

Terms of Reference (ToR)

Consultancy for NbS and Ecological Assessment

Primary objectives	1. Comprehensive assessment of ecosystems (including GIS/drone imagery, NEAT+ and barrier analysis) in Barguna to understand their current conditions, future vulnerabilities, and the services they provide to the surrounding communities. 2. Identify the capacities and vulnerabilities of the ecosystems to inform strategies for conservation and sustainable management, viable locally-led climate change adaptation and nature-based solutions (NbS) that the local stakeholders (including the surrounding communities) can apply to minimise their ecological vulnerability to climate risks and protect their lives, livelihoods and assets.
Secondary objectives	1. Determine the current and future vulnerabilities and threats (both anthropogenic and natural, including hazards and climate change) to ecosystems and ecosystem services on which the target communities depend on. 2. Using spatial data to visualize and provide maps of the ecosystems' capacities and vulnerabilities. 3. Assess existing knowledge, attitude, and practices of target communities on climate change adaptation and NbS. 4. Define the locations where CCA and NbS strategies are most relevant, the types of CCA and NbS strategies that are feasible, any past/current actors implementing similar strategies in the proposed locations, and potential barriers to implementation of such strategies.
Location (s)	Barguna district – Taltali Upazila (Nishsanbaria and Shonakata unions) and Patharghata Upazila (Charduani and Patharghata unions)
Commissioner	• BDRCS Director of Disaster & Climate Risk Management (DCRM) • BRC Programme Coordinator
Management Team	• BDRCS Project Manager – Nature Pulse & CCA • BRC Senior Manager – Program & Partnership
Technical Advisory	• BRC Regional DRR Advisor (in consultation with RCRC Climate Center)
Timeframe	36 workdays (Early June 2025 to end of August 2025)

1. Background

Bangladesh is ranked the seventh most vulnerable country to climate change globallyⁱ. It is a flat, low-lying nation considered the world's largest delta. The country's topography is characterised by its position as the world's largest delta formed by the Brahmaputra, Ganges, and Meghna riversⁱⁱ. With 30% of its arable land in coastal zonesⁱⁱⁱ, Bangladesh's geographical positioning on a major deltaic plain at a low sea level (over half of the territory is less than six metres above mean sea level^{iv}) makes it exceptionally vulnerable to climate change-related disasters. This susceptibility is exacerbated by a temperature rise of 0.5 degrees Celsius from

1979 to 2019^v, projected to increase by 1.5°C by 2050^{vi}, and by increasing rainfall, expected to reach 74 millimetres between 2040 and 2059^{vii}. Specifically, the country faces significant risks from riverine erosion and flooding, rising sea levels, salinisation of groundwater and littoral areas, and increasing extreme weather patterns, including cyclones^{viii}. The countries' vulnerability is magnified by the significant dependence of the population on agriculture for livelihood (38.3% of the population is employed in the sector^{ix}), with climate change poised to drastically reduce the production of essential crops like rice (predicted to decrease between 8-17% by 2050^x) and wheat (production predicted to decline by 61%^{xi}), threatening food security and exacerbating economic instability. Climate change profoundly impacts the nation's economic prosperity and quality of life, with the most negative effects disproportionately borne by the poorest and most marginalised communities.^{xii}

The repercussions of climate change have profound socio-economic dimensions. Climate-related disasters from 2000 to 2019 have cost Bangladesh an estimated US\$1.86 billion annually, leading to an average of 572 fatalities per year^{xiii}. The economic vulnerability to climate change, ranked fifth globally, underscores the ongoing risk from climate-related hazards that detrimentally affect human health, the economy, agriculture, and ecosystems. Over the last decade, climate-related disasters accounted for 0.41% loss of GDP annually (predicted to stand between 1 and 2% by 2041^{xiv}) due to damages to livelihood, infrastructure, and forgone production and are likely to grow further unless policies and investments are made to manage the negative impact of climate change and environmental degradation.^{xv}

The degradation of natural resources, such as the overexploitation of wetlands (66% of the country's wetlands degraded^{xvi}) and forests below sustainability targets^{xvii}, further undermines the country's environmental resilience, currently ranking as the 4th worst country in terms of environmental performance (2022)^{xviii}. Environmental degradation leads to a loss of biodiversity. It diminishes the productivity of critical sectors such as agriculture and fisheries, but it also contributes to the increase in greenhouse gas emissions despite Bangladesh's minimal global share. Rapid land use changes threaten the country's remaining forests, which are a safety net for the poor and, in the face of increasing soil salinity in coastal areas, protection against climate change.

Climate change will bring additional challenges to the country's fragile environment, causing damage to essential ecosystems. The Sundarbans are likely to be the worst affected, and the St Martin's Island coral reef is also endangered.^{xix}

The Sundarbans mangrove forest, covering approximately 10,000 km² across Bangladesh and West Bengal, India, is recognised for its critical role in mitigating wind speeds and storm surges along the coastal region. Despite its significance as a natural area for adaptation and its designation as both a World Heritage Site and a Ramsar site, the Sundarbans face threats from local community extractions and planned industrial development, highlighting the urgent need for protective measures that consider the socio-economic well-being of neighbouring communities.^{xx}

Nature Pulse Program

Bangladesh Red Crescent Society with support from British Red Cross is initiating a program aimed at assisting communities around the Sundarbans' mangrove forest to adapt to climate change through sustainable livelihood practices and nature-based solutions (NbS).

As mangroves are vital natural defence to the impacts of climate change, mangrove protection and restoration needs to be supported while addressing community pressures (i.e. felling for fuelwood) and introduce alternative mangrove-supportive livelihoods, as well as improve public awareness about the important role of coastal ecosystems in shoreline protection and climate change adaptation and mitigation.

This program requires a comprehensive needs assessment and program design tailored to the unique challenges and opportunities within the target communities and the BDRCS Branch Unit in Barguna.

Based on the initial Scoping Assessment done in 2024, BRC and BDRCS have narrowed down the program's target areas to Barguna district – Taltali Upazila (Nishsanbaria and Shonakata unions) and Patharghata Upazila (Charduani and Patharghata unions). While the program is targeting these unions, the Ecological Assessment must also offer insights for other unions in the two Upazilas where possible – which can benefit advocacy with local stakeholders and future program scale-up.

2. Objectives

Primary Objectives

1. Comprehensive assessment of ecosystems in Barguna to understand their current conditions, future vulnerabilities, and the services they provide to the surrounding communities.
2. Identify the capacities and vulnerabilities of the ecosystems to inform strategies for conservation and sustainable management, viable locally-led climate change adaptation and nature-based solutions (NbS) that the local stakeholders (including the surrounding communities) can apply to minimise their ecological vulnerability to climate risks and protect their lives, livelihoods and assets.

Secondary Objectives

1. Determine the current and future vulnerabilities and threats (both anthropogenic and natural, including hazards and climate change) to ecosystems and ecosystem services on which the target communities depend on.
2. Using spatial data to visualize and provide maps of the ecosystems' capacities and vulnerabilities.
3. Assess existing knowledge, attitude, and practices of target communities on climate change adaptation and NbS.
4. Define the locations where CCA and NbS strategies are most relevant, the types of CCA and NbS strategies that are feasible, any past/current actors implementing similar strategies in the proposed locations, and potential barriers to implementation of such strategies.

3. Methodology

At start of contract, the consultant(s) will consult with the program team (BDRCS and BRC) and BRC Regional DRR Advisor to develop a common understanding on the kind and quality of deliverables, expected methodology and process to be undertaken to deliver the outputs and agree on timelines for delivery of the expected services outlined above. An immediate output of these consultations will be submission of an inception report which should include literature review (no more than 10 pages) within 3 days after the consultation – outlining how the consultant(s) will deliver the outputs. A work plan with clear timelines for completing the entire documentation process will be agreed with BDRCS and BRC.

For day-to-day work, the consultant(s) will work closely with the Management Team (*as per page 1 of ToR*) and Regional DRR Advisor. While strategic guidance will be provided by the Commissioners. BDRCS Project Manager for Nature Pulse & CCA (based in Dhaka) and the Unit Level Offer (ULO) (based in Barguna district) will provide support and coordinate for

inception, during process of documentation and delivery of assessment report prior to finalization and approval.

The selection of the most-at-risk wards will be identified through the Climate Risk Assessment conducted by the RCRC Climate Centre which is expected to be completed by end of May 2025.

The Ecological Assessment should provide a cross-sectoral picture, including historical analysis, of the ecosystems surrounding each partner community with:

- Description of the current ecosystems (coastal, soil/agriculture, forests, water, fauna/flora etc.).
- Description of spatial extent, health, condition, composition, and threats to local ecosystems and natural resources.
- Initial identification of key ecosystem services and benefits communities may depend on (cultural, provisioning, supporting, regulating services).
- Description of the potential drivers, reassures and threats to ecosystems and ecosystem services (e.g. deforestation, overfishing, urbanisation, pollution, climate change, natural hazards etc.).
- Summary of policy and planning context.
- Description on traditional and Indigenous Ecological Knowledge/local knowledge systems and practices that may contribute to ecosystem management.

To integrate the Ecological Assessment' findings, the consultant(s) should work with the program team to cross-check and complete secondary data previously collected.

In addition, the consultant(s) should be engaged in the 'Transect Walk' in the selected wards to understand the interactions between the environment and the socio-economic dimensions of resilience at community level. Transect Walk is a method from the IFRC Enhanced Vulnerability and Capacity Assessment (EVCA). The complete EVCA will be conducted by the program team in parallel with the Ecological Assessment.

A **Joint Analysis and Planning Workshop** with management and program team will be held. The purpose of the workshop is to share the findings from the Ecological Assessment and the EVCA, and offer recommendations for CCA and NbS strategies which could provide benefits for selected communities and other relevant stakeholders.

Upon completion of the workshop, the consultant(s) should finalize the Ecological Assessment report, including:

- Integration of the findings from the Climate Risk Assessment and EVCA.
- Analysis of the consequence of future opportunities and threats (including climate change and anthropologic pressure) on these key services.
- Recommendations and description of a suite of locally-led CCA and NbS strategies.

4. Deliverables/expected outputs

- One [1] Inception report that clearly states the tools and methodologies to be used, workplan and timeline of each of the activities.
- One [1] Ecological Assessment report, with one [1] Annex report for each selected wards. The Annex report should reflect: the current and future vulnerabilities, threats and opportunities to ecosystems and ecosystem services on which the community depends, their capacities to sustainably managed the ecosystem resources, and recommendations for CCA and NbS strategies for the selected wards.

- Facilitation and participation in the Joint Analysis and Planning Workshop.

5. Timeline

The consultancy is expected to start 1 June – 31 August 2025 for approximately 36 workdays.

Date	Days	Description
1-4 June	1	Contract signing and inception consultation meeting with BDRCS and BRC
12-17 June	3	Preparation and finalization of Inception report
22 June – 20 July	25	Field data collection* and preparation of draft Ecological Assessment report
20 July	2	Submission of draft Ecological Assessment report, followed by 5-day feedback period
3-5 August**	3	Joint Analysis and Planning Workshop
17 August	2	Submission of final Ecological Assessment report and other deliverables, followed by 5-day feedback period
31 August		Signoff on all deliverables
	36	Total workdays

* In parallel with this consultancy, the program team is conducting EVCAs.

**Tentative date: 22-26 June 2025

6. Payment schedule

The payment for the consultancy as per follows:

- 30% upon submission of Inception report with work plan.
- 70% upon submission of Final report as mentioned in **Section 4: Deliverables/expected outputs** that is agreed and approved by BDRCS and BRC. The Vat and tax shall be deducted in line with Bangladesh Government rules during payment.

7. Consultancy firm/consultant's profile

Essential criteria

- A team of experts with specialization on the fields of environmental science, forestry, environmental conservation, disaster risk reduction, climate change, ecological restoration and management, community development, and environmental planning and impact assessment.
- A combination of more than ten [10] years of progressive experience on the fields stated above.
- Strong research skills supported by published works in the last five years.
- Preferred: a team of academic experts from a highly reputable university specializing on the fields stated above.
- Excellent communication and written skills in English and Bengali.

Desired criteria

- Strong understanding of gender equality and social inclusion, disaster vulnerability assessment in Bangladesh (or demonstrably similar contexts).

8. Expression of Interest

Organisations or individual consultant both are encouraged to apply. The interested firm or individual consultant should submit an expression of interest including both a Financial Offer and a Technical Offer. These include the following:

1. **Financial Offer** - This consists of a detailed financial proposal for the delivery of services outlined above, with costs broken down significantly for each component and sub-component including applicable TAX & VAT. This includes the consultant/s' daily fees and any costs related to the field visit (travel, subsistence, accommodation, security, or costs incurred in organising data collection). Any other administrative support, e.g. document organisation, document formatting, document proofing, translation proofing, etc, should be covered by the consultancy.
2. **Technical Offer** - A method statement / proposal outlining the proposed approach to ensure quality is maintained throughout the duration of the contract and how they propose to meet the Terms of Reference.

Also to include as part of the application package:

- Curriculum Vitae of the consultant(s) or firm proposed for the task, with a focus on similar assignments. If multiple people are involved, an outline of roles/ responsibilities also needs to be included in brief.
- Evidence of previous work, include examples of similar feasibility reports, assessments, surveys, etc.
- References from the organization(s) for whom those pieces of work were contracted.
- Approach paper, including work plan, timeline, budget and availability (maximum 5 pages).

Female-led consultant teams or individual female consultants are highly encouraged to apply to promote gender diversity and inclusion.

The closing date is within ten [10] days of notice published in newspaper or online portal.

9. Award Procedure

This section outlines and describes the procedure that BDRCS and BRC will follow in selecting a consultant(s) to enter into this Contract.

The purpose of the Award Procedure is to enable the BDRCS and BRC to assess the relative advantages of each submission meeting the Award Criteria. The assessment of bids in accordance with the Award Procedure will be based on the following criteria:

- Financial offer: 30%
- Technical offer: 40%
- Technical interview/ presentation: 30%

The **Financial Offer** will be assessed on the basis of the total quote submitted for the requirements detailed, rather than the component parts individually. Following the submission of quotes, the bidder with the lowest total shall receive 100% of the weighting attributed to the Financial Offer (i.e. 30%) award criteria. All subsequent bids will be weighted by calculating a percentage of the lowest price.

The **Technical Offer** will represent 40% of the overall tender score attainable by Bidders. Bidders must note that there must be no changes to the key personnel proposed as part of

any tender submission, without the approval and authorisation of the BDRCS and BRC. In such circumstances, replacement personnel proposed must be at least equally qualified and skilled as the personnel they are replacing. BDRCS and BRC may veto the proposed replacement personnel with a full explanation as to why the proposed individual is not considered to be suitable.

The Technical Offer shall assess the Bidders response in relation to the criteria as detailed below:

Bidders must provide a method statement / proposal outlining the proposed approach to ensure quality is maintained throughout the duration of the Contract and how they propose to meet the Red Cross' Terms of Reference (see details above in EOI).	
1	Your understanding of Red Cross' Terms of Reference and how your proposed methodology shall achieve our aims and objectives. 10%
2	Your approach paper and how it details the process of delivering the expected outputs. 8%
3	CV(s) of the consultant(s) proposed for the task, with a focus on similar assignments. 8%
4	At least two examples of similar work including references from the organization for whom those pieces of work were developed. 5%
5	Approach to communication and engagement with the BDRCS and BRC. 5%
6	Added value and innovation, including tangible charity discounts, consultancy and additional support provided at zero additional cost etc. 4%

Following the assessment of the Technical Offer, the score attained by each Bidder will then be added to their Financial Offer score to give a total tender score out of 70%. The highest scoring Bidders will then be invited for a technical interview/presentation which will make up the remaining 30% of the score.

10. Confidentiality

All information collected by the consultant(s) on behalf of BDRCS and BRC will remain the property of BDRCS and BRC and require explicit permission by both parties for any use not stated here.

Confidentiality and Intellectual Property Rights

"Intellectual Property Rights" refers to any patent, copyright, design right, community design right, registered design, rights in know-how, or any similar right in any part of the world and shall include any applications for the registration of any patents or registered designs or similar rights capable of registration in any part of the world.

Intellectual Property Rights

- a) All Intellectual Property Rights whatsoever in any work produced by the Contractor and/or the Individuals for British Red Cross shall belong to British Red Cross absolutely and the Contractor hereby waives and shall procure that the Individuals (or any individuals it uses in any capacity to provide or assist in providing the Services) waives any moral rights or any other rights whatsoever which it may have in such work and will, at the expense of British Red Cross, take or join in taking such steps to vest such rights in British Red Cross or enforce the same on behalf of British Red Cross as British Red Cross shall require.

- b) The Contractor shall indemnify the British Red Cross (as appropriate) against any costs claims demands expenses or liabilities arising from a claim brought against British Red Cross by a third party alleging infringement of its intellectual property rights arising from use of British Red Cross of the Services provided by the Contractor.

The Red Cross emblem is a protective symbol, the use of which is restricted by international and national law. It may not be reproduced without prior authorisation. For more information, about the emblem, please go to www.redcross.org.uk/About-us/Who-we-are/The-international-Movement/The-emblem.

11. Application Procedures

Interested candidates should submit their application material latest by **10 May 2025** to the following e-mail: ahossain@redcross.org.uk

Please put **Application for Consultancy for NbS and Ecological Assessment** in the subject heading. Application materials are non-returnable and only short-listed candidates will be contacted for the next step in the application process.

Please refer to **Section 8: Expression of Interest** for the required application materials.

12. Documents: (made available to consultancy firm prior to start of the consultancy)

- Program concepts note/proposal
- Logical Framework of Actions
- Information from database system of the existing program (if required)
- Other information (if required) as per mutual agreement

ⁱ IMF, [Bangladesh Prepares for a Changing Climate](#) (September, 2019)

ⁱⁱ [Bangladesh Climate and Disaster Risk Atlas: Exposures, Vulnerabilities, and Risks—Volume II \(pages cover to xxiv\) \(reliefweb.int\)](#) – technical summary

ⁱⁱⁱ needed

^{iv} [Bangladesh Climate and Disaster Risk Atlas: Exposures, Vulnerabilities, and Risks—Volume II \(pages cover to xxiv\) \(reliefweb.int\)](#) – technical summary

^v [Climate Change in Bangladesh: Impact on Infectious Diseases and Mental Health \(worldbank.org\)](#)

^{vi} [Climate Change in Bangladesh: Impact on Infectious Diseases and Mental Health \(worldbank.org\)](#)

^{vii} [Climate Change in Bangladesh: Impact on Infectious Diseases and Mental Health \(worldbank.org\)](#)

^{viii} [ClimateSecurity_Bangladesh.pdf \(unu.edu\)](#)

^{ix} ^{ix} [Employment in agriculture \(% of total employment\) \(modeled ILO estimate\) - Bangladesh | Data \(worldbank.org\)](#)

^x [USAID/Bangladesh Comprehensive Risk and Resilience Assessment](#)

^{xi} GermanWatch Global Climate Risk Index 2020

^{xii} Adam Day and Jessica Caus, Conflict Prevention in an Era of Climate Change: Adapting the UN to Climate-Security Risks (United Nations University: New York, 2020)

^{xiii} [Germanwatch](#) c

^{xiv} GED (2018) Bangladesh Delta Plan 2100 Bangladesh in the 21st Century (Abridged Version)

^{xv} UNDP, [National Adaptation Plan](#) (2017)

^{xvi} [11b Environment-Forestry-and-Biodiversity-Conservation.pdf \(gedkp.gov.bd\)](#)

^{xvii} [11b Environment-Forestry-and-Biodiversity-Conservation.pdf \(gedkp.gov.bd\)](#)

^{xviii} <https://epi.yale.edu/epi-results/2022/component/epi>

^{xix} *ipcc WGII sixth assessment report*

^{xx} [90000708.odt \(live.com\)](#)