

Government of the People's Republic of Bangladesh

Ministry of Food

Modern Food Storage Facilities Project –MFSP

**Terms of Reference
for a Consultant Firm**

Monitoring & Impact Evaluation of MFSP

Assignment Title	Monitoring & Impact Evaluation of MFSP
Assignment duration Contract period	Whole Project Period 01 July 2015 to 30 June 2020
Assignment location	Dhaka and Project Sites
Funding source(s)	IDA Project Cr. Number: 52650- BD for Modern Food Storage Facilities Project –MFSP
Contracting entity	Project Director Directorate General of Food

Background

1. Ministry of Food (MoFood) under Government of Bangladesh 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 1.6 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 millions tons by 2020.
2. Having studied all these the Government has decided to construct steel Silos in 8 different sites in Bangladesh to store more than half a million tons of food grain.
3. Government of the People's Republic of Bangladesh has received an IDA credit toward the costs 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 IDA credit for Consultancy Services of Independent Monitoring, Evaluation and Impact Assessment. The overall project development objective is to increase the grain reserve available to households to meet their post-disaster needs and improve the efficiency of grain storage management in the country.
4. In this respect DG Food will engage a Consulting Firm to Monitor and Evaluate the Impact of the entire works of the project including social and environmental safeguards etc.
5. 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).
6. 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 Secretaries of Planning, Agriculture, Forestry, Environment, Finance and Disaster Management, BADC, representatives of the Cabinet, Deputy Commissioners of the districts where Silos are being constructed, the DG Food and DG FPMU will be the members of the PSC. The DG Food will act as the Secretary of PSC. 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.

Objective

1. The overall objective of the assignment is to develop and implement, under the guidance of DG Food and PMU, a project monitoring and impact evaluation system for MFSP. This includes designing and implementing all activities related to the monitoring, reporting, and impact evaluating of the project.

2. The main objective of this consultancy service is to adopt latest project management tools for monitoring all the project activities and coordinate with the DG Food appointed Project Director to ensure that the targets set as per the Results Framework are met within the lifetime of the project; and that the progress on project implementation is adequately reported on and documented.

3. The specific objectives are:

- a. To conduct Baseline, midterm and end line assessment survey
- c. Prepare all quarterly, annual, medium term and end-of-project reports
- d. Carry out consultation, feedback Grievance, Re-dress mechanisms to alert project staff
- e. Monitor and Evaluate the efficiency and transparency of beneficiary selection, Procurement, manufacturing and supply and distribution of household Silos;
- f. ToMonitor and Evaluate all physical and financial progress of all the components of the project.
- g. To provide spot check evidence on the efficiency, transparency and legitimacy of public disclosure;
- h. ToMonitor and Evaluate the compliance with environmental and social safeguards
- i. To Monitor and Evaluate the impacts of the components during implementation and after implementation.
- j. Carry out Participatory monitoring to identified problems.
- k. Develop and implement training activities on project monitoring and impact evaluation for project team and relevant staff at DG Food, FPMU and Ministry of Food
- l. Collect, process and compile all data at field level to report on regular intervals on all indicators in the project Results Framework
- m. Collaborate on the development of an IT-based integrated monitoring system that reports on the status of public stocks countrywide (linking, modern silos, national and local storage depots).

Description of Activities

Timing

All three components of the project will be implemented in the 8 locations in the country throughout the year. Monitoring fieldwork will need to be scheduled in accordance with the physical progress implementation cycle, but any advance notification to site offices when conducting spot checks at specific sites should be avoided as it might bias field work planning and work implementation. Spot checks should thus be conducted as "surprise checks".

Sampling

1. The spot checks exercise will be conducted in 8 nos. construction sites, where construction works are being implemented and areas where household Silos to be distributed by the NGO subcontracted by the Service Provider. Samples of household within each distributed area of household Silos should be representative of both number of beneficiaries and the number of groups funded. Stratification of sample should be by gender, family type and other factors relevant.
2. The Firm's proposal shall include a proposal on how the sampling will be handled at the distributed area and household level and should justify any variation from the sampling guidance above. After feedback from the World Bank and MoFood is provided, an agreed upon sampling strategy shall be presented in the **Inception Report**.

Scope of Work

1. The Firm will carry out its services, adopting the latest project management tools, will assume overall responsibility for monitoring of project activities and indicators are:
 - Setting up and implementing the project monitoring and impact evaluation system
Monitor the compliance with environment and social safeguards policies triggered by the project, including implementation, where applicable of the EMP and SMP

Development and Implementation of a comprehensive Project Monitoring Information System:

- The Firm will develop summary monitoring information in a tabular form using monitoring indicators and targets as per Result Framework of MFSP;
- The Firm will also monitor and update the indicators and targets in the Result Framework;
- Project Monitoring System will describe process of collection the data from field, who will collect the data and how from where;
- Ensure timely field monitoring for quality management of project activities;
- Regularly collect lessons learnt and communicate to the management in timely manner;

- Work closely with the technical teams and field offices for collection of data related to implementation of project;

Design and Implementation of an Impact Assessment (including baseline, midterm and end-of-project studies/surveys):

- The methodology for the assessment will include several tools, including interviews and focus group discussions, progress reports and observation at worksites and project offices;
- The Firm will submit the survey plan;
- The Firm will develop questionnaires for survey works;
- The Firm will develop method of impact evaluation;
- The Firm will develop the sampling criteria, size and duration and timing;

Design and Implementation of a capacity building program on Project Monitoring and Impact Assessment: The Firm will organize workshop or training program on Impact Evaluation for Policy design for developing skillness of DG Food stuff.

- Conduct Training Program for capacity building of PMU, DG Food, FPMU and others at MoF; annually
- Design an ICT-based food stock monitoring system that provides information to DG Food in real time on availability and movement of stock in modern silos, as well as Central and Local storage depots

Project Reporting: The Firm will prepare Quarterly Progress Report, comprehensive Mid Term Impact Assessment Reports, annual progress reports and end-of-project impact assessment reports covering all aspects of the project implementation i.e. contractual, physical, financial, social and environmental;

- Provide timely support to the project management based on project monitoring and evaluation;
- Ensure follow up and reporting to the project management on different adjustments made to the project activities in the light of Monitoring and Evaluation suggestions;
- Provide support to Ministry/Directorate for project adjustments in the light of Monitoring and Evaluation activities.

Strategic Support to Project Management: The Firm will be asked on the basis of his day-to-day monitoring and evaluation work to regularly submit strategic recommendations to the PMU so that improvements in project implementation can be carried out as need;

- Conduct regular internal evaluation and reviews of the project activities;
- Facilitate, together with the Project Management Unit the commissioning of independent evaluations of the project;

- Ensure proper follow-up of different evaluation outcomes and reviews based on the action plan of implementation of the Project;

However, the Firm will coordinate with the DGF appointed Project Director and prepare reports on the following:

- (ii) Grievance procedures and the associated communications and follow-up;
- (iv) Public disclosure;
- (v) Compliance with environmental and social management frameworks;

Facilitate project evaluation, reviews and project knowledge production for decision making. The key results have an impact on the overall outcome achieved by the project and provide the national and international stakeholders with the facts-based orientation of the project progress and make informed decision makers.

Deliverables

1. The Firm shall be required to deliver the following output:
 - (i) **Inception Report:** Including the work plan for each 5 areas described under Scope of Work, specifying a schedule consistent with the duration and activities required; staff plan with numbers and positions and logistics plan with timeline (within 3 months after signing of contract); technical description and outline for the methodology the impact assessment; detailed methodology and approach for baseline survey; full list of indicators to be measured and reported in the project MIS; full description of project MIS.
 - (ii) **Quarterly Progress Report:** Including the design, contractual, physical, financial status, environmental and social compliance status and summary presentation for quarterly project Bulletin within two weeks of ending the quarter.
 - (iii) **Mid Term Impact Assessment Report:** Covering all the components and activities twice in a year after June and December within three weeks of end of mentioned month.
 - (iv) **Annual Progress Report:** The Annual Progress Report shall be submitted within 30 days after end of financial year.
 - (v) **End-of-Project Impact Assessment Report:** Project End Impact Assessment Report shall be submitted within last month of the contract period.

Qualifications

The Firm shall have extensive experience in

(i) development and implementation of project monitoring information systems;

(ii) design and implementation of impact assessments with field surveys. Similar assignments and other work on project M&E will count as relevant experience. Relevant experience in both Bangladesh and other developing countries is required. Familiarity with projects funded by the World Bank or other development partners is an added advantage. .

Duration of Consultancy

The Consultant Firm would be hired the whole period of the Project. However, the contract will be renewed subject to review after Mid Term Review (MTR) Mission on the basis of satisfactory performance in achieving of objectives of the services.

Selection of the Firm

The client shall ask the applicant to provide both technical and financial proposals at the same time but in separate envelop (Two envelop system). Then the client shall negotiate the financial proposal with the technically highest ranked applicant and contract. Thus the Consultant firm will be hired following the Quality Based Selection (QBS)method according to World Bank Guidelines for Selection and Employment of Consultants under IDA Credits & Grants by World Bank Borrowers updated January 2011.

Lump sum Payment against deliverables:

The contract is performance based, and payments would be based on achievement of key tasks and outputs completed within the stipulated time.

Deliverable 1: Inception Report

Deliverable 2: Baseline study report to be submitted within 6 months from the date of contract signature

Deliverable 3: Quarterly Progress Report

Deliverable 4: Mid Term Impact Assessment Report

Deliverable 5: Annual Progress Report

Deliverable 6: End-of-Project Impact Assessment Report

The consulting firm should be required to put in a detailed break up on the percentage of payment.

Staffing input (Man-months)

Below the staffing schedule is given

No	Description	Year				Man-months		Total	
		2015	2016	2017	2018	Local	Intern.	Local	Intern.
	National								
1	Senior Monitoring and Evaluation Expert, Team Leader (6 month per year)					30		30	
2	Monitoring and Evaluation Officer (6 month per year)					60		60	
1	Data Analysts (6 month per year)					30		30	
5	Data Collector (6 month per year)					150		150	
2	Computer Operator (6 month per year)					60		60	
5	Support Pool (6 month per year)					150		150	

Team Composition (Key professionals qualifications and expertise)

Number	Position	Qualification	Expertise
1	Senior Monitoring and Evaluation Expert (Team Leader)	<ul style="list-style-type: none"> • Master in Physical/Applied Science • Postgraduate Diploma in macro economics and/or development studies will be treated as additional qualification. 	<ul style="list-style-type: none"> • At least 20-year of professional working experience in the area of monitoring and evaluation in public sector development projects, and experience in results-based management (RBM) of donor funded/aided projects, • Experience on monitoring in the Government context, tracking results in a logical framework approach, reporting to the stakeholders are highly desirable. • Knowledge and understanding of food security and disaster management activities; • Knowledge on PPR and World Bank's Procurement Guideline, donors lending policy as well as resettlement policy etc. will be treated as an additional advantage. • A good computer systems skills. • Excellent command of written and spoken English;
2	Monitoring and Evaluation Officer	<ul style="list-style-type: none"> • Graduate in Physical Science • Diploma in macro economics and/or development studies will be treated as additional qualification. 	<ul style="list-style-type: none"> • At least 5-year of professional working experience in the area of monitoring and evaluation in public sector development projects, and experience in result-based management (RBM) of donor funded/aided projects Experience on monitoring in the Government context, tracking results in a logical framework approach, reporting to the stakeholders are highly desirable.
1	Data Analysts	Master in Science	At least 5-year of professional working experience as data analyst
5	Data Collector	4 Years graduate in any Physical Science	Skilled in Computer application
2	Computer Operator	Graduate in any discipline	At least 5-year working experience in computer operator
5	Support Pool		

Annex - 1: Brief Description of the Project

Annex - 2: Proposed Locations for the Construction of Silos

Annex - 3: Revised Result Framework

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 Narayanganj 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 three fold: 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.

Annex-2

Proposed Locations for the Construction of Silos

In order to locate the public silos at the best location considering logistics, availability of rice, distribution and constructability, etc., several sites were examined all over Bangladesh. Out of the 14 sites for which detailed site analysis was carried out, 8 sites were selected for the project as listed in the tables below:

Table 1: Location of proposed silos size and approximate size of storage

Proposed Silos (Capacity in MT)								
Sl. No.	Site	No. of Bins	Bin Size	Total Bin Capacity (MT)	Existing Capacity (MT)	Total Capacity (MT)	Grain Type	Remarks
1	Barisal	16	60Dx40H	48,000	22,700	70,700	Rice	
2	Narayanganj	16	60Dx40H	48,000	25,000	73,000	Rice	
3	Dhaka	16	60Dx40H	48,000	7,500	48,000	Rice	
4	Ashuganj	35	60Dx60H	105,000	50,000	155,000	Rice	
5	Mymensigh	16	60Dx40H	48,000	32,560	80,560	Rice	
6	Maheshwarpasha	6	90Dx78H	76,200	58,827	135,027	Wheet	
7	Chittagong	9	90Dx78H	114,300	100,000	214,300	Wheet	
8	Madhupur	16	60Dx40H	48,000	-	48,000	Rice	
	Sub-Total	130		535,500	289,087	824,587		

Table 2: Coordinates of Location of Public Silos

	Site	Coordinates	
		NORTH	EAST
1	Barisal	22° 40' 50.98"	90° 21' 45.70"
2	Narayanganj	23° 37' 15.63"	90° 30' 37.63"
3	Dhaka	23° 41' 53.87"	90° 25' 12.14"
4	Ashuganj	24° 02' 20.16"	90° 59' 48.93"
5	Madhupur	24° 37' 46.26"	90° 03' 51.87"
6	Mymensigh	24° 46' 36.63"	90° 21' 46.90"
7	MaheshwarPasha (Wheat)	22° 50' 16.66"	89° 32' 36.83"
8	Chittagong (Wheat)	22° 16' 32.70"	91° 47' 44.91"

Revised Results Framework and Monitoring

BANGLADESH: Modern Food Storage Facilities Project (MFSP)

Project Development Objective (PDO): The overall Project development objective is to be increase the grain reserve available to households to meet their post-disaster needs and improve the efficiency of grain storage management.

PDO Level Results Indicators	Core	Unit of Measure	Baseline	Cumulative Target Values							Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition etc)
				YR 1	YR 2	YR3	YR 4	YR5	YR6	YR7				
P1. Increased emergency grain reserve stored in central storage facilities constructed by the project	<input type="checkbox"/>	Tons	0	0	0	0	50,000	280,000	350,000	400,000	Annual	Annual reports (PMU + DG Food),	PMU, Coordinators at the project sites, and third party verification	See Note P below
P2. Increased number of beneficiaries whose emergency grain needs can be met in case of natural disaster (by gender)	<input checked="" type="checkbox"/>	Million people	0	0	0	0.2	2	6	12	14	Annual	Annual reports (PMU + DG Food)	External monitoring agency	Note P2
		% of women	0	0	50%	50%	50%	50%	50%	50%				
P3. Reduction in grain storage and handling costs in public storage facilities	<input type="checkbox"/>	US\$ per ton per year	to be established in year 1	0			??			??	Baseline, MTR and ICR	Survey	External monitoring agency	Note P3
Alternative P3. Reduction in annual budget costs for Public Food Storage and Distributions System	<input type="checkbox"/>	Million US\$	0	0			10			70	Baseline, MTR and ICR	Survey	External monitoring agency	Note P3a

PDO Level Results Indicators*	Core	Unit of Measure	Baseline	Cumulative Target Values**							Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition etc)
				YR 1	YR 2	YR3	YR 4	YR5	YR6	YR7				
INTERMEDIATE RESULTS														
Component A: Construction of Modern Public Food Grain Storage Silo Facilities														
A1. Public food grain silos sites constructed and operational	<input type="checkbox"/>	Number	0	0	0	0	2	4	6	8	Quarterly and Annual	Quarterly and Annual reports (PMU + DG Food)	DG Food	Note A1
A2. Households provided with safe grain storage containers	<input type="checkbox"/>	Number	0	0	0	50,000	100,000	300,000	500,000	500,000	Quarterly and Annual	Quarterly and Annual reports (PMU + DG Food) and survey	External monitoring agency	Note A2

PDO Level Results Indicators*	Core	Unit of Measure	Baseline	Cumulative Target Values**							Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition etc)
				YR 1	YR 2	YR3	YR 4	YR5	YR6	YR7				
Alternative A2. Household level safe grain storage capacity provided under the project	<input type="checkbox"/>	Ton	0	0	0	250	5,000	15,000	25,000	25,000	Quarterly and Annual	Quarterly and Annual reports (PMU + DG Food) and survey	External monitoring agency	Note A2a
Component B: Support for Food Planning and Monitoring Program														
B1. Food Stock and Market Monitoring System developed and established	<input type="checkbox"/>	Qualitative	NA	--	---	System designed and approved	--	--	System operational	--	Annual	Annual reports (PMU + DG Food)	External monitoring agency	Note B1
B2. Number of CSDs and LSDs linked in a centralized public food storage and distribution management system	<input type="checkbox"/>	Number	NA	0	0	0	200	300	600	600	Annual	Quarterly and Annual reports (PMU + DG Food)	External monitoring agency	Note B2
B3. Improved policy advice for grain stock, purchase and distribution developed	<input type="checkbox"/>	Qualitative	NA	--	Food policy research program established	Studies launched	Study results discussed in at least 2 stakeholder workshops	Study results discussed in at least 2 stakeholder workshops	--	Policies adopted in PFDS	Annual	Annual reports (PMU + FPMU)	PMU + FPMU	Note B3
B4. FPMU's capacity to shape the food policy dialogue has improved with additional policy notes published	<input type="checkbox"/>	Number	0	0	0	0	3	6	8	8	Annual	Ministry of Food's website Official publications	DG FPMU	Note B4
Component C: Project management, construction supervision, technical assistance, training														
C1. Persons trained	<input checked="" type="checkbox"/>	Number	0	0	500	1000	4000	6000	6000	6000	Same as above	Quarterly and Annual reports (PMU + FPMU)	External monitoring agency	Note C1

Notes and definitions of indicators:

P1. This indicator will measure the net incremental grain reserve stocked in the eight silos to be constructed under the project. The number will be balanced against changes of existing stocks at the baseline level (e.g. grain held in the godowns at project sites). A baseline will determine the current grain stock at the eight project sites. The average stock of the years 2013 and 2014 would be used as a baseline. The annual measurement would be taken short before the annually cyclone season.

P2. This indicator will measure the additional number of people, whose basic food needs can be met in case of a natural disaster. The number will include beneficiaries supplied with food from central storage facilities and beneficiaries supplied with house hold safe grain storage containers. It cannot be assumed that the project could directly observe the amount of beneficiaries in real emergency situation. The *potential* number is therefore based on an expected grain need of 20-30kg per person in an emergency situation, which would cover the food caloric food requirements for at least a period of 30-40 days. *[Numbers on food requirements per person need to be verified.]* The percentage of women beneficiaries is added as a requirement for all core indicators in the Bank system and will be taken from census data.

P3. This indicator will measure the efficiency gains of the storage management and facilities and will be assessed through a survey. It would capture the reduction of all costs related to the storage, handling, including losses. It would include the costs of transportation, operation of the storage facilities, un packing and repacking, and losses during handling and storage (quantitative and qualitative losses as decreased value). Cost would be expressed in US\$ per ton and year and would refer to the entire Public Food Storage and Distribution System in the country. The assessment would be based on secondary data available from the Ministry of Food combined with primary field data collected from a sample of representative CSDs and LSDs (including at least 10 percent of the existing facilities).

P3a. Alternative to the indicator above (P3) the efficiency gains could be measured by the reduced public spending for the country's Food Storage and Distribution Program. This would capture the handling and storage costs and losses described above and in addition it would capture the efficiency gains related to improved procurement and marketing of grains. *[To avoid a bias by the expansion (or reduction) of total volumes in the public program the indicator could also be expressed in public spending per ton.]*

A1. Newly constructed facilities would be considered operational when the construction is completed and handed over to the operators and when at least 20% of the designed capacity stocked with grain.

A2. This indicator would measure the number of house holds having received a safe grain storage container at the point of distribution, where the house hold representative confirms receiving the container (e.g. exchanging a voucher or by signature or by finger print). The information would be verified by at least two random field surveys at mid-term and end of the project checking the presence and use of the containers at the villages and recipient house holds level.

A2a. Alternatively the provision of safe grain storage capacity at the local village level could be measured by the total capacity in tons irrespective of the distribution at the individual house hold level. It can be expected that some of the containers will be shifted around (sold, traded, borrowed, etc.) and not all containers will remain with the original house holds. The containers would nevertheless serve the objective of providing a safe place to store food and seed grains during floods in disaster prone villages.

B1. For this qualitative indicator two mile stones would be defined. Milestone 1 (design) is met after the selected service provider completed the design of an IT supported management system for the ministry's Public Food Storage and Distribution System and the design has been approved by the Ministry of Food (or DG Food). Milestone 2 (operational) is met after installation and staff training with at least 20% of all the transactions recorded through the system. *[Remark: From the PAD it is unclear whether the system is intended to only monitor stocks or provide a forward and backward management system like giving orders (e.g. buying, selling, or otherwise distributing) from the center (DG Food) down to the respective CSDs and LSDs. It is further more not clear whether the 'stock monitoring' is restricted to public stocks or would include private stocks as well. It is assumed that the proposed system is intended to become a management system with forward and backward linkages and would primarily deal with the public stocks and distribution system.]*

B2. This indicator would capture the number of CSDs and LSDs linked in the centralized management system and conduct all their transactions through the system.

B3. Mile stones for this qualitative indicator would be: (i) establishment for the research program by signing a contract with the lead research institution, (ii) studies started by research personnel mobilized in the country, (iii) study results presented and discussed in at least 2 annual public stake holder workshops, and (iv) elements of the policy advice adopted in the government's PFDS.

B4. The publication of policy notes is considered a proxy indicator for FPMU's capacity. The average number of policy note publications for the years 2010-2014 will be used as a basis to determine the incremental publications.

C1. Indicator will capture all people receiving training under the project. Generally people will receive training in their respective field of work. However, over time few people may attend different subject training courses (e.g. changing positions), in which case they will be counted twice.

Baseline Information:

Baseline information will be needed for the following three indicators (included is the potential source and methodology):

- P1. Existing stock at the 8 silo sites (available at the DG-Food office)
- P3. Average current costs of storage and handling in CSDs and LSDs per ton per year. (source and methodology to be defined and agreed by the incoming third party monitoring agency)
- B4. Average number of policy notes published between 2010 and 2014. (to be provided by FPMU).