



## LARGE-SCALE ECOSYSTEM-BASED ADAPTATION PROJECT (EbA) - GAMBIA

---

### TERMS OF REFERENCE (TOR)

#### ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) STUDY

#### ANALYSIS OF OPTIONS TO PROVIDE IRRIGATION FACILITIES FOR THE EBA PROJECT:

OPTION A: BOREHOLE DRILLING– GROUND WATER HARVESTING

OPTION B: WATER CATCHMENTS: SURFACE WATER (RUN-OFF) HARVESTING

#### GENERAL INFORMATION:

Contact Person: Awa Sillah, M & E Officer

Reporting to: Project Manager

Duration: 5 months in 2019

Expected Start Date: Immediately after signing Contract Agreement

#### 1. BACKGROUND / PROJECT DESCRIPTION

The Gambia Government through the Ministry of Environment, Climate Change and Natural Resources (MECCAR) in partnership with the United Nations Environment Program (UNEP) has received a \$20.5 million grant to implement the Large-scale Ecosystem-based Adaptation (EbA) in The Gambia. The project is being implemented in four administrative regions namely: Lower River, Central River (north & South) and Upper River over a period of 6 years. The project aims to build the climate-resilience of rural Gambian communities and facilitate the development of a sustainable natural resource-based (green) economy in the project regions. The EbA project is divided into three main components:

- a) Restoration of degraded forests and agricultural landscapes with climate-resilient plant species that provide ecosystem goods and services;
- b) Establishment of community based commercially viable natural resource-based businesses
- c) Policy support, institutional strengthening and knowledge generation to support large-scale implementation of EbA in The Gambia

The EbA project aims to restore 7,000 degraded forest, woodland, savanna and mangrove ecosystems and 3,000 ha degraded agricultural lands and to directly benefit 11,550 households (50% female and 50% male). The restoration of the large areas of community forests and degraded agricultural lands require a large number of seedlings raised in nurseries/purchased.

In 2018, over 244,000 seedlings were planted in selected community forests and degraded agricultural lands. Lessons learnt from the 2018 Planting exercise, indicated that almost all the communities, especially the owners of the degraded agricultural lands, raised concerns about the protection of the planted seedlings. The length of the dry season in The Gambia ( $\approx$  8 months) also dictates that the planted seedlings may not survive in the absence of water for irrigation during this

period. Consequently, an uninterrupted availability of water from sources such as surface water runoff and/or groundwater discharges becomes imperative.

## **2. The proposed Actions:**

The EbA project therefore intends to explore irrigation regimes to ensure sustained availability of water for restoration purposes, i.e. enrichment planting in community forests, community conservation Areas; on-farm planting in agricultural landscapes; and business activities such as bee farming in the community protected reserves. A complete project annual plan and budget has been developed and submitted for implementation. However, there are some related environmental and social concerns towards the proposed investment for irrigation facilities involving drilling of boreholes and improvement of natural ponds and/or rain water catchment facilities that need to be addressed prior to approval. The major areas that require further information, clarification, and action include:

- Provision of comprehensive Environmental and Social Impact Assessment of these proposed irrigation facilities
- Sharing of findings from the Environmental and Social Impact Assessment of the irrigation facilities with relevant community stakeholders for consultation, their feedback and inputs
- Elaboration of strategy and enhanced targets/outcomes to ensure that men, women, youth, & vulnerable groups are equally benefiting from the facilities, and
- Consultation and provision of proof of expression of interest and commitment from CF Committees, ensuring sustainability of the facilities.

Cognizant of existing climate related problems and as a climate friendly project, the EbA project is mindful of the potential impacts of environment related activities it undertakes. The construction of the water structures will involve drilling boreholes and improvement of natural ponds and/or creation of new rain water catchment facilities as well as excavation of trenches and laying of irrigation pipelines across different elevations/slopes. The planned paths of the pipelines will run mainly through agricultural lands (active and abandoned), roads, low hills, waterways and perhaps settlements. The study will examine the effects of the planned activities on existing environmental and social conditions in the areas, which may be affected by the investment, and propose measures for monitoring and mitigating any potential negative impacts.

## **3. The purpose of the ESIA**

The aim of the ESIA is to study the environmental and social impacts associated with the design, construction and operation of the planned water structures that will provide GCF with sufficient information to justify acceptance, modification or rejection of the proposed investment for financing and implementing the irrigation facilities.

The Consultancy will further involve a comparative analysis of the two options (surface runoff water harvesting and borehole water supply) as alternative sources of water for irrigation of seeds in nurseries and planted seedlings in community forests and degraded agricultural lands at the EbA intervention sites. The ESIA will propose practical and effective mitigation measures to prevent or reduce potential negative implications of the construction & operation of the planned irrigation options. The specific objectives include:

- (i) evaluation of the quantity of water available from water harvesting and boreholes;
- (ii) the evaluation of the storage capacity required for water harvesting and borehole water in the project sites;
- (iii) the evaluation of the social and environmental impacts of the surface runoff rainwater harvesting and borehole water supply systems;

- (iv) the comparison of water harvesting and borehole water in the project sites in terms of water availability from both sources, physical reliability of the sources, sustainability of the sources, environment and social impacts from both sources;
- (v) recommend a better alternative source of water for seed nurseries and seedling irrigation in the EbA intervention sites.

#### **4. Scope of Work, Deliverables and Duration**

**4.1 The scope of work** under these TOR will be carried out through three phases:

a) Conduct a preliminary mission/visit to the country/project sites for environmental and social screening (ESS) (or scoping study), taking stock of related risks and impacts of activities of proposed actions to finalise the inception report. The ESS must be conducted in accordance with GCF's Guidelines for Environmental and Social Screening of the proposed Activities. The results of the screening form the basis for assigning the environmental and social risk category of activities and inform decisions on the extent and depth of environmental and social due diligence that will be undertaken.

b) Conduct ESIA taking into account the following consideration:

- Environmental and social impacts associated with the irrigation options are assessed and examined at the earliest planning stage possible.
- Environmental impacts to be investigated shall include factors that impact the natural environment, water, soil, water usage, ecosystems etc.
- Social concerns include landscape, gender, cultural heritage, and the surrounding communities understanding & acceptance/feedback regarding the risks
- The direct and immediate impacts, will also be examined and investigated.
- Alternative proposals and/or minimization measures (to prevent or reduce adverse impacts) are examined to choose a better project option in terms of environmental and social considerations. In examination of measures, priority is to be given to the prevention of environmental impact, and when this is not possible, minimization and reduction of impact must be considered next.
- Analysis of environmental costs and benefits, taking into consideration economic, financial, institutional, social and technical aspects.

The ESIA will ensure that the construction and operation of the proposed irrigation options will be in compliance with relevant national laws and ordinances as well as the UNEP and GCF guidelines and safeguards.

c) Conduct Community Consultations in all communities directly or indirectly affected by the construction of irrigation facilities.

#### **4.2 Deliverables**

The consultant(s) is/are expected to deliver the following outputs by end of the consultancy:

a) Pre-mission report detailing schedule of consultations, methods and list of stakeholders to be consulted

b) Final Inception Report (including the work methodology, approach, detailed work plan and results of the literature review) after field visits and stakeholder consultations

c) Final Environmental and Social Impact Assessment (ESIA) Report of the investment

Each report mentioned above will be submitted both as a digital copy and 2 hard copies in the English language.

In addition to Environmental and Social Impact Assessment and community consultations, EbA project must submit additional information regarding:

- a) Elaboration of strategy and enhanced targets/outcomes to ensure that men, women, youth, and vulnerable groups are equally benefiting from project
- b) Consultation and provision of proof of expression of commitment from CF management Committees to manage the facilities sustainably

**4.3 Duration** of the ESIA is anticipated for 16 weeks from the signing of contract

## **5. Methodology**

Among others the consultant(s) is/are expected to use a combination of participatory, qualitative and quantitative methodologies. Therefore, it is anticipated that the consultants might use surveys, interviews, group discussions and any other data collection instrument. The ESIA would be a learning experience for EbA project and implementing partners. Proposed technical approach is expected to be sound, clear and verifiable, as will be used as one of the evaluation criteria of selection.

## **6. Roles and Responsibilities**

### **6.1 Consultants**

- a) Read and understand background information or project documents
- b) Describe, diagnose and characterize the investment options (borehole drilling and rain water catchment) including:
  - Environmental characterization of the area where the investment will be carried out; describing the current and projected relevant climatological and hydrogeological data for the environmental impact assessment of the investment;
  - Social characterization providing an overview of the existing social and cultural conditions in order to place the investment in context. This assessment shall present communities surrounding and benefiting from the investment, and their population & socioeconomic characterization, e.g. occupation and income levels, sources of livelihood, and land tenure/titling to determine the social impact of the investment.
- c) Confirm/determine the catchment characteristics (e.g., existing hard surfaces such as rocks and other geological formations; semi-hard surfaces such as roads and rocky slopes; loose soil surfaces such as fields and valleys and topography of the area);
- d) Quantitatively investigate the long-term sustained water availability and reliability from both Water Harvesting and Borehole sources for the irrigation of nurseries and planted seedlings in Community Forests and Degraded agricultural lands adjacent to these forests;
- e) Determine the current and projected variations in the quantity of surface and groundwater availability during the eight-month dry season and the four-month wet season;

f) Compare the performance of the two sources of water supply based on the results of the assessment; and recommend the better alternative source of water for irrigation in the EbA intervention sites;

g) Carry out any other technical evaluations

h) The consultant shall observe the highest standard of ethics in providing the Services and agrees to adhere to the UN Supplier Code of Conduct, which can be viewed at [http://www.un.org/depts/ptd/pdf/conduct\\_english.pdf](http://www.un.org/depts/ptd/pdf/conduct_english.pdf)

## 6.2 EbA Project and Partners

a) Ensure all logistical support is in place

b) Provide information requested by the consultants during the exercise

c) Notify stakeholders and agreed proposed process

d) Ensure UN Supplier Code of Conduct are adhered to during the ESIA.

## 7. Composition of ESIA Team

### 7.1 Expected profile of team of consultants

A strong core team of specialists (consultants) are anticipated to conduct the ESIA. The team should comprise of ESIA expert, natural resource management expert, sociologist/community development specialist, irrigation engineer and gender specialist.

Position Assigned	Area of Expertise	Experience (years).	Description of Task
International Consultant - Team leader	Environmental & Social impact Assessment	8 years +	Lead/guide the team; overall coordination; specialist advice and quality assurance
Counterpart National Consultant	Natural Resources & Restoration Expert	10 years +	Responsible for coordinating work of other specialists;
Irrigation Specialist	Environmental & water Engineering	10 years +	Providing expert advice on irrigation
Gender Specialist	Gender Assessment & Analysis	10 years +	Analysis of gender related project impacts and specialist advice to team
Sociologist/community development specialist	Social impact Assessment	10 years +	Social characterization and impact assessment

### 7.2 Qualifications and Key Expertise of the Lead Consultant

The lead consultant should have a Master's Degree or equivalent in Environmental and Social Impact Assessment Specialist with expertise preferably in the field of environmental sustainability, environmental science, environmental engineering, eco-system services management, environmental and social sciences or other field relevant to environmental sustainability and climate change.

#### Summary of minimum profile:

- At least Master's degree in any of Hydrology/Hydrogeology, and Water Resources Management;

- Knowledge and expertise on Climate Change and Natural Resources Management is desired;
- Strong and demonstrable Research skills in the field of Environmental and Social Impact Assessment (ESIA)
- Preferably a minimum of five (8) years of relevant professional experience in related fields
- Demonstrated understanding and experience in working with government agencies, multilateral and bilateral organizations on developmental issues in developing countries;
- Ability to work independently and within a team, with proven international experience in developing countries.
- Excellent organizational and interpersonal skills; facilitation and communication;
- Experience and/or knowledge of the Administrative Regions of The Gambia and working with sub-national and national stakeholders;
- Knowledge and experience of GCF, UNEP and UN Common System is desired;
- Possess excellent command of the English language, and an understanding any of the local languages of The Gambia is desirable.

## 8. Reporting and Resource Requirements

The consultancy will be commissioned by EbA project and MECCNAR who are the Contracting Authority for the purpose of the assignment:

a) The consultant will report directly to EbA Project Manager in close cooperation with MECCNAR

Criteria	Weight	Maximum Point
<b>1. Technical</b>	<b>70</b>	
a. Academic background		10
b. Core competencies and motivation		10
c. Relevant Experiences as per the requirement		20
d. Adequacy of the proposed methodology and work plan in response to the TOR		30
<b>2. Financial</b>	<b>30</b>	<b>30</b>

b) The consultant is expected to produce a final report upon successful completion of activities according to the agreed schedules.

c) The consultant is expected to provide his/her own work tools e.g. computer.

## 9. Evaluation Criteria

The following criteria shall serve as a basis for evaluating the offers. A combined scoring method – where the qualifications and methodology will be weighted a maximum of 70% and combined with the price offer, which will be weighted a maximum of 30%

## 10. Application instructions

Interested candidates or consultancy firm fulfilling requirements should submit technical and financial proposal with cover letter on profiles of the lead consultant, including core areas of expertise; in sealed envelopes to The Project Manager, EbA Project, 2<sup>nd</sup> Floor, Fatou Golden Plaza, Mile 7 Area, Kanifing Municipal Council, The Gambia Marked **“Title: Environmental and Social Impact Assessment (Esia) – EbA Project”** by 4PM on Tuesday, 30th April 2019. Candidates may also send application letters electronically (Pdf format only) to e-mail account ([jalamang.kunkudala@gmail.com](mailto:jalamang.kunkudala@gmail.com)) of the Project Manager.

**Summary of Consultants’ Submissions (attachments):**

- Technical Proposal – Maximum 4 pages (clearly presenting understanding of the ToR, methodology to be used in undertaking the assignment, and time and activity schedule).
- Curriculum vitae of team members showing relevant experience to the assignment
- Reference from at least one organisation previously worked for,
- Example(s) of similar work undertaken, particularly examples of previous ESIA reports written (will be kept confidential)
- Financial Proposal – Maximum 1 page (quotation of fees of consultancy for carrying out the assignment and any other costs for the entire team).