### **TERMS OF REFERENCE (TOR)**

#### **FOR**

**Short –Term** Individual Consultant-'Lead Consultant (Economist) for the preparation of the Borrower's Implementation Completion and Results Report (BICRR) of **NATP-2** 

Service Package: SD/PMU/IC/STC-08

Assignment Title:	Preparation of the Borrower's Implementation Completion and
	Results Report (BICRR) of NATP-2
Assignment Duration:	Five (05) months spread over 6 months (From the date of
	Contract signing)
Assignment locations:	Dhaka and Project areas
Funding source (s):	IDA and IFAD
Contracting entity:	Project Director, Project Management Unit, NATP-2

## A. PROJECT BACKGROUND OUTLINE:

The Government of Bangladesh (GOB) is implementing the National Agricultural Technology Program Phase II (NATP-2) project with financial assistance from the World Bank (IDA credit), International Fund for Agricultural Development (IFAD) and the United States Agency for International Development (USAID). NATP-2 is the second 5-year phase of a 15 year long program to support GOB's strategy to improve national agricultural productivity, market linkage and farm income with a particular focus on small, marginal and female farmers. NATP-2 supports research, extension and value chain programs/activities at field level. The Project Development Objective (PDO) of NATP-2 is to increase agricultural productivity of smallholder farms and improve smallholder farmers' access to markets in 270 selected upazilas of 57 districts. NATP-2 drew learning from NATP-1 and other projects and aims at deepening its interventions in the NATP-1 areas (107 of the total 270 upazilas) and also expanding its scope to the new districts and upazilas.

NATP-2 is comprised of 5 inter-related components being implemented by 5 different project implementing units:

Component 1: Enhancing Agricultural Technology Generation is being implemented by the Bangladesh Agricultural Research Council (PIU-BARC), Ministry of Agriculture. Component

Component 2: Supporting Crop Development by the Department of Agricultural Extension (PIU-DAE), Ministry of Agriculture; Component

Component3: Supporting Fisheries Development by Department of Fisheries (PIU-DOF), Ministry of Fisheries and Livestock (MOFL); Component

Component 4: Supporting Livestock Development by Department of Livestock Services (PIU-DLS), Ministry of Fisheries and Livestock (MOFL) and component

Component 5: the Project Management Unit (PMU) established under the Ministry of Agriculture, the Lead Ministry. PMU is overall responsible for coordinating and facilitating the implementation of NATP-2

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under the direction and supervision of the Joint Project Steering Committee (JPSC) and thus support realization of the project development objective (PDO).

The strategies adopted for achieving the project development objective include: (i) strengthening the capacity of research, extension services and farmers to generate, adopt and diffuse agricultural technologies aimed at increasing farm productivity and reducing post-harvest losses; and (ii) promoting sustainability of existing and newly created common interest groups (CIGs) of farmers and producer organizations (PO) by facilitating their stronger participation in commodity value chain, market-linkages, and improving their knowledge and skill base. Thus PDO will be achieved through the generation and release of more productive and improved technologies, enhancing availability of quality seed/breeds/fingerlings/breeding materials at the small farm level and providing relevant production, value addition and marketing support. The NATP-2 Results Chain is attached in Annex 1.

NATP-2 was designed for implementation from 01 October 2015 to 30 September 2021 but actual implementation started from March 2017 after receiving the initial advance from the World Bank. The project duration has been extended till 30 June 2023.

#### **B. DESCRIPTIONS OF THE COMPONENTS:**

Component—I: Enhancing Agricultural Technology Generation is being implemented by the Project Implementation Unit of Bangladesh Agricultural Research Council (PIU-BARC). BARC, as an apex body, is coordinating agricultural research with all National Agricultural Research System (NARS) and non-NARS institutes (Public Universities, NGOs and Other organization). The component has been supporting the need based research and development of crops, fisheries and livestock. The purpose of this component is to generate demand-led agricultural technologies (improved varieties/breeds/fingerlings and production & post-production management packages, socio-economic, etc.) to increase productivity and production and also to provide location and problem- specific technological solutions to production problems under specific agro-ecological conditions and constrained areas.

The research component has two research funding windows. First window is Competitive Research Grant (CRG) Program through which 190 short to medium term research sub-projects (Crops-62, Fisheries-30, Livestock-26, Soil science-19, agricultural engineering/ mechanization-16, socio-economic-10, Planning & evaluation-10 and nutrition-06) were implemented during 2017 to 2019 financial years with the participation of 27 NARS Institutes, Public Universities and private sector institutions. Program Based Research Grant (PBRG) is the second research funding window that supports Public Sector Agricultural Research Institutes for implementation of 51 longer duration research sub-projects in strategic areas including varietal development, bio-technology and climate vulnerability, etc. The component is also assisting the institutional capacity building of the NARS through offering of 140 PhDs and other short-term technical training.

Components II, III and IV of NATP-2 are to support Crop, Fisheries and Livestock sector Development and have been implementing by the Project Implementation Units of the Department of Agricultural Extension (PIU-DAE), Department of Fisheries (PIU-DOF) and Department of Livestock Services (PIU-DLS) respectively. The aims of the components are to contribute in increasing farm yields, diversifying production, and improving market linkages for smallholder farmers by promoting an integrated approach and through technology transfer as well as better access to market opportunities.

These three (extension) components have interventions in 270 upazilas of 57 districts (include 107 upazilas covered under NATP-1, plus 163 new upazilas) covering all major agro-ecological areas including

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the drought-prone areas in the North-West (dry Barind Tract), salt-affected tidal surge areas in the South, flash-flood prone areas in the North and North-East (Annex-2). The project is financing activities related to a) mobilization of Common Interest Groups (CIG) with farmers, b) decentralized extension services by government frontline extension agents i.e., SAAOs for crops and Community Extension Agents for Livestock (CEAL) and Local Extension Agents for Fisheries (LEAF) and through Farmer's Information and Advice Centers (FIACs) c) technology dissemination through establishing of field demonstrations, field days and exchange visits d) training to extension agents and farmers and e) enhancing institutional efficiency of the national institutions involved in agricultural extension.

The Extension components had mobilized over 1 million farmers into 40,514 CIGs established/formed in 270 Upazilas (27,150 under DAE, 5,282 under DoF; 8,082 under DLS management). CIGs are the main interlocutors for field/community level activities. In every Upazila there are about 150 CIGs and in each Union there are 15 CIGs of which 10 are crop CIGs managed by DAE, 3 livestock CIGs managed by DLS and 2 fishery CIGs managed by DoF. The number of members of each CIG varies from 20 to 30. The component-wise 6 year output targets are given in Table 1.

To provide day-to-day need-based extension services to the farmers, Sub Assistant Agriculture Officers (SAAO) of DAE, Community Extension Agents for Livestock (CEAL) of DLS and Local Extension Agents for Fisheries (LEAF) of DoF visits CIGs on regular basis. In addition, one-stop services are being provided to the farmers from Farmer's Information and Advice Centers (FIACs) established in two rooms (one for crop/SAAO of DAE and another for fisheries and livestock/CEAL and LEAF) of 1621 Union Parishad buildings. SAAOs, CEALs and LEAFs are providing necessary advisory services to the farmers in the FIAC sand also in the CIGs through door to door visits.

The three extension components have provisions for two Agriculture Innovation Funds, i.e., AIF-2 and AIF-3 to promote the adoption of innovative technologies specially farming tools, farm machineries and vehicles and access to markets of smallholder farmers. These funds are provided to the registered well performing CIGs and local entrepreneurs on a competitive basis.

AIF-2 matching grants have been provided to minimum 3843well-performing CIGs (crop -1803, fisheries -960, livestock -1080) to help increase their productive assets, potential incomes and sustainability of the groups. Each recipient CIG gets up to 70% of the total sub-project cost, ceiling to BDT 3.875 lakh. The 30% cost has to be borne by the recipient group(s). Details of AIF-2 operational procedures are described in AIF-2 Operational Manual.

AIF-3 matching grants has been targeted to minimum 698 rural entrepreneurs having trade license (crop -287, fisheries -228, livestock-183) whose sub-projects activities will benefit smallholders' farmers in the project areas, either by providing a market opportunity for farmers' produce or by providing services relevant to the smallholder farmers. In some cases, registered CIGs and Producer Organizations (POs) could be eligible for AIF-3 grants. Each recipient gets 50% of the total sub-project cost from AIF-3 grants, ceiling to BDT 5.82 lakh. Other 50% cost has to be borne by the recipient group(s) or entrepreneurs. Details of AIF-3 operational procedures are described in AIF-3 Operational Manual.

The project is supporting activities related to a) strengthening farmer-market linkage and b) enhancing institutional efficiency. Hortex Foundation for crop and two outsourcing firms for fisheries and livestock have been implementing/implemented project's value chain and marketing activities. The crop value chain activities are being piloted in 30 clusters of 30 selected upazilas. For Fisheries the project supports the establishment of 20 Producer Organizations (POs) in 20 upazilas and two special POs, one each at





Trishal, Mymensingh and another at Singra, Natore districts, and provides with logistics and training. For livestock 120 CIGs are being supported for milk and milk processing, and for goat meat marketing.

The Project intends to use a part of the credit/loan for hiring a short-term Individual National consultant for preparation of a Borrower's Implementation Completion and Results Report Project (BICRR) for the National Agricultural Technology Program- Phase-II Project (NATP-2). The report is to be prepared following World Bank BICRR guidelines

#### C. JUSTIFICATION OF THE STUDY

NATP- 2 is scheduled to close on 30 June 2023. One of the requirements of the GoB is to prepare Borrower's Implementation Completion Results Report (BICRR) following World Bank ICRR guidelines that documents the performance of the project in relation to its Project Development Objectives. The study results/findings will be incorporated in the ICRR to be conducted by the World Bank (development Partner). The study/assessment is expected to be commissioned from January 2023 until June 2023. BICRR report will cover assessment of all components' activities of the project indicating achievement of project outcomes, outputs; assess and analyze whether the project has been able to deliver scalable technology generation, productivity improvement of selected crops, livestock and fisheries, market access improvement and livelihood status of project beneficiaries (small, marginal and women farmers) as outlined in the Results Framework of DPP/RDPP/PAD. The report should contain assessments of the technical, economic, financial, social, monitoring, and institutional and procurement aspects of the project. PMU intends to employ an individual consultant to prepare a BICRR by consolidating the collected inputs of 4 implementing units and PMU.

## D. OBJECTIVE OF THE ASSIGNMENT/BICRR

The objective of the assignment is to capture the project performance against its development objectives as mentioned in PAD and DPP/RDPP. The consultant will assess (i) relevance of the project development objective (PDO) with the sectoral context at the preparation and completion; (ii) relevance of PDO indicators in assessing the project outcome; (iii) capture significant changes made in the project during the implementation, including rationale of the changes; (iv) review and reconstruct the Theory of Change (ToC) of the Project attached in Annex 1; (v) discuss relevance of the PDO with the World Bank's strategies (e.g. SCD, CPF) in Bangladesh and the GoB's national strategies (e.g. Five Year Plans, National Agricultural Policies, etc.), (vi) achievement of its overall objective against the DO indicators, and outcomes of the project in terms of its intermediate results indicators listed in the results framework; (vii) reliability of the intermediate output indicators to determine the component effectiveness in the project implementation; (viii) financial and economic rate of return against the total project cost through Economic and Financial Analysis (EFA); (,(ix) implementation efficiency (x) M&E design and effectiveness,(vii) M&E utilization in Project's decision making process, (xi) poverty, gender, and private sector strengthening outcomes of the project; (xii) safeguard compliance (fiduciary, social and environment), (xiii) risks management, and (xiv key lessons learnt.

The major objectives of this assessment report are:

• To document and provide evidence of the extent to which the NATP-2 achieved its Project Development Objective (PDO) as well as outcomes by end of the project, as set in the Results Framework, including benchmarking the achievements against available secondary data from various sources (e.g. Bangladesh Bureau of Statistics);



- To document operational lessons of NATP-2 that can be institutionalised and replicated to other on-going development projects or upcoming new project (s) that will contribute to Research, Extension and market access activities and in the improvement of implementation strategy and in achieving intended goals and objectives of development project (s).
- The evaluation/assessment report will undertake a detailed analysis of the organizational structure and operational processes adopted by the project during its implementation to assess the effectiveness of project and document the challenges and opportunities identified during implementation.
- The report should include an assessment of the extent to which the project complied with fiduciary (procurement and financial management), environmental and social safeguards including gender mainstreaming, citizen engagement and beneficiary satisfaction and the effectiveness of the M&E system. An assessment of cost-effectiveness of the project in terms of achieving the PDO should also be analyzed and documented in terms of value for money.
- An assessment of support provided by the Bank and task team in facilitating and achieving project objectives should be documented and rated with clarifications/reasons in relevance to rating scales and criteria sets in the ICRR guidelines of the World Bank. Similarly, the performance of the project team (NATP-2) will be assessed in terms of achieving project objectives and rated with justification.
- Lessons learned emerging from the assessment would be documented as part of the analysis to recommend corrective measures for embarking on next phase of the projects required for improving quality.

#### E. ASSESSMENT METHODOLOGY

The consultant will review the data or information available in PMU and PIUs as well as undertake field visits to collect information from beneficiaries on random basis. Mixed method of data collection should be followed for quantitative and qualitative data collection that includes secondary data from PMU and PIUs and primary data from the field where necessary. Primary data could be collected by developing field survey questionnaire, focus group discussion, Key Informant Interview etc. Mobile phone interview may also be allowed in some cases. Information from secondary source could be collected from the PMU and PIUs, especially from M&E and other respective officers and consultants of PMU and PIUs. PMIS is another source of both qualitative and quantitative information. Furthermore, report of the impact assessment conducted in 2022-23 by the Bangladesh Center for Advanced Studies (BCAS) should be used in the preparation of the completion report. The key findings and results from this assessment should be benchmarked with the available secondary data from various sources including Bangladesh Bureau of Statistics. The Consultant will develop a detailed plan in consultation with NATP-2 and the World Bank ICRR team.

The following documents will be helpful for the consultants to understand the scope of services and the objectives and for the preparation of BICRR.

He / She will review relevant documents of the project, including but not limited to the following:

## Helpful documents for the consultants:

- Development Project Proposal (DPP/RDPP) Project Appraisal document (PAD) and Project Implementation Manual.
- World Bank ICRR preparation guidelines

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- IDA credit and IFAD loan agreements
- Project Implementation Reports and Annual Reports
- Report of the Studies conducted by PIUs
- Guidelines on AIF-1, AIF-2 and AIF-3
- NATP-2 Impact assessment and thematic studies Reports
- Monitoring and Evaluation Reports
- Balanced Score Card for CIG monitoring
- Implementation Support Mission Reports
- Regional workshop proceedings of PMU and PIUs
- Various publications of PMU and PIUs
- Reports of PCU, PIUs and Hortex Foundation as strategic Partner of DAE.

### F. SCOPE OF SERVICES

The Lead consultant will be responsible and reportable to the Project Director (PD), NATP-2. S/he will be responsible for the preparation and delivery of the overall consolidated Borrower's Implementation Completion Results Report (BICRR). He will also supervise and guide the tasks of the Project Results Assessment Expert and the Technical Expert And timely and quality submission of the inputs from them.

The Specific Scope of work of the consultant will include but not limited to the followings:

The specific responsibilities of the lead consultant will include, but not limited to, the followings:

- 1. Plan and coordinate the overall preparation of the BICRR report. Prepare outline of the Report by following the World Bank's ICRR guidelines and distribute the responsibilities among the teams accordingly.
- 2. Evaluate the project's efficiency how economically resources and inputs have been converted into results using appropriate methods.
- 3. Conduct financial and economic analysis of the overall project which should include: (a) analysis of financial and economic rate of return against the total project cost by component, net benefit gained by the project beneficiaries related to their productivity and farm income against their baseline value. and (b) efficiency related to value for money with evidence;
- 4. Identify and describe both project and non-project factors including the COVID-19, affecting variations in project performance results
- 5. Make quantitative assessment of the project outcomes listed in the Results Framework by collecting and collating data from various sources; including the project's impact assessment and thematic studies. Benchmark the results against available baseline data (e.g. NATP I ICRR data) and secondary data from various sources including the BBS and IFPRI's Bangladesh Integrated Household Surveys (BIHS).
- 6. Examine the existing NATP-2 results chain included in Annex 1 and reconstruct the theory of change based on assessment results;
- 7. Assess the (a) implementation arrangements for delivering the NATP-2 products and outputs, elaborate the challenges, opportunities and lessons learned from NATP-2's implementation arrangements; (b) key milestones and outcomes achieved, (c) type and level of engagement of stakeholders.

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- 8. Assess the quality of the M&E systems, with respect to quality during preparation, implementation and utilization of results (e.g., to inform and update interventions) and their scope for integration with the existing research and extension organizations;
- 9. Synthesize briefly with evidence the Project's contribution to poverty, gender, and private sector mobilization.
- 10. Assign ratings to the project outcomes along with clear justification by following the World Bank ICRR guideline;
- 11. Clearly list the lessons learnt from the project implementation experience and discuss the sustainability of the project results.
- 12. Coordinate and oversee the work of Project Results Assessment Expert and Technical Expert for timely and quality submission of their reports as per their TOR;
- 13. Produce the final BICRR report by incorporating consultancy reports of the Project Results Assessment Expert and Technical Expert

### G. DURATION OF THE ASSIGNMENT

The duration of the assignment will be five (05) person months. The expected commencement of the assignment will be from January 2023 and will be spread over up to 30 June 2023.

## H. REPORTS AND TIME SCHEDULE

After signing the contract, the consultant will report to the Project Director of NATP-2 and provide the following deliverables:

**By end of Week-1**: Inception report, containing understanding of the Terms of Reference (TOR) including scope of services, methodology, data collection and management plan, work plan and approach for carrying out the work, and work plan including, summary of activities, time scales, reporting obligation and other deliverables within 12 working days after joining his/her duty.

By the end of week -3: Collects all reports from PMU and PIUs and hold discussions with Project Director after reviewing the documents, chalk out analysis and compilation including data collection from the fields.

Monthly Progress report: within 1st week of every next month

Draft final report: (within 12th June2023): 18 days before the completion of the assignment

The draft report is to be presented and validated in a meeting of PMU, PIUs and officers and experts/consultants from implementing agencies.

**Final report**: should be prepared and submitted incorporating the comments and suggestions received from PMU, PIUs and Implementing Organizations within timeframe specified and be agreed with the Project Director.

## I. DATA, LOCAL SERVICES, PERSONNEL, AND FACILITIES TO BE PROVIDED BY THE CLIENT

PMU will provide the following inputs and facilities:

1. Office space and other logistic support as per project provision

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2. All available documents, papers and information relevant to the assignment will be provided /made accessible to the consultant.

# J. ACADEMIC QUALIFICATIONS AND EXPERIENCE REQUIRED

- Minimum Master's degree in Agricultural Economics/ Development Economics, / Economics/ Business Management or related subjects from a recognized university
- 2. Ph.D degree in Agricultural Economics/ Development Economics/ Economics/ Business Management or related field will be an added advantage.
- 3. At least 15 years work experience in conducting research/study, monitoring and impact evaluation works in government/autonomous/semi-autonomous organizations,/ Development Projects (GOB and Donor Funded),/ Universities, NGOs/ private organizations
- 4. At least 5 years proven experience in project & program evaluation and in preparing quality analytical reports including ICRR, PCR for development projects, project reports, and economic analysis for project design and projects results of GOB funded /donor funded projects.
- 5. Familiarity with the agriculture and rural development sector in Bangladesh.
- 6. Experience in measuring net benefit, income, financial rate of return and economic rate of return of development projects
- 7. Experience in summarizing, synthesizing and analyzing skills in capturing project output, outcome and learning
- 8. Fluency in English and good writing and communication skills
- 9. Proficiency in data analysis using statistical and socio-economic methods e.g STATA; SPSS
- 10. Computer literacy and skills (MS Word, Excel, and Power Point etc.) is essential.

#### K. EXPECTED OUTPUT

Borrower's Implementation Completion Results Report (BICRR) prepared and delivered and submitted to Project Director, NATP-2



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#### Annex-1

#### NATP-2 Results Chain Assumetion Activities reducing post-harvest loss and price-austenance and powerty reduction Need based support to Outputs Outcomes Impact NARS and extension Action 1. Strengthening Revitalized the National Improved the performance institutional capacity of NARS Agricultural Technology of NARS Institutes and System (NARS) through HRD and infrastructure Effective research-extension extension services -farmer linkage for support knowledge and skill support Increased availability of Action 2. Developing innovative diversified improved Assumption: agricultural technologies through AIFtechnologies/technology Technologies and extension services reach smallholders ncreased Sustainable 1 funding to NARS Institutes and agricultural packages research and and market actors production and extension linkage Universities ncome Page 8 Action 3. Improving outreach and Assumption: Promoted monimizing yeard souther all growth, 6 technologies are quality of extension and advisory Improved Food Established and make Increased farm appropriate to the services through promotion of functional decentralized security productivity and smallholders and costinclusiveness, and pluralistic and extension approach g farm productivity, minimizity achieving higher agricultural reduced post-harvest effective bottom up extension approach Enhanced nutrition through improved technology Action 4. Diffusing Improved knowledge of farmers safer and more AIF-28 AIF-3 sub-projects Assumption: Technologies and Good Agricultural diversified food and their application matches farmers' needs Effective Practices through extension services mechanization demand coordination Improved production and among line Adaptation to post-production Action S. Promoting on-farm and offdepartments Accelerating sential for ac climate change practices farm mechanization through AIF-2 & Assumption: Assumption: exentia Sufficient high Better on-farm Market value produces and off-farm jobs Improved smallholder information created Culture are # Action 6. Improving market linkages farmers' access to matches demand for smallholder farmers through Promote sustainability of markets existing and newly establishing POs created farmers groups Increased availability of Assumption: 48 Market linkage gives and producer Action 7. Improving post-harvest value added and safe high organizations dividend to farmers value agricultural management and marketing of high School value crops through CCMCs produces to consumers Critical Enablers - sector-wide and group based approach to technology dissemination; strong research -extension - farmer linkage; public-private partnership in extension service delivery and marketing; promote innovations; leveraging ICT, knowledge and learning of similar projects; gender mainstreaming; adequate financing

