

**DEVELOPMENT OF INTEGRATED AQUACULTURE
INFORMATION SYSTEM TO ENHANCE
AQUACULTURE VALUE CHAIN FOR MARKET
ACCESS**

TERMS OF REFERENCE (TOR)

DECEMBER 2022

1.0 Introduction

Echo Network Africa (ENA) formerly Kenya Women Holding (KWH) is a National women-led and women empowerment institution founded in 1982. As a women-led institution, ENA seeks to transform women's and girls' economic, political and social lives to make them participate effectively and efficiently in development. ENA targets women of all ages including young women, women with disabilities, and those from marginalized communities. ENA is a catalyst for development and seeks to empower women, girls and communities to interrogate discriminative and harmful norms and practices that hinder them from realizing their rights. We aim therefore to address structural causes and drivers of discrimination and inequality through participatory and inclusive processes to transform women's and girls' lives.

As a catalyst for development, ENA works with other like-minded stakeholders and institutions to empower, position, and advocate for women especially in the area of women's financial, political and social inclusion. At the grassroots and community level, she propels women's empowerment agenda by collaborating with broad community-based organizations referred to as Local Implementing Partners (LIPs) and grassroots women organizations. At the National and County Level, ENA supports the capacity development of duty bearers to strengthening existing mechanisms and structures, enhance coordination and promote culture of accountability and delivering a people driven agenda that respects their dignity and participation. For sustained transformation, the catalytic role of ENA facilitates women and girls and the community to innovate, incubate and promote viable initiatives that enable them to advance their security, governance, empowerment and prosperity.

ENA's programs are anchored on five major focus areas namely: Women Empowerment (Enhancing women's livelihoods, health and inclusion in the Aquaculture Value Chain), Positioning/ Democracy Programme (Addressing gender gaps and engendering reform processes), Tuvuke & Gender Mainstreaming (Tuvuke deals with Women in peace building and national cohesion while Gender Mainstreaming aims at incorporating the gender aspect in ENA's initiatives) and Girls Excel initiative. ENA maintains its edge by employing a private sector driven model to work with individuals and communities to catalyze societal change.

1.1 Vision

To partner with women, young women, women with disabilities and women from marginalized communities to create a better society

1.2 Mission

To be a catalyst that empowers, positions, and advocates for women, young women, women with disabilities and women from marginalized communities towards attainment of their full potential.

1.3 Core Values

- Team Work
- Professionalism
- Uphold the dignity of women

- Integrity
- Diversity
- Mutual respect for each other
- Learning and Innovation

2.0 Problem Statement

Aquaculture farming plays a crucial role in food security, increased employment opportunities which increases household incomes, leading to sustainable livelihoods. According to the Food and Agriculture Organization of the United Nation (FAO) report 2014, aquaculture has been considered the fastest growing food supply industry in the world. A research study conducted by Echo Network Africa (ENA) in 2019 indicated that fishing was the major economic activity for communities living along the Lake Victoria basin and was considered to be the main source of their livelihood. The research also indicated that women and girls continue to be abused along the aquaculture value chain and forced to engage in transactional sex to secure fish stock for sale. Women are only involved as small traders along the value chain due to lack of financial resources and knowledge to actively engage in cage farming. Gender discrimination and disenfranchised cultural beliefs are still in play along the lake region thus hindering women from participating in the fishing practice.

ENA is currently implementing the Aquaculture Anchor Cluster model in Homa Bay to support women in 4 beaches (25 pax each) was launched in 2019 and funded by Open Society Foundation. The women are engaged in a range of aquaculture production and value chain activities. This system will help them overcome challenges around fish business being predominantly run by men while women continue to engage mainly as traders along the fish value chain particularly in processing and marketing which makes them vulnerable to exploitation by the fishermen who have a higher bargaining power. Women will be able to access market at the click of a button and will have a database of market trend to help them plan adequately on the right time for harvest when market for fish is at peak and the women are able to make profit for business and group activities continuity.

3.0 Objectives

- I. To develop an integrated Aquaculture Information system to enhance aquaculture value chain for market access
- II. To train ENA staff and relevant stakeholder on how to navigate the system including sharing access right levels
- III. To provide training manuals/ guides developed for system navigation

4.0 Scope of work

ENA wishes to engage a consultant to develop an integrated Aquaculture Information system to enhance aquaculture value chain for market access for a period of two months. The system development content and details should be made available in a guide booklet and should cover the following but not limited to: -

1. Define scope and capacity of the system being developed – how much the system can take and update requirements
2. Outline step-by-step guide on system navigation, use and copy right

3. Provide access and login rights and define what levels of access have been put in place
4. Demonstrate efficiency and effectiveness i.e., system ability to provide summaries and graphics where possible for ease of data visualization and presentation

5.0 Details on call for Technical and Financial Proposals:

5.1 Technical proposal

The technical proposal should be presented in a booklet format focusing on the following:

- I. Strategic planning process of the intended purpose of the system which forms a basis for market linkage and integrated reporting mechanism
- II. System should capture the following:
 - a. Women group level (Women and Gender Focal Persons) of access to system to do the following:
 - i. Input Real Time Action Planning
 - ii. Upload Activity Reports (recording minutes, Restocking, Harvesting, Dialogues, GBV cases reporting - BMU Gender Desk and referral pathway)
 - iii. Database of identified buyers of fish and suppliers of fingerlings; and numbers with regards to fingerlings restocked, mortalities and fish harvested
 - iv. Loan repayment rate based on income generated from harvest and other IGAs; to be able to automate cost benefit analysis
 - b. Local Implementing Partners (LIP) level of access to system to do the following:
 - i. Input Real Time Action Planning
 - ii. Upload Activity Reporting (Review meetings, monitoring visits, Dialogues, GBV cases reporting & Quarterly review meetings with ENA)
 - c. Partners & collaborators level of access to system to do the following:
 - i. Indicate women's representation in leadership and decision making positions i.e., membership of women in the BMU
 - ii. Record Joint/ Collaboration activities with relevant Ministries and key players in aquaculture value chain - market linkage and access cycle
 - d. GBV service provision (Health Facility and Advocates) level of access to system to do the following:
 - i. Record GBV cases reported, referred and services provided through in reach or outreach database (also costs of services)
 - ii. Database to record Litigation processes and/ or court cases
 - iii. Database for GBV service provision activities i.e., legal aid clinics and know your rights schedules, summary GBV cumulative monthly reports

5.2 Financial proposal

1. List all costs associated with this assignment including remuneration for all staff involved.
2. The currency of remuneration related to this assignment is Kenya shillings.

Support and Maintenance

- Provision for technical support and maintenance of the Aquaculture Information System for three (3) months this should include code level maintenance to remove bugs and security loops.
- Train three ENA staff on how the systems works.

6.0 Duration

The consultancy is expected to take a period of 1.5 months (6 weeks) with key deliverables to be achieved within the stipulated period. Proposed start date will on the **Jan to Feb 2023**

7.0 Payment schedules

To facilitate the delivery of the aforementioned outputs, the fees for the consultancy will be based on ENA's regulations. In addition, the consultants will be provided with the necessary information to enable them to deliver the expected outputs. ENA will apply performance-based principles to the management of the contract, in which case the contract sum will be paid in instalments pegged to achievements of milestones as follows:

- 40% initial deposit, which covers up to the delivery of inception report and detailed methodology, training content on RBM, training schedules and all acceptable by ENA management and contract signing.
- 60% after delivery of the final acceptable comprehensive training report

8.0 Tasks

- Develop a work plan on how to undertake the tasks including the task schedules / milestones and implementation plan. Include project progress review/ validation points.
- Involve ENA's ICT team in the development process to guide in the development.
- Test the integrated Aquaculture information system with ENA's ICT team and make required adjustments before going live.
- Development of a user-friendly application for our target audience including donors, partner organizations, visitors, and staff.
- Integrate the various databases into the system
- Provision for admin and end user login portals
- Maintain the system for at least three (3) months post going live and make any necessary adjustments within the period
- Training of ENA staff

9.0 Deliverables

- An intuitive Aquaculture Information System that can collect, record, analyze and report data.
- Full source code including all developed libraries, API's and databases should be handed over to ENA
- The Systems user manual for administration, support and data management

- Technical documentation, source code associated databases, API's and libraries.
- Staff training on system management, administration, and support.
- Training report on system navigation written and submitted to ENA staff
- All training manuals/ guides developed & submitted to ENA
- ***The System will be owned by ENA thus consultant will hand over related software to ENA***

10.0 Minimum Qualification and Capabilities Required

- A Kenyan individual/organization with adequate knowledge and at least 5 years of progressive experience with developing applications.
- A competent individual/organization with integrity.
- Conversant with the latest application development trends.

11.0 Application Requirements

- A portfolio containing qualifications and links to at least three (3) previous projects undertaken.
- A reasonable financial proposal based on the deliverables and scope of work outlined in the TOR;

12.0 Application Process

Interested individuals are encouraged to apply and forward an Expression of Interest (EoI) and CV to procurement@enafrica.org on or before 19th Jan 2023

Indicate 'Aquaculture Information System' in the email subject line.