



Terms of Reference (TOR)
for
Base line Survey by third party for PARTNER

1. Program Outline:

The Government of Bangladesh (GOB) is implementing the Program on Agricultural and Rural Transformation for Nutrition, Entrepreneurship, and Resilience in Bangladesh (PARTNER) with financial assistance from the World Bank (IDA credit), and International Fund for Agricultural Development (IFAD). PARTNER is a five-year (July 2023 to June 2028) program that aims to promote diversification, food safety, entrepreneurship, and climate resilience in the agri-food systems of Bangladesh. It is financed jointly by GoB and the development partners (US\$ 500 million from the World Bank and US\$ 43 million from IFAD). The financing from the development partners (DPs) is linked to the achievement of targets for a set of Disbursement-Linked Indicators (DLIs) and associated Disbursement-Linked Results (DLRs). There is a total of 10 DLIs and 24 DLRs spread over five years.

PARTNER, a Program for Results (PforR), contributes to the implementation of the Government of Bangladesh's own Plan of Action of the National Agricultural Policy 2018. PARTNER's overall framework rests on solid technical bases. The Program reflects the findings and recommendations of the analytical work and sectoral diagnostics carried out by the Bank in recent years. These include Promoting Agri-Food Sector Transformation in Bangladesh: Policy and Investment Priorities, 2020; Climate Smart Agriculture Investment Plan, 2020; Bangladesh Rural Income Diagnostic Study, 2021; and Dynamics of Rural Growth in Bangladesh Study, 2016. Overall, these assessments highlight the importance of a sectoral transformation approach with a focus on productivity improvement, value-chain strengthening, and enhancing food safety, while ensuring climate resilience of the sector. The Program's technical design is also based on long-standing experience in agricultural development in the country and abroad. Interventions under the proposed Program consist of scaling up activities which the MoA and its agencies are generally acquainted with. The MoA and its agencies have acquired extensive experience in developing and implementing sectoral policies, strategies and action plans, in working with key stakeholders, including farmers, agribusinesses, and in strengthening public institutions serving the agriculture sector. The MoA has clearly shown ownership of its sector policies and strategies throughout NAP preparation and implementation, with technical support from FAO. Besides NAP's and 8FYP's, PARTNER's design reflects priorities documented in other relevant policies for the sector adopted by the Government such as Delta Plan 2100, Agriculture Extension Policy 2020, Agriculture Mechanization Policy 2020, and Good Agriculture Practice Policy 2020.

The Program is designed on experience and lessons learned from on-going and past agricultural projects in Bangladesh (such as NATPII, IAPP, ANGeL) and the region, supported by the World Bank and other partners. The overall design of the Program also benefits from the lessons learned through the Bank's global experience with similar PforR operations and other agricultural transformation programs, especially in the South and South East Asia Region.

2. Program Overview

PARTNER will support the objectives of the NAP 2018 and its 2020 PoA targets. The NAP 2018 is the Government of Bangladesh's medium-term sector strategy for agricultural transformation in the country, and NAP 2018's Plan of Action, finalized in 2020, defines specific areas of intervention and sets targets and timelines. Considering the sector's contribution to national GDP and employment (15 percent in 2017 and 41 percent in 2015-16, respectively), the NAP is highly relevant for Bangladesh. PARTNER will contribute to achieving the objectives of the NAP 2018 which prioritizes diversification, commercialization, and mechanization in agriculture as specific goals to transform the agriculture sector into a more productive, profitable, and sustainable agricultural system. In line with the GoB's strategic priorities for agriculture, PARTNER aims to support crop diversification and modernization, including smart climate agriculture (CSA) in a shift towards a more climate-resilient and market-oriented food system.

The Program will respond to Bangladesh's policy goals and will contribute to key strategic priorities of the Government of Bangladesh. PARTNER is well aligned with key goals of the 8th Five Year Plan (8FYP, 2021-2025) of the GoB, which aims, among others, at reducing extreme poverty to 5 percent and moderate poverty to 12 percent, achieving major Sustainable Development Goal (SDG) targets. The Program will contribute to the key sectoral priorities identified by the plan for agriculture such as promoting modern and sustainable agriculture development with an accelerated process of transformation in agriculture from a predominantly semi-subsistence orientation towards increasingly commercialized and diversified agriculture. PARTNER will also contribute to the longer-term vision of the GoB, as laid out in the Bangladesh Delta Plan 2100 released in 2017, which aims at achieving long-term water and food security, economic growth, and environmental sustainability while effectively reducing vulnerability to natural disasters and building resilience to climate change and other challenges faced in the Delta through robust, adaptive, and integrated strategies and equitable water governance. PARTNER responds to these aims by enhancing beneficiaries' resilience through community mobilization and organization, and promotion of CSA practices in Program activities.

PARTNER will contribute to crowding in the private sector along the agri-food value chain.

The Program will follow a three-pronged approach to supporting greater participation and investment from the private sector: (i) Lifting legal and regulatory constraints for private sector participation through policy reforms, especially in the seeds sector; (ii) Improving market conditions for private investment, especially in food processing, and through GAP practice adoption at farm level, which will increase product quality and reliability; and (iii) Maximizing private sector implementation of program activities through PPPs, including areas such as research and extension, post-harvest logistics and marketing, infrastructure, and services.

The Program Development Objective (PDO) is to promote diversification, food safety, entrepreneurship, and climate resilience in the agri-food systems of Bangladesh. The program's PDO will be assessed by the following indicators:



- I. Increased area under non-rice cereals, pulses, oilseeds, and horticulture crops (hectare) (to capture increased diversification).
- II. Increased area under fruits and vegetables with GAP certification (hectare) (to capture food safety)
- III. Women and youth trained under the Program achieving at least a 30 percent income increase (number) (to capture entrepreneurship).
- IV. Increased area under resilience-building, efficient irrigation technologies (hectare) (to capture increased climate resilience).

To achieve its development objective, PARTNER will focus on three results areas (i) Promoting sustainable and nutritious food production, (ii) Increasing entrepreneurship and access to services along the value chains, and (iii) Modernizing institutions and policies for agriculture transformation. These results areas have strong synergies and are mutually supportive.

Result Area 1: Promoting Sustainable and Nutritious Food Production. PARTNER aims at increasing productivity of all key crops such as cereals, pulses, fruits and vegetables, and spices, promoting agricultural diversification, enhancing on-farm food safety, and building climate resilience in the sector. The operation will promote productivity gains in rice to ensure self-sufficiency while increasing land availability seasonally or permanently for other crops with a high domestic and international market potential. The operation will support more efficient use of inputs and address food safety concerns through the promotion of GAP. Crop diversification and a more balanced and efficient use of inputs (fertilizer, pesticides, water) are expected to enhance climate resilience and mitigation. Under this Result Area, PARTNER will contribute to (i) increase the adoption of GAP standards in fruit and vegetable production; (ii) increase the adoption of new rice HYVs; (iii) increase crop diversification towards non-rice cereals, pulses, oilseeds, spices, and horticulture crops; and (iv) increase the adoption of improved and efficient irrigation technologies.

Result Area 2: Increasing Entrepreneurship and Access to Services along the Value-Chains. PARTNER aims at making the provision of services and subsidies to farmers more efficient, helping with the reform of the food safety system by strengthening the national testing laboratories, and promoting access to better markets. PARTNER will also aim at improving working conditions of female farmers and promoting active participation of women and youth as agents of change by providing them with appropriate skills and access to services to enable their retention on the job market or creation of their own higher-value jobs along the agri-food value chain. Under RA2, PARTNER will contribute to (i) the modernization/digitalization of the provision of extension services and input support, and the improvement of farmers' access to finance and to markets through the provision of the Krishak Smart Card; (ii) the strengthening of testing laboratories for seed certification and food safety, facilitating commercialization in domestic and foreign markets; and (iii) the strengthening of female and youth entrepreneurship skills for their engagement in agri-food value-chains.

Result Area 3: Modernizing Institutions and Policies for Agriculture Transformation. PARTNER aims to reform agricultural research, education, and extension system, improve VC coordination and promotion, and improve the efficiency, effectiveness, coordination, and



information management of agricultural policies and programs. For this purpose, under RA 3, PARTNER will contribute to (i) increase R&D activities and efficiency of extension services through the strengthening of the NARS and extension system, including the adoption of a continuous evaluation framework, and the use of research outcomes by MoA agencies and the private sector; (ii) the establishment and operation of value-chain promotional bodies; and (iii) the improvement of the agricultural information system, including the preparation of quarterly agricultural policy notes and annual agricultural assessment reports.

Implementation Agencies: The PARTNER activities will be implemented by the following seven institutions of the Ministry of Agriculture:

- I. Department of Agricultural Extension (DAE)- *The lead agency*
- II. Department of Agricultural Marketing (DAM)
- III. Bangladesh Agricultural Research Institute (BARI)
- IV. Bangladesh Rice Research Institute (BRRI)
- V. Bangladesh Agricultural Research Council (BARC)
- VI. Bangladesh Agricultural Development Corporation (BADC)
- VII. Barind Multi-purpose Development Authority (BMDA)

The expected contribution from each agency has been determined based on the agency's mandate. Ten indicative DLIs have been identified for the operation, where on each DLI multiple agencies will contribute. One agency will act as the lead agency for each DLI, and other contributing agencies will be responsible for implementing activities that are assigned to them.



Table 1. Key specific targets related to the PDO Indicators by agencies and their related DLIs and DLRs are given below:

Key PDO Targets	Lined with DLI/DLR	DAE	BRRI	BA RI	BADC + BM DA	DAM	BA RC
To increase the area under fruits and vegetables with GAP certification by 300000 hectares	DLR 1.1: GAP standards and protocols for fruits and vegetables developed and approved by MoA						15 Protocol
	DLR 1.2: Farmers and certification staff trained in GAP certification	1500 staff 10 Lakh farmers					
	DLR 1.3: Area under fruits and vegetables with GAP certification	3 Lakh ha,					
To increase area under climate resistant and highyielding Rice varieties by 200000 hectares; (100 + varieties)	DLR 2.1: Stress-tolerated and nutrient-dense rice varieties generated		5 Varieties				
	DLR 2.2: Network established and operational for seed multiplication and marketing (Tons of seeds)		BS- 50 MT CS-500 MT.		FS-4000 MTCS-4500MT		
	DLR 2.3: New area under high-yielding rice (100 & 100+) varieties (Ha)	150,000 ha	50,000 ha				

Key PDO Targets	Lined with DLI/DLR	DAE	BRRI	BARI	BADC + BMDA	DAM	BAR C
To increase area under non-rice cereals, pulses, oilseeds, and horticulture crops by 200000 hectares	DLR 3.1: Stress-tolerant and nutrient-dense varieties developed and on-farm trial for non-rice crops conducted			15 Varieties			
	DLR 3.2: Seed/saplings/propagative material multiplication and marketing network established and operational (Tons of seeds)			BS-275 MT Tuber-225 MT M.clove-140 MT Sucker/vine s/saplings-13.8 million	FS-4000 MT CS-5000 MT		
	DLR 3.3: New area under non-rice cereals, pulses, oil crops, fruits and vegetables (Ha)	180,000 ha		20,000 ha			
To cover new area of 100000 hectares under improved and efficient irrigation technologies	DLR 4.2: New area under efficient irrigation technologies. Sprinkler-500 ha, Drip-500 ha & AWD-99,000 ha	10,000 ha	2,000 ha		88,000 ha		

Key PDO Targets	Lined with DLI/DLR	DAE	BRRI	BARI	BADC + BMDA	DAM	BAR C
To distribute KSC among 227 lakh farmers, Input support for 50 lakh farmers, financial service for 5000 farmers.	DLR 5.3: Farmers receiving services (extension support, input subsidy support, and credit support) through 'Krishak Smart Card'	KSC-227 Lakh Input Support – 50 Lakh & Financial Service agreement with 20 Institutions (each Institution will provide service minimum 5000 farmers)					
To train 20000 youth and women entrepreneurs in commercial agriculture, agribusinesses, agricultural innovations and agricultural services;	DLR 7.2: Youth and women entrepreneurs trained (including on-the-job training) in commercial agriculture, agribusinesses, new agricultural innovations, and agricultural services					20,000 Youth and women entrepreneurs (40% Women)	
To make well equipped of the Upazila officers and staff with, collection capacity, handling and storing high quality data	DLR 10.1: Upazilas with staff equipped in high quality data collection capacity	495 Upazilas					

*BS-Breeders Seed, FS-Foundation Seed, CS-Certified Seed

Proposed Delivery Mechanism: The PARTNER Field School (PFS)

PARTNER Field School (PFS) serves as the primary conduit for disseminating technologies developed by a research organization. PFS members will be the primary recipients of PARTNER supported extension activities, including training, demonstrations, field days, exposure visits, congresses, and publications. Seven PFS per union and a total of 42117 PFS in 495 upazilas will be established. Each

PFS will comprise of 25 farmers and formed in a particular location with similar socio-economic backgrounds, of which 80% small/marginal farmers and at least 30% women farmers. PFS, categorized into six types, such as Rice, Pulse, Oilseed, Maize, Wheat, and Nutrition Field Schools, will have an executive committee of 9 members (Chairperson-1, Vice-Chairperson-1, Secretary-1, Cashier-1 and Member-5). The PFS group activities will include organizing monthly meetings, savings, income generation, technology dissemination, market access assistance, and food/nutrition enhancement. The PFS operations will adhere to the PFS implementation manual.

Market Actors Business School (MABS), being conducted at different phases on different nature based on the beneficiary type, crop category, business stage etc. In case of DLI-9, this business school will try to facilitate the women entrepreneurs to participate in value chain promotional bodies as well as agro processors and exporters who deals with processed and/or finished and /or packaged agricultural produces. DAM will conduct a total of 1400 MABS of which 200 business school with women entrepreneurs (each batch comprising 25 actors like women entrepreneur and value chain bodies members) and 100 batch business school with agro processors and exporters (each batch comprising 25 actors like processors, exporters, transporters, CNF agents and relevant market players). DAM officials along with market integration and incubation support provider will conduct the business schools. The subject matter, content and flow of delivery of these business schools will be developed by a value chain consultant.

Water Users Group (WUG), Techniques for use of irrigation water, when and how to irrigate and how much water needed etc. are not well known to many of the growers. As a result, on farm irrigation efficiency is very low. For this reason, an arrangement will be made to organize the rural farmers in Water Users Groups (WUGs). Around 12000 WUGs will be formed within the Program area with a service consulting firm. Advisory service will be provided to the farmers, and they will be imparted training on AWD, the adoption of efficient irrigation technologies, on-farm water management etc. As a result, trainees will be developed themselves as skilled manpower and they will have the opportunity to established themselves as self-employed worker for which their socio-economic condition will be developed and they will be socially rehabilitated and self- sufficient which will help the poverty alleviation activities taken by the government.

Stakeholder/Farmers Group (S/FG) will be conducted by the Hortex Foundation to achieve the result of DLI-9 along with DAM. A total of 120 groups will be formed and support through following the MABS establishment procedure developed by DAM.

3. Objectives of the Assignment:

The primary purpose of the baseline assessment is to capture the present state of all outcome and impact indicators, existing GAP protocols, Rice production with varietal spread out, Irrigation status, Input accessibility to farmers, CT used in local and foreign marketing channel, including enhanced crop diversification, heightened food safety, increased entrepreneurship, and improved resilience and livelihoods at both household and community levels.

This study complements the recommended quantitative and qualitative data necessary when initiating a program for the first time. The baseline assessment will encompass the evaluation of all outcome and impact indicators, offering additional insights contextualized within the program. These indicators encompass crop diversification, food safety, entrepreneurship, and resilience within the agrifood value chains of Bangladesh. The nationwide survey aims to ascertain the present status of DLIs indicators in the



results framework, serving as a benchmark before any interventions. This strategic approach will enable the measurement of the magnitude of change during the impact evaluation at the Program's conclusion.

The specific objectives of the assignment include, but are not limited to:

1. To identify status of Program indicators and result indicators of the seven implementing agencies as per the Program documents. To collect and analyze the baseline information on all results' indicators.
2. To provide insight into Program indicators covering crop diversification, GAP adoption, irrigation efficiency, digital services, entrepreneurship and resilience.
3. To recommend strategies for efficient tracking of PDO achievements and DLRs

4. Scope of the Work:

- Review relevant Program documents including Result Framework indicators and DLI matrix.
- Formulate a comprehensive methodology for the baseline assessment, aiming
- Develop qualitative and quantitative assessment tools to prepare the baseline conditions of all results indicators.
- Conduct a comprehensive survey of 10,000 households randomly selected from 148 (30%) Upazilas from all 64 Districts, using stratified sampling that ensure regional crop and socio-economic diversity according to AEZ.
- Perform a baseline assessment with consideration for the Results Framework and DLIs outlined in Annex 2.
- Ensured 80% of surveyed households are small/marginal farmers and at least 30% are women headed.
- Develop and administer structured household questionnaires, key informant interviews (KIIs), and checklist for focus group discussions (FGDs).
- Capture the existing conditions of crop diversification, food safety, entrepreneurship, and resilience within the agricultural and food value chain of Bangladesh.
- Perform an in-depth assessment of sustainable and nutritious food production, crop commercialization, Professional bodies working in food marketing channels, value addition, and the modernization of institutions and policies for the transformation of agriculture.
- Program all data collection tools using tablet-based platforms (e.g ODK, SurveyCTO, Kobo toolbox or Survey Solutions).
- Integrate geo-referencing features in survey tools.
- Analyze the data using appropriate statistical and econometric techniques.
- Produce a comprehensive baseline assessment report.
- The scope might be changed based on the Program documents.

5. Technical Approach and Methodology

The scope of the task encompasses the baseline assessment of RF indicators To evaluate the current status of PDO outcome indicators, the consulting firm is expected to devise a suitable baseline methodology, In collaboration with the Project Coordination Unit (PCU), the consulting firm will purposefully choose a total of 148 upazilas (of 495 upazilas) from 64 districts representing all agriculture regions. Additionally, the survey will cover agroclimatic region of Bangladesh. Selection criteria for



Upazilas and Unions should consider agricultural regions, survey proximity, and the geographical distribution of the 495 Upazilas across 64 districts. Emphasis should be on acquiring in-depth, high-quality information, ensuring the sample is strategically chosen from a qualitative perspective to cover the full spectrum of DLIs activities. The sampling strategy should account for regional variations to encompass all types of DLIs activities. The baseline survey will encompass a total sample size of 10,000 households. The survey aims to include 80% small/marginal farmers, with a minimum representation of 30% being women farmers. It will encompass all crops affiliated with PARTNER across various regions. The details of the sampling framework and upazila and households' selection methods will be subject to further discussion and finalization in consultation with the PCU. Where necessary, the firm should apply the participatory tools to capture the baseline status of all results indicators (see annex 2).

The assessment will utilize a blend of quantitative and qualitative methods to comprehensively address baseline conditions. Baseline assessment covers activities such as household surveys, Focus Group Discussions (FGDs), Key Informant Interviews (KIIs), case studies, etc. All draft tools, including questionnaires for household surveys, guidelines for FGDs and KIIs, checklists, etc., should be submitted alongside the technical approach and assessment/survey design. These tools will undergo review and approval by the Program Coordination Unit (PCU) and the Bank team.

- In collaboration with the Program Coordination Unit (PCU), PARTNER, and the Bank team, advise study methodologies and instruments for conducting the study. Utilize the comprehensive Program Development Objective (PDO), DLIs result indicators, and sub-component activities to inform the development of all study instruments. The objective is to assess the present conditions of farmers based on the specified result indicators.
- Create and implement a series of meticulously designed and pre-tested questionnaires for conducting interviews with farmers and pertinent stakeholders. Throughout the questionnaire development process, key questions will be derived from the DLIs, results frameworks, DLI matrix, and checklist outlined in Annex 1&2.
- Provide the survey methodology and sample size details for all stakeholders to the Program Coordination Unit (PCU), PARTNER, and the Bank team. Analyze the collected information using a combination of quantitative and qualitative techniques, with an emphasis on measurable, objective data through various statistical models suitable for analyzing the attitudes and opinions of farmers and stakeholders. Qualitative techniques will complement this analysis by providing deeper insights into subject perspectives and experiences.
- The Firm should highlight the associated problems that may arise and explain the technical approach and methodology to adopt to tackle them including design of the data quality system.

Utilization of Tablets and Geo-referencing: Survey questionnaires will be programmed using relevant software (e.g., Survey Solutions, ODK, Kobo Toolbox etc.) to create an electronic version that will be administered through tablets or similar devices for data collection. The chosen firm is accountable for procuring the tablets needed for data collection and is also responsible for establishing a data server to host the necessary software tools. It is advised that each enumerator be provided with a dedicated tablet/device, and the use of personal mobile phones or tablets for data collection is discouraged. The tablet program should incorporate a built-in geo-referencing feature.



6. Team Composition and Person Months

Table 2 outlines a Tentative Team Composition, indicating the number of team members, total person-months, and their respective types of engagement. The firm is encouraged to propose its team structure and composition, specifying the main disciplines involved, key experts responsible, and the proposed technical and support staff for the assignment.

Table 2: Proposed Team Composition (Key Experts and non-key Experts) and Person Months*

Proposed position	Numbers	Person months	Type
Key Experts			
1. Team Leader	1	6	Continuous
2. Economist/M&E Expert	1	6	Continuous
3. Agricultural Extension Expert	1	03	Intermittence
4. Gender and Social Safeguard Expert	1	02	Intermittence
5. Survey and Data Collection Expert	1	06	Continuous
Non-key Experts			
6. District Supervisor (1 for each district)	64	128	Intermittence
7. Data Analyst	2	10	Intermittence
8. Enumerator (50% female)	148	296	Intermittence
Total	219	457	

* It is the proposed list of professionals for the Firm to be engaged. The proposal will have to provide details of the No. of data enumerators and their related cost in the relevant Financial Form.



7. Requirements of key personnel

Table 4: Composition, qualification, and responsibilities of team members

SN	Designation	Qualification	Role
1	Team Leader	- PhD degree in economics/statistics/ agriculture/social science or related subject - Over 12 years of experience in survey design, statistical analysis, qualitative and quantitative research, preparation of evaluation reports (such as Baseline Surveys, Mid-term Reviews, and Implementation Completion Reports) for multi-disciplinary sectors for governments and or non-government programs. - Demonstrated experience in implementation of institutional reforms, including sound knowledge and working experience in result-based program management - Knowledge of monitoring and evaluation tools - Exceptional leadership skills to manage diverse stakeholders - Experience of leading at least five large-scale related assignments involving quantitative data collection, questionnaire design and large-scale surveys. - Strong communications, analytical, writing, and interpersonal skills; excellent report writing abilities required which should be demonstrated through relevant journal articles.	Oversee the entire baseline survey, coordinates team activities, ensure quality control, and communicates with stakeholders.
2	Economist/M&E Specialist	- Master's in economics/ Agricultural Economics - Minimum 10 years of working experience in economic assessment, baseline study, monitoring and evaluation, data management, reporting using experimental research methods, sampling, and advanced statistical analysis and econometric modeling. - Strong communications, analytical, writing, and interpersonal skills; excellent report writing abilities required which should be demonstrated through relevant journal articles.	Design the survey framework, develop indicators, and ensure the data aligns with project goals and monitoring and evaluation requirements
3	Agricultural Extension Specialist	- Master's degree in agriculture or related fields - At least 10 years of experience working in the agriculture sector. - Working experience in the area of monitoring, evaluation and baseline assessment in the public sector development projects and experience in results-based monitoring of donor-funded/aided projects; - Strong analytical and excellent report writing abilities required.	Provides technical inputs on agricultural practices, help shape relevant survey questions and ensure data reflects field realities.

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SN	Designation	Qualification	Role
4	Gender and Social Safeguard Specialist	- Masters in sociology, anthropology/gender studies/any subjects - Minimum 10 years of work and 5 years of evaluation experience in the field of gender inclusion and social safeguard in agriculture sector projects and programs - Significant demonstrated experience with both quantitative and qualitative research methodologies and data analysis techniques required; - Strong analytical and excellent report writing abilities required.	Ensure gender inclusivity and social equity in the survey design and implementation and address potential social risk.
5	Survey and Data Collection Specialist	- Masters in Statistics/Agri. Economics/Economics/Data Science/Computer Science or related field - Minimum 10 years of work experience in the field of data & MIS, electronic survey software development for any public sector and or donor-funded/aided projects. - Experience related to e-agriculture and e-governance within developing countries. This includes assessing communication needs to improve knowledge sharing, developing programs and training to promote efficient and effective technologies. Additional experience in developing monitoring systems to incentivize results is a plus. - Demonstrated experience in Knowledge Management theory and practice;	Develop survey tools, plans data collection methods, and ensure accurate and efficient data gathering.
6	Data Analyst	- Masters in Statistics/Computer Science or related field - Minimum 5 years of working experience in data analysis.	Clean, processes and analyzes collected data to produce baseline insights and reports.
7	Enumerator	- Graduate or equivalent in any subjects - Computer proficiency is preferable	Conduct field interviews and data collection with farmers and stakeholders, following the survey protocol and ensuring accuracy.

8. Deliverables, Timeline, and Report/Documents

The firm will deliver the following reports/documents:

Table 5: Deliverables, timeline, and report/documents

Deliverable	Description	Timeline	Payments	Remarks
Inception Report	- The firm should submit the Inception Report finalize through the stakeholder workshop within one month after signing the contract containing the agreed points, work plan for all major tasks asdescribed under the scope of work specifying a schedule consistent within the duration and activities required, staff plan, logistics plan with timeline, detailed methodology and approach and a full list of indicators to be measured. - In consultation with PCU, the firm should include the detailed methodology and technical approach for the baseline assessment in the inception report. - The inception report will also cover study upazilas and unions with details of the field survey to be carried out by the firm, coordination and logistics arrangements needed. - The Report must be accepted by the PCU, PARTNER.	Within 30 days of signing the contract	10%	10 copies
Development & validation of the survey instrument and Field Executions	- The firm should develop instruments for the assessments that should be validated through a workshop with stakeholders. - The workshop proceeding will show the electronic version of all study instruments and pretesting details and versions. - This instrument will cover the HH questionnaire, group discussion, key informant interview etc. - The Report including all instruments must be accepted by the PCU, PARTNER.	Within 60 days of signing the contract	20%	

Deliverable	Description	Timeline	Payment	Remarks
Data Collection & Verification	- Under the supervision of 64 District Supervisor 148 Enumerators will Collect the data from the field. 5% of collected data should be back checked by supervisors. Data collection should be completed within 40 working days. The firm shares the soft copy of raw database with the PCU for checking the data quality.	Within 120 days of signing the contract	20%	
Draft baseline Report/s	- The firm should prepare a draft report after analysis the field data on baseline study. The reports should include their related introduction, applied research methodologies, findings, recommendations and suggestions. - The draft reports should be presented in the one day-long results sharing workshops at national level to be organized by the Firm. - In collaboration with PCU, the Firm will coordinate a workshop for sharing results. - The draft Report must be agreed/accepted by PCU, PARTNER.	Within 150 days of signing the contract	20%	10 copies
Final Report	- The Firm should finalize the reports incorporating suggestions and comments of the workshop and from the Clients within two weeks from the date of the workshop. - The final report should be submitted to PCU on agreed formats and in print. Among others the reports should contain Executive Summary, Introduction, Methodology, Findings, Discussions, Lessons Learned, Recommendations/Suggestions and Annexure - The Firm should submit 50 Nos. of printed copy and electronic copy (in hard disk) of report and final database. - The Report must be approved/accepted by PCU, PARTNER.	Within 180 days of signing the contract	30%	50 copies

9. Duration of Work and Duty Station

The duration of the assignment is 6 months after the signing of the contract. The firm is expected to work from its own offices and attend meetings at DAE office as required. Team leader and study coordinator should close connection with PCU and share the regular update of the study. For successful completion of the baseline study PCU will give access to all the required documents, correspondence and any other information associated with the assignment, field level supports etc.

10. Experience and Qualifications for Firm

The consulting firm must submit necessary documents, i.e., its profile- describing the nature of business, field of expertise, licenses, audited financial statements, certifications, accreditations, and proof of experience while submitting the proposal to substantiate the above eligibility criteria. The consulting firm should have the following experience and qualifications.

- i. At least 15 years of demonstrated experience in conducting any type of project evaluation/ assessment.
- ii. Experience in performing minimum 05 similar assignments (project's baseline study/ project's baseline survey) within last 08 years; Experience of conducting baseline study/ survey in agriculture or any related projects will add value;
- iii. Experience of consulting services of at least BDT 1.4 (one point four) Crore or equivalent amount in other currencies within last 5 years of conducting similar assignment.
- iv. Experience of performing baseline study/ baseline survey under the World Bank/ UN/any other international development funded projects will be added advantage.
- v. Strong financial capability to carry out the assignment (Submission of audited balance sheets, statements of cash flows, and profit & loss statements for the last 03 (three) completed financial years is required);
- vi. The firm should be a registered under the joint stock company of Bangladesh. The firm must have all legal documents as a proof legal capacity to perform the services.
- vii. Valid Trade License, TIN, and VAT Certificate;
- viii. Availability of assignment-related professional skills among staff and availability of necessary logistics (e.g. vehicles, office equipment etc.)

11. Selection Method

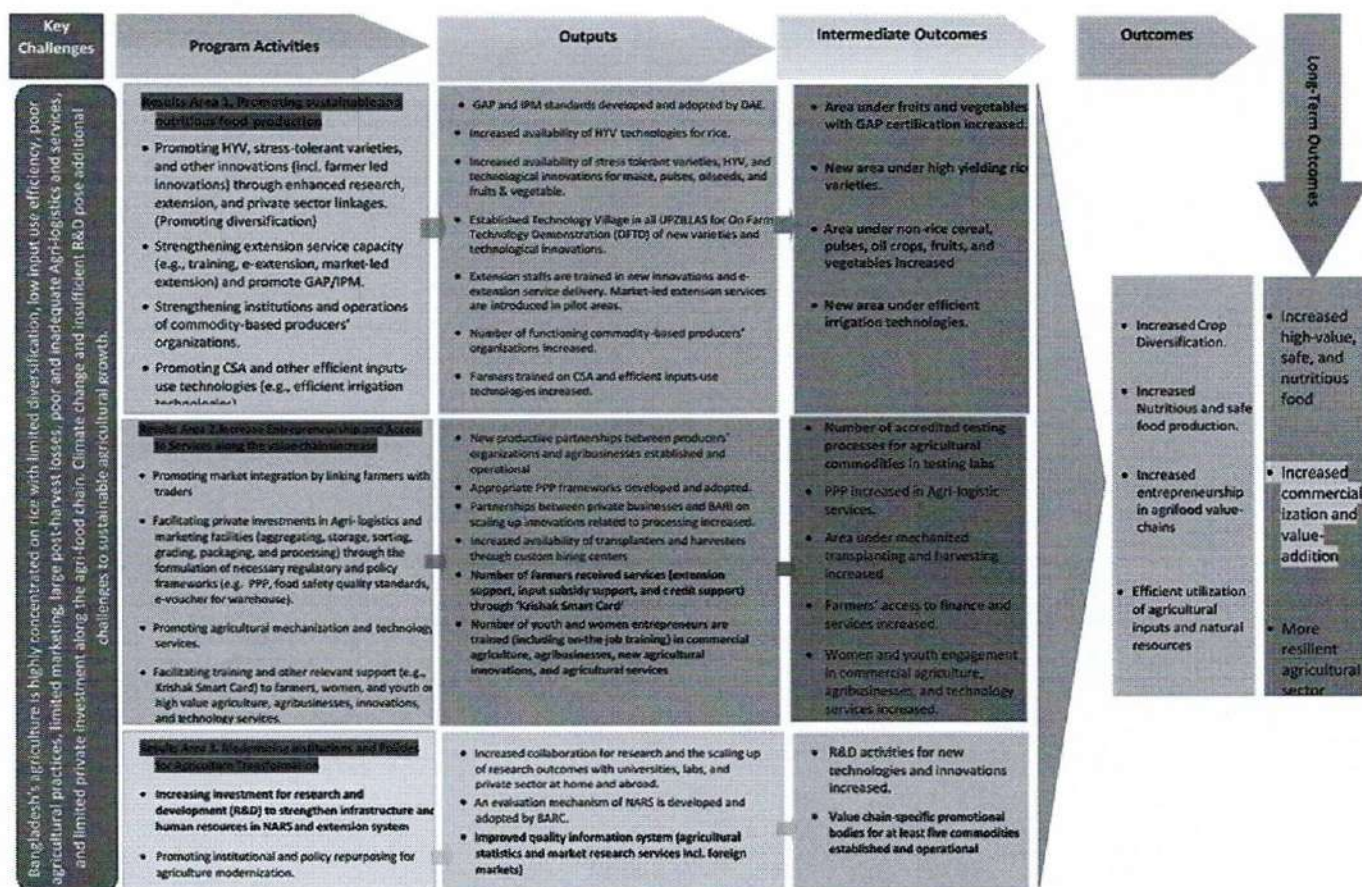
The firm will be selected on the basis of technical and financial evaluation as per the Quality-and Cost-Based Selection (QCBS).

12. Property Rights

All information gathered under the contract will be the property of PCU, PARTNER. The selected firm must deliver all data with proper labelling and self-explanatory formatting; documents, background information and other relevant information gathered during the course of the activities carried out while under contract must be delivered to PCU, PARTNER in their entirety.



Figure 1. Theory of change



RESULTS FRAMEWORK MATRIX

Results Framework COUNTRY: Bangladesh

Program on Agricultural and Rural Transformation for Nutrition, Entrepreneurship, and Resilience in Bangladesh (PARTNER)

Program Development Objective(s)

The Program Development Objective (PDO) is to promote diversification, food safety, entrepreneurship, and resilience in the agrifood value chains of Bangladesh.

Program Development Objective Indicators by Objectives/Outcomes			
Indicator Name	DLI	Baseline	End Target
Increased Crop Diversification			
Increased area under non-rice cereals, pulses, oilseeds, and horticulture crops (Hectare (Ha))	DLI 3	0.00	200,000.00
Improved Food Safety			
Increased area under fruits and vegetables with GAP certification (Hectare(Ha))	DLI 1	0.00	300,000.00
Increased Entrepreneurships			
Women and youth with entrepreneurship training have started businesses (Number)	DLI 7	0.00	12,000.00
Improved Resilience			
Farmers adopting improved agricultural technology (CRI, Number)	DLI 4	0.00	400,000.00

Indicator Name	DUI	Baseline	End Target
Farmers adopting improved agricultural technology - Female (CRI, Number)		0.00	100,000.00
Farmers adopting improved agricultural technology - male (CRI, Number)		0.00	300,000.00



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Intermediate Results Indicator by Results Areas

Indicator Name	DLI	Baseline	End Target
Promoting sustainable and nutritious food production			
GAP standards and protocols for fruits and vegetables developed and approved by MoA (Yes/No)		No	Yes
Farmers and certification staff trained in GAP certification (Number)		0.00	1,000,000.00
New area under high yielding rice varieties (Hectare(Ha))	DLI 2	0.00	200,000.00
Stress-tolerant and nutrient-dense rice varieties generated (Number)		0.00	5.00
Network established and operational for rice seed multiplication and marketing (Yes/No)		No	Yes
Stress-tolerant and nutrient-dense varieties developed and on-farm trial for non-rice crops conducted (Number)		0.00	15.00
Seed/saplings/propagative material multiplication and marketing network (including private sector participation) established and operational (Yes/No)		No	Yes
Increased area under efficient irrigation technologies (Hectare(Ha))		0.00	100,000.00
Policy/Regulatory framework & strategic plan developed for the promotion of efficient irrigation technologies (Yes/No)		No	Yes
Share of farms using AWD (%) (Percentage)		0.00	30.00
Number of extension staffs, who are trained in new innovations and e-extension service delivery (Number)		0.00	1,000.00
Number of farmers trained in improved technologies (new tech & seeds for Rice and Non-Rice Crops, and new tech for efficient		0.00	116,250.00

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Indicator Name	DLI	Baseline	End Target
irrigation) (Number)			
Increasing Entrepreneurship and Access to Services along the value-chains			
Number of farmers received services (extension support, input subsidy support, and credit support) through 'Krishak Smart Card' (Number)	DLI 5	0.00	5,000,000.00
Number of farmers received services (extension support, input subsidy support, and credit support) through 'Krishak Smart Card'-Male (Number)		0.00	3,000,000.00
Number of farmers received services (extension support, input subsidy support, and credit support) through 'Krishak Smart Card'-Female (Number)		0.00	2,000,000.00
Policy/Regulatory framework for service delivery through "Krishak SMART CARD" developed and approved (Yes/No)		No	Yes
Number of Upazilas with digital extension service capacity (Number)		0.00	495.00
Digital extension services delivered and e-voucher pilot for new input subsidy mechanism implemented (Yes/No)		No	Yes
Number of youth and women entrepreneurs are trained (including on-the job training) in commercial agriculture, agribusinesses, new agricultural innovations, and agricultural services (Number)		0.00	20,000.00
Number of youth and women entrepreneurs are trained (including on-the job training) in commercial agriculture, agribusinesses, new agricultural innovations, and agricultural services-Male (Number)		0.00	12,000.00
Number of youth and women entrepreneurs are trained (including on-the job training) in commercial agriculture, agribusinesses, new agricultural innovations, and agricultural services-Female (Number)		0.00	8,000.00

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Indicator Name	DLI	Baseline	End Target
Number of institutions provide financial services to at least 1000 farmers (Number)		0.00	20.00
Number of MoUs with businesses and financial institutions for on-the-job training and financial support (Number)		0.00	35.00
Number of accredited testing processes for agricultural commodities in testing labs (Number)	DLI 6	0.00	10.00
Laboratories established (including refurbished/upgraded) with adequate HR and equipment (Number)		0.00	10.00
Modernizing institutions and policies for agriculture transformation			
Increase in R&D budget for NARS Institutes (Percentage)		0.00	30.00
MoUs/agreements on research collaboration/scaling up research outcomes with global research labs and Private Sector (Number)	DLI 8	0.00	30.00
Value chain-specific inter professional bodies for select commodities established and operational (Number)	DLI 9	0.00	5.00
Policy and regulatory framework for the establishment of value-chain promotional bodies developed and adopted by MoA (Yes/No)		No	Yes
Number of stakeholders' (especially Farmer) organizations of selected value chains strengthened with institutional capacity building support (Number)		0.00	500.00
Improved quality information system (agricultural statistics and market research services incl. foreign markets) (Yes/No)	DLI 10	No	Yes
Number of upzilas with staffs equipped in high quality data collection capacity (Number)		0.00	495.00
Agricultural Annual Performance Report prepared (Text)		No	Yes
Quarterly Agricultural Policy Note (including market forecasts) prepared and published (Yes/No)		No	Yes
Share of farmers who received support/ services through the "Krishak SMART Card" and other activities are satisfied. (Percentage)		0.00	80.00

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Monitoring & Evaluation Plan: PDO Indicators					
Indicator Name	Definition/Description	Frequency	Data source	Methodology for Data Collection	Responsibility for Data Collection
Increased area under non-rice cereals, pulses, oilseeds, and horticulture crops	Increased area (ha) under non-rice cereals, pulses, oilseeds, and horticulture crops	Annually	DAE, BARI, and DAM	Annual crop survey by M&E teams at DAE, BARI, and DAM	DAE, BARI, DAM
Increased area under fruits and vegetables with GAP certification	Increased area under fruits and vegetables with GAP certification	Annually	DAE	Document review and Annual Survey	DAE
Women and youth with entrepreneurship training have started businesses	Women and youth with entrepreneurship training have started businesses	Annually	DAM	Annual Survey and Document Review	DAM, DAE

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Farmers adopting improved agricultural technology	This indicator measures the number of farmers (of agricultural products) who have adopted an improved agricultural technology promoted by operations supported by the World Bank. NB: "Agriculture" or "Agricultural" includes: crops, livestock, capture fisheries, aquaculture, agroforestry, timber and non-timber forest products. Adoption refers to a change of practice or change in use of a technology that was introduced or promoted by the project. Technology includes a change in practices compared to currently used practices or technologies (seed preparation, planting time, feeding schedule, feeding ingredients, postharvest storage/ processing, etc.). If the Program introduces or	Annually	DAE and BADC	Process Monitoring by the Monitoring and Evaluation Teams at the DAE and BADC	The Monitoring and Evaluation Teams at the DAE and BADC
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	promotes a technology package in which the benefit depends on the application of the entire package (e.g., a combination of inputs such as a new variety and advice on agronomic practices such as soil preparation, changes in seeding time, fertilizer schedule, plant protection, etc.), this counts as one technology. Farmers are people engaged in farming of agricultural products or members of an agriculture related business (disaggregated by men and women) targeted by the Program.			
Farmers adopting improved agricultural technology - Female		Annually	DAE and BADC	Process Monitoring by the M&E teams at DAE and BADC
Farmers adopting improved agricultural technology - male		Annually	DAE and BADC	Process Monitoring by the M&E teams at DAE and BADC





Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
GAP standards and protocols for fruits and vegetables developed and approved by MoA	GAP standards and protocols for fruits and vegetables developed and approved by MoA	Annually	DAE	Document Review	DAE
Farmers and certification staff trained in GAP certification	Farmers and certification staff trained in GAP certification	Annually	DAE	Process monitoring by DAE	DAE
New area under high yielding rice varieties	New area under high yielding rice varieties	Annual	BRRRI	Sample Survey	BRRRI
Stress-tolerant and nutrient-dense rice varieties generated	Stress-tolerant and nutrient-dense rice varieties generated	Annually	BRRRI	Document Review	BRRRI
Network established and operational for rice seed multiplication and marketing	Network established and operational for rice seed multiplication and marketing	Annually	BRRRI and DAE	Process Monitoring	BRRRI/DAE
Stress-tolerant and nutrient-dense varieties developed and on-farm trial for non-rice crops conducted	Stress-tolerant and nutrient-dense varieties developed and on-farm trials for non-rice crops conducted	Annually	BARI	Process monitoring, Document Review	BARI/DAE
Seed/saplings/propagative material multiplication and marketing network (including private sector participation) established and operational	Seed/saplings/propagative material multiplication and marketing network (including private sector participation) established and operational	Annually	BARI	Process monitoring/document review	BARI, DAE
Increased area under efficient irrigation	Increased area under	Annually	BADC	Process monitoring and	BADC

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technologies	efficient irrigation technologies			sample survey	
Policy/Regulatory framework & strategic plan developed for the promotion of efficient irrigation technologies	Policy/Regulatory framework & strategic plan developed for the promotion of efficient irrigation technologies	BADC	BADC	Document Review	BADC
Share of farms using AWD (%)	Water-use efficiency improved %	Annual	BADC/DAE	Sample Survey	BADC/DAE
Number of extension staffs, who are trained in new innovations and e-extension service delivery	Number of extension staffs, who are trained in new innovations and e-extension service delivery	Annual	DAE	Document Review and Random Sampling	DAE
Number of farmers trained in improved technologies (new tech & seeds for Rice and Non-Rice Crops, and new tech for efficient irrigation)	Number of farmers trained in improved technologies (new tech & seeds for Rice and Non-Rice Crops, and new tech for efficient irrigation)	Annual	DAE/BARI/BRRI	MIS and Sample Survey	DAE/BARI/BRRI
Number of farmers received services (extension support, input subsidy support, and credit support) through 'Krishak Smart Card'	Number of farmers received services (extension support, input subsidy support, and credit support) through 'Krishak Smart Card'	Annual	DAM	Document Review and Random Sampling	DAM, DAE
Number of farmers received services (extension support, input subsidy support, and credit support) through 'Krishak Smart Card'-Male					
Number of farmers received services (extension support, input subsidy support, and credit support) through					

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'Krishak Smart Card'-Female	Policy/Regulatory framework for service delivery through "Krishak SMART CARD" developed and approved	Policy/Regulatory framework for service delivery through "Krishak SMART CARD" developed and approved	Once	DAE	Document Review	DAE
Number of Upazilas with digital extension service capacity	Number of Upazilas with digital extension service capacity (with both equipment and human resources)	Number of Upazilas with digital extension service capacity (with both equipment and human resources)	Annual	DAE	Document Review and On-site Review	DAE
Digital extension services delivered and e-voucher pilot for new input subsidy mechanism implemented	Digital extension services delivered and e-voucher pilot for new input subsidy mechanism implemented	Digital extension services delivered and e-voucher pilot for new input subsidy mechanism implemented	Annually	DAE	Document Review and On-site review	DAE
Number of youth and women entrepreneurs are trained (including on-the job training) in commercial agriculture, agribusinesses, new agricultural innovations, and agricultural services	Number of youth and women entrepreneurs are trained (including on-the job training) in commercial agriculture, agribusinesses, new agricultural innovations, and agricultural services	Number of youth and women entrepreneurs are trained (including on-the job training) in commercial agriculture, agribusinesses, new agricultural innovations, and agricultural services	Annual	DAM, DAE	Document Review and On-site Review	DAM, DAE
Number of youth and women entrepreneurs are trained (including on-the job training) in commercial agriculture, agribusinesses, new agricultural innovations, and agricultural services-Male	Number of youth and women entrepreneurs are trained (including on-the job training) in commercial agriculture, agribusinesses, new agricultural innovations, and agricultural services-Male					
Number of youth and women entrepreneurs are trained (including	Number of youth and women entrepreneurs are trained (including					

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on-the job training) in commercial agriculture, agribusinesses, new agricultural innovations, and agricultural services-Female						
Number of institutions provide financial services to at least 1000 farmers	Number of institutions provide financial services through 'Krishak Smart Card' to at least 1000 farmers	Annual	DAE	Document Review and sample survey	DAE	
Number of MoUs with businesses and financial institutions for on-the-job training and financial support	Number of MoUs with businesses and financial institutions for on-the-job training and financial support	Annual	DAM	Document Review and On-Site Review	DAM	
Number of accredited testing processes for agricultural commodities in testing labs	Number of accredited testing processes for agricultural commodities in testing labs	Annual	DAM/DAE	Document Review and ON-site Review	DAM/DAE	
Laboratories established (including refurbished/upgraded) with adequate HR and equipment	Laboratories established (including refurbished/upgraded) with adequate HR and equipment	Annually	DAE	Document review and on-site review	DAE	
Increase in R&D budget for NARS Institutes	Increase in R&D budget for NARS Institutes	Annual	BARC	Document Review	BARC	
MoUs/agreements on research collaboration/scaling up outcomes with global research labs and Private Sector	MoUs/agreements on research collaboration/scaling up research outcomes with global research labs and Private Sector	Annual	BARC	Document Review and On-site Review	BARC	

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Value chain-specific inter professional bodies for select commodities established and operational	Value chain-specific inter-professional bodies for select commodities established and operational	Annual	DAM, DAE	Document review and on-site review	DAM, DAE
Policy and regulatory framework for the establishment of value-chain promotional bodies developed and adopted by MoA	Policy and regulatory framework for the establishment of value-chain promotional bodies developed and adopted by MoA	Annually	DAM, DAE	Document review	DAM, DAE
Number of stakeholders' (especially Farmer) organizations of selected value chains strengthened with institutional capacity building support	Number of stakeholders' (especially Farmer) organizations of selected value chains strengthened with institutional capacity building support	Annual	DAE/DAM	Document Review and On-Site Review	DAE/DAM
Improved quality information system (agricultural statistics and market research services incl. foreign markets)	Improved quality information system (agricultural statistics and market research services incl. foreign markets)	Annual	DAE	Document Review	DAE
Number of upzilas with staffs equipped in high quality data collection capacity	Number of upzilas with staffs equipped in high quality data collection capacity (with both equipment and human resource capacity)	Annual	DAE	Document Review and On-site review	DAE
Agricultural Annual Performance Report prepared	Agricultural Annual Performance Report prepared	Annual	DAE/MoA	Document Review	DAE/MoA





Quarterly Agricultural Policy Note (including market forecasts) prepared and published	Quarterly Agricultural Policy Note (including market forecasts) prepared and published	Quarterly	DAM	Document review	DAM
Share of farmers who received support/ services through the "Krishak SMART Card" and other activities are satisfied.	Share of farmers who received support/ services through the "Krishak SMART Card" and other activities are satisfied.	Annually	DAE	Process monitoring/Document review	DAE

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Disbursement Linked Indicators Matrix

Development, rollout, and adoption of GAP standards in fruit and vegetable production

DLI 1

Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
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Intermediate Outcome Period		Yes Value	Hectare(Ha)	Allocated Amount (USD) Formula	
Baseline		0.00		60.00	0.00
2024		0.00		8.00	See Description
2025		0.00		6.00	See Description
2026		75,000.00		14.00	See Description
2027		150,000.00		12.00	See Description
2028		300,000.00		20.00	See Description
DLI 2		Development and adoption of High Yielding Rice Varieties			
Type of DLI		Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount

Intermediate Outcome Period		Yes Value	Hectare(Ha)	Allocated Amount (USD) Formula	
Baseline		0.00		55.00	0.00
2024		40,000.00		9.00	See Description





2025	80,000.00		9.00	See Description
2026	120,000.00		9.00	See Description
2027	160,000.00		13.00	See Description
2028	200,000.00		15.00	See Description
DLI 3	Crop diversification towards non-rice cereals, pulses, oilseeds, and horticulture crops			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	Yes	Hectare(Ha)	65.00	0.00
Period	Value	Allocated Amount (USD)		
Baseline	0.00			
2024	20,000.00		0.00	See Description
2025	50,000.00		15.00	See Description
2026	90,000.00		11.00	See Description
2027	140,000.00		17.00	See Description
2028	200,000.00		22.00	See Description
DLI 4	Adoption of improved and efficient irrigation technologies by farmers			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	Yes	Hectare(Ha)	60.00	0.00
Period	Value	Allocated Amount (USD)		





Baseline	0.00			
2024	0.00		10.00	See Description
2025	0.00		0.00	See Description
2026	20,000.00		10.00	See Description
2027	50,000.00		10.00	See Description
2028	100,000.00		30.00	See Description
DLI 5 Expansion of digital agricultural services provision through 'Krishak Smart Card'				
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Output	Yes	Number	70.00	0.00
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
2024			10.00	See Description
2025	500,000.00		0.00	See Description
2026	1,200,000.00		16.00	See Description
2027	2,200,000.00		17.00	See Description
2028	5,000,000.00		27.00	See Description

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Promotion of the accreditation of seed certification and food safety testing processes					
DLI 6	Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
	Output	Yes	Number	40.00	0.00
	Period	Value		Allocated Amount (USD)	Formula
	Baseline	0.00			
	2024	0.00		0.00	See Description
	2025	0.00		2.00	See Description
	2026	2.00		8.00	See Description
	2027	5.00		15.00	See Description
	2028	10.00		15.00	See Description
DLI 7	Promotion of Ag entrepreneurship for youth and women				
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount	
Output	Yes	Number	43.00	0.00	
Period	Value		Allocated Amount (USD)	Formula	
Baseline	0.00				
2024			1.00	See Description	
2025	3,000.00		6.00	See Description	
2026	8,000.00		12.00	See Description	

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2027	14,000.00			12.00	See Description
2028	20,000.00			12.00	See Description
DLI 8					
Increase of R&D activities for new technologies and innovations along with development of an operational evaluation system for NARS institutes and extension systems					
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount	
Output	Yes	Yes/No	100.00	0.00	
Period	Value	Allocated Amount (USD) Formula			
Baseline	No				
2024	Yes		10.00	See Description	
2025	Yes		15.00	See Description	
2026	Yes		20.00	See Description	
2027	Yes		25.00	See Description	
2028	Yes		30.00	See Description	
DLI 9					
Establishment and operationalization of value chain promotional bodies for select commodities					
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount	
Output	Yes	Number	30.00	0.00	
Period	Value	Allocated Amount (USD) Formula			
Baseline	0.00				

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2024	0.00			5.00	See Description
2025				0.00	See Description
2026				10.00	See Description
2027				15.00	See Description
2028	5.00			0.00	See Description
DLI 10	Improvement of quality information system (agricultural statistics and market research services incl. foreign markets)				
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount	
Intermediate Outcome	Yes	Yes/No	20.00	0.00	
Period	Value	Allocated Amount (USD) Formula			
Baseline	No				
2024			2.00	See Description	
2025			4.00	See Description	
2026			6.00	See Description	
2027			6.00	See Description	
2028	Yes		2.00	See Description	





Verification Protocol Table: Disbursement Linked Indicators

DLI 1	Development, rollout, and adoption of GAP standards in fruit and vegetable production
Description	Description, allocated amount, targets and formula for DLRs: - DLR 1.1: GAP standards and protocols for fruits and vegetables developed and approved by MoA (US\$10 million) = Yes/No for GAP standards in Year 1 (US\$5 million) and US\$1 million for each 3 protocols (target = 15 protocols) - DLR 1.2: Number of farmers and certification staff trained in GAP certification (US\$10 million) = US\$1 million for every 100,000 farmers trained (target = 1,000,000) and US\$1 million for every 300 staff trained (target = 1,500) - DLR 1.3: Area (hectare) under fruits and vegetables with GAP certification (US\$40 million) = US\$10 million each for additional 75,000 Ha (target = 300,000 ha)
Data source/ Agency	Lead agency: DAE Contributing Agencies: DAM, BARC, BARI
Verification Entity	Third-Party Verification Agency (to be recruited)
Procedure	The third-party VA will verify whether the farmers have adopted the GAP standards through on-site review and sample survey in the Upazilas where DAE promoted GAP standards under the PforR.
DLI 2	Development and adoption of High Yielding Rice Varieties
Description	Description, allocated amount, targets and formula for DLRs: - DLR 2.1: Stress-tolerant and nutrient-dense rice varieties generated (US\$15 million): target = 5 varieties in total : US\$3 million for each variety - DLR 2.2: Network established and operational for seed multiplication and marketing (US\$10 million): target = total 50 tons of Breeder Seeds (BS), 4,000 tons of Foundation Seeds (FS), 5000 tons of Certified Seeds produced and marketed through the network = 10t BS, 800t FS, 1,000t CS produced and marketed in Year 2 and 3 / 15t BS, 1,200t FS, 1,500t CS in Year 4 and 5: US\$2 million each for 50t BS, 2,000t FS, 2,500t CS - DLR 2.3: New area (hectare) under high yielding rice varieties: target = 200,000ha (40,000 per year): US\$ 3 million for each additional 20,000ha
Data source/ Agency	Lead agency: BRRI Contributing Agencies: DAE, BARC, BADC
Verification Entity	Third-Party Verification Agency (to be recruited)





Procedure	The third-party VA will verify the adoption of new technologies by farmers through on-site review and sample survey in the Upazilas where these technologies are demonstrated under the PforR.
DLI 3	Crop diversification towards non-rice cereals, pulses, oilseeds, and horticulture crops
Description	Description, allocated amount, targets and formula for DLRs: - DLR 3.1: Stress-tolerant and nutrient-dense varieties developed and on-farm trial for non-rice crops conducted (US\$15 million) : target = 15 varieties (US\$1 million per variety) - DLR 3.2: Seed/samplings/propagative material multiplication and marketing network established and operational (US\$10 million) = target = total 50 tons of Breeder Seeds (BS), 4,000 tons of Foundation Seeds (FS), 5000 tons of Certified Seeds produced and marketed through the network = 10t BS, 800t FS, 1,000t CS produced and marketed in Year 2 and 3 / 15t BS, 1,200t FS, 1,500t CS in Year 4 and 5: US\$2 million each for 50t BS, 2,000t FS, 2,500t CS - DLR 3.3: Area (Ha) under non-rice cereals, pulses, oil crops, fruits and vegetables increased (US\$40 million) : target = 200,000ha (Y1= 20,000, Y2= 30,000, Y3 = 40,000, Y4 = 50,000, Y5 = 60, 000) : US\$5 million every additional 25,000Ha
Data source/ Agency	Lead agency: BARI Contributing Agencies: DAE, BARC, BADC
Verification Entity	Third-Party Verification Agency (to be recruited)
Procedure	The third-party VA will verify the adoption of new technologies by farmers through on-site review and sample survey in the Upazilas where these technologies are demonstrated under the PforR.
DLI 4	Adoption of improved and efficient irrigation technologies by farmers
Description	Description, allocated amount, targets and formula for DLRs: - DLR 4.1: Policy/Regulatory framework & strategic plan developed (US\$10 million) = Yes/No in Year 1 - DLR 4.2: New area (Ha) under efficient irrigation technologies (US\$50 million): target = 100,000Ha (Y3 = 20,000, Y4 = 30,000, Y5 = 50,000): US\$10 million for every new 20,000Ha
Data source/ Agency	Lead agency: BADC Contributing Agencies: DAE, BMDA, BARI, BRRI
Verification Entity	Third-Party Verification Agency (to be recruited)
Procedure	The third-party VA will verify the adoption of new technologies by farmers through on-site review and sample survey in the Upazilas where these technologies are demonstrated under the PforR.





DLI 5	Expansion of digital agricultural services provision through 'Krishak Smart Card'	
Description	Description, allocated amount, targets and formula for DLRs: - DLR 5.1: Policy/Regulatory framework developed (US\$10 million) = Yes/No in Year 1 - DLI 5.2: Digital extension services delivered and voucher pilot for new input subsidy mechanism implemented (US\$15 million) = Number of upzila covered by digital extension = US\$1 million for every new 100 upzila / Number of upzila where e-subsidy pilot conducted = US\$5 million for every 8 upzila (Target = 16) - DLR 5.3: Number of farmers received services (extension support, input subsidy support, and credit support) through 'Krishak Smart Card' (US\$45 million): target = 5,000,000 : US\$9 million for every 1,000,000 farmers	
Data source/ Agency	Lead agency: DAE Contributing Agencies: DAM, BARC, BADC	
Verification Entity	Third-Party Verification Agency (to be recruited)	
Procedure	The third-party VA will verify the receipts of input support and extension services by farmers based on random sampling in the Upazilas where farmers are provided this support under the PforR.	
DLI 6	Promotion of the accreditation of seed certification and food safety testing processes	
Description	Description, allocated amount, targets and formula for DLRs - DLR6.1: Laboratories established (including refurbished/upgraded) with adequate HR and equipment (US\$10 million) : target = 10 (Y2= 2, Y3=3, Y4=5): US\$1 million for every 1 lab - DLI 6.2: Number of accredited testing processes for agricultural commodities in testing labs (US\$30 million): target = []	
Data source/ Agency	Lead agency: DAE Contributing Agencies: DAM, BARC, BADC, BARI, BRRI	
Verification Entity	Third-Party Verification Agency (to be recruited)	
Procedure	The third-party VA will review and verify the achievement of the results by reviewing the pertaining policy changes, the labs' accreditation, and the certification process.	
DLI 7	Promotion of Ag entrepreneurship for youth and women	
Description	Description, allocated amount, targets and formula for DLRs: - DLR 7.1: Partnerships with businesses for on-the-job training and PARTNER award mechanism established (US\$10 million) = Award mechanism established Y/N (Year 1, US\$1 million); Number of MoUs on business partnership (target = 30), 10 each (Year 2 to 4, US\$3 million for every 10 MoUs) - DLR 7.2:	





	Number of youth and women entrepreneurs are trained (including on-the job training) in commercial agriculture, agribusinesses, agricultural innovations and agricultural services (US\$33 million): target = 20,000: US\$3 million for every 2,000 and additional US\$3 million if 20,000 target is achieved
Data source/ Agency	Lead agency: DAM Contributing Agencies: DAE, BARC
Verification Entity	Third-Party Verification Agency (to be recruited)
Procedure	The third-party VA will verify the achievements reported by the DAM through document review and on a random sampling basis.
DLI 8	Increase of R&D activities for new technologies and innovations along with development of an operational evaluation system for NARS institutes and extension systems
Description	Description, allocated amount, targets and formula for DLRs - DLR 8.1 Increase in research budget (US\$50 million) : target = [] - DLR 8.2 Number of MoUs/agreements on research collaboration with research labs and on the scaling up of NARS research Outcomes with MoA agencies and Private Sector (US\$50 million): target = []
Data source/ Agency	Lead agency: BARC Contributing Agencies: DAE, DAM, BMDA, BADC
Verification Entity	Third-Party Verification Agency (to be recruited)
Procedure	The third-party VA will verify the improvement in research infrastructure and human resource capacity that led to the improvement in the performance evaluation system by reviewing the publications, innovations, and technologies released from the NARS system.
DLI 9	Establishment and operationalization of value chain promotional bodies for select commodities
Description	Description, allocated amount, targets and formula for DLRs: - DLR 9.1: Policy and regulatory framework developed and adopted by MoA (US\$5 million) = Yes/No in Year 1 - DLR 9.2: Value Chain-specific inter-professional bodies for at least five commodities established and operational (US\$25 million): US\$5 million for every new body "Operational": Organizational mechanism to be developed, meeting held, annual report produced (incl. review of the previous year and plan for the next year)
Data source/ Agency	Lead agency: DAM Contributing Agencies: DAE, BARC

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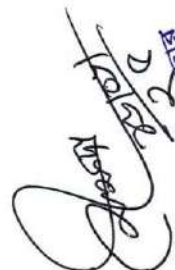
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Verification Entity	Third-Party Verification Agency (to be recruited)
Procedure	The third-party VA will verify the development of the necessary policy framework and the establishment and operating procedures of the inter-professional bodies by reviewing relevant documents.
DUI 10	Improvement of quality information system (agricultural statistics and market research services incl. foreign markets)
Description	Description, allocated amount, targets and formula for DLRs: - DLR 10.1: Number of upzila with staff equipped in high quality data collection capacity (US\$10 million): Y2=100, Y3= additional 200, Y4= additional 200: US\$2 million for every 100 upzila - DLR 10.2 Quarterly Agricultural Policy Note (including market forecasts) prepared and published (US\$10 million): Yes (published all 4 quarterly notes)/No: US\$2 million for every Yes (Y1 to 5)
Data source/ Agency	Lead agency: DAE Contributing Agencies: DAM, BARC
Verification Entity	Third Part Verification Agency (to be recruited)
Procedure	The third-party VA will verify the facilities/systems by reviewing documents and outputs from the activities completed d each year.


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