimara	Kannup	Palashbari	Palashbari	26 07 02.3 N	91 28 09.7 E	26 07 01.09 N	91 28 13.8	200	NIL	NIL	NIL		
			AI Simina area	Kannup	Palashbari	Palashbari	26 07 17.9 N	91 27 23.6 E	26 07 21.5 N	91 27 08.4	640	NIL	NIL	NIL		
			In between Malakthij spur and Land spur No 1 Futuri	Kannup	Palashbari	Palashbari	26 07 41.6 N	91 26 03.3 E	26 07 28.5 N	91 26 43.8	1450	NIL	NIL	NIL		
				Kannup	Palashbari	Palashbari	26 07 41.6 N	91 26 03.3 E	26 07 28.5 N	91 26 43.8	1450	NIL	NIL	NIL		

Notes: The critical areas are marked in the map.

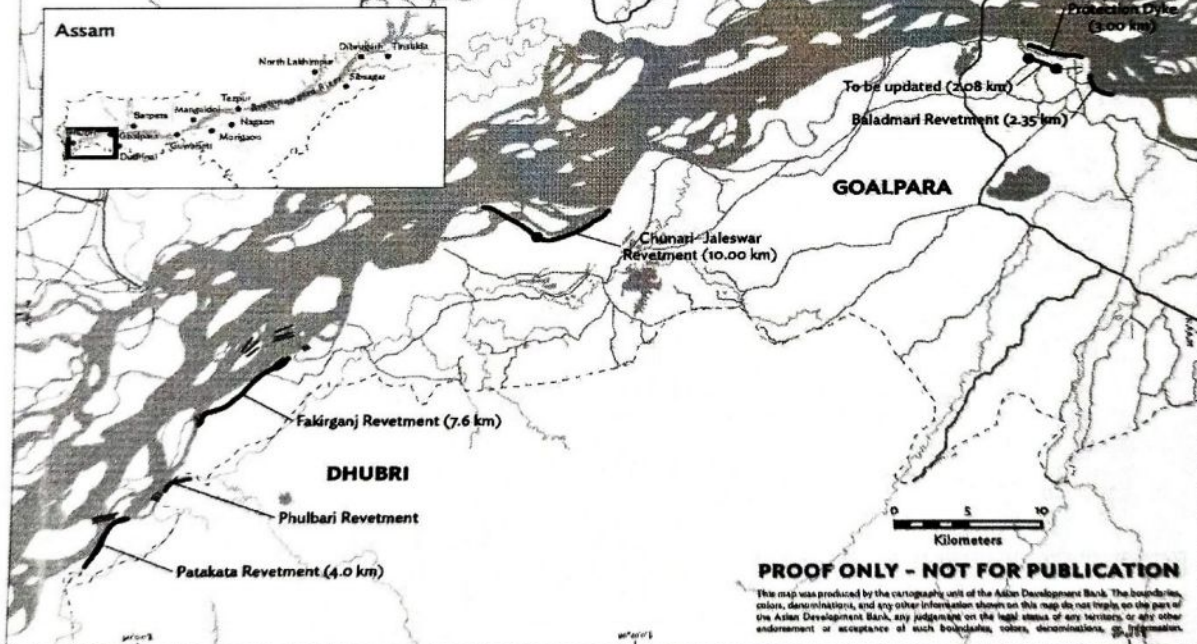
INDIA

CLIMATE RESILIENT BRAHMAPUTRA INTEGRATED FLOOD AND RIVERBANK EROSION RISK MANAGEMENT PROJECT IN ASSAM

Palasbari-Gumi-Guwahati West Subproject Area



Goalpara Subproject Area



170

Appendix B

General Description. The Service Provider will provide the information and data required to evaluate the economic benefits of the proposed project interventions under CRBIFRERMP which will be implemented within four priority subprojects. The Service Provider will gather information from (i) certified data in the Detailed Project Reports (DPRs) to be provided by FREMAA at the start of the Services, and (ii) data to be collected during a field survey within each of the four subproject areas

Appendix C

Specific Standards. The Service Provider will conduct the field survey which will cover a minimum of 40 villages distributed across the four subproject areas. The villages will be selected in close consultation with FREMAA and will include unprotected villages vulnerable to riverbank erosion and flooding as well as protected villages with riverbank revetment works and flood embankments. During the field survey, focus group discussions (FGDs) will be held with about 15 to 20 selected villagers representing a wide range of local households including below the poverty line (BPL) households and women headed households.

For each subproject area, the Service Provider will collect, analyze, and assemble, as a minimum, the following data:

- Area of land (in hectares) vulnerable to riverbank erosion over the next five years along river reaches to be protected by revetment works;
- Land use in areas vulnerable to riverbank erosion as well as in adjacent areas protected by revetment works;
- Prices of agricultural, settlement and commercial land (and annual rental values for agricultural land, houses and shops) in areas vulnerable to riverbank erosion as well as in adjacent areas protected by revetment works;
- Extent of flooded areas (in hectares) due to flood embankment breaches and overtopping in locations vulnerable to flooding as well as the types and areas of land affected by flooding (e.g. agricultural, settlement, and commercial/industrial land);
- Frequency of flooding (due to embankment breaches and overtopping) as well as the month and year of the flood events;
- Value of flood damages, with respect to crops, houses, public buildings, infrastructure and livestock/fisheries for each flood event. Sufficient data should be collected to estimate the flood damages for at least five flood events with return periods ranging from 1 in 2 years to 1 in 50 years (or 1 in 100 years if applicable);
- Prices (and rental values) of charland to be reclaimed as well as prices of agricultural land (and annual rental values) in villages adjacent to the charland, in order to estimate the potential increase in the value of charland;
- Cropping patterns, cropping intensity, crop yields and crop prices in: (i) areas vulnerable to riverbank erosion and flooding, and (ii) adjacent areas protected from riverbank erosion and flooding, in order to estimate the increase in the value of crop production;
- Estimated reduction in dredging costs at one ferry crossing ghat in Goalpara in close consultation with Assam Inland Water Transport Development Society (AIWTDS) staff.

Appendix-D

Performance Parameters. The Services are expected to start on 7th January 2023 and will be implemented over a 4-month period. The Service Provider is expected to complete all tasks specified in the Scope of Services within this period. The study outputs (deliverables) will comprise:

- Inception Report (0.5 month after contract signing date) which will include survey questionnaires/checklists, list of 40 villages selected for inclusion in the field survey, survey schedule, and a study work plan;
- Draft Final Report (3 months after the contract signing date); and
- Final Report (3.5 months after the contract signing date) incorporating all comments received from FREMAA and ADB.

The Service Provider will also provide FREMAA with short, fortnightly progress reports comprising: (i) work completed in the previous 2 weeks, (ii) work planned in the next 2 weeks, (iii) potential issues and recommendations, and (iv) any other relevant information related to the Services

Appendix-E

FORMAT OF CURRICULUM VITAE (CV) FOR KEY & NON-KEY EXPERTS

1. **Proposed Position:** *[As per Scope of Services]*

2. **Name of Firm:** *[Insert name of firm proposing the expert, if applicable]*
(Do not abbreviate or use symbols in any portion of the firm or individual name)

3. **Name of Expert:**
(Do not abbreviate or use symbols in any portion of the firm or individual name)

4. **Current Residential Address:**

Telephone No.:

Fax No.:

E-Mail Address:

5. **Date of Birth:**

Citizenship¹⁰:

Type of government ID and ID Number.

(please attach a copy of the ID to this form)

6. **Education:** *[Indicate college or university and other specialized education of expert, giving names of institutions, degrees obtained, and dates of obtainment]*

7. **Membership in Professional Associations:**

8. **Other Trainings:**

9. **Countries of Work Experience:** *[List countries where expert has worked in the last 10 years]*

10. **Languages:** *[For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing]*

11. **Employment Record** *[Starting with present position, list in reverse order every employment held by expert since graduation, providing for each employment (see format here below): dates of employment, name of employing organization, positions held.]*

From *[Month/Year]*: _____

To *[Month/Year]*: _____

Employer: _____

Positions held: _____

12. **Detailed Tasks Assigned**
[List all tasks to be performed under this assignment]

13 **Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned**

[Among the assignments in which the expert has been involved, indicate the following information for those assignments that best illustrate the expert's capability to handle the tasks listed in line 12.]

Name of assignment or project: _____

Month and Year: _____

Location: _____

Client: _____

Main project features: _____

Positions held: _____

Activities performed: _____

14. Certification:

I, the undersigned, certify to the best of my knowledge and belief that

- (i) This CV correctly describes my qualifications and experience;
- (ii) I am not a current employee of the Executing or the Implementing Agency;
- (iii) In the absence of medical incapacity, I will undertake this assignment for the duration and in terms of the inputs specified for me in the scope of services provided team mobilization takes place within the validity of this proposal;

- (iv) I was not part of the team who wrote the terms of reference for this scope of services assignment;
- (v) I do not have conflict of interest in accordance with ADB Procurement Framework 2017;
- (vi) I am not subject to any national or international sanctions, temporary suspension or debarment by ADB or other multilateral development banks (MDB);
- (vii) I certify that I have been informed by the firm that it is including my CV in the Proposal for the [insert name of project and contract]. I confirm that I will be available to carry out the assignment for which my CV has been submitted in accordance with the implementation arrangements and schedule set out in the Proposal.
- (viii) I have not been found guilty or convicted of any violation of law that is not a minor traffic violation.
- (ix) I can accept payments through the international banking system or otherwise discharge ADB's obligation upon initiation of wire transfer.
- (x) I understand that it is my obligation to notify the Client and ADB should I become subject to any national or international sanction, including becoming ineligible to work with ADB or other MDBs, cannot accept payments through the international banking system, should integrity issues including conflict of interest arise and/or should we or the proposed consultant be convicted of an offence excluding minor traffic violations

If the answer to any of the declarations above is NO, please provide details:

If the CV is signed by the firm's authorized representative, insert:

- (xi) I, as the authorized representative of the firm submitting this Proposal for the [insert name of project and contract], certify that I have obtained the consent of the named expert to submit his/her CV, and that s/he will be available to carry out the assignment in accordance with the implementation arrangements and schedule set out in the Proposal, and confirm his/her compliance with paras (i) to (v) above.

I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

_____ Date: _____
 [Signature of expert or authorized representative of the firm]¹ Day/Month/Year

Full name of authorized representative
