

WEST AFRICA FOOD SYSTEM RESILIENCE PROGRAM (FSRP2)

Phase 2 of a Multiple-Phase Programmatic Approach Project Number: p178132

DRAFT TERMS OF REFERENCE

CONSULTING SERVICES FOR THE ASSESSMENT, TECHNICAL DESIGN AND CONSTRUCTION SUPERVISION OF THE REHABILITATION OF SELECTED WAREHOUSES

LIST OF ACRONYMS

1D1F One-District-One-Factory
 1V1D One-Village-One-Dam
 BSc Bachelor of Science degree

CGIAR Consultative Group on International Agricultural Research

CILSS Comité permanent inter-Etat de lutte contre la sécheresse au Sahel CORAF Conference de responsable Recherche Agronomique Africain

COE Centre of Excellence
CSA Climate Smart Agriculture

ECOWAS Economic Community of West African States
EHSMP Environmental Health and Safety Management Plan
FSRP West Africa Food System Resilience Program

HVAC Heating, Ventilation and Air-Condition
ILM Integrated Landscape Management
MDAs Ministries, Departments, and Agencies
MoFA Ministry of Food and Agriculture

MSc Master of Science degree

NCoS National Center of Specialization

WB World Bank

GoG Government of Ghana

CSIR Council for Scientific and Industrial Research (CSIR)

PGRRI Plant Genetic Resources Research Institute
GLDB Ghana Grains & Legumes Development Board

CRI Centre for Research Institute
RCoE Regional Centre of Excellence

1.0 INTRODUCTION

The Government of Ghana (GoG) in collaboration with ECOWAS and the World Bank is implementing the Food System Resilience Project (FSRP) Phase 2 under the World Bank Multiphase Programmatic Approach (MPA) for Investment Project Financing Instrument. Phase 2 consists of three countries namely: Sierra Leone, Chad, and Ghana and three regional partners, (ECOWAS¹, CILSS² and CORAF³. The FSRP2 is expected to be implemented over a 5-year period. In Ghana, it commenced on June 5, 2023, with a financing envelope of US\$150 Million.

The development objective of the FSRP2 is to increase preparedness against food insecurity and improve the resilience of food systems in Ghana. The Food Systems Resilience Project is organized around five core distinct but interrelated components to help achieve the objectives of the project. The project components include:

Component 1: Improving digital advisory services to support timely agriculture and food crisis prevention and management - This component aims at strengthening national capacity to provide demand-driven digital advisory services. This will include agro-advisory and impact-based hydromet/climate information and early warning services, and promote their use for food crisis prevention, management, and response.

This Component has two **Sub-components**. Sub-component 1.1 will specifically, roll out interventions to; i) improve national capacity to deliver reliable information services on vulnerability, nutrition, and food security; ii) reorganize and improve national pest and disease monitoring and management mechanisms; and iii) strengthen regional collaboration for food crisis prevention.

Sub-component 1.2 seeks to; i) strengthen digital hydromet and agro- advisory services for agriculture producers; ii) improve the production of climate, hydromet, agromet, and impact-based information for use by decision-makers, farmers, pastoralists, and other actors in the food system; iii) support the timely delivery and use of essential agro-hydro-meteorological information to key users; and iv) strengthen the institutional and financial sustainability of agro-hydro-meteorological service providers.

Component 2: Sustainability and adaptive capacity of Ghana's food systems productive base - This component consolidates the regional agricultural innovation systems and strengthens regional food security through integrated landscape management. These include strengthening regional research and extension systems to deliver improved technological innovations including climate-smart, nutrition-sensitive, gender- and youth friendly technologies in a sustainable manner, as well as a combination of natural resource management with environmental and livelihood activities using the integrated landscape management approach.

This Component has two **Sub-components**. Sub-component 2.1, will address the following by; i) consolidating regional agriculture innovation system; ii) strengthening the national and regional

¹ ECOWAS – Economic Community of West African States

² CILSS – Comité permanent inter-Etat de lutte contre la sécheresse au Sahel (translated as Permanent Inter-State Committee for Drought Control in the Sahel). CILSS invests in research for food and nutritional security and fight against the effects of desertification and climate change in the Sahel and West Africa.

³ CORAF – Conference de responsable Recherche Agronomique Africain (West & Central Africa Council for Agriculture Research and Development). CORAF is responsible for improved efficiency and effectives of smallholder producers and to promote agribusiness sector.

research centers; iii) deepening and expanding regional research and development networking; and iv) modernizing national extension services and promoting technology access and exchange

Sub-component 2.2 will strengthen regional food security through the use of Integrated Landscape Management (ILM) systems through i) the promotion of participatory ILM practices and techniques ii) enhancing the resilience of ecosystems and food systems in priority landscapes and iii) securing resilient eco- and food systems beyond priority landscapes.

Component 3: Enhancing regional food market integration and agricultural inputs and output trade - This component aims at expanding food trade in West Africa to enable effective distribution of surplus produce to deficit regions. It will facilitate the production and commercialization of agricultural products, inputs, and technologies within and across national borders.

There are two **Sub-components** under Component 3. Sub-component 3.1 aims at facilitating trade across key corridors and consolidating food reserve systems by supporting the preparation and implementation of sound regional policies and regulations to strengthen the enabling environment for expanding regional agricultural output and input markets through i) harmonization of national agricultural trade policies with regional instruments; ii) building national capacity for agricultural trade negotiations; iii) developing an ECOWAS agricultural trade and market scorecard as well as; iv) improving regional food reserve system performance.

Sub-component 3.2 seeks to support the development of strategic and regional value chains i.e., (a) rice; (b) maize and (c) livestock (Poultry) with backward integration with the soya bean value chains through i) strengthening multi-stakeholder coordination and promotion of enabling environment for the private sector to thrive; ii) strengthening value chain organization and financing; and iii) supporting agricultural competitiveness and market access infrastructure.

Component 4: Contingency emergency response – This component aims at making available resources to strengthen the response capacity of the Government of Ghana in case of an emergency. This involved making available funding to respond to eligible emergencies or crises, including pest and disease infestation such as the Fall Army Worm, locusts, swine fever and bird flu; extreme droughts or floods; widespread and severe bush and wildland fires.

Component 5: Project management - This component involves establishing effective coordination, management, and monitoring and evaluation system for the project. These will include: (i) establishing and maintaining financial management and procurement systems; (ii) reporting on program activities; (iii) ensuring the full implementation of environmental and social risks and impacts management; (iv) maintaining and ensuring the performance of the monitoring and evaluation system; and (v) developing and implementing knowledge management and communication for development strategy and study tours, among others.

The expected outcomes at the end of the program include:

- i. Program direct beneficiaries reach 300,000; of which 40% are women;
- ii. Proportion of food-insecure households in the targeted areas reduced by 25%;
- iii. Food system actors accessing hydro and agrometeorological advisory services reach 211,200; of which 40% are women;
- iv. Producers adopting supported climate-smart agricultural technologies and services reach 240,000; of which 40% are women;

- v. Surface area under integrated landscape management increased by 4,850 ha; and
- vi. Share of intra-regionally traded production in selected value chains (maize, rice) increased from 20% to 30%

The Food System Resilience Project (FSRP) is a flagship regional investment program aimed at building food system resilience in West Africa through a strategic regional approach. Specifically, the program contributes to increasing the resilience of food systems in West Africa through investments in regional risks management, commodity trade, and sustainability of the production base.

As part of its activities, the Project seeks to support the development of strategic and regional value chains of rice, maize and poultry with backward integration with the soya bean value chain by providing funding support to competitively selected beneficiaries including smallholders, private Small and Medium Enterprises and private businesses to improve productivity and competitiveness along the selected value chains.

Further to improvement of performance of regional food reserve system, the Project is expected to collaborate with relevant agencies such as the Planting for Food and Jobs (PFJ) Secretariat of MoFA and Ghana Commodity Exchange (GCX) to undertake the following activities;

- i. Assess the state of storage facilities holding regional food stock in terms of capacity, standards, and quality;
- ii. Improve existing and/or establish storage infrastructure close to major production areas, and to expected places of need/various border posts to reduce losses in transit; and
- iii. Train staff on management of these facilities.

FSRP therefore plans to rehabilitate and equip selected existing state-owned warehouses, as well as enhance utilization and management through Public Private Engagements (PPE). The Project would also collaborate with GCX to ensure improved quality of commodities stored, management of storage facilities and effective trading of FSRP priority value chains.

2.0 INFORMATION ON THE PROPOSED PROJECTS

The terms of reference (TOR) cover the rehabilitation of existing warehouses. Currently four (4no.) warehouses are targeted for rehabilitation. The selection of the sites was done based on agreed selection criteria in consultation with the PFJ 2.0 Secretariat, Agricultural Engineering Services Directorate (AESD) of MOFA and GCX. After a process of validation by a team from PFJ, AESD, GCX and FSRP, the following are the warehouses recommended for rehabilitation.

Table 1 Locations of Selected Warehouses Earmarked for Rehabilitation

| Lot | Municipal/District | Location of Warehouse | GPS Location |
|-----|----------------------|-----------------------------|-------------------------|
| 1 | Techiman | Nkweaso (A & B) Techiman | 7°33'35.3"N 2°00'09.5"W |
| 2 | Nkoranza South | Donkro Nkwanta- Nkoranza | 7°23'03.8"N 1°38'20.8"W |
| 3 | Mampong Municipal | Asaam-Mampong | 7°06'50.4"N 1°27'46.0"W |
| 4 | Ejura Sekyedumasi | Ejura (A & B) | 7°23'35.3"N 1°20'52.0"W |

Below are the observations of the condition of the warehouses during the course of the preliminary assessment by the team from PFJ, AESD, GCX and FSRP.

Table 2: Results of Preliminary Assessment of Selected Warehouses

| Item | Name of Warehouse & Location | Preliminary Assessment of Construction Works Required to be done | Capacity and Current Management |
|------|------------------------------------|---|---|
| 1 | Nkweaso (A) Techiman | Repairs to floor (portions need to be re-constructed) Carry out complete electrical works | ■ 1,000MT ■ Leased out to Isaac Darkwa Ent. |
| | Nkweaso (B) Techiman | Repairs to floor (portions need to be re-constructed) Carry out complete electrical works | 1,000MTLeased out to Isaac Darkwa Ent. |
| 2 | Donkro Nkwanta- Nkoranza | Replace roofing sheets at required sections Repair cracks in walls Change windows Check and repair electrical system Repair floor Repair fence | 1,000MTHanded over to Kopon Farms |
| 3 | Asaam- Mampong | Repair loose roofing sheets/ Leakages Repair ramps Repair doors Repair damaged wall Check electrical system Fix drainage system | 1,000MTLeased out to Private Sector |
| 4 | Ejura (A) | Check roof for leakage and repair Repair cracks in walls Extend electricity and fix electrical system Repair floor (gap between floor and wall) Replace doors | 1,000MT Leased out to Grow For Me Ltd. |
| | Ejura (B) | Check roof for leakage and repair Repair cracks in walls Extend electricity and fix electrical system Repair floor (gap between floor and wall) Replace doors | 1,000MTLeased out to Grow For Me Ltd. |

3.0 OBJECTIVE OF THE ASSIGNMENT

The rehabilitation of the warehouse infrastructure falls under component 3.1, and forms part of FSRP activities towards improving regional and country level food reserve system performance, through improvement of existing and/or establishment of storage infrastructure close to major production areas, and to expected places of need/various border posts to reduce losses in transit, as well as train staff on management of these storage facilities.

The objective of this assignment is to assess the state of infrastructure and facilities at the selected warehouses, conduct engineering/ architectural studies, produce designs, drawings and supervise the rehabilitation and construction of the approved facilities.

4.0 FRAMEWORK AGREEMENT

This assignment is the first phase of activities to develop ten (10) warehouses during the life of FSRP. A short list of consultants will be selected through the appropriate WB procedures of Request for Expression of Interest and Request for Proposals. After evaluating the submissions, a Framework Agreement (FWA)will be signed with the successful consultant to provide services for the current scope of works and subsequent development under the same terms and conditions and price quotation as in the previous contract as required. The FWA shall be for a period of one (1) year.

At the expiry of the term of the Framework Agreement, the performance of the consultant will be assessed to determine if the consultant has performed creditably. This will inform FSRP on the future involvement of the consultant in subsequent contracts.

5.0 SCOPE OF THE ASSIGNMENT

The scope of the assignment initially covers a total of four (4) warehouses. It is proposed that an individual consultant be engaged for the provision of technical services as follows:

- a. Preparation of a Technical Report, including all Engineering/ Architectural Drawings (where necessary) that clearly outline the full scope of works for rehabilitation and construction of the approved facilities.
- b. Propose alternative design options including use of renewable energy such as solar, etc if they have not already been incorporated in the design of the facility. Some of the facilities already have solar systems but they are not working.
- c. Preparation of the Cost Estimates (Bill of Quantities) and Bidding Documents (using the appropriate World Bank Template) into lots, if required to facilitate the procurement of Construction Firm(s) for the Works.
- d. Preparation of Operations & Maintenance Manual as necessary.
- e. Supervision of construction works to complete the full scope for the rehabilitation and construction of the facilities and installation of equipment.

The Assignment will be divided into two (2) Parts:

o **Part 1** – Site Assessment, Determination of Scope of Works per each site, Draft Architectural/ Engineering Designs, Detailed Architectural/Engineering Designs

(the preparation of architectural plans and layouts), Costing, and preparation of bidding documents for the selected research facilities

O Part 2 - Construction Supervision of the Works, Installation of Equipment covering the construction and installation period & Post Construction Defects Notification Period (DNP).

The consultant shall conduct Part 2 of the Assignment only after satisfactory performance of Part 1 and the availability of funds for construction works. The consultant shall work closely with the FSRP Infrastructure Engineer through all phases of the assignment.

6.0 SPECIFIC TASKS TO BE PERFORMED BY THE CONSULTANT

6.1 Design and Preparation of Bidding Documents

The designs will include but not limited to preparation of working drawings for all civil, mechanical, electrical, water supply and sanitary arrangements (internal and external) and site development plans for the sites including landscaping, soil conservation and drainage as required. The designs shall be environmentally friendly, accessible to differently abled persons, energy efficient, and shall satisfy all relevant standard building codes.

The consultant will provide the following services:

6.1.1 Architectural/ Engineering Services:

- a) Carry out site assessments and draft designs and relevant design modifications (in consultation with PFJ, AESD and FSRP) and costing for discussions with FSRP and management of the beneficiary institution and finalise the SOW.
- b) The designs will include fire-fighting details (fire alarm system layout, and emergency exit route layout), working drawings for all civil, mechanical, electrical, water supply and sanitary arrangements (internal and external) and site development plans for the sites including landscaping, soil conservation and drainage.
- c) Consult with MOFA (AESD), District Directorate of Agriculture, MMDAS to confirm the ownership of the facilities and the status of land ownership, as well as existing technical reports and drawings
- d) Consult statutory authorities for permits as required.
- e) Prepare an Inception Report including Site Assessment Report which includes the full scope of the works. The report must include information on the status of the land together with the site and block plans and access to utility services The layout must indicate the source of utility services (water, electricity etc) and include the cost of connection in the BOQ
- f) Propose alternative design options including use of renewable energy such as solar. Where a solar system has been installed but is not working determine the defects and propose solutions
- g) Prepare and submit Draft Design Report including: BOQ, drawings, Technical. Specification for the building works. The designs must include a layout for the installation of equipment.

Work together with PFJ, AESD, GCX and FSRP to determine the type and specification of equipment and instruments required for each warehouse.

- h) Package works into appropriate Lots if required.
- i) Prepare and submit Draft Final Design Report including: BOQ, drawings, Technical. Specification for the building works.

This report must incorporate stakeholders' comments submitted to FSRP
The Final Design Report will be submitted after incorporating comments from the WB

- j) Carry out supervision of the rehabilitation/construction works in accordance with the Conditions of Contract, specifications, drawings and other relevant documents.
- k) Preparation of Operations & Maintenance Manual as necessary.
- 1) Supervision of construction works to complete the full scope for the rehabilitation and construction of the facilities.
- m) The consultant shall co-ordinate the installation of electrical and mechanical services and ensure that there are no holdups.
- n) Perform any other services as required.

5.1.2 Quantity Surveying Services:

- Prepare detailed costing during the development of the design and submit to FSRP under confidential cover.
- Prepare Bill of Quantities and Bidding Documents, including the Technical Specification for the building works and Technical Specifications for the equipment

Construction Supervision

The following services are required to be undertaken by the consultant during the construction phase:

6.2.1 General

- Represent the Client in any matter related to the rehabilitation/ construction contract and the proper execution thereof.
- Carry out the assignment in accordance with generally accepted professional standards and practices,
- Participate in the introduction of works contractor(s) to site.
- Keep and regularly update a list of the Contractor's equipment and its conditions to ensure compliance with the Contractor's commitments in his bid.
- Inform the Client of difficulties or potential difficulties which may arise in connection with the construction contract and make recommendations for possible solutions;
- Maintain Project Dairy and Site Instruction Book.
- Organise and preside over all site meetings;
- Prepare Monthly and other Reports as required.
- Monitor the security and safety of the construction and temporary works to protect life and property;
- Arrange and make public presentations of the works done at the request of the Client;
- Consult, coordinate and collaborate with all stakeholders to ensure successful implementation of the contract.
- Inspect the progress and quality of the works, with other stakeholders, to determine that they are in accordance with the contract documents, during the construction stage

- Manage and coordinate decommissioning and hand-over activities e.g., testing and decommissioning of equipment, plumbing elements etc
- Submit documents, in a timely manner, to the FSRP for forwarding to the Bank for 'no objection.'
- Supervise contractors during physical construction of the approved scope of work to ensure construction is done according to the standards, design, and specifications.
- Ensure contractor's compliance with technical specifications and design drawings.
- Carry out any revision of designs when necessary.
- Ensure contractor's compliance with environmental, social risk management including waste management, preventing sexual exploitation and abuse/sexual harassment (SEA/SH) and child labour, health and safety risks and impacts management requirements.
- Review contractor's Environmental and Social Management Plan (C-ESMP) and ensure it adequately assesses and mitigates all potential environmental, social, health and safety risks and impacts that may be associated with the works. Ensure that the contractor revises the C-ESMP as necessary and required by the contract.
- Ensure that contractor develops code of conduct that include prohibited behaviours for SEA/SH and sanctions for violations. Ensure that all contractor workers sign the Code of Conduct (CoC) and are sensitized on SEA/SH prevention and mitigation measures (roles and responsibilities of project stakeholders, reporting mechanism for SEA/SH allegations, accountability structures and referral procedures within agencies and procedures for community members to report cases involving project staff). In addition, all Contractors are sensitized to child labour prevention policies and referral and remediation procedures if cases are identified.
- Ensure management of labour influx and that contractor prevent the use of all forms of child labour and forced labour in their workforce and in executing their contract according to the national regulations and World Bank Environmental and Social Standard 2. That the contractors develop and maintain mitigation and remediation measures to prevent the use of child labour and that they report on this regularly.
- Ensure that the contractor promotes fair treatment, non-discrimination and equal opportunity in its workforce and that workers are provided with accessible means to raise workplace concerns.
- Timely advise the client on issues of non-compliance on the part of the contractor(s) with regards to technical, environmental, social, health and safety requirements
- Verify and approve payments and/or claims submitted by the contractor for payment.
- Organize site meetings or monthly progress meetings.
- Carry out periodic valuation and prepare Interim Payment Certificates (IPC) for works executed by the contractor(s)
- Issue the Taking Over Certificate at practical completion and the Performance and Final Completion Certificate to the contractor
- Prepare draft completion report to the Client. This Construction Completion Report will detail information on the system, major activities carried out, As-built" drawings, and the total cost of the completed rehabilitated works.

6.2.2 Quality Assurance: - The consultant shall be responsible for the approval of:

- Working drawings;
- Work Method statements and Work Programmes;
- Inspection of works prior to execution;
- Results of Tests of fill materials and concrete tests;
- Environmental, Social & Health and Safety Management Plans or C-ESMP; and
- Provision of adequate PPEs.

6.2.3 Quality control: - The consultant shall be responsible for:

- Inspection and evaluation of the contractor's installations, housing, shops and warehouses/ storage and other accommodations to ensure compliance with the terms and conditions of the contract;
- Providing the Contractor with all necessary engineering information and data for carrying out the works in a timely manner;
- Examining and approving all traffic management schemes and equipment that the Contractor intends to put in place ensuring that interruption to movement by all road users are kept to a minimum;
- Furnishing timely assistance and direction to the Contractor in all matters related to ground survey controls, quality control and testing;
- Reviewing and approving Contractor's working drawings and drawings for temporary works;
- Organizing and operating a materials laboratory as specified in the construction contract, perform all laboratory and field testing of materials and products in accordance with the contract:
- Monitoring and overseeing the relocation of utility service lines, if any.

6.2.4 *Time Control*: The consultant shall:

- Review and recommend for the Client's approval, the contractor's work schedules, method of construction and any revisions thereto.
- Prepare and submit site meeting records and any other relevant documents. The report shall cover contract data, financial information, the progress of works, contractor personnel, equipment on site, materials on site, implementation of C-ESMP etc.;
- Propose and present for the approval of the Client any changes in the scope of works or extension of time that may be deemed necessary.

6.2.5 *Cost Control:* - The consultant shall:

- Verify and certify works done by the Contractor for each month in accordance with the Conditions of the Contract.
- Examine and make recommendations to the Client on the extension of time and other similar matters from the Contractor if required.

6.3 Defects Notification Period (DNP):

The Consultant shall perform the following tasks:

- Before the issuance of the Taking-Over Certificate, carry out the necessary inspection, specify and supervise any remedial works to be carried out. The consultant shall propose to the Client a date for a joint inspection prior to the issuance of the Taking-Over Certificate;
- Regularly inspect the contract during the Defects Notification Period (DNP) and inform the Contractor to remedy any defects thereto, monitor any repair works carried out by the Contractor and prepare a deficiency list prior to the final inspection with the Client.
- Carry out the Final Inspection of Works together with representatives of the Client and the Contractor and issue the Performance Certificate;
- Prepare Final Payment Certificate and Final Accounts
- Supervise the preparation of "As-built drawings" by the Contractor

7.0 ENVIRONMENTAL AND SOCIAL RISK CONSIDERATIONS

In conformance with the requirements of the World Bank Environmental and Social Framework (ESF), specifically the ESS1, the FSRP has prepared an Environmental and Social Management Framework (ESMF) and a Resettlement Policy Framework (RPF) to guide the management of potential environmental and social risks associated with project activities. Other instruments developed in connection with Environment and Social Risk Management (ESRM) under the FSRP are the Environmental and Social Commitment Plan (ESCP), Labour Management Plan (LMP), Stakeholder Engagement Plan (SEP), Integrated Pest Management Plan (IPMP), and the Gender Action Plan (GAP), which will be used to implement project activities in an environmentally sustainable and socially acceptable manner. These documents give guidelines on the ESRM commitment of the Project, management of labour issues at sites sponsored by the project, steps in the engagement of stakeholders, safe use of agrochemicals and inclusion of gender -sensitive considerations in project activities. The documents will serve as referral documents in the implementation of activities.

In conformance with the ESMF's Environmental and Social Screening Checklist, the rehabilitation of the facilities will require the preparation of stand-alone, site-specific Environmental and Social Management Plans (ESMPs), however, where the potential impacts are minimal and is not likely to cause any significant impacts, the Contractor's Environmental and Social Management Plan (C-ESMP) and a checklist from the FSRP's Environmental and Social risk management unit should be sufficient.

These four warehouses selected are in non-environmentally sensitive sites, impacts generally localised, short-term and reversible, mitigation measures easy to design and implement, not requiring much data outside the work area and the warehouses are location on government lands under the management of the Municipal and District Assemblies. These warehouses are well fenced with an operational area of about 3-5 acres large enough for the man space for long trucks and prevent encroachment from the public.

The warehouses are already constructed providing adequate space for the storage of produce, washrooms, space for chemical storage and offices for the operation of the warehouse team. However, there were no wind breaks in the form of trees in all the facilities which was evidence from the state of roofs of the some of the warehouses.

The warehouses were generally constructed on land belonging to communities except for the Drobonso facility which was located on District Assembly land. The arrangement between the MMDAs and the communities is not clear which will need to be further assessed through consultation with the assemblies who facilitate the establishment of the warehouses. The FSRP is currently working with Assemblies to establish the ownership of these land with supported documents.

The Contractor for the works will be required to prepare a Contractor's Environmental and Social Management Plan (C-ESMP) for the rehabilitation and improvement of these four warehouses. This C- ESMP will be reviewed and shaped to manage these warehouses. The main risk identified at the warehouses was fire safety which need to be managed well. The Grievance Mechanism (GM) established by the project will be used for the implementation of these sub-projects giving various stakeholders the opportunities to register and have their concerns appropriately addressed during all phases of the implementation period. The Directors of the District Directorates of Agriculture have been identified as focal persons to receive complaints during the construction and operation phases of these sub-projects. These Directors who are the Secretaries of the FSRP Grievance Mechanism Committees (GMC) have been given training on Alternative Dispute Resolution.

The major environmental and social risk management issues which will feature in the client checklist during monitoring, and which should be well captured by the Contractor's C-ESMP include but not limited to:

- Fire risk management,
- Waste generation and disposal management,
- Traffic management,
- Occupational health and safety management,
- Noise pollution prevention,
- Labour management issues,
- Child labour prevention, and
- Sexual exploitation and abuse/ Sexual harassment etc.

8.0 CONSULTANT INPUTS

Table 3: Input of personnel for the Assignment

| S/N | Description of Consultant | No | Proposed Input Months | | | Total Input Month |
|-----|----------------------------------|----|------------------------------|---------|-----|----------------------|
| | | | Phase 1 | Phase 2 | DNP | |
| 1 | Agricultural Engineer | 1 | 1.5 | 2.0 | 1.0 | 4.5 |
| 2 | Quantity Surveyor | 1 | 1.0 | 1.0 | 0 | 2.0 |
| 3 | ESHS Compliance Officer | 1 | 0.5 | 1.0 | 0 | 1.5 |
| 4 | Clerk of Works (4) | 4 | 0 | 2.0 | 1.0 | 12.0 |
| | | | | | | |
| | Total Staff input-month | | 3.0 | 12.0 | 5.0 | 20.0 |

At the construction stage, the facilities **may** be offered in LOTS for different contractors to bid (after consultation with the client). The consultant is expected to make provision for a Clerk of Works for each site if required.

9.0 DURATION OF THE ASSIGNMENT

The assignment is intended for a total period of Seven (7.0) calendar months, consisting of

- Part 1 -Site Assessment, Determination of Scope of Works per each site, Preparation of site layout and block plans, Preliminary Architectural/Engineering Designs, Detailed Architectural/Engineering Designs aspect shall be completed within 16 weeks (4.0 months). The Assignment is expected to commence by August 1, 2024
- Part 2 Construction Supervision of the Works covering the construction period & Post Construction Defects Notification Period (DNP). Three -months (3) months made up of Two (2) months Construction Period and One (1) month Defects Notification Period (DNP)

10.0 PREPARATION AND SUBMISSION OF REPORTS

Part 1: Design Phase

The consultant shall maintain full and continuous liaison with the Project Coordinator (PC) of FSRP and officers designated by the PC. In addition, he/she shall prepare and submit the reports listed in Table 4 below.

Table 4: Part 1: Design Review Reports

| S/N | Description of Report | No of printed Copies | Timeline | Cumulative Period (M + 0 months) |
|-----|---|----------------------|---|---|
| 1 | Inception Report including Site Assessment Report which includes the full scope of the works. The report must include information on the status of the land together with the site and block plans and access to utility services | 3 | 1.0 months after commencement | M + 1.0 months |
| | Allow for Review of Inception Reports by FSRP | | 0.50 months after submission of inception report | M+1.5 months |
| 4 | Draft Design Report including (a) BOQ, drawings, Technical. specification; and cost estimates (b) Specifications for Equipment | 3 | 1.0 month after acceptance of inception report | M + 2.5 months |
| | Allow for Review of Reports by FSRP | | 0.50 months after submission and acceptance of Draft Design Report | M + 3.0 months |
| 5 | Draft Final Design Report including (a) BOQ, drawings, Technical. specification; and cost estimates (b) Specifications for Equipment The report must incorporate stakeholders' comments submitted to FSRP | 3 | 0.25 months after the stakeholders' review | M + 3.25 months |
| 6 | Allow for World Bank Review and Comments | | 0.5 months after the Draft Final Design Report | M + 3.75 months |
| 7 | Final Design Report incorporating Bank comment submitted to WB for NOL | 3 | 0.25 months after the World Bank review | M + 4.0 months |

All reports must be submitted in soft copies in addition to printed copies. The soft copies must be in Word format for the Review processes. The Final document after NOL from the Bank must be submitted in pdf format.

Part 2: Construction Phase

Phase 2 services will begin as soon as an award decision has been taken. Table 10 below indicates the relevant reports to be submitted during this period.

Construction Supervision Reports

The following reports will be submitted to FSRP with respect to the supervision of the Works and attendance during the DNP:

- Mobilisation Report
- Monthly Reports
- Minutes of meetings
- Final Reports
- Special Reports

a. Mobilisation Report

The Mobilisation Report will describe the planning the Consultant has established for the construction supervision aspect of the Assignment, the staffing plan, and remarks as deemed appropriate. This report will update the methodology and programme of work that was included in the proposal and as a basis for agreed pricing, noting the changes, and detailing any difficulties encountered, together with a proposal on how they may be overcome. FSRP will comment on the Mobilisation Report.

The Mobilisation Report will include at least the following:

- Methodology
- Scoping
- A statement defining the proposed supervision services, including:
 - o methods and parameters;
 - o any changes to the composition of Consultant's team and specialists needed;
 - o methods of consultation with the Contractor, FSRP, MOFA and other identified Stakeholders in line with the recommendations for consultation/methods in the SEP including vulnerable groups and the disadvantaged;
 - Methods of consultation with the contractors, including Quality Assurance and Health and Safety issues;
- Proposed methodology for tracking compliance with World Bank Environmental and Social Standards (ESSs), applicable GOG environmental and labour laws, regulations, EPA and other statutory permit conditions, site-specific Environmental and Social Management Plans (ESMPs) and other relevant E&S instruments, child right act and the World Bank Environmental and Social Standard 2 in relation to child labour prevention and Labour Management Procedures (LMP). Make provision for the implementation of Workplace Grievance Mechanism which also addresses issues related to SEA/SH and violation of child rights, especially the right to not be exploited.
- Detailed program of work, showing time, duration, and personnel deployment as well as the inter-relationship between activities.
- Management of environmental, social, health and safety risks of mobilization activities.

b. Monthly Reports

The consultant shall submit comprehensive monthly reports on the progress of the works. The Monthly Reports will address the following, among others:

- Overall progress of work
- Programme (including forecast) for the coming month
- Activities of Consultant
- Financial forecast and projection of the works
- Revised programme for the completion of Works
- Summary of progress and challenges (including information on the implementation of SEA/SH and child labour mitigation measures)
- All necessary contract data (both financial and physical)
- Environmental, social including SEA/SH and child labour, labour contract information, health and safety risks and impacts management.

d. Minutes of Meetings

The Consultant shall issue comprehensive minutes of regular and special meetings and distribute copies as required. During the Design Phase, the minutes shall be distributed as separate documents. However, during the construction Phase, the minutes of the regular meetings may be attached to the works Monthly Progress Reports or, depending on the circumstances, may be submitted as separate documents.

e. Substantial Completion Report

This shall be submitted prior to issuance of the Taking-over certificate when the Contractor has notified of substantial completion of whole, section, or part of works. This Report shall include the Defects List as well as provide details of the DNP.

f. Final Report

A Final Report, including the approved "As-Built" drawings (to be submitted by the Contractor), will be submitted within four (4) weeks after the issuance of the Final account and Completion Certificate to the Contractor.

g. Special Reports

The Consultant shall issue if the need arises, ad-hoc reports related to the performance of the Works contract. Dispute/litigation or even arbitration, acquisition of land, evaluation of claims, changes of the design, etc. are among the issues the Consultant is likely to be requested to advise on within the scope of the assignment.

The Consultant is required to make provisions in his proposal for appropriate personnel to carry out each part of the services to meet requirements. These are Review of Design and Bidding Documents, Contract Supervision Services, Post-Construction Services and all aspects of environmental and social issues. The reports for the construction supervision stage are summarized in Table 5 below.

Table 5: Part 2: Construction Stage & Defects Notification Period

| S/N | Description of Report | No of | Timeline | Cumulative Period |
|-----|-------------------------|--------|------------------------|-------------------|
| | | Copies | | (M + 0 months) |
| 1 | Mobilization Report | 3 | 0.5 months after | M + 0.50 months |
| | | | commencement of part 2 | |
| 2 | Monthly Report | 3 | At the end of Month 1 | M + 1.00 months |
| 3 | Taking over and a draft | 3 | At the end of Month 2 | M + 2.00 months |
| | Completion Report | | | |
| | Final Account, Issuance | 3 | 3 months after the | M + 3.00 months |
| 4 | Maintenance (Final | | commencement of work | |
| | Completion) Certificate | | | |
| 5 | Consultant's Final | 3 | | |
| | Report including as- | | | |
| | built-drawings | | | |

All reports must be submitted in soft copies in addition to printed copies. The soft copies must be in Word format for the Review processes. The Final document after NOL from the Bank must be submitted in pdf format.

11.0 PROPOSED SCHEDULE OF PAYMENTS

Part 1- The schedule of payments for the Design Phase (Part 1) of the Assignment shall be as follows:

- 20% of the cost will be paid to the Consultant upon receipt and acceptance of Inception Report.
- 50% of the cost will be paid to the Consultant upon receipt and acceptance of Draft Design Report including Architectural and Working Drawings, Tech Specifications, BOQ and Cost estimates.
- 20% of the cost will be paid to consultant when the Draft Final Design Report & Draft Tender Documents are received and accepted.
- 10% of study cost will be paid to consultant when the Final reports are submitted and accepted.

Part 2- The schedule of payments for the Construction Supervision (Part 2) of the Assignment shall be as follows:-

The following schedule of payments is proposed. It is to be concluded during the period of negotiations:

- 20% of the payments will be made on submission of Mobilisation Report in acceptable format
- 60% of the payments will be Periodic/ Interim Payments based on agreed milestones to be negotiated. The consultant is to submit appropriate invoices in accordance with the terms of the contract
- 20% of the payment will be made on submission and acceptance of Final Assignment Report, Final Accounts and "As built Drawings"

12.0 KEY QUALIFICATIONS OF THE CONSULTANT

It is proposed that an Individual Consultant with the requisite qualifications in Agricultural

Engineering is recruited to see to the final determination of the full scope of works including connection to utility services, confirm land ownership and prepare site and block plans (if they are not available), preparation of the bills of quantities and costing. The site plans must be duly signed by a licenced surveyor. The consultant will then supervise the contractor who is procured to carry out the works. In addition to the academic qualifications the person must have the following competencies

- Experience with international donor funded public sector work
- Experience in the design and construction supervision of building works
- Experience in the supervision of rehabilitation of buildings works
- Experience in World Bank Rules for procurement for goods and works, and the use of consultants is required;
- Experience in participatory approach to designing, is essential
- Excellent communication and reporting skills are required.
- Competence in the use of computer-aided design
- Competence in the use of standard office software

12.1 Professionals and Qualifications for

PART I – Assessment, Design and Preparation of Bidding Documents

Agricultural Engineer: is expected to have a minimum qualification of BSc. Degree or its equivalent in a relevant field and at least 10 years post-qualification experience and shall have handled at least 3 similar assignments within the last 5 years at the same position or similar. The person should have been a Team Leader for a similar assignment at least twice and must be a member of the Ghana Institution of Engineering.

NON-KEY PERSONNEL

Quantity Surveyor: is expected to have a minimum qualification of BSc. Degree or its equivalent in a relevant field and at least 10 years post-qualification experience and shall have handled at least 3 similar assignments within the last 5 years at the same position or similar. The person must be a member of the Ghana Institution of Surveyors.

Environmental, Social and Health & Safety Officer should have a minimum of BSc. Degree in any of the following disciplines: environmental science, environmental technology, natural resources management, environmental engineering, or any of the natural sciences, and must possess at least 3 years practical experience undertaking environmental management in the building industry. He/she must additionally possess at least a certificate in occupational health and safety and must have knowledge in social science.

12.2 Professional Qualification for

Agricultural Engineer: is expected to have a minimum qualification of BSc. Degree or its equivalent in a relevant field and at least 10 years post-qualification experience and shall have handled at least 3 similar assignments within the last 5 years at the same position or similar. The person should have been a Team Leader for a similar assignment at least twice and must be a member of the Ghana Institution of Engineering.

NON-KEY PERSONNEL

Quantity Surveyor: is expected to have a minimum qualification of BSc. Degree or its equivalent in a relevant field and at least 10 years post-qualification experience and shall have handled at least 3 similar assignments within the last 5 years at the same position or similar. The person must be a member of the Ghana Institution of Surveyors.

Environmental, Social and Health & Safety Officer should have a minimum of BSc. Degree in any of the following disciplines: environmental science, environmental technology, natural resources management, environmental engineering, or any of the natural sciences, and must possess at least 3 years practical experience undertaking environmental management in the building industry. He/she must additionally possess at least a certificate in occupational health and safety and must have knowledge in social science.

Clerk of Works should have a Diploma in Civil Engineering or CTC III or its equivalent in a related field with 5 years' experience I in supervising building works.

13.0 FACILITIES TO BE PROVIDED BY THE CLIENT

The FSRP shall provide the following to facilitate the work of the consultant:

- Relevant documentation on the 4 no. warehouses such as assessment reports, technical drawings and other reports from AESD-MOFA if available.
- Liaise with PFJ, Relevant MMDAs and FSRP and other stakeholders to facilitate access to, and possession of the various sites for the works;
- Provide electronic copies of the Bank's Standard Bidding Documents for goods and works
- List of Equipment to be provided by AESD and GCX.
- Facilitate the acquisition of the necessary permits as required.

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14.0 PERSONS TO WHOM THE CONSULTANTS WILL REPORT

The Consultant will report to the Project Coordinator of FSRP or his designated representative.

| APPENDICES |
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| Photos showing the google map locations of the various warehouses and current conditions of the warehouses earmarked for Rehabilitation |
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Google map of Nkweaso Warehouse location

Photos showing current condition of facility.





Two gas powered Dryers on a concrete platform

Donkro Nkwanta- Nkoranza

7°23'03.8"N 1°38'20.8"W



Google map of Nkoranza Warehouse location

Photos showing current condition of facility.



Description
Exterior view of the
Donkro Nkwanta
warehouse



Interior view of the warehouse

Asaam-Mampong

7°06'50.4"N 1°27'46.0"W



Google map of Asaam Warehouse location **Photos showing current condition of facility.**

Photo

DescriptionFront view of the Asaam warehouse



Interior view



Maize dryer and cleaning facility installed in the warehouse

Ejura (A & B)



Google map of Ejura Warehouse location

Photos showing current condition of facility.





Interior view showing deep cracks on floor inside the warehouse where the superstructure wall sits on the foundation.