Government of the People's Republic of Bangladesh
Directorate General of Food
Modern Food Storage Facilities Project (MFSP)
Probashi Kallayan Bhaban (Level-17)
71-72, Eskaton Garden, Dhaka-1000.
www.mfsp.gov.bd

Memo No: 13.01.0000.362.11.227.18. 458 Date: 07 /04/2019

REQUEST FOR EXPRESSIONS OF INTEREST (CONSULTING SERVICES– FIRMS SELECTION)

Bangladesh
Modern Food Storage Facilities Project (MFSP)
IDA Credit No. 52650-BD

Assignment Title: Feasibility Study for the Construction of a Concrete Silo of Capacity 50,000.00 MT with ancillary facilities at Payra Sea Port. (Firm)

Reference No: SD-42

The Government of Bangladesh has received for financing from the International Development Association (IDA) towards the Modern Food Storage Facilities Project (MFSP) and intends to apply part of the proceeds to payments for the consultancy services.

The consulting services ("the Services") include detailed feasibility designs for the proposed storage facilities, the consultant will carry out, but not limited to, the following:

1. Carry out necessary topographical survey and Geo-technical investigations (SPT, CPT and Vane Share Test) for Silo using appropriate technology on the ground and satellite imagery, GIS and other computerized systems to gather data, necessary for providing most optimal solutions, storage facilities considering technical, economic, social and environmental aspects;
2. Develop technical/functional specifications for the storage facilities that can easily be customized for specific site conditions during the detailed design stage by the contractor, and determine criteria for design to minimize the cost and improve performance requiring least amount of O&M during operation;
3. Prepare estimates in the form of Bill of Quantities of construction and price schedules of materials, equipment with appropriate physical and price contingencies, and breakdown by major work items;
4. Prepare item wise Computer Aided Design and corresponding drawings.
5. After approval of design, the consultant will have to prepare detailed design & drawing including bidding documents, technical specification, BOQ for the mechanical, electrical and electro-mechanical equipment and civil works as well as preparation of DPP.

The Directorate General of Food now invites eligible national/international consulting firms ("Consultants") to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. The short listing criteria are:

1. Registration details of the applicant including certificate of incorporation, memorandum of Association and Article of Association, as appropriate
2. General experience of the firm in the relevant field including existing professionals working in the organization.

3. Annual turnover of the applicant with audited statement of Comprehensive Income.
4. Proven track record of consultancy for detail design of grain silo with Jetty;
5. Experience of the applicant in similar complex assignments.

The attention of interested Consultants is drawn to paragraph 1.9 of the World Bank's *Guidelines: Selection and Employment of Consultants [under IBRD Loans and IDA Credits & Grants] by World Bank Borrowers* [updated January 2011] ("Consultant Guidelines"), setting forth the World Bank's policy on conflict of interest.

Consultants may associate with other firms in the form of a joint venture or a sub-consultancy to enhance their qualificationsbut should mention specifically whether the association is in the form of a "joint-venture" or of "sub-consultancy". All members of such an association should have real and well-defined inputs to the assignment, and it is preferable to limit the total number of firms in the association to three.

The consulting firm will be selected through **Quality and Cost Based Selection (QCBS)** procedure of World Bank Guidelines for Selection and Employment of Consultants under IDA Credits & Grants by World Bank Borrowers updated January 2011.

Further information can be obtained at the address below during office hours [*0900 to 1700 hours*].
Expressions of interest must be delivered in a written form to the address below in person, or by mail or by email to gaziur60@gmail.com with a copy to SPS@mfsp.gov.bd by 5 May 2019.

The Terms of Reference (TOR) of the above services are available in the MFSP Website (www.mfsp.gov.bd) or can be obtained upon request either through email to sps@mfsp.gov.bd or in person from the under mentioned office during office hours as mentioned above..

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07/04/2019

(Md. Gazi Ur Rahman)
Project Director (Addl. Secretary)
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Government of People's Republic of Bangladesh

Directorate General of Food
Terms of Reference (TOR) of the Consulting Firm
for
The Construction of a Concrete Grain Silo of Capacity 50,000 MT with ancillary facilities at Payra Sea Port.

Assignment Title	: Feasibility Study
Assignment Duration	: 12 (Twelve) Months
Contract Period	: July 2019-June 2020
Primary Assignment Location	: Dhaka
Source of Funding	: IDA Project Credit No. 5265-BD from Modern Food Storage Facilities Project (MFSP)
Contracting Entity	: Project Director, Modern Food Storage Facilities Project

31.03.19 31.3.2019 31.3.19

TERMS OF REFERENCE (TOR) of the Consulting Firm for the Feasibility Study for the Construction of Concrete Grain Silo of Capacity 50,000 MT with ancillary facilities at Payra Sea Port.

1. BACKGROUND:

Bangladesh is highly vulnerable to natural disasters and climate change, facing frequent extreme weather events that cause serious damages to infrastructure, crops, and the overall economy. Bangladesh's vulnerability to widespread floods, severe droughts, and super cyclones is particularly acute for the rural poor; almost 80 percent of Bangladesh's population lives in the rural areas, with around 26.4 percent of the rural population classified as poor. For many poor rural people, reliance on subsistence agriculture means that the impact of climate shocks and stresses are likely to have negative implications for their food and livelihood security, human capital and welfare.

Payra Sea Port is the 3rd sea port of Bangladesh located in general area in between latitude 21°15'- 22°00' North and longitude 90°00'- 90°30' East on the bank of Rabnabad Channel under Kalapara, a sub district of Patuakali. In order to increase the economic activities in the central zone and meet the future demand, Payra Sea Port Act 2013 was passed in National Parliament on 10 November 2013. Honourable Prime Minister Sheikh Hasina inaugurated country's 3rd seaport named as "Payra Sea Port" at Rabnabad Channel at Patuakhali district on 19 November 2013.

Projected climatic changes and rise in the sea level are likely to worsen the situation; climate change is anticipated to lead to more intense and frequent cyclones, floods, and droughts, as well as sea level rise and associated salinity intrusion in the coastal areas leading to growing pressure on ensuring adequate food security and nutrition. This pressure on nutrition and health will be particularly acute for women and children, who face difficulties in the aftermath of a natural disaster event. Growing climate variability and natural disaster risks is anticipated to increase pressure on the Government of Bangladesh to effectively distribute food packets and food aid as a part of its post-disaster recovery programs.

Although the population of the country has substantially increased during the last decade, the effective storage capacity of MoF has not increased as required. This has been created a great impediment in tackling the volatile food grain market situation. The Govt. is very keen to address such situation effectively which requires an affordable security stock. With this view the govt. has planned to increase the storage capacity by additional 9.00 lakh MTs by i.e. within the Seventh Five Years Plan (SFYP)

In view of the global food market context, the Government of Bangladesh needs to maintain a higher food stock in the future in order to achieve food security during crisis. Also Public food stock need to increase to support an expanding safety net programmes. Sudden sharp increase in food prices along with normal seasonal upward movement of prices will also require larger public intervention to have an effect on the expanding market. Further, increased frequency of natural disasters with greater damage to economy requires higher emergency food operation. The size of the stock will depend on the size of the PFDS and other factors including anticipated food grain situation in domestic and international markets and trade polices of exporting countries. Proper management mechanism that ensure quality and effective distribution are key to taking full advantage of these stocks and reducing the vulnerability of Bangladesh to external shocks.

Some of the conventional Good godowns are recently built but many of those are built many years ago. Though the Directorate General of Food conducts regular repair and maintenance works of the godowns, some of those are not functional and some will become abundant in near future. At present there are 7 (seven) Silos of DG Food. Four Silos in Chittagong, Narayangonj, Ashugonj and Santahar are in good condition though these were built in 1970. A new Concrete grain Silo with ancillary facilities having capacity of 50,000 Tons at Mongla port was constructed in 2016. A Multi Storied Warehouse for storage of rice having capacity of 25000 MT was completed. The Government has received an IDA credit toward the cost of the Modern Food Storage Facilities Project (MFSP) and is constructing steel silos in 8 (eight) different sites to store more than half a million tons of food grain. The Government has taken initiative to increase the food grain storage capacity through the construction of new godowns and silos. But at the same time, many of the old conventional godowns are expected to further deteriorate over the next 5-7 years diminishing the available effective food storage capacity.

Annual consumption is estimated at about 30 million tons of rice and 1.1 million tons of wheat. At present, the Ministry of Food (MoF) is responsible for managing food grain operations in Bangladesh and maintaining food grain stocks. The food grains are stored in traditional brick and concrete godowns that were built many years ago. At present, the total capacity of these godowns is over 2.1 million tons, and they are located all over the country. Most of these godowns are in poor physical condition, and the storage is very ineffective; on average, food grain losses from these godowns exceed 15% of the stored grain. In addition, many of these buildings are expected to further deteriorate over the next 5-7 years, diminishing the available effective food storage capacity to about 1.2 million MT by 2020.

According to HIES in FY-2016-17 the total national consumption of wheat was 19.83 gram per capita per day. Therefore, total national consumption was 11.70 Lac MT. In FY 2016-17 total amount of wheat was procured by DG Food from internally 98998 MT and imported from foreign countries was 307744 MT. Total amount of wheat imported privately in FY 2016-17 was 54.30 Lac MT. As a result, total national demand of wheat is (11.70+0.99+3.07+54.30)= 70.06 Lac MT. Total Production of wheat in FY 2016-17 was 11.53 Lac MT. Hence, deficiency of wheat was (70.06-11.53)=58.53 Lac MT. In view of the above situation, the Government has planned to increase the present storage capacity from 21.00 Lac MT to over 30.00 Lac MT by the year 2021. In order to maintain food security and to enhance storage capacity to 30.00 Lac MT, Government decided to construct a Concrete Grain Silo with ancillary facilities having a capacity of 50000 MT at Paira Sea Port.

2. Objectives of the Project:

The overall objective of the project is to ensure availability of food grain in the country among disaster affected and vulnerable people during and after disaster. The specific objectives are to:

- To strengthen sustainable food security by constructing a concrete grain silo of capacity 50,000 MT at Paira Sea port with ancillary facilities with a view to boost up Government food management system;
- To ensure smoother and quicker unloading of food grain at Paira Sea Port;
- To ensure proper weighment of food grain at the time unloading;
- To reduce abnormal post landing shortage of food grain at Paira Sea Port;
- To facilitate food distribution in social safety net programme across the country
- To maintain buffer stock of good grain;
- To provide food assistance in climate vulnerable and disaster prone areas;
- To create opportunity for Employment generation and poverty alleviation.

3. **Selection criteria of the Sites:**

In order to build the new government silo storage facilities at the best possible locations, considering logistics, availability of land, quantity of wheat to be imported, distribution and constructability, etc. The site is linked with road, inland water ways and sea. The site will be suitable place nearer to Payra sea Port, Located at Kalapara Upazila under Patuakhali District, Bangladesh. The consultant will have to select the site in co-operation with Directorate General of Food, Dhaka. Government of Bangladesh has planned to enhance storage capacity of Food Grain across the country. The purpose of the Concrete Grain Silo will be storage of Wheat only a of capacity 50000 MT.

4. **Scope of Services:**

The preparation of studies would be carried out according to the international standard, which will form the basis for project appraisal that will be prepared by the consulting firm(s). The activities and the scope of works for the study will include, but not limited to the following:

Stage 1:

Feasibility study with focus on Payra Silo, as follows:

- Annual throughput of wheat per site based on government procurement and rotation schemes of the product, and wheat sourcing areas
- Projection of traffic volumes
- Intake of wheat based on mode of transport (road/rail/river) and form (bulk/bag) and moisture contents of the commodities
- Dispatch of wheat in bulk or bags and final clients: flour mills, wholesale, small and medium sized flour mills (village mills)
- Based on above evaluation define the scope of supplies including silo layout and grain handling technology
- Based on above develop the Business Case including throughput/annual turnover, intake system (truck, rail, port/river), dispatch (bulk, 50 kg bag), equipment selection and a detailed investment plan, and preparation of conceptual drawings
- Location study
- Compile a Feasibility Report

Stage 2:

After approval of the Feasibility Report the Design Brief will have to be prepared, including:

a. Review and re-asses all information with respect to
   - The general layout of the silos (special attention to insulation of rice silos)
   - River bank protection
   - Unloading equipment and jetties required
   - Concrete silo bins and ancillary facilities
   - Conveying systems
   - Loading equipment
   - Dust collection, fumigation and aeration and chilling system.
   - Other equipment: bagging m/cs, weigh bridges for bagged wheat, bulk weighing, cleaning, PLC/SCADA process control, etc.

b. Provide appropriate calculations to validate the required capacities for:

- Unloading equipment and jetties required
- Conveying systems
- Concrete silo bins and ancillary facilities
- Loading equipment
- Other equipment etc.
- Power supply
- Environmental safeguard considerations
- Social safeguard considerations

Stage 3:

The design brief will be approved by Director General of Food, the client. After approval of design the consultant will have to prepare detailed design & drawing including bidding documents, technical specification, BOQ for the mechanical, electrical and electro-mechanical equipment and Civil works as well as preparation of DPP.

Besides these the consultants will have to perform the following activities such as:

(a) Review of all related available documents and recommendations of the previous plans and studies and projects for food storage, and discussions with the concerned relevant organizations and other multilateral and bilateral financing institutions, development partners and stakeholders covering the concept and options of the tasks;

(b) Studies to assess supply of food grain, and demand, spatial and temporal patterns of supply and demand and determination of optimal level of food storage requirements. Assessment of food storage requirements for meeting food shortages during and after the natural disasters;

(c) Inventory and mapping of the current food storage facilities in the country, their capacity performance, and plans for future development. The inventory and mapping would be done using GIS mapping technologies;

(d) Studies of the transportation networks, costs and time requirement for movement of food, production and demand centers and based on all this determine optimum locations for conventional godowns, Silos and Automatic Rice Mills as well;

(e) Studies to determine technologies to be used in constructing modern storage and handling facilities. The feasibility studies would include technical/engineering studies, structural analysis, institutional and economical analysis, environmental and social impact assessments and management plans;

(f) Preparation of technical specifications and bidding documents for carrying out construction of Concrete Grain Silos as Design Build and Transfer (DBT) operation. These would be undertaken considering least cost options for construction and effective performance for a long time with low operation and maintenance (O&M) suitable for the local condition;

(g) Assistance to DG Food in project preparation and processing the project including Government requirements Development Project Proposal (DPP) preparation, preparation of the project institutional arrangement and implementation plan, procurement plan, financial management system, technical specifications;

(h) Preparation of environmental management and social/resettlement policy framework covering project scope and preparation of social, resettlement and environmental management plan (SMPs/RAPs/EMPs);

(i) Preparation of disaster management policy framework in line with plan of action as taken by the Government.
(j) Estimation of O&M plan including necessary institutional set up (based on the existing set-up) and recurrent funding requirements for the project facilities;
(k) preparation of monitoring and evaluation framework along with establishment of baseline for monitoring indicators as well as indicators for the project implementation and assessment methodology for measuring impact;
(l) Project cost and benefit estimates, investment scheduling, economic and financial analysis including sensitivity analysis for possible scenarios and
(m) Technical assistance and training on the above, etc.

5. Feasibility Study:

The feasibility study should be based on all the studies, analysis and experience in construction of food storage facilities worldwide and experiences in other countries in the region. The Feasibility study shall also include problems to be faced during the implementation of actions such as analysis of major strengths, weaknesses, opportunities and threats. In these respects consultant will make a list of stakeholders and carry out classification of stakeholders, stakeholders' impact analysis and risk analysis, mapping of stakeholders Influence and mapping of Risk. The study should focus on the specific approaches which are given below:

5.1 Data collection and review:
5.2 Storage Needs and conformity Assessment by the year 2041, considering Food Cycle and Food Wave
5.3 Selection of strategic location for Silo and analysis of logistics and transportation network.
5.4 Technology to be used in Silo and its Technical Conformity Assessment.
5.5 Preparation of Technical Specifications (General and Particular) including Drawing.

For detailed feasibility level designs for the proposed storage facilities, the consultant will carry out, but not limited to, the following:

(a) Carry out necessary topographical survey and Geotechnical investigations (SPT, CPT and Vane Share Test) for Silo using appropriate technology on the ground and satellite imagery, GIS and other computerized systems to gather data, necessary for providing most optimal solutions, storage facilities considering technical, economic, social and environmental aspects;
(b) Develop technical/functional specifications for the storage facilities that can easily be customized for specific site conditions during the detailed design stage by the contractor, and determine criteria for design to minimize the cost and improve performance requiring least amount of O&M during operation;
(c) Prepare estimates in the form of Bill of Quantities of construction and price schedules of materials, equipment with appropriate physical and price contingencies, and breakdown by major work items;
(d) Prepare item wise Computer Aided Design and corresponding drawing.

5.6 Social Impact Assessment and beneficiary participation aspects.
5.7 Environnemental Assessment, IEE, EIAs, EMP, SMP etc.
5.8 Dis aster Impact Assessment including recovery management Plan and recommandations.
5.9 Project Implementation Planning.
5.10 Project Cost Estimates, Benefits and Economic Analysis.
5.11 Preparation of Development Project Proposals (DPP)
5.12 Design and Preparation of Bidding Documents
5.13 Operation and Maintenance (O&M).
5.14 Monitoring and Evaluation.
5.15 Development of a Financial Management System.
5.16 Duration of the study:

Duration of the contract would be 12 (Twelve) months, though most of the work would be completed by the consultants during the first 4 to 5 months.

Last but not least is the undertaking of the consultants (standard) on obligatory responses to any technical related query arising from time to time after the implementation of the project but during the first year after closure (post warranty period).

6.0 Required Expertise:

The Required expertise with key positions, staff months, qualification & experiences are summarized in the following way:

6.1 Key Staffing input (staff-month):

Position	Quantity	Staff-Month
Team Leader	1	12
Deputy Team Leader	1	12
Business development Specialist	1	4
Civil Engineer	1	6
Mechanical Engineer	1	6
Electrical Engineer	1	6
Environment Specialist	1	4
Expert pool- Resettlement, GIS, IT, Geotechnical, quality control, port hydrologist, HVAC Specialist, Economist	8	24
Total	15	74

The above staffing input is tentative. It may vary based on experience and implementation of the project.

6.2 Key Professional Qualification and Experiences :

The key personnel of the firm should have the following academic qualification, dexterity and professional experiences to perform the specific job appended below:

SL. No.	Position	Qualification and experiences
1	Team Leader	Post graduation degree in Engineering or equivalent with minimum 15 years of experience in project management specially in design and/or operation and maintenance engineering of silo facilities.
2	Deputy Team Leader	BSc in Engineering or equivalent with minimum 12 years of experience as in project management and/or enterprise expert (Civil/Electrical /Mechanical engineering) in design and/or operation and maintenance engineering of silo facilities.
3	Business development	MSc in Economics or Graduation in Engineering with

SL. No.	Position	Qualification and experiences
3	Business development expert	MSc in Economics or Graduation in Engineering with MBA. He/she should have minimum 15 years of overall professional experience in business planning and engineering for grain handling &storage facilities. Besides, experience in handling, conveying, weighing, packaging, quality control.
4	Civil Engineer	BSc in Civil/Structural engineering having minimum 15 years experience in designing foundation/ sub& superstructure, design of steel and concrete structure including reinforced concrete silo, structural design of industrial structures, yard, grain terminal, jetty fender etc engineering for grain.
5	Mechanical Engineer	BSc. in Mechanical engineering having minimum 15 years of experience in design of silo control panels, equipment and interlocking of electrical machinery. Experience for equipment of Silo technology, pneumatic unloading equipment, grain conveying, bagging, sewing, weighing and packaging operation.
6	Electrical Engineer	BSc. in Electrical and Electronics Engineering having minimum 15 years of experience in design of silo electrical equipment and extensive knowledge of reputed manufacturing companies.
7	Environment Specialist	MSc. in Environmental engineering/science having minimum 15 years of experience in the environmental engineering, monitoring and safeguarding for handling and storage systems.
8	Expert pool	CV's to be forwarded upon needed.

6.3 Staff Task and Responsibilities :

SL. No.	Position	Task and Responsibilities
1	Team Leader	• Full responsibility of all aspects of project management, design review, quality control, supervision, monitoring and reporting • Management of the activities of the team to ensure timely delivery of the project output • provide advice and direction of the team • Prepare project plan, schedules and time frame for publication of different reports • Oversee all procurement such as services, equipment required for the work • Overall supervision and guidance of detailed design, bidding document preparation, quality control & report preparation. • Liaison with DG Food and other concerned agencies. • Periodic and regular updating of the project implementation schedule. • preparation of reports.
2	Deputy Team Leader	• Assist to prepare project plan, and time frame for publication of different reports • Oversee all procurement specially services, equipment and materials required for the work • Overall supervision and guidance of design review, bidding document preparation, quality control & report preparation • Liaison with DG Food and other concern agencies • Preparation of reports
3	Business development expert	Development of clear business cases for proposed concrete grain Silo at Payra Sea port.
4	Civil Engineer	• Assessment of engineering requirement of the Silo structures • Review and complete the layout to ensure correct location of different structure

SL. No.	Position	Task and Responsibilities
		• Establish construction of design criteria and standards • Preparation of detailed design calculations ad drawings sufficient to prepare of bidding document for the civil works • Preparation of BOQ and Bidding Documents • Assist in evaluation of Bids • To supervise erection, testing and commissioning of the Silo
5	Mechanical Engineer	• Preparation of overall design development program • Establish electro-mechanical system, design criteria and standards • Determine Electro-mechanical system requirement for the project • Prepare and guide electro-mechanical system design and drawings • To supervise construction of Mechanical & Electro-mechanical works • Preparation of price schedule, estimate and bidding documents
6	Electrical Engineer	• Preparation of overall design development program • Establish electro-mechanical system, design criteria and standards • Determine Electro-mechanical system requirement for the project • To supervise construction of Mechanical & Electro-mecjanical works • Preparation of price schedule, estimate and bidding documents
7	Environment Specialist	• Preparation of overall design development program for environmental protection and safeguarding systems • Determine environmental prevention and protection systems for the proposed project • Prepare environmental systems design & drawing
8	Expert pool	CV's to be forwarded upon need

7.0 Outputs:

In all matters the reporting authority of the consultants will be the Project Director. The Consultants shall submit the following deliverables (in English) in 05 sets with softcopy in CD-ROM in PDF format and additional copies as asked for time to time.

7.1 **Baseline Study Report:**Among all other things, the report shall include selection of site based on the water draft at the sea side end of the jetty, Land acquisition proposal following the prescribed format of land acquisition.

7.2 **Survey Report**: The report shall include digital topographic survey showing RLs with respect to the reference line of PWD and photographs of landscapes before land development. Also it shall include soil investigation at shore site and sea site (under water) to be conducted by CPT method.

7.3 Environmental and Social Assessment and Management Framework (ESAMF)

The report shall include depth understanding of the project objectives and project intervention, baseline information of physical, biological and socio-economic environment, assessment and analysis of the Environmental and Social impact in the targeted project area, comprehensive reviewing and analysis of the national and international policy, legal, and administrative framework relevant to the project, analysis of feasible alternatives to the proposed project site, technology, design, and operation, potential impacts and corresponding mitigation measures, EMP and SMP that consists a set of monitoring and institutional measures and mitigation steps and budget allocation for conducting mitigation measures, monitoring activity and institutional set-up of the project.

7.4 Environmental and Social Impact Assessment including Environmental & Social Management Plan (IEE, ESIA, EMP & SMP)

The deliverables of the assignment will be as follows:

-The study shall include depth understanding of the project objectives and project intervention;

-Comprehensive reviewing and analysis of the national and international policy, legal, and administrative framework relevant to the project;

-Comprehensive analysis of the baseline data on physical, biological and socio-economical environment of the project area;

-Compare feasible alternatives to the proposed project site, technology, design, and operation including without-project scenario in terms of potential environmental impacts and the feasibility of mitigating the impacts. State the basis of selecting a particular alternative.

-Depth understanding of the project intervention and potential Environmental and social impacts in the targeted project area;
-Develop an EMP and SMP that consists a set of monitoring and institutional measures and mitigation steps to be taken during different stages of the project (pre-construction, construction, and operation) to mitigate the adverse environmental and social impacts, offset them, or reduce them to acceptable levels;

-Budget allocation for conducting mitigation measures, monitoring activity and institutional set-up of the project.

7.5 **Draft Design Report**: This should be included detailed drawing, Quantity calculations, Bill of Quantity (BOQ), technical specification on Silo, Silo Jetty, Electrical, Mechanical and Electro-mechanicalequipment and other ancillary facilities.

7.6 **Final Design Report**: This should be included detailed drawing, Quantity calculations, Bill of Quantity (BOQ), technical specification on Silo, Silo Jetty, Electrical, Mechanical and Electro-mechanical equipment and other ancillary facilities which required to be prepared in consultation with the project management unit where several meetings may be needed to finalize

7.7 **Financial and Economic Analysis Report**: This report should be included Net Present Value(NPV), Benefit Cost Ratio (BCR), Financial Internal Rate of Return(FIRR), Economic Internal Rate of Return(EIRR), Economic Rate of Return (ERR), Benefits and Costs in Shadow prices Calculation etc.

7.8 **Project Appraisal Document**: This should include Institutional and Implementation Arrangement, Results Framework and Monitoring Approaches, Key Risks and Mitigation Measures, Appraisal Summaries on Economic and Financial Analysis, Technical Analysis, Financial Management Analysis, Procurement Management Analysis, Social Management Analysis and Environmental Analysis, Operational Risks Assessment Framework etc.

7.9 **Development Project Proposal(DPP)**: DPP must be prepared in prescribed Development Project Proforma of Planning Commission which is used for Investment Financed Project. Among others things DPP should contain comprehensive Logical Framework Matrix, linkage with the Scope of works of Ministry of Food, Seventh Five Year Plan, Sustainable Development Goals (SDGs), MTBF of Ministry of Food, Manpower Organogram, Procurement Plan, Project Implementation Plan etc.

7.10 **Final Feasibility Study Report**. It includes an Executive Summary report attaching all the previous reports/documents.

7.11 **Support Service for DPP approval and PCR**: The consultant will provide relevant support to the MFSP and DG Food during DPP approval process.

8.0 Data, Personnel, Facilities and Local Services to be provided by the Client:

The Client will provide the following inputs and facilities:

9.1 Administrative assistance in obtaining visas, custom clearances and other administrative permissions required by the consultants in performing their duties;

9.2 All relevant reports, maps, data and studies as are available with the Client;

9.3 Any other assistance not readily available that the consultants may reasonably request, including liaison with the Government and agencies concerned; and

9.4 Counterpart staff in Directorate General of Food and other relevant agencies, who will liaison with consultants.

9.0 Deliverables, Payment Terms and Timeline

Lump sum against deliverables:

SL.No	Payment Percentage	Deliverables	Time line
1	10	**Baseline Study Report**	Contract Sign +1 Months
2	10	**Survey Report**	Contract Sign +2 Months
3	10	**Submission of Environmental and Social Assessment and Management Framework (ESAMF) report.**	Contract Sign +3 Months

SL.No	Payment Percentage	Deliverables	Time line
4	10	**Submission of IEE report with the proposal of land clearance certificate from the DOE. Submission of ESIA report with the proposal of Environmental clearance certificate from the DOE.**	Contract Sign + 4 Months
5	20	**Draft Design Report**	Contract Sign +8 Months
6	10	**Final Design Report**	Contract Sign + 9 Months
7	5	**Submission of Financial and Economic analysis report**	Contract Sign +10 Months
8	10	**Final Feasibility Study Report**	Contract Sign +11 Months
9	10	**Submission of Project Appraisal Document (PAD) and DPP.**	Contract Sign +12 Months
10	5	**Support service for DPP approval and PCR**	As and when required

Contractor to provide:

- Computer systems and software including AutoCAD
- Vehicles and operating cost
- Office supplies
- Etc.
- Contractor will arrange office space in Dhaka nearer to MFSP and relevant institutional support needed to carry out the assignment

Procurement Method

The Consulting Firm will be hired by Quality and Cost Based Selection (QCBS)method following World Bank Guidelines for Selection and Employment of Consultants under IDA Credits & Grants by World Bank Borrowers updated January 2011.

FIDIC

FIDIC Contract Conditions will apply.

Facilities to be provided by the Consultant: The Consultant shall be entirely responsible for all facilities such as arranging office space, accommodation of staff, vehicles, equipment, computers, support/secretarial services and other logistics required for providing the services under DIMAPP Project. The individuals shall work as a team under the leadership of the Team Leader/Implementation Expert who will report to the DG of the CPTU.

Facilities to be provided by the Client: The Client will provide all available information, materials and documents (i.e. existing training materials, manuals and reports) for smooth implementation of the assignment. Should this information be deemed as confidential, the consultant shall not disclose such information, materials and documents to any person or group without written permission of the client and return all such information, materials and documents to the client within the contract period or before finalize the report.

10. Organizational set up

This project will be implemented by the full time appointed Project Director under the direct supervision of Director General of Food, the Head of the executing agency who will in turn act under the supervision of Ministry of Food. The organizational arrangement is appended bellow: