

**Government of the People's Republic of Bangladesh**  
**Ministry of Food**  
**Modern Food Storage Facilities Project (MFSP)**

**Terms of Reference for Integrated Food Policy Research Program**

<b>Assignment Title</b>	<b>Integrated Food Policy Research Program under Modern Food Storage Facilities Project</b>
<b>Assignment duration</b>	<b>30 months</b>
<b>Primary assignment location</b>	<b>Dhaka</b>
<b>Funding Source(s)</b>	<b>IDA Project Cr. Number: 5265-BD for Modern Food Storage Facilities Project (MFSP)</b>
<b>Contracting entity</b>	<b>Project Director Directorate General of Food Ministry of Food</b>

## I. General Background

1. **Grain Production and Consumption.** Agriculture plays an important role in Bangladesh's economy, employing nearly half of the workforce and providing **45 percent** of total household income. Rice remains the country's major food crop, followed by wheat. During 2011-12, the production of milled rice equivalent was about **33.5 million tons**, and production of wheat was about **1.1 million tons**. The country consumes an average of **30-34 million tons of rice** and **4 million tons of wheat** annually. Whereas the country is generally self-sufficient in rice production, it still imports significant amounts of wheat (about 30 percent by the Government, and **70 percent** by the private sector) to fill the consumption gap. Government imports, which are principally lower grades of wheat (and coarse rice in times of emergency), are for complementing locally-procured grain for distribution through the Public Food Distribution System.
2. **Public Food Distribution System (PFDS).** Under the PFDS, food grains are distributed through various channels, mostly to the poor and victims of natural disasters. An estimated **2.8 million tons** of grain were distributed in 2012-13 (**1.7 million tons of rice and 1.05 million tons of wheat**) under monetized and non-monetized social safety net programs (SSNP). These grains are stored in a vast network of Government owned facilities spread all over the country to facilitate local procurement and distribution.
3. **Public Grain Storage.** Government grain storage capacity stands at **1.62 million tons**, largely in the form of traditional godowns where the average shelf-life of grain is typically less than **12 months**. Annual loss in quality is reportedly very high due to lack of proper moisture and temperature control in these facilities and shortcomings in overall grain management. The Ministry of Food (MoF) intends to increase the overall storage capacity to **2.2 million tons by 2015** and **3 million tons by 2021**. In this regard, construction is underway for 261 godowns in different parts of the country with a total storage capacity of 219,000 tons, and a concrete grain silo of 50,000 tons capacity (for wheat) at Mongla Port. In addition, MoF plans to construct eight steel silos (**six for rice and two for wheat**) with a combined capacity of **535,500 tons** under the Modern Food Silo Project. Large-capacity, privately-owned storage is still limited.
4. **Private Sector Presence in the Grain Market.** Over 100,000 privately owned small mills are responsible for processing most of the nation's rice output, although there are some larger more industrial mills as well. Regarding grain storage, the private sector is mostly engaged in small-volume, high-turnover grain storage, and is less present in bulk grain storage. This is attributed to, *inter alia*: (i) high construction costs of modern silos, including the high land value in Bangladesh; and (ii) low margins on inter-temporal grain storage. On the other hand, there are possibilities for the private sector to rent excess capacity from Government whenever such opportunities arise. For instance, there is a likelihood of increased use of cash transfers to the poor instead of physical grain distribution, and an expected progressive decline in dependence on social safety programs in tandem with the gradual decline in poverty numbers in the medium term. Under such a scenario, Government would progressively limit public grain storage to quantities needed for post-disaster relief, at which point it would be able to rent out or to divest some of the storage capacity to the private sector. Also, there are possibilities for private sector management of Government owned-facilities. Similarly, there are opportunities for Government-private sector partnership in nutrient fortification of rice stored in Government facilities. All these issues need to be investigated and the requisite public-private-partnership modalities worked out.
5. **Nutrient Fortification.** Government data for 2013 (from the Utilization of Essential Service Delivery surveys) shows that still only 32 percent of **children aged 6 to 23 months**

are fed a minimum acceptable diet, albeit an improvement from 21 percent in the 2011 survey. Estimates for 2012/13 show **underweight children at 35.1 percent** and **child stunting at 38.7 percent**. Whereas the consumption of iodized salt is up (**at 80 percent in 2013**), and fortification of edible oil has been on-going since 2010, deficiencies in **vitamin A, iron, zinc, iodine, vitamin B12, and foliate** are wide-spread, with the poorest people most affected. The World Food Programme has been carrying out trials with fortified rice on a small sample of ultra-poor women and their families (3,000) and disaster-affected families (6,000) under Government social safety net programs. The Government's vast network of storage facilities with rice primarily distributed to the poor present a great opportunity for meeting their nutritional needs. However, there are still many questions that need to be answered regarding the most effective ways of rice fortification from the economic and technological point of view.

## **II. Ministry of Food**

6. Most of the above grains storage management issues fall under the Ministry of Food. The Ministry of Food has two principal operational wings: (i) the Food Policy and Monitoring Unit (**FPMU**) which is responsible for monitoring the food situation in the country and implementing related policies; and (ii) the Food Directorate which is responsible for physical procurement and management of government grain stocks.

7. **Food Policy and Monitoring Unit (FPMU).** Specifically, PFMU is responsible for collecting, storing and disseminating information for food security analysis and policy formulation, and delivering evidence-based policy advice to the Government on issues relevant to food security – on its own initiative or on demand by the Government of Bangladesh. The Unit provides secretarial support to the Food Planning and Monitoring Committee (**FPMC**) and contributes to other Government committees relevant to food security, such as the Early Warning Technical Committee (**EWTC**) or the Safety Net Technical Committee (**SNTC**). As the lead agency on food security issues in Bangladesh, **FPMU** is also responsible for enhancing inter-ministerial collaboration for the implementation of the National Food Policy and monitoring its Plan of Action. The agency also plays a pivotal role in coordinating, monitoring and evaluating interventions under the Country Investment Plan.

8. **Food Directorate (DG Food).** The specific activities of DG Food include:(i) procurement of food grain mainly from domestic sources, but also from international sources as required; (ii) grain stock management; (iii) construction and maintenance of warehouses and ancillary facilities; and (iv) release of grain to maintain grain price stability (under the Open Market Sales and Fair Price Card systems), and to cater to several social safety net programs.

9. The Government of Bangladesh, with support from the World Bank, is carrying out a project for the modernization of grain storage in the country. The project's implementation is primarily managed by the Ministry of Food.

### **III. The Modern Food Storage Project**

10. The project's primary objective is to increase the grain reserve available to households to meet their post-disaster needs and improve the efficiency of grain storage management. Principal activities include:

- (A) **Establishment of Modern Grain Storage Facilities.** This primarily consists of construction of eight steel silos (**six for rice and two for wheat**) with a combined capacity of **535,500 tons**. This will allow grain **storage for longer periods** (more than one year), minimize **losses in quality, reduce leakages** often present in godowns, and reduce **costs associated with frequent grain turnover in traditional godowns**. Also, **500,000 specially designed 70-liters, food-grade plastic bins equipped with watertight lids** will be distributed to households in disaster-prone areas for emergency grain storage.
- (B) **Supporting of Food and Market Planning and Monitoring.** This aims at improving and modernizing the monitoring and management of grain stocks in Government storage in the country, as well as development, management, and implementation of a food policy research agenda that covers grain storage and distribution.

11. In this regard, the Government of Bangladesh intends to hire a "Consortium" of a renowned international institution and a renowned national institution to provide a sound analytical basis for guiding its policies and practices on grain procurement, storage, and distribution.

### **IV. Assignment Objectives**

12. The objective of the assignment is twofold: (i) to enhance the **institutional capacity in policy and strategic decision making of FPMU and DG Food to carry out their mandates linked to wider food market;** (ii) to 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.**

#### **A. Enhancing the Food Policy Capacity of FPMU and DG Food**

13. The consultant will carry out **food policy** capacity assessment of FPMU and DG Food to identify existing gaps and bottlenecks in their operations including how they work with other Ministries to maximize synergy and avoid overlap, and based on the assessments' findings, develop and implement a **capacity development program for both entities.**

14. With respect to FPMU, the consultant will, among other things, carry out a systematic and comprehensive review of:

- its programs — including activity formulation processes, the activities' pertinence with respect to priority policy concerns and other national topical issues, their consistency with FPMU's mandate, their coherence and complimentarily with other ongoing programs in the country (by other public and private entities), etc.;

- its outputs —the analytical rigor of the underlying research, the extent of their dissemination, the simplicity and usability of the distilled policy notes and briefs for the policy makers, etc.;
- its human resources —the adequacy of the personnel’s technical skills; the adequacy of staff numbers and skills mix relative to their mandate; FPMU operating procedures, etc.

15. With respect to DG Food, the consultant will, among other things, carry out a systematic and comprehensive review of:

- the national food policy /2006 and plan of action/2008 and updating the same in respect of CIP
  - the Directorate’s policies, procedures, and practices with respect to grain procurement, transport, storage, distribution, and operation and maintenance of the storage facilities, including an assessment of their pertinence, clarity, and the extent to which they are systematically applied.
- their staff competence and skills with a view to develop their ability to understand research process, finding and recommendations in order to fulfill the directorate’s wider food market related mandate.

## **B. Undertaking Analytical Research and Developing Actionable Policy Instrument**

16. A range of studies will be developed, undertaken, and disseminated upon taking the private sector behaviours into consideration to answer major strategic challenges facing the country, covering (but not limited to) the thematic areas covered below. The final comprehensive list of research undertakings will be finalised upon the **Steering Committee approval** after the discussion in the **research inception workshop** and taking into account the recent analytical work existing in the respective areas to avoid duplication

### ***17. Optimum Grain Storage:***

- The “optimum” volume of grain stored given GoB’s goals to meet incremental short- and medium-term demand for food grain in a post-disaster situation and to sustain an efficient PFDS.
- Finance and economic (including social) impacts of the estimated “optimum” volume of stored grain, their impact pathways and their implications on GoB’s vision and policies for developing incremental storage facilities (adding storage capacity as opposed to **replacing the old godowns with modern silos**).

### **Market Interventions**

- The impacts of GoB food market interventions on price stabilization and broader food markets. Parameters that should govern the GoB intervention in the food market policies that should be adopted and implemented to that effect.
- The strategy for **disposing of grain stored** in the modern facilities.
- The policy issues relevant to some of the options (**e.g., auctioning, exporting,**

**processing, channelling through food-based SSN programs).**

#### ***Public-Private Partnerships***

- What improvements are required for the enabling environment (policies, regulations, and institutional arrangements) to promote a sustainable partnership between the public and private sector's management of the country's strategic grain reserves? What would it take to operationalize Government's food policy provisions about **renting out storage space?**
- What are the requirements for the policy, legal, and institutional framework, as well as the technical requirements, to pilot **nutrient fortification of rice** held in modern storage facilities? What is the economic feasibility for bringing the production of fortified rice to scale? What kind of PPP arrangements would make sense between Government and the private sector?
- What would be the requirements for the policy, legal, and institutional framework, as well as the technical requirements, to pilot the introduction of a **warehouse receipt system** to promote access to rural finance for producers against grain stored in Government facilities?

#### ***Condition of Storage Facilities/Stored Grain***

- What is the current physical **condition of the existing public storage facilities** (baseline diagnostic)? How high are the **losses (in terms of volume and nutritional value) incurred by the grain stored in traditional godowns**? What would it cost to improve the efficiency of the current public storage facilities?

## **V. OUTPUTS**

18 The consultant will produce a series of outputs including, but not limited to the following:

- Proposals for econometric modelling of optimal stock in public storage and the corresponding storage investment needs, taking into account all relevant variables (such post-disaster emergency grain needs, non-cash social safety net needs, etc.);
- An evaluation of the effectiveness of current grain procurement modalities, and prospects for other modes of domestic grain procurement such as open tendering for grain procurement by GoB; and development of a framework for stock turnover, including strategies for auctioning off rotated grain;
- An assessment of losses in grain stored in existing facilities , including their magnitude and sources, and the potential solutions for reducing them;
- A review of the logistics for grain transportation (modes of transport, types of contracts, etc.) and a proposal for enhancing economy and efficiency in grain transportation;
- A detailed assessment of the physical condition of current storage facilities, with an identification of priority facilities and needed repairs, and an identification of facilities that could be divested to the private sector for construction of modern storage;

- An assessment of FPMU and DG Food capacity gaps with respect to evidence-based policy formulation, policy research, and policy formulation; , and a remedial program to strengthen the two agencies developed and implemented.
- An assessment of Government's farm-gate and consumer price stabilization objectives and policy instruments, the impact of current grain procurement and grain release practices with respect to these policy objectives and on the overall grain market (positive and negative), and proposals for grain market policy orientations that are consistent with other Government policy objectives on grain market development, including a greater role for the private sector in grain markets;
- Proposals for optimal stock in public storage and the corresponding storage investment needs, taking into account all relevant variables (such post-disaster emergency grain needs, non-cash social safety net needs, etc.);
- An evaluation of the effectiveness of current grain procurement modalities, and prospects for other modes of domestic grain procurement such as open tendering for grain procurement by GoB; and development of a framework for stock turnover, including strategies for auctioning off rotated grain;
- An assessment of current grain losses, including their magnitude and sources, and the potential solutions for reducing them;
- A review of the logistics for grain transportation (modes of transport, types of contracts, etc.) and a proposal for enhancing economy and efficiency in grain transportation;
- A detailed assessment of the condition of current storage facilities, with an identification of priority facilities and needed repairs, and an identification of facilities that could be divested to the private sector for construction of modern storage;
- A list of potential storage sites for government disinvestment (with accompanying legal and regulatory requirements, property value assessments, transaction modalities), and should a decision be taken by Government to disinvest in one or more sites, offering transaction advice for the first deal;
- An evaluation of the opportunities and a presentation of modalities for renting some of the storage capacity to the private sector and for entrusting the operation and maintenance of some of the modern storage facilities to the private sector, along with recommendations for the required policy and regulatory framework;
- An economic feasibility analysis for private investments in modern food storage and the role of the public sector, if any, in promoting such investments;
- Technical and regulatory requirements for fortification of strategic rice reserves;
- An assessment of the potential for a warehouse receipt financing system, including the requisite legal and regulatory framework, and if feasible, a design of the main features of such a system, drawing on lessons from other countries;
- A methodology for estimating private stocks of grain for effective food planning and management;
- An early warning food information system with potential integration with Global Information and Early Warning System (GIEWS) and Famine Early Warning System (FFWS).
- Knowledge sharing and dissemination activities.

- Formulation of an updated national food policy and plan of action
- 19. The research program is expected to run for 3 years starting in March 2015**

## **VI. Consultant Selection**

20. The consultant shall be selected on the basis of the strength its detailed proposal spelling out, among other things:

- Proven international experience with similar types of assignment (policy research on food, agriculture or related area) in collaboration with public agencies
- the proposed methodological approach to the assignment – including data collection methods, analytical tools to be deployed in addressing various research topics, and the dissemination of the research outcomes;
- the proposed work plan – including the phasing of the various activities and production of the various outputs;
- Quality of expertise and composition of the core team to be fielded and the proposed organizational arrangements in order to successfully accomplish the research and capacity building goals of the assignment
- proposed plans and strategies for building research to policy uptake capacity of the FPMU and the DG Food

## **VII. Reporting**

21. For contract administration, the consultant will report to Project Director in the Project Management Unit (DG Food). However, technical oversight of the consultant's activities will be provided by FPMU. The consultant will also work very closely with DG Food.

## Staffing input (Man-months)

Below the staffing schedule is given

No	Description	Year				Man-months		Total	
		2015	2016	2017	2018	Local	Intern.	Local	Intern.
	<b>International</b>								
1	Research Team Leader/ Co Team Leader of the Consortium						30		30
1	Food Supply and Management Adviser/ Commodity Storage Analyst						30		30
1	Institutional and Capacity Development Specialist						30		30
1	Food Market and Trade Analysis Advisor						30		30
1	Food Quality, Nutrition and Fortification Advisor						30		30
	<b>National</b>								
1	National Research Team Leader/ Co Team Leader of the Consortium					30		30	
1	Public -Private Partnership in Food Sector Advisor/ Private Sector Specialist					30		30	
1	Food Quality, Nutrition and Fortification Advisor					30		30	
LS	The firm may have expertise in Institutional and Capacity Development, Food Supply and Management , Food Market and Trade Analysis, Food Quality Control, political economy, media expertise, legal expertise etc					350		350	
LS	Support pool					250		250	

### 1.1 Staff qualifications

The key professionals of the consortium should have the following academic qualification, skill and professional experiences to perform the job described below: It is important to ensure that each expert has the ability to work on her/his own in an IT as well as a non IT environment, and has the ability to review the literature and past experiences in the respective fields for which they are taken in the team.

N o.	Position	Qualification and expertise required	Job Description
1	<b>Research Team Leader/ Co Team Leader of the Consortium (International)</b>	<p><b>Education</b>            Master in Economics/Agricultural Economics with a Ph D degree in relevant field.</p> <p><b>Expertise</b></p> <ul style="list-style-type: none"> <li>• Minimum 15 years of overall professional experience in research coordination and supervision activities and in conducting research on food planning and monitoring system of international exposure.</li> <li>• Must have proven analytical abilities in food and agricultural policy.</li> <li>• Should have proven abilities in coordinating large technical assistance and research team, and capable of analyzing and synthesizing the research findings and presenting actionable recommendations to the government.</li> </ul>	<ul style="list-style-type: none"> <li>• Act as the Prime Research Advisor/Co-advisor in the project and assume responsibility of coordinating and completing all research activities with necessary help from the research team.</li> <li>• In coordination with the national team Leader, supervise the delivery of the project's capacity development and policy advice to the government of Bangladesh and other stakeholders including civil society and the private sector;</li> <li>• In coordination with the national team Leader, prepare, coordinate and manage detailed work plans/budget for the Programme; monitor and ensure the quality and timeliness of technical assistance and reporting on implementation of work plans;</li> <li>• In coordination with the national team Leader, develop and maintain effective relationships with the Government of Bangladesh policy makers and national/international partners (including donors, international and civil society organizations, private sector) involved in the formulation and monitoring of cross-sectoral and sectoral policies and programs related to food security and nutrition;</li> <li>• In coordination with the national team Leader, supervise the design and implementation of long- and short-term training programmes in-country and aboard, including on-the-job training, in food security and nutrition analysis to officers of the FPMU and partner ministries as well as representatives of civil society and the private sector;</li> </ul> <p>* Perform other related duties as required.</p>

N.O.	Position	Qualification and expertise required	Job Description
1	<b>Food Supply and Management Adviser/ Commodity Storage Analyst (International)</b>	<p><b>Education</b></p> <ul style="list-style-type: none"> <li>• Master in Economics/ Agriculture Economics preferably with a PhD</li> </ul> <p><b>Expertise</b></p> <ul style="list-style-type: none"> <li>• At least 15 years relevant experience of which 7 years in the field of policy research with respect to public procurement, stock maintenance and overall food management;</li> <li>• Proven track record of ability to develop research program plan and relevant report;</li> <li>• Strong interpersonal communicative skills, experience in team leadership and participatory management;</li> <li>• Capable in advising and responding questions to the senior government officials and policy makers with minimum lead time.</li> </ul>	<p>Under overall supervision of the Team Leader, and in close cooperation with the national team Leader, the Advisor will:</p> <ul style="list-style-type: none"> <li>• Advise the GOB officials especially Move and DG Food to take critical operational decisions in the areas of food grain stock management, procurement, shipping, disposal of imported grains, efficient food grain movement, and private sector food grain marketing;</li> <li>• Conduct analysis on maintenance of optimum public stock, private stocking behavior, import/export for assessing food supply situation in the country; and drawing implications for nature and extent of intervention in the food market;</li> <li>• Play a key role in resolving the operational issues faced by the GOB officials. in procuring and maintaining stock, analyzing price and market behavior of food grains and other important food commodities:</li> <li>• Assist the GOB to align procurement and sales decisions with market forces to make the new food system work better;</li> <li>• Review existing instruments and develop new analytical instruments to assist government staff in monitoring and assessing periodic food stock and rotating the stocks for ensuring efficiency in public food management system;</li> <li>• Plan and deliver training courses for food policy and planning for officers of FPMU, partner Ministries/Organizations on issues related to procurement, optimal stocking and distribution of food in the cost-effective manner.;</li> <li>• Conduct analysis on efficiency of public food distribution system;</li> </ul>

N. o.	Position	Qualification and expertise required	Job Description
			* Perform other related duties as and when required
1	<b>Institutional and Capacity Development Specialist (International)</b>	<p><b>Education</b> Master in Economics with a PhD degree in the relevant field.</p> <p><b>Expertise</b> 15 years experience in the field of research in Agricultural or Food sector with special experiences in institutional capacity assessment and promotion. Revealed knowledge of institutional economics will be an advantage.</p>	<p>The consultant will carry out an institutional capacity assessment of FPMU and DG Food to identify existing gaps and bottlenecks in their operations including how they work with other Ministries to maximize synergy and avoid overlap, and based on the assessments' findings, develop and implement a capacity development program for both entities.</p> <p>With respect to FPMU, the consultant will, among other things, carry out a systematic and comprehensive review of:</p> <ul style="list-style-type: none"> <li>• Its program including activity formulation processes, the activities' pertinence with respect to priority policy concerns and other national topical issues, their consistency with FPMU's mandate, their coherence and complimentarily with other ongoing programs in the country (by other public and private entities), etc.;</li> <li>• Regularly review its outputs the analytical rigor of the underlying research, the extent of their dissemination, the simplicity and usability of the distilled policy notes and briefs for the policy makers, etc.;</li> <li>• Its human resources the adequacy of the personnel's technical skills; the adequacy of staff numbers and skills mix relative to their mandate; FPMU operating procedures, etc.</li> </ul> <p>With respect to DG Food, the consultant will, among other things, carry out a systematic and comprehensive review of:</p> <ul style="list-style-type: none"> <li>• The Directorate's policies, procedures, and practices with respect to grain procurement, transport, storage, distribution, and</li> </ul>

N. o.	Position	Qualification and expertise required	Job Description
			<p>operation and maintenance of the storage facilities, including an assessment of their pertinence, clarity, and the extent to which they are systematically applied.</p> <p>* Their staff competence and skills with a view to develop their ability to understand research process, finding and recommendations in order to fulfil the directorate's wider food market related mandate.</p>
1	<b>Food Market and Trade Analysis Advisor (International)</b>	<p><b>Education:</b> Master in Economics/ Agricultural Economics preferably with a PhD or extensive first-hand experience in the relevant field.</p> <p><b>Expertise:</b></p> <ul style="list-style-type: none"> <li>• At least 15 years relevant research experience of which 7 years in the field of food market and trade.</li> <li>• Capable in advising and responding to questions from the senior government officials and policy makers with minimum lead time.</li> <li>• Familiar with GTAP or similar numerical models.</li> </ul> <p>-</p>	<p>Under the overall supervision of the Team Leader, the Advisor will:</p> <ul style="list-style-type: none"> <li>• Advise GoB Officials on issues arising out of price formation of food commodities in the domestic and international markets, including future price behaviour;</li> <li>• Conduct analysis of food markets focusing on production, marketing and trade of food grains and other agricultural commodities;</li> <li>• Conduct analysis of global food supply and demand situation, including production, stocking and trade of agricultural products;</li> <li>• Conduct analysis on cost of production of major crops to assist fixing of procurement price for public food operation;</li> <li>• In collaboration with the economic specialist, develop monitoring and forecasting models and do exercise on monitoring and forecasting of production and prices of selected agricultural products;</li> <li>• Support planning and monitoring of agricultural, food security and other related policies and assess their contributions to achieving national food security objectives;</li> <li>• Design and conduct training programs for officials of FPMU/MoF and other related Ministries/Organizations on market analysis, including demand, supply</li> </ul>

N. o.	Position	Qualification and expertise required	Job Description
			<p>and price behaviour of agricultural commodities;</p> <ul style="list-style-type: none"> <li>• Perform other related tasks as and when required.</li> </ul>
	<b>Food Quality, Nutrition and Fortification Advisor (International)</b>	<p><b>Education:</b> Master in Nutrition/Food Science/Biochemistry, preferably with a PhD or extensive first-hand experience in the relevant subject.</p> <p><b>Expertise:</b> 20 years experience in the research in the relevant field, including 7 years practical experience in food quality analysis. Work experience in laboratory research is an added advantage.</p>	<p>Under the overall supervision of the Team Leader, the Advisor will:</p> <ul style="list-style-type: none"> <li>• Conduct analysis on grain and overall food qualities including determination of shelf lives of products under different conditions of storage, transportation and processing;</li> <li>• Identify practical steps to scale up rice fortification. Also identify country specific factors that enable or hinder scaling up of rice fortification and overall bio-fortification of different food products. Strategies to overcome bottlenecks and leverage enabling factors to be identified and reported.</li> <li>• Operationalize rice fortification analysis across the fortified rice and other relevant food supply chain. Different delivery options would be required to be identified;</li> <li>• Prepare country standards for fortified kernels and standard blending ratio in collaboration with BSTI;</li> <li>• Undertake activities to assist institutionalization of regular monitoring by relevant agencies within the government.</li> <li>• In collaboration with the team members in the field of economics, provide innovative research on behavioural economics and healthy food choices that addresses questions of public policy interest and importance.</li> <li>• Disseminate information obtained via its research program to a diverse stakeholder audience, including other researchers, policy and program officials, and the general public;</li> <li>• Perform other related tasks as required.</li> </ul>

<b>N o.</b>	<b>Position</b>	<b>Qualification and expertise required</b>	<b>Job Description</b>
			(Quality/Fortification and Public Storage/Stock Condition and possibility for improvement (working on the specifics)
	<b>NATIONAL</b>		
1	<b>National Research Team Leader/Co-Leader of the Consortium (National)</b>	<p><b>Education:</b> Master in Economics/Agricultural Economics, preferably with a PhD or extensive first-hand experience in the relevant field.</p> <p><b>Expertise:</b> 20 years of overall professional experience of which 15 years of practical experience in conducting research, coordination and supervision of research on food security, food planning and monitoring system. Proven abilities in coordinating research team, and capable of synthesizing research findings and presenting actionable recommendations to the government.</p>	<p>The National Team Leader will also act as the Co-Leader of the Consortium. He/he will:</p> <ul style="list-style-type: none"> <li>• Hold responsibility with the Team Leader for all aspects of research management, review, quality control, maintain liaison and reporting;</li> <li>• Manage the activities of the team to ensure timely delivery of project output;</li> <li>• Conduct analytical works to fulfill the mandates of FPMU and DG Food;</li> <li>• Oversee the works done in the areas of Food Supply and Management Analysis, and Market and Trade Analysis, and be involved in the technical works in professional capacity;</li> <li>• In consultation with the international counterpart, and with supports from other members of the international and national teams, prepare program plan, schedules and time frame for publication of different reports;</li> <li>• Oversee all required logistics for efficient performance of the project;</li> <li>• Ensure periodic and regular updating of program implementation schedule;</li> <li>• Perform other tasks as and when required.</li> </ul>
	<b>Public -Private Partnership in Food Sector Advisor (national)</b>	<p><b>Qualification:</b> Master degree in Economics/ Agriculture Economics preferably PhD or extensive first-hand experience.</p> <p><b>Expertise:</b></p>	<ul style="list-style-type: none"> <li>• Conduct base line study on market Infrastructure and Function, Private sector and Public-Private Partnership.</li> <li>• Analyze, Polices, regulations and institutional arrangements to</li> </ul>

N. o.	Position	Qualification and expertise required	Job Description
		<p>10 years experience in the field of Agricultural or Food Management and public policy.</p> <p>Knowledge on the economics of public-private partnership, and contracts.</p>	<p>promote a suitable public private partnership.</p> <ul style="list-style-type: none"> <li>Operationalize Government's food policy provisions about renting out available/unused storage space.</li> </ul>
	<b>Food Quality, Nutrition and Fortification Advisor (national)</b>	<p><b>Education:</b> Master in Nutrition/Food Science/Biochemistry preferably with a PhD in the relevant subject.</p> <p><b>Expertise:</b> 20 years experience in the research in the relevant field, including 7 years practical experience in food quality analysis. .</p> <p>.</p>	<p>Under the overall supervision of the Team Leader and in close consultation with the International Advisor on Food Quality and Nutrition, the Advisor will:</p> <ul style="list-style-type: none"> <li>Conduct analysis on grain and overall food qualities including determination of shelf lives of products under different conditions of storage, transportation and processing;</li> <li>Identify practical steps to scale up rice fortification. Also identify country specific factors that enable or hinder scaling up of rice fortification and overall bio-fortification of different food products. Strategies to overcome bottlenecks and leverage enabling factors to be identified and reported;</li> <li>Operationalize rice fortification analysis across the fortified rice and other relevant food supply chain. Different delivery options would be required to be identified;</li> <li>Prepare country standards for fortified kernels and standard and standard blending ratio in collaboration with BSTI;</li> <li>Provide innovative research on behavioural economics and healthy food choices that addresses questions of public policy interest and importance.</li> <li>Disseminate information obtained via its research program to a diverse stakeholder audience, including other researchers, policy and program officials, and the general public;</li> <li>Perform other related tasks as required.</li> </ul>