Government of the People's Republic of Bangladesh

Ministry of Food

Modern Food Storage Facilities Project (MFSP)

Terms of Reference for

Financial Management Information System (FMIS) Software

Package Name	**Financial Management Information System of Modern Food Storage Facilities Project**
Package Number	**SD- 22**
Assignment duration	**6 month** **From 01 January 2015 to 30 June 2015**
Primary assignment location	**Dhaka**
Funding source(s)	**IDA Project Cr. Number: 5265-BD for Modern Food Storage Facilities Project (MFSP)**
Contracting entity	**Project Director** **Modern Food Storage Facilities Project** **Directorate General of Food** **Ministry of Food**

1. Context of the Assignment

Government of The People's Republic of Bangladesh has received an IDA credit toward the cost of the Modern Food Storage Facilities Project (MFSP), being implemented by the Directorate General of Food, Ministry of Food, and intends to apply part of the credit for Individual Consultancy Services. 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.

The Project consist of major 3 components: (i) Development of an improved silo storage system to store grain through the construction of modern grain storage silos at eight selected 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 identified in the ESMPs and/or RAPs 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 through the DG Food. DG Food will have overall responsibility for project implementation, including fiduciary compliance. The DG Food will also be responsible for overall financial management and operation of the designated account. FPMU will lead the development, management and implementation of the integrated food policy research program under Component-B. The 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.

A dedicated Project Management Unit (PMU) has been set up for the implementation of project components. At present in the Project, there is manual financial record keeping system which results in delay in record keeping as well as reporting system. Therefore, it is very essential to introduce computerized accounting system.

2. Rationale of the FMIS

The Financial Management System (FMIS) aims to serve as a management tool for the project to ensure accuracy , transparency ,timeliness and completeness of audit trail in financial management practices as per the World Bank and the Government of Bangladesh financial management practices.

3. Objective of the Assignment:

The overall objective of this consultancy is to develop an efficient and flexible Financial Information Management and Reporting System which will facilitate timely submission of accurate and comprehensive financial data from the project for financial reporting.

The proposed consultancy work will develop FMIS software which will be utilized by Project Management Unit (PMU) and eight site office for managing all financial transactions and reporting. The consultant/Firm will develop appropriate software which will be helpful to generate monthly / quarterly / annual financial reports of GoB system, Quarterly Financial Monitoring Reports (SoE/IUFR) for World Bank System, Project Financial Statements for C&AG audit, and other related financial reports as required by the World Bank and GoB. The consultant will also provide training and ongoing support to maintaining the FMIS system. The proposed software should be an ERP-based integrated system for accounting, project monitoring and report generation for the stakeholders.

3.1 The list of requirements from FMIS are as under:

1. Reporting Requirements

a) Reporting to the World Bank (IUFR etc)
b) Reporting to the GOB (IMED, Ministry etc)
c) Management Monitoring (e.g. Sub-Project Reports etc)
d) Real time financial information for management decision .
e) Other additional reports as may be required and specified

2. World Bank Reports (Qtly IUFR):

1) 1-A Project Sources and Uses of Funds
2) 1-B Uses of Funds by Project Components
3) 1-C Project Cash Withdrawals (Disbursement)
4) 1-D Designated Accounts (DA) Activity Statement
5) 1-E Projected Cash Forecast Statement
6) 2-A Designated Account Expenditure for Contracts/Subject to prior Review
7) 2-B Designated Account Expenditure for Contracts/Not Subject to prior

3. GOB/IMED Reports:

8) Project Monitoring Form: IMED 02/2003 (Annual)

9) Project Monitoring Form: IMED 03/2003 (Quarterly)

10) Monthly Implementation Progress IMED 05 (Monthly)

4. FAPAD Audit :

11) Project Financial Statement (Annual)

Internal Audit : Documentation on internal control components .

5. Management Reports:

12) Accounts report by contracts/Sub-Projects
13) Accounts report by GOB Economic head (Ledger Accounts)
14) Accounts report by project component head (Ledger Accounts)
15) DPP financial progress & RDPP Preparation
16) GOB budget utilization report
17) Trial Balance
18) Contracts/Sub-Projects Monitoring Reports

6. Books of Accounts:

- Chart of Accounts
- Annual Work Plan/Budget
- Budget & Comparative Statement
- Cash & Bank Book
- Statement of Expenditure(SoE , as world Bank Format)
- General Ledger
- Receipts & Payment Accounts
- Bank Reconciliation
- Voucher
- Bill/Invoice

7. Registers:

- Bill Register
- VAT & AIT Register
- Fixed Assets Register
- Pay roll Register
- Vehicle log book Register
- Leave Record Register
- Withdrawal Application Register

4. Scope of the Work

The consultant will be responsible for requirement analysis, system design, development/customization of the software, Testing and rolling out the FMIS in MFSP offices including PMU and eight site office. The following sections describe key tasks, system design guidelines and components for the FMIS.

4.1 Key tasks

The consultant will perform the following key tasks to design and develop/customize, test, and install a FMIS in the MFSP servers within the stipulated time of 180 days:

4.1.1 Requirement analysis

The Consulting firm will conduct a requirement analysis to define detailed user requirements for the FMIS based on business requirements of MFSP at various levels – PMU, DG Food, FPMU and Site office including:

a) identifying the FMIS stakeholders (all who have a role in data acquisition, processing, reporting, or use/decision making);

b) identifying of detailed reporting requirements for financial management of the project;

c) identifying the various types of reporting content, formats, and frequency;

d) determining of various types of information to be catalogued and stored in the FMIS relating to the accounts and financial management of various activities of the project;

e) identify basic information flow requirements (into, within, and out of the FMIS);

f) preparing detail design recommendations in a Systems Requirement Study for the proposed FMIS. The design should be based on close interaction with the Client and be flexible to incorporate changes in activities or future phases of the project.

In the requirement analysis phase, the consultant will review the project documents (Development Project Proposal (DPP), Project Appraisal Document(PAD), and Project Implementation Manual(PIM), in particular) to understand project's objectives, activities and implementation mechanism; review existing Results Framework, Financial Management Tools and Reports to ascertain data needs; discuss with project management and find out data needs and information flow; review the data capture tools, if any, and propose data capture mechanism from the field to use FMIS effectively; and produce a Requirement Analysis Document, share it with the project and get approved.

4.1.2 Design and Development of Software

Once the Requirement Analysis is completed, the consultant will produce design document detailing all key aspects of design (FMIS structure, report formats, information flow, deployment mechanism, additional hardware/ software/ data/ connectivity requirements, institutional arrangements, etc.). The design document must be shared with the client and be agreed upon.

Based on the agreed upon design document, the consultant will develop/customize the FMIS software (preferably web based), conduct unit and functional testing for bug reporting and debugging. Throughout the development process, the consultant will update the client and show incremental progress to rectify design errors at the early stage of development.

4.1.3 Testing of Software

Once a functional version of the FMIS software is developed/ customized, the consultant will provision it for testing at all operational levels including site offices and PMU levels. The test is to ensure that the software and accompanied methodologies of data capture, entry, reporting, access control, data flow, etc work as intended in the design document. At the end of the successful Testing of the system test, the consultant will submit the Testing report and finalize the FMIS software based on the findings from Testing.

4.1.4 Capacity Building of Relevant Staff for FMIS

The primary activities of the Consultant in this phase will include:

a. Operational Arrangements: The Consultant will suggest appropriate mechanism in the MFSP project structure (based on site visits and interviews) that can effectively manage the various FMIS-related tasks – such as data entry/capture, computerization, validation, processing, reporting, and use, as well as effective systems administration, security, updating, and sustainability.

b. Documentation and Training: The Consultant will develop electronic and hardcopy documentation for all aspects of the FMIS and will provide appropriate training to relevant FMIS stakeholders. This will include on-the-job support and handholding (including in-person, telephone and on-line support), as well as formal courses at regular intervals throughout this assignment. Quantity etc

4.1.5 Support for Operation and Maintenance

Once the FMIS is finalized, the consultant will perform the following activities for continuous support for operation and maintenance of the FMIS:

a) Prepare final operational and technical documentation (which includes requirements documentation, design documentation, technical documentation, source code, data flow diagrams) and provide with both hard copy and soft copy.

b) Prepare and develop Training Documentation for providing training to resource personnel of MFSP PMU and field staff to operate FMIS (in hard copy and electronic version).

c) Train resource personnel from PMU MFSP for maintenance and troubleshooting

d) Provide 1 (one) year warranty after implementation of FMIS in MFSP server

e) Provide system support and maintenance for 3 (three) year after implementation of FMIS in MFSP Server.

f) Handover necessary source codes and software for future use for FMIS maintenance by MFSP in hardcopy and CD/DVD media.

4.2. Guideline for Development of FMIS

This guideline presents mandatory requirements for design and development/customization of the FMIS for MFSP. In design and development of FMIS for MFSP following guidelines must be followed:

a) The system design will be based on multi-layered, multi-tiered, distributed and modular open system client-server architecture.

b) The system must have the capability and flexibility to support scalability having scope of expansions in transaction volume, data volume, application functions, business applications and business models.

c) The system components shall be modular in order to allow future revision, extension and/or replacements.

d) The system shall have Information Security Policy, Access Security Policy and Data Security Policy focusing on the mechanisms to achieve confidentiality, integrity and availability, which shall act as the prevention of unauthorized disclosure, modification, and withholding of information.

e) The Key Technology elements of the system must be based on open industry standards following best practices supported by major vendors or consortium of vendors.

f) The system should be capable of generating the following types of reports:

I. Generation of all necessary statistical system reports

II. Generation of required financial management information report.

III. All reports those will be revealed and agreed upon at the requirement analysis phase.

IV. Design new reports using report design tool.

V. Report exporting capabilities in different formats like MS Excel, PDF, MS Word, etc.

g) For each and every report, data export in PDF, XLS and RTF format must be supported. There must be feature for offline data entry using XLS/CSV format and importing to the system later.

h) Appropriate Access Control, authorization and authentication system must be in place so that users at different levels of the project organization can perform certain tasks as per their defined roles.

i) While the major burden of collecting, reporting and transmitting information is to be borne by the project staff, the FMIS design should ensure that it does not impose a high work load at any level in the organization and at the same time there is no information/data 'overload' at any level. The design should be intelligent to minimize data entry during routine use (e.g. drawing upon lists, dynamic menus/options, avoiding repetitive and unnecessary entries, etc.).

j) Enough documentation should be made to support system development life cycle of application system including System Specification, Design Document, Technical Manual, User Manual, Acceptance Test Report, List of Known Bug/Defects etc.

5. Methodology

The consultant will have to clearly spell out technicalities of developing and implementing web-based FMIS. The methodology will have to describe ways to achieve fast operation with the developed FMIS.

The methodology will describe in details, design of the modules and key technologies. The methodology must also describe in details the security and access control in web architecture and data back-up methods.

The developer will keep in mind the following:

a) System security Requirements

b) Ability to upgrade system as per user requirement

c) Simple content development tools

d) Multilayer Access Control System

e) Extensibility

The methodology should focus on the above dimensions and be flexible enough to accommodate change in the design and development process as per the client's need.

6. Staffing Plan

An indicative staffing plan is proposed. The bidder should propose the person-days required for each staff, keeping in mind that the entire project has to be completed within 180 days, including handing over of source code, preparing training documentation and debugging. At least following key positions are required:

S/N	Position	No. of Persons (Indicative)	Person days proposed
1	Systems Manager	1	
2	Senior System Analyst	1	
3	Application Development Expert -Web	1	
4	Quality Assurance Tester	1	
5	Software Trainer	1	

7. Reporting

Consulting firm/consultant will be directly reporting to Project Director, MFSP and work in close coordination with the Senior Financial Management Specialist of the project on regular basis. The project will ensure the necessary technical linkages between the employee and key stakeholders and will also provide required information and other materials to facilitate the process.

All produced materials would be the property of the project. By no way, without authorized permission from MFSP can any of these be handed over OR reported to other person and/or organization OR be presented/published anywhere else - nor even after the completion of the contract.

8. Eligibility of the Firm

The consulting firm should fulfill the following requirements:

- Legal establishment for a minimum of three years (proven document)
- Experience in similar assignments with proven track record of development of accounting software, database application, and financial management.

Besides the above the following are required for eligibility:

a) Proven experience to develop and maintain web based application using open technologies or other rapid application development framework following highest professional standards.

b) Proven track record of delivering high quality, web based custom solutions on time and within budget.

c) Proven experience of undertaking similar assignment.

d) Company has sufficient experienced core professionals specialized in developing large and complex web application, database and FMIS.

e) The organization must have the necessary relevant hardware, software(s) and tools.

f) Required Documents: The company must furnish the following documents:
    a. Company Registration,
    b. Financial statement (last Year)
    c. Audit Reports (Last 2 years),
    d. Bank Solvency Certificate,
    e. Project completion certificates from clients for similar projects,
    f. Technical Methodology,
    g. Resource personnel qualification for the project,
g) Logistics support including computer hardware, software licenses and other testing tools, training facilities, transport and office space.

9. Selection Criteria:

The consultant/firm shall be through "Selection Based on the Consultants' Qualifications (CQS)" method of the World Bank's Guidelines-Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers January 2011. Main criteria for the selection will be relevant work experience and qualification.

10. Expected Deliverables

At the end of the assignment, the consultant shall deliver the following:

Stage 1

a) Requirement Analysis document identifying information need, data flow and frequency of data collection;
b) Design document detailing the architecture, modules, data input and out methods for FMIS;
c) Report on capacity development of MFSP PMU and Site Offices for operation of the FMIS;

Stage 2

d) Final version of FMIS for MFSP;
e) Training of MFSP personnel.
f) Electronic and hardcopy documentation of all aspects of FMIS developed/ customized; and
g) Electronic and hardcopy of Training Manual.

11. Timeframe

The consultant will submit detail time frame for completing the assignment in light of the following tentative timeframe for the milestones.

Task/Output	Description	Deadline / Time
Requirement Analysis	Must submit the finalized requirement analysis document within 1 month after signing the contract with the client.	Within 15 days
Design and Development of Software	Must submit the detailed design document and get approval within 1 months after the requirement analysis phase.	By 1 month

Task/Output	Description	Deadline / Time
Software ready for testing	The software must be developed as per approved design document and be ready for Testing.	by 2nd month
Testing	Testing of the software must be finished by 3rd month of after awarding the contract and submit the Testing report.	by 3rd month
Capacity building trainings	Conduct capacity building training on FMIS operation and management for PMU and RPIUs. No of trainee: Venue: Arranged by:	Before formal go-live
Deployment of Finalized FMIS	After finishing the Testing, the consultant must produce the finalized FMIS ready for deployment in all offices. (How many?)	By 4th month
Submission of Documentation	Submit finalized documentation on software design, administration and training, and source code of the software.	By 4th month.

12. Payment Terms:

Payments shall be made **in line with agreed-on outputs** according to the following schedule:

- **Requirement Analysis Report, Design document and Testing report:** Twenty (20) percent of the lump-sum Contract Price shall be paid upon submission of the Requirement Analysis Report duly accepted by the Client.
- **Completion Report:** Seventy (70) percent of the lump-sum Contract Price shall be paid upon submission of the Final Report (including report on capacity development, final deployment of software, submission of source code and software documentation) duly accepted by the Client.
- **Final Report:** Ten (10) of the Contract amount after the Warranty period of One Year

VAT and Advance income Tax will be deducted from the consultant bill as per GoB rules.

The consultant firm shall be produced invoice with complementation of the assignment conditioned for the payment of each installment.

Annex- 1

Brief Description of the Project

Modern Food Storage Facilities Project (MFSP)

Project Description

1. 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 at that 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 Objective:

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 Objective 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) Achieved higher operational efficiency;
(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.