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Investing in rural people

President's report

Proposed loan to the People's Republic of Bangladesh for the National Agricultural Technology Programme – Phase II Project

Note to Executive Board representatives

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Abbreviations and acronyms

AIF	agricultural innovation fund
BARC	Bangladesh Agricultural Research Council
CIG	common interest group
COSOP	country strategic opportunities programme
DAE	Department of Agricultural Extension (MoA)
DLS	Department of Livestock Services (under the Ministry of Fisheries and Livestock)
DoF	Department of Fisheries (under the Ministry of Fisheries and Livestock)
EMF	environmental management framework
FM	financial management
GAAP	Governance and Accountability Action Plan
HOPE	Head of Procurement Entities
ICT	information and communication technology
IDA	International Development Association (WB Group)
MoA	Ministry of Agriculture
MoFL	Ministry of Fisheries and Livestock
NAEP	National Agricultural Extension Policy
NARS	National Agricultural Research System
NATP	National Agricultural Technology Programme
PACE	Promoting Agricultural Commercialization and Enterprises Project
PDO	project development objective
PIM	project implementation manual
PIU	project implementation unit
POs	partner organizations
PMU	project management unit
SDR	special drawing rights (for IMF)
USAID	United States Agency for International Development

People's Republic of Bangladesh

National Agricultural Technology Programme – Phase II Project

President's report



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.
 Map compiled by IFAD | 30-06-2015

People's Republic of Bangladesh

National Agricultural Technology Programme – Phase II Project

Financing summary

Initiating institution:	World Bank
Borrower:	Ministry of Finance
Executing agency:	Ministry of Agriculture
Total programme cost:	US\$214 million (net of beneficiary contributions)
Amount of IFAD loan:	SDR 17 million (equivalent to approximately US\$23.8 million)
Terms of IFAD loan:	Highly concessional: Maturity period of 40 years, including a grace period of 10 years, with a service charge of 0.75 per cent per annum
Cofinancier(s):	Government of Bangladesh, World Bank, United States Agency for International Development (USAID)
Amount of cofinancing:	World Bank loan: US\$176 million USAID grant: US\$7.4 million
Contribution of borrower:	US\$6.7 million
Contribution of beneficiaries:	US\$6.5 million
Appraising institution:	World Bank
Cooperating institution:	World Bank

Recommendation for approval

The Executive Board is invited to approve the recommendation for the proposed loan to the People's Republic of Bangladesh for the National Agricultural Technology Programme – Phase II Project, as contained in paragraph 55.

Proposed loan to the National Agricultural Technology Programme – Phase II Project for the People's Republic of Bangladesh

I. Strategic context and rationale

A. Country and rural development and poverty context

1. Building on its remarkable social and economic performance over the past 20 years, the People's Republic of Bangladesh aims to become a middle-income country by 2021; achieving this will require that the Government of Bangladesh overcome considerable challenges in agricultural development and rural economic growth. The country's annual GDP growth averaged about 6 per cent between 2000 and 2013, accompanied by a decline in the national poverty headcount rate from 48.9 to 31.5 per cent over the first decade of the century, effectively lifting some 16 million people out of poverty.
2. Bangladesh, a country of over 160 million inhabitants, has also made noteworthy gains in education and health, and is well set to achieve most of the Millennium Development Goals. Despite these gains, it remains a poor country, with a 2013 GDP per capita of about US\$1,000. Bangladesh is regularly hit by natural disasters that severely impact the economy, disproportionately affecting the infrastructure and agriculture sectors, as well as vulnerable groups. Nutrition outcomes have not kept pace with the progress achieved with most social and economic indicators.
3. Agriculture covers about three quarters of the country's scarce land and supports the majority of the population's livelihoods. While overall poverty has significantly declined over the last decade, the poverty headcount in rural areas (still around 35 per cent) has not declined as fast as in urban settings; and the proportion of people living in extreme poverty in rural areas is still three times higher than in urban areas.
4. Agriculture's contribution to the country's economic output has declined over the past decade, but crops, livestock, forestry and fisheries still account for 17 per cent of GDP. Some 67 per cent of the population live in rural areas and over 43 per cent of the country's total labour force are engaged in agriculture. Therefore, achieving further socially and environmentally sustainable economic growth and poverty reduction will require policies and investments conducive to lasting transformational changes in rural areas – including through technological innovation in agriculture.

B. Rationale and alignment with government priorities and RB-COSOP

5. While the performance of the National Agricultural Research System (NARS) has been impressive in contributing to food security (particularly with rice), research in some key subsectors (e.g. livestock, fisheries) has yet to reach its potential productivity in terms of releasing a sufficient stream of useful innovations (including a range of new climate-smart technologies for production and post-harvest). The proposed National Agricultural Technology Programme (NATP) – the second phase of three projects initially planned – will seek to overcome some of

the key constraints still holding back the NARS, and to add greater value to the output of the agricultural sector.

6. The NATP phase two (NATP-II) project is fully aligned with the government's priorities, in particular with: (i) the Perspective Plan 2010-2021 outlining the strategy for achieving food security, making adequate infrastructure available and pursuing environmentally friendly development; (ii) the Sixth Five-Year Plan (6th FYP) identifying focal sectors for pro-poor growth, including agriculture, livestock, community-based fisheries and rural finance; (iii) the policy framework of the National Agricultural Extension Policy (NAEP, 2012); and (iv) the Bangladesh Agricultural Research Council (BARC, 2011).
7. Being agriculture-centric, the NATP-II project will complement the ongoing IFAD-funded portfolio in Bangladesh and is fully aligned with the country strategic opportunities programme's (COSOP) objectives of achieving: (i) better adapted livelihoods of poor people in vulnerable areas to climate change; (ii) greater market access and improved value chains for small producers and entrepreneurs; and (iii) economic and social empowerment for marginalized groups, including poor rural women.

II. Programme description

A. Project area and target group

8. Project area. The three-phase programme will cover all of the 64 districts by the third phase. In this context, NATP-II will cover 57 districts (including the 25 covered by NATP-I) and span a broad range of agroecological zones across Bangladesh. The project will be implemented over a six-year period in up to 270 subdistricts (or upazillas); this includes 120 already covered under NATP-I, plus up to 150 new upazillas. New upazillas will be selected following the multicriteria approach successfully applied under NATP-I (including poverty incidence, high prevalence of marginal farmers and agroecologically stressed areas).
9. Target group. In compliance with government policies and strategies, the primary target group for NATP-II will be smallholder farmers: particularly small, marginal and landless farmers. Special emphasis will be placed on targeting women.

B. Programme development objective

10. The development objective of this project is to increase agricultural productivity of smallholder farms and improve smallholder farmers' access to markets in selected districts. This will be achieved by: (i) strengthening the capacity of the NARS and the extension services to generate and diffuse agricultural technologies aimed at increasing farm productivity and reducing post-harvest losses; and (ii) promoting the sustainability of existing and newly created farmer groups and producer organizations by facilitating their linkages with markets.

C. Components/outcomes

11. Component 1: Enhancing agricultural technology generation. Component 1 will improve the performance of NARS through the support to agricultural technology development, and the strengthening of agricultural research institutions (institutional and human capacity). Research will be funded through competitive grants. The component will also finance a number of activities (including specific studies, policy notes, training, research-extension linkages, and others) in support of the implementation of the 2012 BARC Act approved under NATP.
12. To scale up NATP achievements, the project design includes – embedded in the different project components – an agricultural innovation fund (AIF). The AIF is at the core of the NATP-II scale-up strategy; it aims to provide grant funding for eligible research and microproject proposals to be implemented by potential project beneficiaries. The AIF is fully aligned with the holistic approach to agricultural innovation promoted by the project. In order to effectively contribute to achieving

the project development objective, the AIF includes the following three funding windows: (i) AIF-1 (US\$26.2 million) will promote agricultural technology generation through a programme-based research initiative (AIF-1 PBRG) and a competitive research grant programme (AIF-1 CRG); (ii) AIF-2 (US\$17 million), through matching grants, will promote farmers' adoption of innovative technologies generated by the research community; and (iii) AIF-3 (US\$4.6 million), through matching grants, will support private operators in developing business and market opportunities for farmers, as well as in providing relevant private services to farmers. NATP-II will use calls for proposals, scientific and technical peer-reviewing and transparent selection mechanisms for the allocation of all grants under the AIF; disbursement against the AIF is subject to the Bank's approval of an AIF Manual of Operational Guidelines and Procedures. NATP-II will explore synergies between its AIF and the access to rural financial services promoted under IFAD's new project for Promoting Agricultural Commercialization and Enterprises (PACE).¹

13. Component 2: Supporting crop development. Component 2 will increase farm yields, diversify agricultural production, and improve market linkages for smallholder farmers by: (i) improving the outreach and quality of crop extension and advisory services by strengthening the skills of public extension workers from the Department of Agricultural Extension; (ii) promoting information and communication technology (ICT) in agricultural extension services and supporting farmer-to-farmer extension; (iii) developing farmers' skills to scale up the dissemination of good agricultural practices including those developed under NATP, as well as identifying technologies for a sustainable production of safer food; (iv) promoting farm and off-farm mechanization to increase crop productivity, farm output and diversification, as well as to increase efficiency in crop handling, reduce post-harvest losses and support processing; (v) facilitating stronger collaboration with the private sector for agribusiness development on agroprocessing, market access for smallholders, as well as for the establishment of machinery hire-services; and (vi) strengthening institutions involved in the crop sector, through capacity development and selected investments in infrastructure.
14. Component 3: Supporting fisheries development. Component 3 will promote productivity, quality and output increases through technology transfer, as well as a better access to market opportunities for fish farmers. NATP-II will provide support for the sustainable development of inland culture fisheries (small-scale aquaculture ponds) and inland capture fisheries (open water fisheries in beels [a lake-like wetland with static water] and haors [a haor may host several beels]) by (i) scaling up NATP good aquaculture practices for the production systems prevailing in the project area; (ii) promoting community-based fisheries management; (iii) supporting the participation of fisheries common interest groups (CIGs) and partner organizations (POs) in value chains; (iv) reinforcing research-extension-farmer linkages; and (v) strengthening the capacity of fisheries institutions. NATP-II will explore linkages with fishery activities under the ongoing IFAD-supported operations in the haors.
15. Component 4: Supporting livestock development. Component 4 will promote productivity and output increases through enhanced technology transfer, service delivery, as well as better access for livestock farmers to markets. Activities under this component will cover dairy farming, goat rearing, beef fattening, and poultry farming, and focus on: (i) strengthening livestock institutions, improving livestock extension services, and reinforcing the linkages between research, extension and livestock farmers; (ii) scaling up outreach programmes to a larger number of

¹ PACE aims to enhance the livelihoods of rural women and men by improving profitable business opportunities for microentrepreneurs, and creating wage employment for extreme and moderately poor people. PACE will provide NATP-II finance groups with business planning/development services to prepare business plans for funding through PACE's microenterprise loan programme. In addition, crop, fisheries and livestock farmers unable to access NATP-II matching grants could be referred to PACE loan schemes.

farmers; and (iii) facilitating the participation of smallholder farmers in selected livestock markets.

16. Component 5: Project management. Activities under this component will: (i) ensure that the project is carried out in line with the provisions in the official project documents, in particular all fiduciary and governance aspects; (ii) establish liaison mechanisms between the World Bank and the project, and between the project and the Government of Bangladesh, and (iii) coordinate the implementation of selected overarching project activities with the support of external technical assistance.

III. Programme implementation

A. Approach

17. NATP-II will build on and scale up successful interventions and address important lessons learned from NATP-I. The integrated approach to reaching the project development objectives will include a foundational component that contributes towards decentralized, demand-driven agricultural research, as the basis for an enhanced agricultural technology system. The project will include a further three subsector components (crops, livestock and fisheries) to address a range of constraints to technology generation, technology transfer and adoption at farm level, and farmers' access to markets. This approach is expected to lead to an enhanced linkage between agricultural research, extension, and production – an area regularly reported under NATP as requiring further improvement.

B. Organizational framework

18. The representative of the borrower is the Ministry of Finance. NATP-II will be implemented under the responsibility of the Ministry of Agriculture (lead implementing agency) and the Ministry of Fisheries and Livestock. It will be fully integrated into the Government of Bangladesh administration, and project implementation is designed to promote the use of existing government structures at the central level and, when available, at decentralized levels.
19. A joint steering committee, composed of senior representatives from the agencies under the Ministry of Agriculture and Ministry of Fisheries and Livestock involved in project implementation, as well as representatives from the farmers and private sector, who will provide strategic guidance, approve annual budget and activity plans, monitor overall implementation progress, facilitate interagency coordination and resolve any outstanding issues requiring high-level decisions.
20. Project management unit. A small project management unit (PMU) will be set up to oversee implementation of project activities, carry out day-to-day project management functions, facilitate coordination among components, and liaise with the World Bank on all project implementation-related aspects. The PMU will also be in charge of project monitoring and evaluation, producing a project implementation manual (PIM) that is acceptable to the development partners, detailing the operational, financial and administrative procedures of NATP-II. The PMU will also be responsible for the implementation of component 5.
21. Project implementation units. All other project components will be integrated in the corresponding line department (or agency); each department/agency will set up a component-specific project implementation unit (PIU). Under the Ministry of Agriculture, BARC and the Department of Agricultural Extension will each set up a PIU; BARC for the implementation of component 1 (agricultural technology generation) and the Department of Agricultural Extension for component 2 (crops). Under the Ministry of Fisheries and Livestock, the Department of Fisheries will set up a PIU for the implementation of component 3 (fisheries) and the Department of Livestock Services will set up a PIU for component 4 (livestock). Using project funds, the Department of Fisheries, Department of Livestock Services and BARC will recruit service providers (e.g. international institutions, agro-consulting firms,

academia or others) to deliver the technical assistance needed for strengthening their institutional capacity and supporting their PIUs with the implementation of component-specific activities.

C. Planning, monitoring and evaluation, and learning and knowledge management

22. Planning. The PMU will be responsible for preparing the annual work plan and budget, getting it approved by the Ministry of Finance and cleared by the World Bank. The plan will include planned activities along with targets and expenditures and will reflect the general project targets and activities.
23. Monitoring and evaluation. NATP-II will have a multi-tier results monitoring and impact evaluation system that will inform on the progress made towards achieving the development objective. Results will be sex-disaggregated reported as much as possible to capture the gender dimension of NATP-II.
24. Learning and knowledge management. Knowledge sharing and learning is a key activity throughout all of NATP-II's components. The project will utilize ICT for extension and capacity-building purposes, and further aims to build an agriculture knowledge repository and a knowledge platform under its ICT initiative. Another important tool will be the farmers information and advisory centres that will serve as fully equipped agricultural technology and knowledge-sharing centres.

D. Financial management, procurement and governance

25. A fiduciary assessment of NATP-II was carried out during design, and follows World Bank procedures. The fiduciary assessment rated the risk in financial management (FM) as "substantial", due to (i) the involvement of multiple PIUs and accounting centres; (ii) the timeliness of consolidation of FM reports; and (iii) compliance with the requirements of multiple donors. Risk-mitigating measures have been incorporated into the design of the FM implementation arrangements, and a number of additional measures will be taken to ensure overall FM capacity and performance.
26. NATP-II will hire an experienced consultant for the PMU (a senior financial management specialist), with qualifications acceptable to the Bank and IFAD, to lead and coordinate FM activities. The consultant will support the project in strengthening budgeting practices, internal controls, fund reconciliations, and other relevant financial functions, including coordination with the FM staff at the PIUs. The current manual system of accounting will be enhanced within 12 months of project effectiveness by a computerized FM information system to facilitate easy and timely access to financial information and its consolidation. In order to ensure that clear practices are harmonized across the project, the PIM will include all the relevant parts of FM operations, donors' compliance and financial disclosure. Prior to effectiveness, the project will also adopt an online, off-the-shelf, web-enabled accounting software. Annual external audits of all project components will be conducted by the Foreign Aided Project Audit Directorate and will be supplemented by additional internal audits from an independent audit firm (twice in the project lifetime).
27. Flow of funds. Financing from the International Development Association (IDA), IFAD and a USAID trust fund will be disbursed through three separate designated accounts. These will be opened and operated by the PMU. All PIUs will maintain a designated operating account to receive funds from the PMU. The IFAD loan will be administered by the World Bank under a cooperation agreement with IFAD. An initial advance will be provided and will be replenished based on regular statements of expenditure. The same method will be applied between the PMU and PIUs. After the first year of implementation, the Bank will review the FM performance and, in consultation with IFAD, may recommend converting the disbursement modality to

one based on interim unaudited financial reports, including a six-monthly forecast of fund requirements.

28. Project-related transactions relating to all funding sources (IDA, USAID, IFAD and the Government of Bangladesh) will be accounted for separately in the PMU following double-entry bookkeeping principles and on a cash basis. The key project accounting functions for which the PMU will be responsible are as follows: (i) budget preparation and monitoring; (ii) payments for eligible project expenditure to third parties; (iii) disbursement of project funds to various agencies, as per approved work plan; (iv) maintenance of books and bank accounts; (v) cash flow management; (vi) financial reporting to the Government of Bangladesh, the World Bank, IFAD and other stakeholders; (vii) preparation of withdrawal applications to claim funds from the World Bank and IFAD; and (viii) assistance to the external auditor and ensuring appropriate follow-up of audit. Details on the proposed FM and disbursement arrangements can be found in annex 3 of the World Bank's Project Appraisal Document.
29. Procurement. Procurement financed under the project will be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated July 2014 (Procurement Guidelines) and "Guidelines: Selection and Employment of Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated July 2014 (Consultant Guidelines), and the provisions stipulated in the financing agreement. The procurement method will depend on the nature of the expenditure and the value of the contract. The PMU and all PIUs will preserve all procurement records and documents in accordance with provisions of the Public Procurement Act 2006 (PPA 2006).
30. Procurement under NATP-II will be guided by the World Bank-approved procurement plan and processed through pooled procurement by the PMU for selected goods and services (e.g. ICT equipment and peripherals, furniture and office equipment, consultant services to be provided across various components, and others) under component 5, and by the four PIUs and the PMU for all other component-specific goods, works and services. To mitigate procurement risks from low in-house capacity, the project will contract six procurement specialists (consultants): two for the PMU and one for each PIU. An acceptable procurement plan covering the first 18 months of project implementation is available. Institutional procurement approval will be provided by the respective Head of Procurement Entities (HOPE) or his/her delegate as per delegation of financial powers of the four agencies (departments' Director General and BARC Chairman); the HOPE for the PMU is the Secretary of the Ministry of Agriculture (lead implementing agency).
31. Audit. The Foreign Aided Projects Audit Directorate of the Comptroller and Auditor General will conduct an audit of the project's annual financial statements within six months from the end of the fiscal year. The project director will be responsible for audit follow-up and taking remedial actions. Internal audits will include prepayment audits and independent appraisals of the financial, operational and control activities in the sector. The responsibilities of the internal auditors will further include reporting on the adequacy of internal controls, the accuracy and propriety of transactions, the extent to which assets are accounted for and safeguarded, and the level of compliance with financial procedures and government laws and regulations. The first audit will be due by the end of the second year of implementation.
32. Governance. Lessons learned over the last five years to improve project implementation and safeguard against potential governance issues have been incorporated in the project design, implementation arrangements and monitoring

procedures. The project design allows for full and distinct accountability with a single line agency (BARC, Department of Fisheries and Department of Livestock Services) for each component. Project monitoring and impact evaluation will be carried out in collaboration with the PMU and the PIUs by an independent entity recruited competitively and operating with national and international consultants. An independent assessment (technical and financial audit) of the AIF will be carried out for project midterm review to improve the grant system's performance accordingly. Beneficiaries' feedback will be obtained through IT apps tailored to the project's needs and channelled directly to the NATP-II management information system's area coordinated by the third-party monitoring firm. The project will also set up project-level grievance redress mechanisms with local communities being consulted early in the process. In addition, in line with the Bank's Disclosure Policy and the country's Right to Information Act, all information in the project shall be made public.

33. Several risks and risks mitigation measures related to procurement, financial management, and environmental and social safeguards compliance have already been described in the corresponding parts of the project appraisal document. In order to further minimize governance and corruption risks, NATP-II will follow a Governance and Accountability Action Plan (GAAP). This plan outlines a framework for action, institutional arrangements, specific responsibilities, and additional measures to facilitate effective and appropriate use of project funds. It is based on the Bank's and IFAD's experiences in addressing governance and anticorruption issues. The GAAP will be adjusted as necessary during implementation to reflect governance issues that may emerge and/or to strengthen or add actions.

E. Supervision

34. The IFAD loan will be administered and supervised by the World Bank.

IV. Programme costs, financing, benefits

A. Programme costs

35. The total estimated cost of NATP-II amounts to US\$214 million (net of beneficiary contribution), inclusive of contingencies and taxes.

B. Programme financing

36. Of the total cost of US\$214 million, US\$23.8 million will be financed through an IFAD loan on highly concessional terms. The World Bank will be providing a loan of US\$176 million and USAID will contribute a grant of US\$7.4 million. The contribution of the Government of Bangladesh, in the form of parallel cofinancing, will cover all vehicles purchased for NATP-II, as well as the salaries of civil servants assigned to work full-time on the project, and other expenses.² The financing of taxes on eligible expenditures will be permitted with IFAD funds, to harmonize with IDA practice and simplify the project's accounting and disbursement procedures.

² As per the table, the Government of Bangladesh contribution reported amounts to US\$6.65 million (or 3 per cent of project costs). This is likely to be underestimated, as it does not include the hiring by DOF and DLS of upazilla-level extension staff. However, since this process is underway and has not yet been submitted to the Manpower Committee (Finance Division/Ministry of Finance), the final number of staff that actually will be recruited is not yet known. Hence, the exact amount to be added to the reported government contribution is not yet available.

Table
Programme/project costs by expenditure category and financier
 (Millions of United States dollars)

Expenditure category	IFAD loan		World Bank loan		USAID		Gov't of Bangladesh		Total
	Amount	%	Amount	%	Amount	%	Amount	%	Amount
1. Goods, works, services and operating costs	19.0	11.5	140.0	84.5			6.7	4.0	165.7
2. AIF-1 ³	2.3	8.8	16.5	63.0	7.4	28.2			26.2
3. AIF-2	2.0	11.8	15.0	88.2					17.0
4. AIF-3	0.5	10.9	4.0	87.0					4.6
5. Project preparation advance (World Bank)			0.5	100.0					0.5
Total	23.8	11.1	176.0	82.2	7.4	3.5	6.7	3.1	214

37. In addition, beneficiaries will be required to provide cash contributions towards the matching grants. Beneficiary contribution is expected to amount to US\$6.5 million.

C. Summary benefit and economic analysis

38. Project benefits. It is estimated that over one million farming households will directly benefit from project activities, including from improved extension services, stronger linkages with research, on-farm demonstrations of new technologies, capacity enhancement through training and skills development, as well as cofunding productive assets. Based on previous experience, significant spillover effects and knowledge transfer to farmers who are not members of groups supported by NATP (the CIGs) can be anticipated. Therefore, all members of the supported farming communities will potentially benefit from the technologies generated, the improved extension services provided, as well as from the market linkages developed. Up to three million farmers in the project area are expected to benefit from NATP-II. The project will promote gender mainstreaming and women's empowerment to ensure that a significant proportion of direct beneficiaries is female.
39. Economic analysis. The parameters used in making these projections were based on the NATP-I experience and impact. On this basis, the NATP-II internal rate of return is calculated at 28 per cent, the project's economic rate of return (ERR) at 31 per cent, and the corresponding net present value at US\$49.9 million. This ERR remains robust under hypothetical scenarios of a 10 per cent decrease in expected net revenues and/or a 10 per cent increase in project costs.

D. Sustainability

40. To ensure the durability of the model for technology transfer and delivery of advisory services to farmers, NATP-II will promote a pluralistic extension system that supports various complementary elements (e.g. public extension staff, local private extension agents, lead farmers, Farmers' Information and Advice Centres, ICT connectivity, gender focus).
41. Improved access to knowledge, markets, market and price information and financial services will help contribute to the sustainability of CIGs and POs supported by the project. To further increase smallholders' voices and economic strength in the selected value chains, NATP-II will establish producer organizations for farmers. In addition, bankable CIGs and POs will be linked up with financing institutions involved in other programmes/projects supporting access to finances.

³ For explanation of AIF-1, AIF-2 and AIF-3 see para. 12.

42. The sustainability of NATP-II outcomes will further be supported by the institutional capacity and skills development agenda of the project.

E. Risk identification and mitigation

43. The overall risks of NATP-II not achieving the project development objectives and targets, and for NATP-II activities to have a negative impact on the people and the environment are considered substantial.
44. The substantial risks identified with regard to policies and sector strategies refer to the potential for lack of operationalization of the Bangladesh Agricultural Research Council Act; delays in hiring public extension workers by the Ministry of Fisheries and Livestock; and the lengthy approval process for the validation of the NAEP. Under NATP-II, these will be addressed through: (i) strengthening the BARC institutional capacity in the area of research management by hiring an international service provider; (ii) expanding the use of private community-based extension agents for livestock and fisheries with the aim of developing sustainable models for private extension (e.g. scaling up fee-based services for livestock, promoting additional sources of revenues for local extension agents for fisheries; and (iii) adopting in NATP-II some of the core pillars of the NAEP (e.g. promoting a group approach, complementary farmer-to-farmer extension; promoting private extension services, etc.).
45. The substantial risk identified with respect to institutional capacity for implementation refers to the challenges in coordinating four line agencies from two different ministries and their capacity to implement the respective components. As shown in the previous project, the coordination challenge can be adequately addressed through a neutral PMU that has strong leadership. The recruitment of a senior project director and a team of technical experts (consultants only, no civil servants) at the PMU level will be a key factor for the successful coordination across line agencies. An important mitigation measure in the implementation arrangements for NATP-II (different from the previous project) is the support from service providers recruited internationally for each line agency.

V. Corporate considerations

A. Compliance with IFAD policies

46. NATP-2 is fully aligned with the IFAD Strategic Framework 2011-2015 and with the current RB-COSOP for Bangladesh, focusing on market access and value chains, and on the economic empowerment of marginalized people. The project design adheres to IFAD policies on private sector participation, environment, targeting and gender. It further complies with the World Bank's safeguards on indigenous people. In terms of environmental impacts, the project is classified as "B".

B. Alignment and harmonization

47. The project, whose design has seen the close involvement of the Government of Bangladesh, will support the Government's strategic priorities in agriculture, i.e. increasing production, achieving food security, supporting adaptation to climate change, and enhancing nutrition through safer and more diversified food. NATP-II will support the decentralization process already under way for agricultural research and extension services.
48. Project implementation will be done through existing government structures at central level and, when available, at decentralized levels.
49. NATP-II will be cofinanced by the World Bank and USAID. It benefits from the experience of all three partners and will link up with existing and relevant projects, such as the IFAD-supported PACE project and the Haor Infrastructure and Livelihood Improvement Project.

C. Innovations and scaling up

50. With the Agricultural Innovation Fund, NATP-II offers a tool to promote research efforts for new and innovative technologies. The AIF is at the core of the NATP-II scaling-up strategy; it aims at providing grant funding for eligible research and microproject proposals to be implemented by potential project beneficiaries. The AIF promotes a competitive research grant programme; farmers' adoption of innovative technologies generated by the research community; and will support private operators in developing business and market opportunities for farmers and by providing relevant private services to farmers (through matching grants).

D. Policy engagement

51. With its contributions to the agricultural technology development, NATP-II is expected to support policies that create an enabling environment for smallholder farmers. This work will include commodity-specific market and value chain analyses, and the preparation of sector policy notes for senior decision makers.

VI. Legal instruments and authority

52. A programme financing agreement between the People's Republic of Bangladesh and IFAD will constitute the legal instrument for extending the proposed financing to the borrower. A copy of the negotiated financing agreement is attached as appendix I.
53. The People's Republic of Bangladesh is empowered under its laws to receive financing from IFAD.
54. I am satisfied that the proposed financing will comply with the Agreement Establishing IFAD and the Policies and Criteria for IFAD Financing.

VII. Recommendation

55. I recommend that the Executive Board approve the proposed financing in terms of the following resolution:

RESOLVED: that the Fund shall provide a loan on highly concessional terms to the People's Republic of Bangladesh in an amount equivalent to seventeen million special drawing rights (SDR 17,000,000) and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

Kanayo F. Nwanze
President

Negotiated Financing Agreement:

"National Agricultural Technology Programme – Phase II Project (NATP-II)"

(Negotiations concluded on 29 June 2015)

Loan Number: [_____]

Project Title: National Agricultural Technology Programme – Phase II Project (the "Project")

The People's Republic of Bangladesh (the "Borrower")

and

the International Fund for Agricultural Development (the "Fund" or "IFAD")

(each a "Party" and both of them collectively the "Parties")

Whereas the Borrower and the International Development Association ("IDA") have entered into a Financing Agreement dated [_____] (the "IDA Financing Agreement") to provide financing for the Project; and

Whereas the Borrower has requested the Fund to provide additional financing for the Project,

The Parties hereby agree as follows:

Section A

1. The following documents collectively form this Agreement: this document, the Project Description and Implementation Arrangements (Schedule 1) and the Allocation Table (Schedule 2).
2. The Fund's General Conditions for Agricultural Development Financing dated 29 April 2009, as may be amended from time to time (the "General Conditions") are annexed to this Agreement, and all provisions thereof shall apply to this Agreement except for the provisions identified in Section D paragraph 3 below. For the purposes of this Agreement the terms defined in the General Conditions shall have the meanings set forth therein.
3. The Fund shall provide a loan to the Borrower (the "Loan"), which the Borrower shall use to implement the Project in accordance with the terms and conditions of this Agreement.

Section B

1. The amount of the Loan is seventeen million special drawing rights (SDR 17 000 000).
2. The Loan is granted on highly concessional terms, shall be free of interest but bear a service charge of three fourths of one percent (0.75%) per annum and have a maturity period of forty (40) years including a grace period of ten (10) years.

3. The Loan Service Payment Currency shall be the United States dollar.
4. The first day of the applicable Fiscal Year shall be 1 July.
5. Payments of the principal amount of the Loan and service charge shall be payable on each 15 February and 15 August.
6. There shall be one (1) Designated Account, for the Loan and for the exclusive use of the Project, in the Bangladesh Bank (the "Central Bank of the Borrower").
7. There shall be one (1) Project Account, denominated in Bangladeshi Taka, for the Loan and for the exclusive use of the Project, in a commercial bank acceptable to the Fund.

Section C

The Loan shall be administered and the Project supervised by IDA as the Cooperating Institution appointed by the Fund in accordance with Article III of the General Conditions, without prejudice to the rights of the Fund as provided in this Agreement.

Section D

1. The following is designated as an additional ground for the suspension of the right of the Borrower to request withdrawals from the Loan Account: the Borrower's right to withdrawals under the IDA Financing Agreement has been suspended.
2. The following is designated as an additional ground for the cancellation of the Loan: the financing under the IDA Financing Agreement has been cancelled in whole or in part.
3. The following provision of the General Conditions shall not apply to this Agreement: Section 7.05 (Procurement).
4. The following are the designated representatives and addresses to be used for any communication related to this Agreement:

For the Borrower/Recipient:

Senior Secretary
Economic Relations Division
Ministry of Finance,
Government of the People's
Republic of Bangladesh
Sher-e-Bangla Nagar
Dhaka 1207, Bangladesh

For the Fund:

President
International Fund for Agricultural Development
Via Paolo di Dono, 44
00142 Rome, Italy

This Agreement, dated [_____], has been prepared in the English language in two (2) original copies, one (1) for the Fund and one (1) for the Borrower.

PEOPLE'S REPUBLIC OF BANGLADESH

Authorized Representative

INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT

Kanayo F. Nwanze
President

Schedule 1

Project Description and Implementation Arrangements

The Project shall be the same as described in Schedule 1 of the IDA Financing Agreement in Annex 1, as such may be amended by the Parties thereto from time to time. The Project shall be implemented in accordance with the provisions of Schedule 2 of the IDA Financing Agreement, as such may be amended by the Parties thereto from time to time.

Schedule 2

Allocation Table

1. Allocation of Loan Proceeds. The Table below sets forth the Categories of Eligible Expenditures to be financed by the Loan and the allocation of the amounts of the Loan to each Category and the percentages of expenditures for items to be financed in each Category:

Category	Amount of the loan allocated (expressed in SDR)	Percentage of Expenditures to be Financed Inclusive of Taxes
(1) Goods (except vehicles), works, non-consulting services, consultants' services, training and Incremental Operating Costs under the Project	13 570 000	12%
(2) Grants under Part 1(b)(i) of the Project (AIF-1/PBRG)	1 600 000	12%
(3) Matching Grants under Parts 2(i)(A), 3(o)(A) and 4(i)(A) of the Project (AIF-2)	1 440 000	12%
(4) Matching Grants under Parts 2(i)(B), 3(o)(B) and 4(i)(B) of the Project (AIF-3)	390 000	12%
TOTAL	17 000 000	

Annex 1

Financing Agreement

(National Agricultural Technology Program – Phase II Project)

between

PEOPLE'S REPUBLIC OF BANGLADESH

and

INTERNATIONAL DEVELOPMENT ASSOCIATION

Dated, 2015

FINANCING AGREEMENT

AGREEMENT dated , 2015, entered into between PEOPLE'S REPUBLIC OF BANGLADESH ("Recipient") and INTERNATIONAL DEVELOPMENT ASSOCIATION ("Association"). The Recipient and the Association hereby agree as follows:

CONSIDERING THAT (A) the Recipient, having satisfied itself as to the feasibility and priority of the Project described in Schedule 1 to this Agreement ("Project"), has requested the Association to extend a credit in an amount equivalent to SDR 125,200,000, as provided in Section 2.01 of this Agreement, to assist in the financing of the Project;

(B) the Recipient has also requested the Association, acting as administrator of the United States Agency for International Development Trust Fund ("USAID Trust Fund"), to provide assistance towards the financing of the Project, and the Association has agreed to make available a grant to the Recipient from the USAID Trust Fund in an amount equal to seven million four hundred thirty thousand Dollars (\$7,430,000) to assist in the financing of Part 1(b)(ii) of the Project ("USAID Co-financing Grant Agreement"); and

(C) the Recipient has also requested the International Fund for Agricultural Development ("IFAD") to provide assistance towards the financing of the Project, and IFAD has agreed to make available a loan to the Recipient in an amount equal to twenty three million eight hundred sixty thousand Dollars (\$23,860,000) to assist in the financing of all the Parts of the Project (except for Parts 1(b) (ii) ("IFAD Co-financing Loan Agreement");

NOW THEREFORE, the Recipient and the Association hereby agree as follows:

ARTICLE I — GENERAL CONDITIONS; DEFINITIONS

- 1.01. The General Conditions (as defined in the Appendix to this Agreement) constitute an integral part of this Agreement.
- 1.02. Unless the context requires otherwise, the capitalized terms used in this Agreement have the meanings ascribed to them in the General Conditions or in the Appendix to this Agreement.

ARTICLE II — FINANCING

- 2.01. The Association agrees to extend to the Recipient, on the terms and conditions set forth or referred to in this Agreement, a credit in an amount equivalent to one hundred and twenty five million two hundred thousand Special Drawing Rights (SDR 125,200,000) (variously, "Credit" and "Financing"), to assist in financing the Project.
- 2.02. The Recipient may withdraw the proceeds of the Financing in accordance with Section IV of Schedule 2 to this Agreement.

- 2.03. The Maximum Commitment Charge Rate payable by the Recipient on the Unwithdrawn Financing Balance shall be one-half of one percent (1/2 of 1%) per annum.
- 2.04. The Service Charge payable by the Recipient on the Withdrawn Credit Balance shall be equal to three-fourths of one percent (3/4 of 1%).
- 2.05. The Payment Dates are February 15 and August 15 in each year.
- 2.06. The principal amount of the Credit shall be repaid in accordance with the repayment schedule set forth in Schedule 3 to this Agreement.
- 2.07. The Payment Currency is Dollar.

ARTICLE III — PROJECT

- 3.01. The Recipient declares its commitment to the objectives of the Project. To this end, the Recipient shall carry out the Project in accordance with the provisions of Article IV of the General Conditions.
- 3.02. Without limitation upon the provisions of Section 3.01 of this Agreement and except as the Association shall otherwise agree, the Recipient shall ensure that the Project is carried through its Implementing Agencies in accordance with the provisions of Schedule 2 to this Agreement. Specifically, the Recipient shall:
 - (a) through MOA, cause: (i) BARC to carry out Part 1 of the Project; and (ii) DAE to carry out Part 2 of the Project;
 - (b) through MOFL, cause: (i) DOF to carry out Part 3 of the Project, and (ii) DLS to carry out Part 4 of the Project; and
 - (c) through MOA cause the PMU to carry out Part 5 of the Project.

ARTICLE IV — EFFECTIVENESS, TERMINATION

- 4.01. The Additional Conditions of Effectiveness consist of the following:
 - (a) the USAID Co-financing Grant Agreement has been executed and delivered on behalf of the Recipient and all conditions precedent to its effectiveness or to the right of the Recipient to make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled;
 - (b) the IFAD Co-financing Loan Agreement has been executed and delivered on behalf of the Recipient and IFAD and all conditions precedent to its effectiveness or to the right of the Recipient to

make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled; and

- (c) the Project Implementation Manual has been adopted by all the Implementing Agencies in a manner satisfactory to the Association.

4.02. The Effectiveness Deadline is the date ninety (90) days after the date of the signing of this Agreement.

4.03. For purposes of Section 8.05 (b) of the General Conditions, the date on which the obligations of the Recipient under this Agreement (other than those providing for payment obligations) shall terminate is twenty (20) years after the date of this Agreement.

ARTICLE V — REPRESENTATIVE; ADDRESSES

5.01. The Recipient's Representative is the Senior Secretary/Secretary, or the Additional Secretary, or any Joint Secretary, or Deputy Secretary, or Senior Assistant Secretary, or Assistant Secretary, or Joint Chief, or Deputy Chief, or Senior Assistant Chief, or Assistant Chief of the Economic Relations Division of the Recipient's Ministry of Finance.

5.02. The Recipient's Address is:

Economic Relations Division
Ministry of Finance
Government of the People's Republic of Bangladesh
Sher-e-Bangla Nagar
Dhaka 1207, Bangladesh

Facsimile:

88029180671

5.03. The Association's Address is:

International Development Association
1818 H Street, N.W.
Washington, D.C. 20433
United States of America

Cable:

Telex:

Facsimile:

INDEVAS 248423 (MCI) 1-202-477-6391
Washington, D.C.

AGREED at _____, People's Republic of Bangladesh, as of the day and year first above written.

PEOPLE'S REPUBLIC OF BANGLADESH

By

Authorized Representative

Name: _____

Title: _____

INTERNATIONAL DEVELOPMENT ASSOCIATION

By

Authorized Representative

Name: _____

Title: _____

SCHEDULE 1

Project Description

The objective of the Project is to increase agricultural productivity of smallholder farms and improve smallholder farmers' access to markets in Selected Districts.

The Project consists of the following Parts:

Part 1: Enhancing Agricultural Technology Generation

Helping improve the performance of the NARS by:

- (a) strengthening agricultural research institutions by, inter alia: (i) strengthening the institutional capacity of BARC and selected national agricultural research institutes, including to carry out research management, institutional coordination, policy formulation activities; (ii) supporting the carrying out of doctoral studies of eligible staff from the Implementing Agencies; (iii) building, updating and renovating research infrastructure of selected national agricultural research institutes, including the construction of laboratory infrastructure and the acquisition of associated research equipment; and (iv) developing a web-based agricultural research platform to serve as a research database and knowledge center; and
- (b) Supporting the development of innovative agricultural technologies, mobilization of available research capacity and stimulation of scientific creativity by: (i) establishing and operating a program-based research initiative, including the provision of Grants to be funded out of AIF-1/PBRG; and (ii) establishing and operating a competitive research grant program aimed at promoting agricultural technology generation, including the provision of Grants, to be funded out of AIF-1/CRG, to in-country research providers.

Part 2: Supporting Crop Development

Supporting DAE to carry out an integrated approach to increase crop productivity, quality and output and facilitate crop farmers' access to markets by, inter alia: (a) enhancing skills, mobility and connectivity of public extension workers; (b) supporting the development of farmers information and advise centers; (c) promoting the use of information-and-communication-technology-based extension methods; (d) developing skills of farmers to scale up the dissemination of good agricultural practices and identify technologies for a sustainable production of safer food; (e) promoting farm and off-farm mechanization processes to increase crop productivity and efficiency in crop handling and reduce post-harvest losses; (f) facilitating collaboration with the private sector in areas such as agro-processing, value-chain integration and machinery hire-services; (g) strengthening the institutional capacities of entities involved in the crop sector through the carrying out of capacity-building activities and building of selected associated infrastructure in the crop sector such as seed testing laboratories; (h) improving smallholders' marketing activities through the setting up of run collection points for washing, sorting, the

upgrading of specific commodities and the building of commodity collection points and other marketing facilities; and (i) establishing and operating a matching grant scheme aimed at supporting the adoption of new crop technologies and the carrying out of rural services and value-chain activities beneficial to crop farmers, including: (A) the provision of Matching Grants to be funded out of AIF-2 to eligible crop farmer groups; and (B) the provision of Matching Grants to be funded out of AIF-3 to eligible rural entrepreneurs.

Part 3: Supporting Fisheries Development

Supporting DOF to carry out of an integrated approach to increase fish productivity, quality and output and facilitate fish farmers' access to markets by, inter alia: (a) providing support for the sustainable development of inland culture fisheries and inland capture fisheries; (b) promoting selected fish production models involving improved fish varieties; (c) supporting the production of better quality fish seed; (d) supporting the introduction of appropriate fish feed; (e) applying relevant fisheries management tools including community-based fisheries management activities; (f) restoring aquatic habitats; (g) creating suitable market linkages for better access to markets; (h) supporting institutional capacity enhancement for quality control in fish feed development including the improvement of associated facilities; (i) promoting climate-resilient and innovative aquaculture technologies; (j) strengthening existing and recruiting new local extension agents for fisheries aimed at expanding the delivery of extension services, and improving their skills, mobility and connectivity; (k) promoting information-and-communication-technology-based extension methods; (l) carrying out of activities to strengthen linkages with fisheries research; (m) facilitating the participation of smallholder fish farmers in selected commodity markets; (n) improving fish market infrastructure and management of such infrastructure; and (o) establishing and operating a matching grant scheme aimed at supporting the adoption of new fish technologies and the carrying out of rural services and value-chain activities beneficial to fish farmer groups, including: (A) the provision of Matching Grants to be funded out of AIF-2 to eligible fish farmer groups; and (B) the provision of Matching Grants to be funded out of AIF-3 to eligible rural entrepreneurs.

Part 4: Supporting Livestock Development

Supporting DLS to carry out of an integrated approach to increase livestock productivity, quality and output and facilitate livestock farmers' access to markets by, inter alia: (a) strengthening and building capacities of livestock institutions; (b) strengthening existing and recruiting new community extension agents for livestock aimed at expanding the delivery of extension services, and improving their skills, mobility and connectivity; (c) reinforcing linkages between research, extension and livestock farmers; (d) scaling up outreach programs such as fodder development, primary animal health care, artificial insemination and reproductive management services; (e) demonstrating improved and climate-resilient animal husbandry practices; (f) facilitating a close collaboration with the private sector; (g) supporting the development of livestock food safety and food quality standards; (h) piloting community level market interventions aimed at increasing farmer's participation in selected commodity markets; and (i) establishing and operating a matching grant scheme aimed at supporting the adoption of new livestock technologies and the carrying out of rural services and

value-chain activities beneficial to livestock farmers, including: (A) the provision of Matching Grants to be funded out of AIF-2 to eligible livestock farmer groups; and (B) the provision of Matching Grants to be funded out of AIF-3 to eligible rural entrepreneurs.

Part 5: Project Management

Supporting the implementation, management and coordination of the Project activities including: (a) the carrying out communication, public awareness and outreach activities; (b) the coordination of Project monitoring, progress reporting, impact evaluation, and GAAP's implementation activities; and (c) the preparation of analytical studies and policy notes on areas such as agricultural research, extension, and production.

SCHEDULE 2

Project Execution

Section I. Implementation Arrangements

A. Institutional Arrangements

1. The Recipient shall establish, by the date which is no later than one month after the Effective Date, and thereafter maintain throughout the implementation of the Project:
 - (a) a Joint Project Steering Committee, with a mandate, terms of reference and resources satisfactory to the Association, which shall be: (i) co-chaired by MoA and MoFL on an alternate basis; (ii) composed of senior representatives from relevant Ministries, the Planning Commission and each Implementing Agency, as well as from farmers' groups and rural entrepreneurs; and (iii) responsible for, inter alia: (A) providing strategic and policy direction on all activities under the Project; (B) approving Project annual budgets and activities' plans; and (C) addressing any obstacle during the implementation of the Project; and
 - (b) a Project Management Unit with mandate, terms of reference and resources satisfactory to the Association, which shall be: (i) headed by a full-time Project director with terms of reference, qualifications and experience satisfactory to the Association; (ii) composed of relevant technical experts, and senior specialists in, inter alia, procurement, financial management, gender, marketing, information-technology, communication and public awareness, research-extension linkages, sector coordination, producer organizations, monitoring and evaluation and reporting matters, all with terms of reference and qualifications and experience satisfactory to the Association; and (iii) responsible for, inter alia, overseeing the overall coordination, implementation and management of the Project, including the activities to be carried out by the Project Implementation Units.
2. The Recipient shall establish, by the date which is no later than two months after the Effective Date, and thereafter maintain throughout the implementation of the Project in each of the Implementing Agencies, a Project Implementation Unit, with mandate, terms of reference and resources satisfactory to the Association, which shall be: (i) headed by a full-time director with terms of reference, qualifications and experience satisfactory to the Association; (ii) composed of relevant technical experts and senior specialists in, inter alia, procurement, financial management, environment and social safeguards, and monitoring and reporting, all with terms of reference, qualifications and experience satisfactory to the Association; and (iii) responsible for, inter alia, carrying out the procurement, financial management, environment, social, monitoring and reporting activities of its respective part under the Project, including

coordinating the implementation of its respective Part of the Project in accordance with the Project Implementation Manual.

3. The Recipient, through DAE, shall enter into a strategic partnership agreement with HORTEX, under terms and conditions satisfactory to the Association, whereby, inter alia, HORTEX agrees to provide technical assistance to support DAE in the carrying out of Part 2(f) of the Project.

B. Project Implementation Manual

1. The Recipient shall maintain the Project Implementation Manual, in form and substance satisfactory to the Association, which shall include, inter alia:
 - (a) the Project administrative, accounting, auditing, reporting, financial (including cash flow aspects in relation thereto), procurement and disbursement procedures of the Project; and
 - (b) the Project monitoring and evaluation framework, including all the Project monitoring indicators and targets.
2. The Recipient shall, through each Implementing Agency, ensure that the Project is carried out in accordance with the arrangements and procedures set out in the Project Implementation Manual, provided, however, that in the case of any conflict between the arrangements and procedures set out in the Project Implementation Manual and the provisions of this Agreement, the provisions of this Agreement shall prevail.
3. Except as the Association shall otherwise agree in writing, the Recipient shall not amend, abrogate or waive any provision of the Project Implementation Manual.

C. Agricultural Innovation Fund Operational Guidelines and Procedures

1. Prior to starting the carrying out of Parts 1(b), 2(i), 3(o) and 4(i) of the Project, the Recipient, shall cause each Implementing Agency to adopt, and thereafter maintain, throughout the implementation of the Project and in form and substance satisfactory to the Association, operational guidelines and procedures for the management and operation of an agricultural innovation fund ("Agricultural Innovation Fund Operational Guidelines and Procedures"), which shall include, inter alia:
 - (a) AIF-1/PBRG Operational Guidelines and Procedures;
 - (b) AIF-1/CRG Operational Guidelines and Procedures;
 - (c) AIF-2 Operational Guidelines and Procedures;
 - (d) AIF-3 Operational Guidelines and Procedures; and
 - (e) the terms and conditions of each Subproject Financing Agreement to be entered into between an Implementing

Agency and an Eligible Beneficiary to access to one of the funds referred to in paragraph (a), which shall include, inter alia:

- (i) the Eligible Beneficiary's obligations to: (A) carry out the Subproject with due diligence and efficiency and in accordance with sound technical, economical, financial, managerial, environmental and social standards and practices set out in the Agricultural Innovation Fund Operational Guidelines and Procedures; (B) provide in cash contributions of thirty percent (30%) of the total cost of the Matching Grant to be financed out of AIF-2, cash contributions of fifty percent (50%) of the total cost of the Matching Grant to be financed out of AIF-3 or any other percentages approved by the Association; (C) procure the goods, works and services to be financed out of the Grants or Matching Grants in accordance with the provisions of this Agreement; (D) maintain policies and procedures to enable to monitor the progress of the Subproject and the achievement of its objectives; (E) comply with, the terms and conditions of the EMF, SMF and PMP and each relevant Safeguards Assessment and Plan, as applicable; and (F) to accept physical or documentary inspection by the Implementing Agency and/or the Association, in relation to the carrying out of the Subproject; and
 - (ii) the Implementing Agency's right to suspend or terminate the right of the beneficiary to use the proceeds of Subproject Financing, as the case maybe, or obtain a refund of all or any part of the amount of Grants or Matching Grants then withdraw, upon the beneficiary's failure to perform any obligations under the Subproject Financing Agreement.
2. The Recipient shall ensure that the Project and each Subproject is carried out in accordance with the Agricultural Innovation Fund Operational Guidelines and Procedures, provided, however, that in the case of any conflict between the arrangements and procedures set out in Agricultural Innovation Fund Operational Guidelines and Procedures and the provisions of this Agreement, the provisions of this Agreement shall prevail.
3. Except as the Association shall otherwise agree, the Recipient shall not amend, abrogate or waive any provision of the Agricultural Innovation Fund Operational Guidelines and Procedures.
4. The Recipient shall: (a) engage, not later than September 30, 2017 or such later date as the Association shall otherwise agree, an independent third party entity under terms of reference satisfactory to the Association, to carry out two (2) technical and financial assessments (one assessment to be carried out prior to the Project's mid-term review established by the Association and the other prior to the Project's Closing Date) for purposes

of evaluating the management and operation of the agricultural innovation fund referred to in the above-mentioned Section I.C.1; and

- (b) review with the Association, by July 31, 2018, or such other date as the Association shall request, the results of the assessment report referred to in (a) above, and thereafter, take all measures required to ensure the efficient completion of the Project and the achievement of the objectives thereof, based on the conclusions and recommendations of the said report and the Association's views on the matter.

D. Environmental and Social Safeguards

1. The Recipient shall ensure that the Project is carried out in accordance with the provisions of the EMF, SMF, PMP and the relevant Safeguard Assessments and Plans.
2. Whenever an additional or revised Safeguard Assessment and Plan shall be required for any proposed Project activity, including any Subproject, in accordance with the provisions of the EMF and SMF, as the case may be, the Recipient shall:
 - (a) prior to the commencement of such activity, proceed to have such Safeguard Assessment and Plan: (i) prepared in accordance with the provisions of the EMF and SMF, as the case may be; (ii) furnished to the Association for review and approval; and (iii) thereafter adopted and disclosed as approved by the Association, in a manner acceptable to the Association;
 - (b) thereafter take such measures as shall be necessary or appropriate to ensure compliance with the requirements of such Safeguard Assessment and Plan; and
 - (c) in the case of any resettlement activity under the Project involving Affected Persons, ensure that no displacement shall occur before necessary resettlement measures consistent with the RAP applicable to such activity have been executed, including, in the case of displacement, full payment to Affected Persons of compensation and of other assistance required for relocation, prior to displacement.
3. The Recipient shall not amend, abrogate or waive, or permit to be amended, abrogated or waived, the EMF, SMF, PMP or any Safeguard Assessments and Plans, unless the Association has provided its prior approval thereof in writing, and the Recipient has complied with the same consultation and disclosure requirements as applicable to the original adoption of the said instruments.
4. Without limitation on its other reporting obligations under this Agreement, the Recipient shall collect, compile and submit to the Association on a bi-annual basis (or such other frequency as may be agreed with the Association) consolidated reports on the status of compliance with the EMF, SMF, PMP and the Safeguard Assessments and Plans, giving details

of: (a) measures taken in furtherance of the said instruments; (b) conditions, if any, which interfere or threaten to interfere with the smooth implementation of the said measures; and (c) remedial measures taken or required to be taken to address such conditions.

5. In the event of any conflict between the provisions of any of the EMF, SMF, PMP or any Safeguard Assessments and Plan, and the provisions of this Agreement, the provisions of this Agreement shall prevail.

E. Anti-Corruption

1. The Recipient shall ensure that the Project is carried out in accordance with the provisions of the Anti-Corruption Guidelines.
2. Without limitation on the provisions of paragraph 1 above, the Recipient shall:

(a) carry out the Governance and Accountability Action Plan in accordance with its terms; and

(b) submit reports on the status of the implementation of said plan as part of each Project Report (or such other frequency as may be agreed with the Association).

Section II. Project Monitoring, Reporting and Evaluation

A. Project Reports

1. The Recipient shall monitor and evaluate the progress of the Project and prepare Project Reports in accordance with the provisions of Section 4.08 of the General Conditions and on the basis of the indicators acceptable to the Association and set forth in the Project Implementation Manual. Each Project Report shall cover the period of one (1) calendar quarter, and shall be furnished to the Association not later than forty-five (45) days after the end of the period covered by such report.
2. Without limitation on the provisions of paragraph 1 above, the Recipient shall engage, not later than four months after the Effective Date, an independent third party entity, under terms of reference satisfactory to the Association, to carry out a Project baseline survey and stakeholders analysis, mid-term and end-of-project surveys, an impact evaluation, draft implementation progress reports and any other work pertaining to the monitoring and evaluation aspects of the Project.

B. Financial Management, Financial Reports and Audits

1. The Recipient shall maintain or cause to be maintained a financial management system in accordance with the provisions of Section 4.09 of the General Conditions.

2. Without limitation on the provisions of Part A of this Section, the Recipient shall prepare and furnish to the Association as part of the Project Report, not later than forty-five (45) days after the end of each calendar quarter, interim unaudited financial reports for the Project covering the quarter, in form and substance satisfactory to the Association.
3. The Recipient shall have its Financial Statements audited in accordance with the provisions of Section 4.09 (b) of the General Conditions. Each audit of the Financial Statements shall cover the period of one (1) fiscal year of the Recipient. The audited Financial Statements for each such period shall be furnished to the Association not later than six (6) months after the end of such period.

Section III. Procurement

A. General

1. Goods, Works and Non-consulting Services

All goods, works and non-consulting services required for the Project and to be financed out of the proceeds of the Financing shall be procured in accordance with the requirements set forth or referred to in Section I of the Procurement Guidelines, and with the provisions of this Section.

2. Consultants' Services

All consultants' services required for the Project and to be financed out of the proceeds of the Financing shall be procured in accordance with the requirements set forth or referred to in Sections I and IV of the Consultant Guidelines, and with the provisions of this Section.

3. Definitions

The capitalized terms used below in this Section to describe particular procurement methods or methods of review by the Association of particular contracts, refer to the corresponding method described in Sections II and III of the Procurement Guidelines, or Sections II, III, IV and V of the Consultant Guidelines, as the case may be.

B. Particular Methods of Procurement of Goods, Works and Non-consulting Services

1. International Competitive Bidding. Except as otherwise provided in paragraph 2 below, goods, works and non-consulting services shall be procured under contracts awarded on the basis of International Competitive Bidding.
2. Other Methods of Procurement of Goods, Works and Non-consulting Services. The following methods, other than International Competitive Bidding, may be used for procurement of goods, works and non-consulting services for those contracts specified in the Procurement Plan: (a) National Competitive Bidding, following the procedures of the Procurement Laws subject to the additional provisions set forth in paragraph 3 below; (b) Shopping; (c) Direct Contracting; and (d) Well-

established Private Sector Procurement Methods or Commercial Practices which have been found to be acceptable to the Association.

3. National Competitive Bidding Procedures. The following provisions apply for the contracting of goods, works and non-consulting services under National Competitive Bidding, using bidding documents acceptable to the Association:
 - (a) post bidding negotiations shall not be allowed with the lowest evaluated or any other bidder;
 - (b) bids should be submitted and opened in public in one (1) location immediately after the deadline for submission;
 - (c) lottery in award of contracts shall not be allowed;
 - (d) bidders' qualification/experience requirement shall be mandatory; bids shall not be invited on the basis of percentage above or below the estimated cost and contract award shall be based on the lowest evaluated bid price of compliant bid from eligible and qualified bidder; and
 - (e) single stage two (2) envelope procurement system shall not be allowed.

C. Particular Methods of Procurement of Consultants' Services

1. Quality- and Cost-based Selection. Except as otherwise provided in paragraph 2 below, consultants' services shall be procured under contracts awarded on the basis of Quality and Cost-based Selection.
2. Other Methods of Procurement of Consultants' Services. The following methods, other than Quality and Cost-based Selection, may be used for procurement of consultants' services for those contracts which are specified in the Procurement Plan: (a) Quality-based Selection; (b) Selection under a Fixed Budget; (c) Least Cost Selection; (d) Selection based on Consultants' Qualifications; (e) Single-source Selection of consulting firms; (f) Procedures set forth in paragraphs 5.2 and 5.3 of the Consultant Guidelines for the Selection of Individual Consultants; (g) Single-source procedures for the Selection of Individual Consultants; and (f) Well-established Private Sector Procurement Methods or Commercial Practices acceptable to the Association.

D. Pooled Procurement of Selected Goods and Services

Notwithstanding the provisions of Section III of this Schedule, the procurement of Selected Goods and Services will be pooled following the procedures set forth in the Project Implementation Manual.

E. Review by the Association of Procurement Decisions

The Procurement Plan shall set forth those contracts which shall be subject to the Association's Prior Review. All other contracts shall be subject to Post Review by the Association.

Section IV. Withdrawal of the Proceeds of the Financing

A. General

1. The Recipient may withdraw the proceeds of the Financing in accordance with the provisions of Article II of the General Conditions, this Section, and such additional instructions as the Association shall specify by notice to the Recipient (including the "World Bank Disbursement Guidelines for Projects" dated May 2006, as revised from time to time by the Association and as made applicable to this Agreement pursuant to such instructions), to finance Eligible Expenditures as set forth in the table in paragraph 2 below.
2. The following table specifies the categories of Eligible Expenditures that may be financed out of the proceeds of the Financing ("Category"), the allocations of the amounts of the Financing to each Category, and the percentage of expenditures to be financed for Eligible Expenditures in each Category:

Category	Amount of the Credit Allocated (expressed in SDR)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods (except vehicles), works, non-consulting services, consultants' services Training and Incremental Operating Costs under the Project	99,550,000	88%
(2) Grants under Part 1(b)(i) of the Project (AIF-1/PBRG)	11,750,000	88% of the amount disbursed for a Grant
(3) Matching Grants under Parts 2(i)(A), 3(o)(A) and 4(i)(A) of the Project (AIF-2)	10,650,000	88% of the amount disbursed for a Matching Grant
(4) Matching Grants under Parts 2(i)(B), 3(o)(B) and 4(i)(B) of the Project (AIF-3)	2,850,000	88% of the amount disbursed for a Matching Grant
(5) Refund of Project Preparation Advance	400,000	Amount payable pursuant to Section 2.07 of the General Conditions
TOTAL AMOUNT	125,200,000	

B. Withdrawal Conditions; Withdrawal Period

1. Notwithstanding the provisions of Part A of this Section, no withdrawal shall be made:
 - (a) for payments made prior to the date of this Agreement;
 - (b) under Category (2) unless the AIF-1/PBRG Operational Guidelines and Procedures have been submitted by the Recipient to the Association, in a manner satisfactory to the Association;
 - (c) under Category (3) unless the AIF-2 Operational Guidelines and Procedures have been submitted by the Recipient to the Association, in a manner satisfactory to the Association;
 - (d) under Category (4) unless the AIF-3 Operational Guidelines and Procedures have been submitted by the Recipient to the Association, in a manner satisfactory to the Association; and
 - (e) for Eligible Expenditures under a contract financed or agreed to be financed by any other international institution or agency, or the Association, under any other agreement.
2. The Closing Date is September 30, 2021.

C. Other Commitment

By no later than twelve (12) months after the Effective Date, the Recipient shall enhance its current manual system of accounting by a computerized financial management information system, in a manner satisfactory to the Association, to facilitate easy and timely access to Project financial information and its consolidation.

SCHEDULE 3

Repayment Schedule

Date Payment Due	Principal Amount of the Credit repayable (expressed as a percentage)*
On each February 15 and August 15, commencing August 15, 2021 to and including February 15, 2053	1.5625%

* The percentages represent the percentage of the principal amount of the Credit to be repaid, except as the Association may otherwise specify pursuant to Section 3.03 (b) of the General Conditions.

APPENDIX

Section I. Definitions

1. "AIF-1/CRG" means Agriculture Innovation Fund Window 1 for Competitive Research Grant.
2. "AIF-1/PBRG" means Agriculture Innovation Fund Window 1 for Performance Based Research.
3. "AIF-2" means Agriculture Innovation Fund Window 2.
4. "AIF-3" means Agriculture Innovation Fund Window 3.
5. "AIF-1/CRG Operational Guidelines and Procedures" means the rules, procedures and eligibility criteria for managing the AIF-1/CRG referred to in Section I.C.1(b) of Schedule 2 to this Agreement to promote agricultural technology generation through Grants for research providers under Part 1(b)(ii) of the Project.
6. "AIF-1/PBRG Operational Guidelines and Procedures" means the rules, procedures and eligibility criteria for managing the AIF-1/PBR referred to in Section I.C.1(a) of Schedule 2 to this Agreement to promote agricultural technology generation through Grants for research providers under Part 1(b)(i) of the Project.
7. "AIF-2 Operational Guidelines and Procedures" means the rules, procedures and eligibility criteria for managing the AIF-2 referred to in Section I.C.1(c) of Schedule 2 to this Agreement to promote the adoption of innovative technologies through Matching Grants for CIGs under Parts 2(i)(A), Part 3(o)(A) and 4(i)(A) of the Project; including rules and procedures establishing that AIF-2 shall only co-finance capital investments and technical assistance.
8. "AIF-3 Operational Guidelines and Procedures" means the rules, procedures and eligibility criteria for managing the AIF-3 referred to in Section I.C.1(d) of Schedule 2 to this Agreement to support private sector operators through Matching Grants for rural entrepreneurs under Part 2(i)(B), Part 3(o)(B) and 4(i)(B) referred to in Section I.C.1(a) and (b) of Schedule 2 to this Agreement; including rules and procedures establishing that AIF-3 shall only co-finance capital investments and technical assistance.
9. "Affected Person" means a person who, on account of the execution of the Project, experienced or would experience direct economic and social impacts caused by: (a) the involuntary taking of land, resulting in (i) relocation or loss of shelter; (ii) loss of assets or access to assets; or (iii) loss of income sources or means of livelihood, whether or not such person must move to another location; or (b) the involuntary restriction to access to legally designated parks and protected areas, resulting in adverse

- impacts on the livelihood of such person; and "Affected Persons" means, collectively, all such Affected Persons.
10. "Agricultural Innovation Fund Operational Guidelines and Procedures" means the set of operational guidelines and procedures referred to in Section I.C.1.(a),(b), (c) and (d) of Schedule 2 of this Agreement; as such guidelines may be amended, abrogated or waived from time to time with the prior agreement of the Association
 11. "Anti-Corruption Guidelines" means the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006 and revised in January 2011.
 12. "BARC" means the Bangladesh Agricultural Research Council, established in 1973 by the Recipient's Presidential Order 32 of 1973, as amended in 2012 through the BARC Act of 2012.
 13. "Category" means a category set forth in the table in Section IV of Schedule 2 to this Agreement.
 14. "Consultant Guidelines" means the "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011(revised July 2014).
 15. "DAE" means the Department of Agricultural Extension within MOA and any successor thereto acceptable to the Association.
 16. "DLS" means the Department of Livestock Services within MOFL and any successor thereto acceptable to the Association.
 17. "DOF" means the Department of Fisheries within MOFL, and any successor thereto acceptable to the Association.
 18. "EIA" mean each of the environmental impact assessments to be prepared under the Project in accordance with the EMF, pursuant to Section I.D of Schedule 2 to this Agreement, each such assessment in form and substance satisfactory to the Association, and defining details of potential environmental risks and adverse impacts associated with the implementation of Project activities, together with an environmental management plan defining measures to manage such risks and impacts; as each EIA may be revised, supplemented or updated from time to time with the prior agreement between the Recipient and the Association.
 19. "Eligible Beneficiary" means an entity which meets the requirements of and has been selected by the relevant Implementing Agency in accordance with the Agricultural Innovation Fund Operational Guidelines and Procedures, and which has entered into a Subproject Financing Agreement with the relevant Implementing Agency.
 20. "EMF" means the environmental management framework of the Recipient dated November 5, 2014 and disclosed on November 18, 2014, setting forth the policy framework, principles, standards, processes and

institutional arrangements to be applied to assess potential adverse environmental impacts associated with Project activities and the ways to avoid, minimize, mitigate or offset them, including public consultation, disclosure and reporting; as such framework may be revised, supplemented or updated from time to time with the prior agreement between the Recipient and the Association.

21. "EMP" mean each environmental management plan to be prepared under the Project in accordance with the EMF, pursuant to Section I.D of Schedule 2 to this Agreement, each such plan in form and substance satisfactory to the Association, and defining details of measures to manage potential environmental risks and mitigate, reduce and/or offset adverse environmental impacts associated with the implementation of Project activities, together with adequate budget, institutional, monitoring and reporting arrangements capable of ensuring proper implementation of, and regular feedback on compliance with, its terms; as each EMP may be revised, supplemented or updated from time to time with the prior agreement between the Recipient and the Association.
22. "General Conditions" means the "International Development Association General Conditions for Credits and Grants", dated July 31, 2010.
23. "Governance and Accountability Action Plan" and "GAAP" mean the plan agreed between the Association and the Recipient, dated May 10, 2015, setting forth actions and measures to be taken by the Recipient to ensure integrity, transparency and accountability in the implementation of the Project and the use of the proceeds of the Financing; as each GAAP may be revised, supplemented or updated from time to time with the prior agreement between the Recipient and the Association.
24. "Grant" means the amount allocated for each Subproject in accordance with the rules set forth in the Agricultural Innovation Fund Operational Guidelines and Procedures; and "Grants" means collectively, all such Grants.
25. "HORTEX" means the Horticulture Export Development Foundation; or any other successor thereto acceptable to the Association.
26. "IFAD" means the International Fund for Agricultural Development.
27. "IFAD Co-financing Loan Agreement" means the agreement to be entered into between the Recipient and IFAD, providing a loan in an approximate amount of \$23,860,000 for purposes of financing of all the Parts of the Project (except for Parts 1(b), 2(i), 3(o) and 4(i)).
28. "Implementing Agencies" means: (a) BARC; (b) DAE; (c) DLS; and (d) DOF; and "Implementing Agency" means any of the aforementioned entities.
29. "Incremental Operating Costs" means the reasonable required costs for the day-to-day coordination, administration and supervision of Project activities, including leasing and/or routine repair and maintenance of vehicles, equipment, facilities and office premises, fuel, office supplies,

utilities, consumables, communication expenses, translation, printing, photocopying and postal expenses, bank charges, advertising expenses, insurance, costs of clearing, forwarding, inspection, survey and transportation of goods, Project-related meeting expenses eligible under the PIM, and Project-related travel allowances, subsistence and lodging expenses for civil servants from the Project Implementation Units, and Project districts and upazillas only for Project supervision and monitoring activities, but excluding salaries, allowances and honorarium of officials of the Recipient's civil service and/or other sitting allowances and honorarium.

30. "Joint Project Steering Committee" means the committee referred to in Section I.A.1(a) of Schedule 2 to this Agreement.
31. "Matching Grant" means the amount allocated for each Subproject in accordance with the rules set forth in the Agricultural Innovation Fund Operational Guidelines and Procedures; and "Matching Grants" means collectively, all such Matching Grants.
32. "MOA" means the Recipient's Ministry of Agriculture and any successor thereto acceptable to the Association.
33. "MOFL" means the Recipient's Ministry of Fisheries and Livestock, and any successor thereto acceptable to the Association.
34. "NARS" means the Recipient's National Agricultural Research System, consisting of twelve agricultural research institutes under the umbrella of BARC.
35. "PMP" means the pest management plan of the Recipient dated November 5, 2014 and disclosed on November 18, 2014, setting for an integrated approach to pest management practices under the Project; as such plan may be revised, supplemented or updated from time to time with the prior agreement between the Recipient and the Association.
36. "Procurement Guidelines" means the "Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 (revised July 2014).
37. "Procurement Laws" means collectively, the Recipient's Procurement Act 2006 (Act No. 24 of 2006), Public Procurement Rules 2008 (as amended in August 2009) and Public Procurement Act (1st Amendment) 2009.
38. "Procurement Plan" means the Recipient's procurement plan for the Project, dated May 9, 2015 and referred to in paragraph 1.18 of the Procurement Guidelines and paragraph 1.25 of the Consultant Guidelines, as the same shall be updated from time to time in accordance with the provisions of said paragraphs.
39. "Project Implementation Manual" or "PIM" the manual referred to in Section I.B.1 of Schedule 2 to this Agreement.

40. "Project Implementation Unit" means the unit to be maintained by each of the Implementing Agencies in accordance with the provision of Section I.A.2 of Schedule 2 to this Agreement, and "Project Implementation Units" means, collectively, all such Project Implementation Units.
41. "Project Management Unit" means the unit to be maintained by the Recipient in accordance with the provisions of Section 1.A.1(b) of Schedule 2 to this Agreement.
42. "Project Preparation Advance" means the advance referred to in Section 2.07 of the General Conditions, granted by the Association to the Recipient pursuant to the letter agreement signed on behalf of the Association on February 16, 2015, and on behalf of the Recipient on March 3, 2015.
43. "RAP" mean each resettlement action plan to be prepared under the Project in accordance with the SMF, pursuant to Section I.D of Schedule 2 to this Agreement, each such plan in form and substance satisfactory to the Association, and containing, a program of actions, measures and policies for compensation and resettlement of Affected Persons, including the magnitude of displacement, compensation and resettlement arrangements, budget and cost estimates, and sources of funding, together with adequate institutional, monitoring and reporting arrangements capable of ensuring proper implementation of, and regular feedback on compliance with its terms; as each RAP may be revised, supplemented or updated from time to time with the prior agreement between the Recipient and the Association.
44. "Safeguard Assessment and Plan" means any EIA, SIA, EMP, SMP, RAP, SEVCDP and/or TPDP prepared or to be prepared by the Recipient in accordance with the EMF and/or SMF and the provisions of Section I.D of Schedule 2 to this Agreement; and "Safeguard Assessments and Plans" means, collectively, all such assessments and plans.
45. "Selected Districts" means a total of fifty-seven (57) districts of the Recipient duly selected between the Recipient and the Association and set out in the Project Implementation Manual and any other district agreed to in writing between the Recipient and the Association.
46. "Selected Goods and Services" means goods and services that for purposes of improving competitiveness in the contracting that would otherwise have been procured by each Implementing Agency and the PMU separately have been selected for pooled procurement as set forth in the Procurement Plan.
47. "SEVCDP" mean each small ethnic and vulnerable communities development Plan acceptable to the Association and prepared on the basis of the SMF, detailing the specific actions, measures and policies designed to address any impact on Small Ethnic Communities and facilitate the achievement of the objectives of the SMF; as said plan and any annexes or schedules to such plan, may be revised from time to time with the prior written approval of the Association.

48. "SIA" means each social impact assessment to be prepared under the Project in accordance with the SMF, pursuant to Section I.D of Schedule 2 to this Agreement, each such assessment in form and substance satisfactory to the Association, and defining details of potential social risks and adverse impacts associated with the implementation of Project activities, together with measures to manage such risks and impacts; as each SIA may be revised, supplemented or updated from time to time with the prior agreement between the Recipient and the Association.
49. "Small Ethnic Communities" means, for purposes of the Project, the social groups (including tribes, minor races, ethnic sects and communities) residing or engaged in livelihood activities in specific areas (or where a concentration of ethnic people are present) under the Project from time to time; each of which possesses a distinct social and cultural identity that makes it vulnerable to being disadvantaged in the development process, including the presence in varying degrees of the following characteristics: (a) close attachment to ancestral territories and to the natural resources in these areas; (b) self-identification and identification by others as members of a distinct cultural group; (c) a language, often different from the Bangla language; (d) presence of customary social and political institutions; and (e) primarily subsistence-oriented production.
50. "SMF" means the social management framework of the Recipient dated November 5, 2014 and disclosed on November 18, 2014, including a land acquisition and resettlement policy framework, a tribal peoples development framework and a gender and inclusion framework; together setting forth social impact assessment and mitigation procedures and arrangements and grievance redress procedures, including guidelines and procedures for assessing and addressing any Project impacts on women and other vulnerable groups, resettlement procedures, institutional arrangements, eligibility criteria, entitlements and compensation, including valuation procedures, budget, public consultation and participation, monitoring and evaluation and disclosure; as such framework may be revised, supplemented or updated from time to time with the prior agreement between the Recipient and the Association.
51. "SMP" mean any social management plan to be prepared in accordance with the SMF, pursuant to Section I.D of Schedule 2 to this Agreement, each such plan in form and substance satisfactory to the Association, defining details of measures to manage potential social risks and avoid, minimize and/or mitigate any adverse social impacts associated with Project activities, together with adequate budget, institutional, monitoring and reporting arrangements capable of ensuring proper implementation of, and regular feedback on compliance with, its terms; as said plan may be modified from time to time with the prior written no-objection of the Association, and such term includes any schedules or annexes to such plan; as each SMP may be revised, supplemented or updated from time to time with the prior agreement between the Recipient and the Association.

52. "Subproject" means a set of activities to be supported under Parts 1(b), 2(i), 3(o) and 4(i) of the Project and in respect of which a Grant or Matching Grant, as the case may be, will be provided pursuant to a Subproject Financing Agreement.
53. "Subproject Financing Agreement" means the agreement to be entered between the Implementing Agency and an eligible beneficiary for the financing of a Subproject in accordance with the terms and conditions set forth in the Agricultural Innovation Fund Operational Guidelines and Procedures.
54. "Training" means the reasonable costs of goods and services required for the participation of personnel involved in training activities, workshops and study tours under the Project which have been approved by the Association in writing on annual basis, including: (a) allowances (i.e. per diem, honoraria, travel and subsistence costs and others) for training, workshop and study tour participants provided that such allowances are paid via bank's wire into the personal bank's account of the eligible recipient; (b) costs associated with securing the services of trainers, rental of training and workshop facilities, preparation and reproduction of training and workshop materials, costs of academic degree studies, and other costs directly related to training course, workshop or study tour preparation and implementation, but excluding salaries of consultants.
55. "USAID" means the United States Agency for International Development.
56. "USAID Co-financing Grant Agreement" means the agreement to be entered into between the Recipient and the Association, acting as trustee of USAID, providing a grant in an approximate amount of \$7,430,000 for purposes of financing Part 1(b)(ii) of the Project.

Logical framework (World Bank Results Framework and Monitoring)

Project Development Objective: To increase agricultural productivity of smallholder farms and improve smallholder farmers' access to markets in selected districts										
Baseline value (2014)		Cumulative or Annual values (targets and actuals)						Frequency of data collection	Data source	Comments
		Year 1	Year 2	Year 3 mid term	Year 4	Year 5	Year 6 project end			
PDO Level Indicators										
1. Farm Productivity: Increase in the yield of selected agricultural commodities										
Crops: Rice (paddy): 4.7 t/ha Tomato: 30.0 t/ha Livestock: Dairy: 3.0 ltr milk/day/cow Beef: 160 kg live weight Fish: Culture (ponds): 3.0 t/ha Capture (<i>beel</i>): 0.7 t/ha	Target	Rice: 4.7 Tomato: 30.0 Dairy: 3.0 Beef: 160 Culture: 3.0 Capture: 0.7	Rice: 4.8 Tomato: 31.2 Dairy: 3.2 Beef: 175 Culture: 3.4 Capture: 0.8	Rice: 5.0 Tomato: 32.4 Dairy: 3.4 Beef: 185 Culture: 3.7 Capture: 1.0	Rice: 5.1 Tomato: 33.6 Dairy: 3.5 Beef: 200 Culture: 4.1 Capture: 1.1	Rice: 5.2 Tomato: 34.8 Dairy: 3.7 Beef: 215 Culture: 4.4 Capture: 1.3	Rice: 5.4 Tomato: 36.0 Dairy: 3.9 Beef: 225 Culture: 4.8 Capture: 1.4	Annually	DAE, DLS and DOF district & Upazila statistics	Crops Rice: +14% overall increase Tomato: +20% Livestock Dairy: +30% Beef: +40% Fisheries Culture (ponds): +60% Capture (<i>beel</i>): +100%
	Actual	Rice: Tomato: Dairy: Beef: Culture: Capture:	Rice: Tomato: Dairy: Beef: Culture: Capture:	Rice: Tomato: Dairy: Beef: Culture: Capture:	Rice: Tomato: Dairy: Beef: Culture: Capture:	Rice: Tomato: Dairy: Beef: Culture: Capture:	Rice: Tomato: Dairy: Beef: Culture: Capture:			
2.										
Market Access: Volume (in tons) of agricultural commodities sold annually through new marketing structures/arrangements promoted by the project	Target	0	200	2,000	4,000	6,800	8,400	Semi-annually	PIUs at DAE, DOF and DLS	
	Actual									
3. Project beneficiaries: Direct project beneficiaries, of which female [CORE INDICATOR]										
Cumulative number of members in farmers groups (CIG) supported by the project (percentage of female members)										
CIG members: 397,600 (of which female: 29%)	Target	600,000 (35%)	800,000 (35%)	1,000,000 (35%)	1,000,000 (35%)	1,000,000 (35%)	1,000,000 (35%)	Semi-annual	PIUs at DAE, DOF and DLS	Most new CIG will be formed in YR1 (others are 1 st gen. CIG already formed)
	Actual									

Project Development Objective: To increase agricultural productivity of smallholder farms and improve smallholder farmers' access to markets in selected districts										
Baseline value (2014)		Cumulative or Annual values (targets and actuals)						Frequency of data collection	Data source	Comments
		Year 1	Year 2	Year 3 mid term	Year 4	Year 5	Year 6 project end			
Intermediary Indicators										
4. Research: Technologies demonstrated in the project area [CORE INDICATOR]										
Technologies demonstrated: 0	Target	5	10	15	30	40	0	Semi-annual	PIU BARC	Only on-farm, i.e., informing also about research-extension-farmer linkages
	Actual									
5. Research: Research sub-projects under implementation or completed [CORE INDICATOR]										
AIF-1 grants: 0	Target	15	70	100	130	130	130	Semi-annual	PIU BARC	Total of at least: 30 PBRG 100 CRG
	Actual									
6. Extension: Targeted clients satisfied with agricultural and rural advisory services [CORE INDICATOR] Percentage (percentage female satisfied)										
Farmers satisfied: % (tbd %)	Target	66% (64%)	74% (68%)	79% (77%)	85% (84%)	89% (89%)	93% (93%)	Annual	PIU DAE, DOF, and DLS	
	Actual									
7. Extension: Clients who have adopted an improved agricultural technology promoted by the project [CORE INDICATOR] Cumulative number of CiG members adopting at least 1 technology (percentage female)										
Adopters: 0 (female: 0)	Target	0 (0%)	226,000 (35%)	396,000 (35%)	529,000 (35%)	602,000 (35%)	640,000 (35%)	Semi-annual	PIU DAE, DOF, and DLS	
	Actual									
8. Market access: Marketing solutions implemented by the project (cumulative)										
Marketing solutions: 0	Target	15	30	65	95	120	140	Annual	PIU DAE, DOF, and DLS	
	Actual									

Project Development Objective: To increase agricultural productivity of smallholder farms and improve smallholder farmers' access to markets in selected districts										
Baseline value (2014)		Cumulative or Annual values (targets and actuals)						Frequency of data collection	Data source	Comments
		Year 1	Year 2	Year 3 mid term	Year 4	Year 5	Year 6 project end			
9. Agricultural Innovation Fund: Technology adoption and marketing sub-projects under implementation or completed										
Cumulative number										
AIF-2&3 grants: 0	Target	0	500	1,000	2,000	2,800	3,500	Semi-annual	PMU	Total of at least: 3,000 AIF-2 grants and 500 AIF-3 grants
	Actual									
10. Client-days of training provided [CORE INDICATOR]										
(percentage female)										
0 (0%)	Target	500,000 (35%)	1,000,000 (35%)	1,000,000 (35%)	700,000 (35%)	600,000 (35%)	500,000 (35%)	Semi-annual	PMU and PIUs at DAE, DOF and DLS	
	Actual									