

EXPRESSION OF INTEREST DOCUMENT

“Hiring of Consulting Firm for Balochistan Carbon Credit Mapping and Offset Potential Assessment”

(REOI for Quality and Cost Based Selection Method)



National Disaster Risk Management Fund

SECTION I: INSTRUCTIONS

National Disaster Risk Management Fund

REOI # 1(1)Misc/CC/2024

for

Hiring of Consulting Firm for Balochistan Carbon Credit Mapping and Offset Potential Assessment

Date: 31/12/2024

1. NDRMF invites eligible and reputable “Consultancy Firms for Balochistan Carbon Credit Mapping and Offset Potential Assessment”.
2. Eligible Consultants should submit Expression of Interest (EOI) in English language along with relevant complete details of their qualification and experience as requested hereunder: -

a) Basic Information: -

- i. Name, address, Phone, Fax and E-mail address
- ii. postal and telegraphic address for the head office, branch offices and contact personnel

b) Mandatory Criteria: -

- i. Firm’s Registration with authorized Government Department(s) as Legal Entity–
Provide Copy
- ii. Having registration with Income & Sales Tax Departments – **Provide the copy of Tax registration certificates for both**
- iii. Active on Income & Sales Tax (**Provide ATL status**)
- iv. Affidavit confirming that: (a) applicant Consultant (Name of the Consultant) has never been blacklisted by any National, Government/Semi Government Organization and (b) All the information provided by the applicant Consultant is correct.

c) Parameters for Evaluating EOI Responses: -

Interested **Firms/JV** are required to demonstrate/provide requisite information to prove their qualification/eligibility to perform the assignment. **The short-listing criteria are:**

i. Technical Competence: - [Max. Score = 60]

- At-least five (05) years’ experience in carbon credit markets and emissions reduction projects, with expertise in carbon capture, carbon offsetting, and Clean Development Mechanism (CDM) projects and;
- The firm must have a proven track record in carbon credit mapping, assessment, and quantification, ideally in similar geographic or ecological contexts, as well as experience in carbon inventory assessments, greenhouse gas (GHG) calculations, and the development of carbon offset strategies.

Firms must furnish the details regarding completed/ongoing projects in aforesaid similar capacities with requisite information on following format;

Project Category	Project Name	Project Description- Details of	Cost of Project	Duration of Project	No. of Field Staff Mobilized	Name of PA and contact person for Reference
(a)						
(b)						

ii- **Management System:** - [Max. Score = 30]

- Corporate profile indicating years of operations,
- Complete organogram along with availability of number of experienced professionals as per TOR. Brief CVs shall be submitted for technical experts, *(CVs of the experts shall not be evaluated at EOI stage, detailed CVs of required experts, as per TORs will be required at RFP stage).*

iii- **Latest audited financial Statement:-** [Max. Score = 10]

Latest audited financial statements from the **last three years** of the Consultant to check Financial Soundness. The Bidder's net worth for the last three years, calculated as the difference between total assets and total liabilities, should be positive.

3. Interested Firms/JV must provide lucid information as per above requirements indicating that they are qualified to perform above services and must provide only materials that would be specific to the proposed services, and to avoid submitting generic promotional material. **Non-provision of requisite documentary evidences/ information as per this Instructions to Consultants, may lead to “Non-Responsiveness” of the Consultants’ response/ application.**
4. Firms/JV are required to **submit their EOIs through PPRA EPAD system (www.eprocure.gov.pk)** while hard copy of the same in original (for record purpose) is requested to be submitted at below stated address. Kindly note that evaluation will be made on the EOI submitted only at EPAD system hence EPAD System must be used for submission of EOIs.
5. Selected Consultant will be required to declare any conflicts of interest, both for the organization as a whole as well as individuals assigned to carry out this work.
6. Any further information/clarification can be sought.

MANAGER PROCUREMENT
National Disaster Risk Management Fund,
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SECTION II: TERMS OF REFERENCE

Consultancy Firm: Baluchistan Carbon Mapping and Offset Potential Assessment

BACKGROUND

Pakistan is one of the top five countries globally that is most vulnerable to climate change, and Balochistan, the country's largest and least populated province, faces significant environmental and socio-economic challenges from climate impacts. Given its unique landscapes and ecological zones, Balochistan holds substantial potential for carbon sequestration. However, current data gaps and limited engagement in carbon markets have left much of this potential untapped.

This activity, therefore, seeks to identify and map Baluchistan's carbon offset potential, focusing on the forestry/mangroves sector as forests store more carbon than the entire atmospheric carbon, with estimates suggesting they hold up to one trillion tons—double the amount present in the atmosphere. These forests contain five carbon pools: above-ground biomass, below-ground biomass, soil organic carbon, litter, and deadwood. Balochistan is home to 1.5% of Pakistan's forest ecosystem, which is currently under pressure from human activities. However, with sustainable management practices, these forests have the potential to play a significant role in carbon sequestration. The activity will contribute to Pakistan's commitments under the Paris Agreement, contribute to Nationally Determined Contributions (NDCs), and provide financial opportunities through carbon credit generation.

OBJECTIVES

The primary objectives of this assignment are to:

1. Assess and map Baluchistan's carbon offset potential in the forest sector.
2. Provide a baseline for carbon stocks and emissions in line with international standards.
3. Strengthen stakeholder capacities to undertake carbon offset potential and enhance engagement with local and international stakeholders.
4. Deliver an actionable implementation roadmap for feasible carbon offset potential in Balochistan.

SCOPE OF WORK

Task 1: Inception and Planning

- **Kick-off Meetings**
Organize initial meetings with stakeholders (government agencies, local communities, private sector, NGOs) to present the objectives, clarify roles, and establish lines of communication.
- **Capacity Building Needs Assessment**
Assess stakeholders' current capacity levels in carbon mapping identifying training and resource needs.
- **Data Collection Strategy**
Develop a strategy for collecting relevant data specifically tailored to the forest sector. This strategy should outline methods, tools, sources, and verification processes, ensuring data accuracy and alignment with international carbon standards.

- **Work Plan Development**
Formulate a comprehensive work plan detailing methodologies, timelines, roles, responsibilities, and anticipated deliverables to provide a clear roadmap.

Task 2: Carbon Offset Opportunity Mapping

- **Sectoral Analysis**
Conduct a thorough analysis of the Forestry sector with carbon offset potential, identifying areas with the highest offset value.
- **GIS Mapping**
Create GIS-based maps that display high-potential carbon offset areas for forestry, reforestation, afforestation, and other relevant offset initiatives.
- **Co-benefits Analysis**
Identify additional benefits from forestry, such as biodiversity conservation, soil protection, water management, and community development. Assess how sustainable forest practices can enhance ecosystem services, protect wildlife, improve water retention, and support local livelihoods.

Task 3: Technical Advisory Services on Carbon Offsets

- **Methodology Review**
Assess and recommend carbon offset strategies suitable for Baluchistan’s context, including options like REDD+, CDM, Verra, and Gold Standard frameworks.
- **Risk Assessment**
Identify potential risks (e.g., political, climate variability, deforestation) and develop mitigation strategies to address these risks.
- **Policy Alignment**
Ensure alignment with local and national policies, as well as Pakistan’s international climate commitments.

Task 4: Stakeholder Engagement and Capacity Building

- **Capacity Building Programs**
Design and deliver capacity-building sessions for local stakeholders, covering topics like carbon measurement, reporting, verification, and project implementation.
- **Workshops and Consultations**
Conduct workshops with local communities, government agencies, and private sector actors to gather input, address concerns, and foster a collaborative approach.
- **Stakeholder Mapping**
Identify key stakeholders and investors, outlining their roles and potential contributions to carbon offset initiatives.

Task 5: Feasibility and Implementation Plan

- **Economic Feasibility Study**
Conduct a financial analysis to assess the economic viability of proposed carbon offset projects, evaluating potential revenue from carbon credits and associated co-benefits.
- **Implementation Roadmap**
Develop a roadmap for implementing carbon offset projects, defining timelines, roles, responsibilities, and resources required for each phase.

- **Financing Mechanisms**
Identify potential funding sources, including partnerships with international organizations, carbon credit buyers, and government funds.

Task 6: Final Reporting and Recommendations

- **Final Report**
Compile all findings, maps, and recommendations into a comprehensive final report, outlining the potential carbon offsets, economic feasibility, and anticipated benefits.
- **Presentation**
Present the key findings, including GIS maps, recommendations, and potential implementation strategies, to relevant stakeholders.
- **Data Collection**

The data collection for the *Balochistan Carbon Mapping and Offset Potential* will be conducted through extensive engagement with key stakeholders, including government departments, local communities, NGOs, and the private sector. The process will encompass field visits to specific sites within Balochistan, where detailed assessments will be carried out. Briefing and debriefing sessions with local authorities, landowners, and community groups will ensure clarity on goals, processes, and expectations. Moreover, the data collection and methodology will be focused on generating accurate and reliable data to assess the forest sector's carbon credit potential. The approach will involve a combination of remote sensing, field-based measurements, and engagement with local stakeholders to ensure that all data is comprehensive, accurate, and aligned with international carbon credit standards.

1. Forestry Data Collection: A thorough analysis of forest land-use patterns will be undertaken using a combination of remote sensing technologies and field surveys. This component will focus on assessing Baluchistan's forest cover, tree density, biomass, and changes over time. Remote sensing data will help capture accurate information on vegetation density, forest extent, and land-use changes over time, while field surveys will validate these findings on the ground. This will include tree measurements (diameter at breast height (DBH) and tree height to estimate above-ground biomass and carbon stock), biomass estimation (ground-based sampling methods will be used to estimate above-ground and below-ground biomass in target forest areas), and deadwood and litter measurement (they contribute significantly to carbon sequestration in forest ecosystems). These data points will be crucial for identifying viable areas for carbon sequestration and mapping the ecological landscape.

2. Climate Data Collection: Regional climate data, including temperature and precipitation, will be collected to assess how climate variables influence forest growth and carbon sequestration. This data will help model carbon dynamics, as temperature and rainfall patterns directly affect forest health and carbon storage potential. For carbon sequestration models, climate data will also include parameters such as humidity, seasonality, and frost, which impact tree growth and carbon accumulation in forest ecosystems.

3. Carbon Stock Assessment: Based on the field data, the biomass will be converted into carbon stock estimates using standard carbon conversion factors. This process will include calculating the carbon stock of both above-ground and below-ground biomass, deadwood, and forest litter.

4. Stakeholder Engagement: Conduct workshops and meetings with local communities, government agencies, and stakeholders to gather input on land-use practices, deforestation, and forestry management. Gather local insights on sustainable forest management, community forest practices, and carbon offset opportunities.

5. Carbon Stock Baseline: Establishing a baseline of carbon stock in Baluchistan’s forests is essential for measuring study outcomes. Using international standards and methodologies, such as IPCC guidelines, data on existing carbon levels will be compiled. This baseline assessment will serve as a reference point for evaluating future carbon sequestration progress and guide the design of effective carbon offset initiatives.

Data collection will also encompass an evaluation of environmental and social safeguards, focusing on adherence to the Environmental and Social Management Framework (ESMF) and Environmental and Social Management Plan (ESMP) for each phase. This includes assessing compliance with mitigation measures, verifying the project’s alignment with environmental goals, and ensuring that social impacts are adequately addressed.

By integrating these data collection activities, the study will ensure that all collected data are accurate, relevant, and comprehensive, forming a solid foundation for assessing carbon offset potential and contributing to sustainable development in Balochistan.

○ **Methodology**

This activity will employ both quantitative and qualitative research methodologies, including:

- **Desk Reviews** of relevant literature and data sources.
- **GIS Mapping** and remote sensing analysis for spatial data collection.
- **Stakeholder Consultations** via workshops and interviews.
- **Field Surveys** for on-ground validation of remote sensing data.

The methodology should ensure the inclusion of diverse data sources, verifying accuracy through triangulation where applicable.

REQUIRED QUALIFICATIONS

The Consultants shall possess the following qualifications and requirements summarized in the table given below;

S #.	Position	Man months	Suggested Tasks
1.	Project Lead	Master’s degree (16 years of education) in environmental science, climate policy, or a related field, with over 10 years of experience in carbon markets and project management.	(i) Lead the planning and implementation of all project phases, including monitoring and evaluation activities; (ii) Ensure all project deliverables are met on time and to quality standards; (iii) Provide technical guidance on carbon offset methodologies, climate policy alignment, and stakeholder engagement
2.	Carbon Market Expert	Master’s degree (16 years of education) in climate change, environmental science, economics, or a related field, with at least 8 years of experience, including 5 years in climate policy and carbon mitigation projects under carbon market programs (e.g., Clean Development Mechanism - CDM).	i) Conduct sector assessment, identifying performance challenges and low-carbon investment opportunities; (ii) Develop feasibility study and preliminary design, exploring carbon credit generation and trade potential;

		The expert should have understanding of domestic and international carbon markets, including voluntary carbon markets. T	(iii) Strengthen institutional capacity for carbon market operations.
3.	Forestry Specialist	Master's degree (16 years of education) in forestry, natural resource management, or related field, with over 10 years of experience in forestry, carbon sequestration, and offset programs.	(i) Conduct technical evaluations of forestry-based carbon sequestration activities; (ii) Monitor and validate forestry intervention progress; (iii) Provide expertise on sustainable land use and reforestation practices.
4.	Climate Finance Advisor	Master's degree (16 years of education) in environmental finance, economics, or related discipline, with experience in climate finance mechanisms and international carbon credit standards.	(i) Identify and evaluate potential funding sources, including carbon credit buyers and international partnerships; (ii) Advise on financial viability and revenue streams for offset projects; (iii) Align financing strategies with global carbon credit standards.
5.	Capacity Building Expert	Master's degree (16 years of education) in social sciences, environmental studies, or a related field, with experience in capacity building and environmental training for project stakeholders.	(i) Monitor compliance of all the requirements related to Voluntary Land Donations (VLD) / Land acquisition/ Land Management related process; (ii) Conduct compliance monitoring visits; and (iii) Validate compliances of the conditions and covenants pertaining to Social Safeguards' Requirements.
6	GIS Specialist	Master's degree (16 years of education) in GIS, environmental science, or a related field, with expertise in remote sensing and GIS-based mapping for carbon offset projects, and at least 5 years of relevant experience.	(i) Develop and manage GIS maps to identify high-potential carbon offset areas; (ii) Use remote sensing to assess land cover and vegetation density; (iii) Conduct pre- and post-analysis of project sites to validate offset interventions.

CONFIDENTIALITIES AND DATA OWNERSHIP

All data, maps, and reports generated by the consultants are the property of the contracting entity and may not be used for any other purposes by the consultants, field workers, coordinators, or advisors without prior written approval. The ownership of both raw and processed data rests solely with the contracting entity, and this data must be promptly

submitted upon the completion of each project phase. Delays in data submission may impact payments to the consultants.

TIMELINE AND DELIVERABLES

S. No.	Deliverable	Timeline
1	Inception Report	Within 2 weeks from start
2	Baseline Carbon Stock Report	Within 6 weeks from start
3	Sectoral Carbon Offset Opportunity Report	End of Month 2
4	Technical Advisory Reports	End of Month 3
5	Capacity Building Workshop Reports	End of Month 4
6	Feasibility and Implementation Plan	Mid-Month 5
7	Final Report and Presentation	End of Month 6

The carbon market firm should have at-least 5 years of experience in carbon credit markets and emissions reduction projects, with expertise in carbon capture, carbon offsetting, and Clean Development Mechanism (CDM) projects. The firm should provide both technical and financial advisory support, particularly in developing markets.

The firm must have a proven track record in carbon credit mapping, assessment, and quantification, ideally in similar geographic or ecological contexts, as well as experience in carbon inventory assessments, greenhouse gas (GHG) calculations, and the development of carbon offset strategies.
