**Government of The People's Republic of Bangladesh**

**Ministry of Food**

**Modern Food Storage Facilities Project –MFSP**

# Terms of Reference for Consultant Services

## Individual Consultant

| | |
|---|---|
| **Assignment title** | **Senior Environmental Specialist** |
| **Assignment duration**<br>**Contract period** | **48 Man-months**<br>**(15 man-month already consumed,**<br>**33 months remaining)** |
| **Primary assignment location** | **Dhaka** |
| **Funding source(s)** | **IDA Project Cr. Number: 52650- BD for**<br>**Modern Food Storage Facilities Project – MFSP** |
| **Contracting entity** | **Project Director**<br>**Directorate General of Food** |

## Context of the Assignment

Government of The People's Republic of Bangladesh has received a grant from the Bangladesh Climate Change Resilience Fund Administered by the World Bank and an IDA credit toward the costs of the Modern Food Storage Facilities Project (MFSP), being implemented by the Directorate General of Food (DG Food), Ministry of Food, and intends to apply part of the IDA credit for Individual Consultancy Services for management of environmental safeguard issues. The overall project development objective is to increase the grain reserve available to households to meet their post-disaster needs and improve the efficiency of grain storage management in Bangladesh.

The Project consist of major 3 components: (i) Development of improved storage system to store grain through the construction of modern grain storage silos at eight strategic sites, provision of grain storage bins to eligible households under a voucher system for safekeeping of rice and other food in the event of disasters and food shortages and implementation of environmental and social safeguard management activities for the Project (Component-A). (ii) Implementation of a food policy research program including, inter alia, a range of priority studies for the development of evidence-based policies, strategies, legal and institutional frameworks for improved food stock management and distribution(Component-B). (iii) Project Management, Construction, Supervision, Technical Assistance, Training and Strategic Studies (Component-C).

The project will be implemented by the Ministry of Food (MoFood) through the DG Food. DG Food will have overall responsibility for project implementation, including fiduciary and safe guards compliance. The DG Food will also be responsible for overall financial management and operation of the designated account. The Food Policy and Management Unit (FPMU, MoFood) will lead the development, management and implementation of the integrated food policy research program under Component B.A Project Steering Committee (PSC), chaired by the Secretary, MoFood, will provide overall guidance and help coordination among various government agencies The project will be implemented over a period of six years. All works will be completed in year four or five of the project and one to two years will be allowed for the warranty period. A Project Management Unit (PMU) has been established nearby the DG Food's office for day–to-day implementation and monitoring of the project activities.

Although most of the sites are already developed, new technology construction and deployment may require land filling and put pressure on utility supply like gas and electricity. Dhaka site will required emollition of existing structures. Location for stacking of demolished debris and management should be planned before hand. The drainage and sewerage facility may also need to be enhanced. The increased traffic flow both road and water ways will have impact on the existing environment.

## Objectives of the Assignment

The overall objective of this assignment is to lead and coordinate, as a core member of the MFSP Project Management Unit (PMU), all aspects relevant to the environmental management and environmental safeguards of the project, in accordance with the provisions of the legal agreements prevailing for the MFSP and in line with relevant government rules and regulations. The construction activities under the proposed project are likely to cause moderate level of environmental impacts. Potential environmental impacts include additional vehicular traffic, air and noise pollution, water contamination, health and safety hazards, and possible damage to the

existing infrastructure/amenities at the sites. However most of these impacts are temporary and reversible in nature and with the help of appropriate procedures and measures, these impacts can be adequately mitigated.

Extensive monitoring of the environmental concerns of the MFSP project will be required as per World Bank operational policy on Environmental Assessment (OP 4.01) guideline. DG Food has prepared and publicly disclosed a comprehensive Environmental and Social Assessment and Management Framework (ESAMF) for the project in response to the requirements defined in OP 4.01 and the national regulatory framework. This document provides the Environmental Framework, the Environmental Assessments for the eight sites proposed for construction, and the project overall Environmental Management Plan. The document has been prepared to provide guideline about the procedure for environmental screening/assessment, identifying environmental code of practice (ECoP), preparation and implementation of site specific Environmental Action Plans (EAP) in accordance with the overall Environmental Management Plan (EMP) and the monitoring and institutional responsibility. DG Food will have to submit quarterly progress reports on environmental management. To ensure adequate environmental compliance, DG Food will appoint a fulltime environmental specialist for the project, who will also develop DG Food office's technical skill on relevant environmental issues.

## Scope of the Assignment

Project Director through its nominated representative, Deputy Project Director and his supports staff, shall work in close association with the consultant with regard to the environmental management of the construction sites. In all environmental management activities the consultant will work directly under and in coordination with the Project Director. Extensive monitoring of the environmental concerns of the MFSP project will be required as per World Bank guideline. The monitoring program will help evaluate: (i) the extent and severity of the environmental impacts against the predicted impacts and baseline; (ii) trends in impacts; and (iii) overall effectiveness of the project environmental protection measures (iv) effectiveness and promptness of environmental, health and safety measures.

The monitoring plans should be included in the Environmental Management Plan (EMP) for specific sub-projects. Moreover, for all types of monitoring, a comprehensive database of the site specific Environmental Impact and Monitoring information should be created, which will help evaluate the impacts easily. A comprehensive site specific EMP which focuses on managing construction and operation phase-related impacts should suffice in managing the potential construction and operation phase impacts. The EMP will be attached with the Bidding Document. The environmental management parameter along with budgeting will be included in the BoQ. The contractor needs to submit an Environmental Action Plan (EAP) based on the EIA, EMP and EMF in line with the construction schedule and guideline. The EAP needs to be reviewed by the consultant and cleared by DG Food and World Bank **i**n accordance with (OP 4.01). All outstanding site-specific environmental assessments and management plans will be completed prior to bid allocation, and bidding documents will be required to include environmental action plan and mitigation costs.

Based on project preparation, DG Food has proposed eight possible silo construction locations based on an initial analysis of fourteen different sites. Further studies will be conducted during first year of project implementation to finalize the choice of sites taking in to account environmental factors and other technical issues. During the preparation phase a partial environmental assessment (EA) had been carried out at the proposed eight sites and an overall project EMP has been prepared. Once it has developed detailed technical and geotechnical's designs for each of the proposed sites, the PMU will be required to develop site specific EMP satisfactory to IDA prior to issuing the invitation to submit bid proposals. Subsequently, all bids submitted will need to include fully costed and budgeted EAP sand SAPs. The EIA and implementable EMP will beaky determinant for final site selection and final design approval. Though there is very little possibility of adverse long-term environmental effects from the construction of the silo facilities, there are some anticipated effects during the construction phase for which proper mitigation measures will be adopted in the pre-construction phase.
The Senior Environmental Specialist will be accountable to the MFSP management for the overall environmental management activities. S/He will facilitate the establishment of a sound Environmental Management System within PMU and supervising all environmental management planning, recording, budgeting and reporting for the management and implementation of the project;

**Key Responsibilities :** The main responsibilities of the Consultant include, but are not necessarily limited to the following:

**Task 1: Review and Updating the Site Specific EIA/EMP**

(i) Review the detailed engineering design of silos of each site and share with the local communities – beneficiaries and likely affected persons, and seek their feedback.

(ii) Have dialogue back with the design engineers and planners to further review the engineering design to avoid environmental negative impacts.

(iii) Preparing site specific environmental management parameters based on the EIA, EMP and EMF along with budget (cost estimate) in coordination with other consultants which will be included in the BoQ of the bidding documents. Prepared EMP will also be attached with the bidding document. Ensure the EMP for each site is prepared in line with the general EMP embedded in the ESAMF report. Update the environmental assessment of the preliminary sites

- When location of the construction camp, stacking of construction material and dismantled material will be finalized, type, time and number of equipment, vehicles, etc to be used by the contractors will be selected, plan of traffic will be completed, and the contractor's work plan will be received.
- If discrepancy in the baseline information of any site is observed
- If any aspect with environmental consequence is overlooked and needs to be addressed

(iv) Conducting all outstanding site-specific environmental assessments and management plans which should be completed prior to bid allocation in conformity with the government's commitment as per the legal documents of the MFSP;

(v) Assisting PMU to finalize the choice of sites taking into account environmental factors and other technical issues based on further studies conducted during first year of project implementation and to develop site specific EMPs satisfactory to IDA prior to issuing the invitation to submit bid proposals. The EIA and implementable EMP will beakey determinant for final site selection and final design approval.

(vi) If any new site is selected ensure the detail environmental assessment along with site specific EMP.

(vii) Any other tasks as assigned by the PD on updating the EIA of 8 sites.

**Task 2: Monitoring and Evaluation: Implementation of EMP**

(i) Review and approve the Contractor's Environmental Action Plan (EAP), as per the EMP;

(ii) Liaise with the officers in each field office and make spot checks during implementation to ensure that environmental plans are being properly implemented;

(iii) Liaison with the Contractors, Construction Supervision consultant for the Implementation of the EMP;

(iv) Dialogue with the project affected persons (PAPs) and ensure that the environmental concerns and suggestions are incorporated and implemented in the project;

(v) Report to the PD on the environmental aspects pertaining to the project.

(vi) Update of Environmental Management Plan and Environmental Impact Assessment after receiving information from the contractors and design consultants.

(vii) Supervise construction work and monitor the implementation of mitigation measures under the Environmental Management Plan

(viii) Conduct regular field visit during the project implementation to ensure environmental safeguards are being properly conducted;

(ix) Supervise and monitor of the project activities in the field level and provide technical advice to ensure compliance of the mitigation measures by the Contractors;

(x) Monitor the disclosure of project environmental safeguard documents throughout the project cycle, including the EMF/ EIAs/EMP at the local, regional and national level;

**Task 3: Documentation & Capacity Building**

(i) Assist in the preparation of bid documents and construction contracts to ensure that environmental safeguards are incorporated;

(ii) Contribute to the environmental part of the monthly, quarterly, annual, midterm and final reports and Emergency Action Plan;

(iii) Document the experience in the implementation of the environmental process;

(iv) Responsible for maintaining Site Specific Database for Environmental Management and ensuring Update of Database for site specific environmental information

(v) Assist the PD to arrange for the Environmental Auditing and follow up action on the Audit recommendation.

(vi) Assist in development of training program with regard to the environmental aspects of the project for the key stakeholders (DG Food, contractors, public representatives and local government institutions) in collaboration with the field level junior Environmental Specialist;

(vii) Assist in capacity building of the responsible people for operation and maintenance

(viii) Guide and assist the PD and the key stakeholders (DG Food contractors, public representatives and local government institutions) to strengthen the environmental management practices in Steel Silo construction

(xi) Assist the DG Food at site by providing appropriate environmental advice, and developing appropriate environmental mitigation measures for each site;

(xii) Assist field level junior environment specialist to resolve any environment related issue in the project.

(xiii) Writing a 'Standard Operating Procedure (SOP)' for mitigating environmental problems arising during the construction period and also post construction period.

(xiv) Closely coordinating with all the implementing agencies of various components of the project to ensure mitigating environmental problems arising during the construction period in accordance with the stipulated IDA guidelines and rules and regulations of GoB.

(xv) Produce the corresponding chapter on Environmental Safeguards in the Project Implementation Manual (PIM).

(xvi) Assisting PMU in the creation of a comprehensive database of the site specific environmental impact and monitoring information for all types of monitoring which will help evaluate the impacts easily.

(xvii) Helping to develop DG Food office's technical kill on relevant environmental issues.

(xviii) Advising the Technical Specialist/Supervising consultants/Contractors for mitigating environmental problems arising during the construction period.

The Consultant will work closely with the MFSP Project Management Unit and coordinate all relevant activities with other units of DG Food and DG FPMU. The consultant will sit in PMU office in Dhaka at convenient location from DG Food office to whom s/he will be reporting on a day to day basis. S/He will work in close collaboration with the other staff in the PMU.

**Expected Outputs & Deliverables**

The Consultant will need to produce the following:

| No | Description | Reporting Time |
|---|---|---|
| 1 | Quarterly progress reports on environmental management. The report will cover: (a) the progress of each component, implementation of key features of the environmental management plan, | Quarterly, no later than 7 days after completion of the quarter. |
| 2 | Annual progress reports on environmental management. The report will cover: (a) the progress of each component, implementation of key features of the environmental management plan, | By 15 August of eachyear |
| 3 | Corresponding chapter on environmental Safeguards in PIM . | 1st Month |
| 4 | Oversee production of comprehensive site specific EMP incorporating monitoring plans which focuses on managing construction and operation phase-related impacts that should suffice in managing the potential construction and operation phase impacts. | During first year of project implementation (By 30 June, 2014) |
| 5 | Assist PMU to finalize the choice of sites taking into account environmental factors and other technical issues based on further studies conducted during first year of project implementation and to develop site specific EMPs satisfactory to IDA prior to issuing the invitation to submit bid proposals. The EIA and implementable EMP will beakey determinant for final site selection and final design approval. | During first year of project implementation |
| 6 | Comprehensive database of the site specific environmental impact and monitoring information for all types of monitoring which will help evaluate the impacts easily. | During first year of project implementation |
| 7 | Writing a 'Standard Operating Procedure (SOP)' for mitigating environmental problems arising during the construction period and also post construction period. | During first year of project implementation |
| 8 | Periodical reports following formats and guidelines of IMED and Bank respectively. | Whenever necessary |

**Consultant qualifications and expertise required:**

The Senior Environmental Specialist should have the following academic qualification, skill and professional experiences:

**Education :** Post Graduate (Masters) in Environmental Science or equivalent degree. Civil Engineering background will be an added advantage.

**Experience:**

- Minimum 10 (ten) years of relevant working experience with advance knowledge, obtainable usually through a combination of experience and continuing education; or Equivalent combination of education, training and experience ;
- Experience in working with multiple discipline projects ;Experience with foundation engineering background will be preferred.
- Experiencewithensuringoccupationalhealthand safetyis must.
- Experience of working with silo construction will be preferred ;
- Experience of working with IDA/ADB funded project as Environmental Specialist will be preferred.

**Specific Abilities and Skills:**

- Excellent proven report writing skill on Environmental issues ;
- Excellent computer skills (MS Word, Excel and internet) ;
- Strong interpersonal communicative skills, experience in team leadership and participatory management;
- Ability to impart training to the project staff on different Environmental issues followed by world Bank and Government of Bangladesh;
- Must possess excellent communication skills in English, both written and spoken.

**Reporting and supervision arrangements:**

The consultant will report to The Project Director; Directorate General of Food .

**Responsibilities of the Contracting party**

MFSP will provide office space and relevant institutional support needed to carry out the assignment. The contracting authority will provide all relevant reports, maps, data and studies as are available. The Employer will provide any other assistance not readily available that the consultant may reasonably request, including liaison with the Government and other agencies concerned.

# Annex 1

## Brief Description of the Project
**Modern Food Storage Facilities Project (MFSP)**

### Project Description

The major component of the project is an improvement of silo storage system to store milled rice (and wheat to a lesser extent) with a total capacity of around 535,500 tons. Subject to full compliance with the requirements in the publicly disclosed ESAMF and prior completion of all complementary site-specific studies and analyses required, the silos would be constructed at about eight sites in various strategic locations across the country. The eight sites proposed are on land currently owned by the DG Food, and no land acquisition will be required. BCCRF funds are expected to be used for silo construction at the Narayangang site. Subject to the above requirements or in the event that end-of-construction date atthat site would go beyond the BCCRF Grant Agreement closing date, these funds could be used for the silo construction at another project site, subject to prior consultations and approval by the BCCRF Management Committee.

### Overall Project Objectives:

The overall project development objective is to increase the grain reserve available to households to meet their post-disaster needs and improve the efficiency of grain storage management.

### Specific Objectives of The Project:

### The following are the key objectives of the project

(i) Increased availability of grain stocks immediately following a major disaster event;
(ii) Increased number of households whose grain needs can be met immediately after the disaster;
(iii) Improved efficacy of the grain storage system, and monitoring and management of the food stock in the country;
(iv) Reduced loss in grain stocks relative to pre-project losses;
(v) Reduced cost in storing foods and its transportation and distribution;
(vi) Ensured better monitoring, and improved governance and management of food stocks;
(vii) Achievedhigheroperationalefficiency;
(viii) Minimized Land area required;
(ix) Ensured higher security against pilferage; and
(x) Minimized insect pest infestation and grain moulds.

## Description of the Project Components:

### Component A – Construction of Modern Grain Storage Silo Facilities

**The primary objective of this component is**: i) to improve the storage capacity for grain at the country level by financing the construction of modern steel silos for rice and wheat, that will be built in accordance with social and environmental sustainability parameters and safeguards compliance criteria; and (ii) facilitate the access of households to domestic silos for food grain and seed storage, to improve household level food security during and after natural disasters. This component would include: (A1) Public storage facilities in the form of modern grain storage silos; (A2) Household level storage facility or family silos particularly in the disaster prone areas of the coastal zone; and (A3) Implementation of social and environmental management plans.

### Component B – Support for Food Planning and Monitoring Program.

**The objective of this component is threefold:** i) enhance the institutional capacity of DG Food and FPMU and support these agencies in carrying out their respective mandates; ii) address analytical gaps and support the development of an evidence-based policy framework to improve the efficiency and performance of the country's overall food storage system and management of strategic grain reserves, and iii) improve the coordination of public agencies (in particular DG Food and FPMU with MoDMR) involved in procurement, public storage, and distribution of food grains, as well as disaster relief. FPMU is responsible for monitoring of the food situation in the country and the implementation of related policies, while DG Food is responsible for physical procurement and management of government food stocks in accordance with agreed food security policies including the supply of food to the disaster-affected population, through relief and rehabilitation programs. The component will contribute to reconciling policies and public interventions: i) on food distribution (taking into account short and longer term storage capacities), ii) in response to incremental demand for food grain in post-disaster situations, and iii) aimed at achieving price stabilization for coarse grains normally consumed by the poor and vulnerable.

Activities supported under this component will directly contribute to enhancing the coordination between MoFood and MoDMR agencies, and to improving the decision-making process on food storage, food distribution, and market intervention on the basis of up-to-date, sound and informed analyses. Subsequently, the Bank expects GoB to follow up on these policy recommendations with concrete policy actions and/or improvements to relevant regulations and institutional arrangements that address key questions around enhancing the efficiency and performance of the food storage and food distribution system. To that effect, a range of studies will be developed, undertaken and disseminated under Component B to answer the following strategic challenges: (a) the 'optimum' volume of grain to be stored and its implications on GoB's policies; (b) impacts of GoB food market interventions on price stabilization and broader food markets; (c) improvements in enabling environment to promote a sustainable participation of private sector; (d) strategy for disposing of the grain stored in the modern facilities; (e) current physical condition of the existing public storage facilities; (f) policy, legal and institutional framework, and technical requirements for nutrient fortification; and (g) introducing warehouse receipt system.

**Component C - Project Management, Construction Supervision, Technical Assistance, Training and Strategic Studies.**

This component will finance costs required to ensure adequate overall management of the project, monitoring and evaluation of the activities implemented, and capacity enhancement of selected stakeholders. It will include: (C1) project management of the task, incremental staff and expenditures of the DG Food in implementation of the project, the costs for implementing the Governance and Accountability Action Plan (GAAP), including a panel of experts, as needed, a procurement panel, audit and other such costs; (C2) cost of consultants for preparation of bidding documents, construction supervision and updating of designs required during the construction; this would among others include costs for construction supervision, monitoring and evaluation of project impacts; (C3) provision of technical assistance, training, institutional capacity building, preparation of future projects, and any strategic studies needed during project implementation and not covered under Component-B.