

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: PIDA16835

Project Name	Bangladesh NATP-2: National Agricultural Technology Program - Phase II Project (P149553)
Region	SOUTH ASIA
Country	Bangladesh
Sector(s)	Agricultural extension and research (50%), Animal production (20%), Crops (20%), Information technology (10%)
Theme(s)	Rural services and infrastructure (50%), Technology diffusion (25%), Rural markets (25%)
Lending Instrument	Investment Project Financing
Project ID	P149553
Borrower(s)	Government of Bangladesh (MoFin/ERD)
Implementing Agency	Ministry of Fisheries and Livestock (MOFL), Ministry of Agriculture (MOA)
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	01-Dec-2014
Date PID Approved/Disclosed	02-Dec-2014
Estimated Date of Appraisal Completion	19-Dec-2014
Estimated Date of Board Approval	17-Mar-2015
Decision	

I. Project Context

Country Context

Building on its remarkable social and economic performance over the past 20 years, Bangladesh aims to become a middle income country by 2021; to achieve this will require among others that the Government of Bangladesh (GoB) overcomes considerable challenges in agricultural development and rural economic growth. The country's annual GDP growth averaged about 6 percent between 2000 and 2013, accompanied by a decline in the national poverty headcount rate from 48.9 percent to 31.5 percent over the first decade of the century, effectively lifting some 16 million people out of poverty. 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 MDGs. Despite these gains, Bangladesh remains a poor country, with a 2013 GDP per capita of some US\$1,000, and is regularly hit by natural disasters that severely impact the economy, disproportionately affecting the infrastructure and agriculture sectors, as well as vulnerable groups. Further, nutrition outcomes have not kept pace with the progress achieved with most social and economic indicators.

Bangladesh remains a predominantly agricultural country and growth and development achievements in rural areas must be brought on par with those in urban areas. Agriculture occupies some three-quarters of the scarce land space of the country and supports the livelihoods of the majority of the population. While overall poverty has significantly declined over the last decade, the poverty headcount in rural areas (still around 35 percent) has not declined as fast as in urban settings; moreover, the proportion of people living in extreme poverty in rural areas is still three times higher than in urban areas. The contribution of agriculture to the country's economic output has declined over the past decade, but crops, livestock, forestry, fisheries still combine for 17 percent of GDP. Moreover, with some 67 percent of the population living in rural areas and over 43 percent of the country's total labor force engaged in agriculture, achieving further economically, 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.

Sectoral and institutional Context

To eliminate the country's extreme poverty by the year 2030 and to promote shared prosperity for the poorest 40 percent, agriculture must continue to grow (in ways that are sustainable and adapted to climate change) and rely on a more diversified production base. Poverty reduction in rural areas depends crucially on growth in agricultural productivity, which is driven by investment in infrastructure, generation of new or improved technologies adapted to changing climate, and their adoption by farmers and other supply chain actors (e.g., processors). Sustainable intensification and diversification of agriculture through technological change requires an efficient and productive national agricultural technology system, comprising agricultural research (technology development and refinement) and agricultural extension (technology dissemination and adoption). This needs to be supported by appropriate value addition and market linkages through smallholder participation in emerging/established commodity supply chains for higher value agriculture. To achieve these strategic goals, the GoB has been seeking the support of development partners such as the Bank, IFAD and USAID to develop and finance activities aimed at boosting agricultural production through productivity enhancement, and increasing smallholders' income.

In Bangladesh, while the performance of the NARS has been impressive in contributing to food security (particularly with rice), research in some key sub sectors (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 extension system has still extremely limited reach into the myriad communities of the nation (particularly for the fisheries and livestock subsectors where local-level public extension workers are absent), and worse, hardly communicates with the public NARS, or the relevant private and non-government entities also engaged in technological advance. In short, the national agricultural innovation system is far from exploiting the systemic interactions that should drive it to success, and the insufficiencies pervade the system both within the subsystems, the all-too disconnected and in some instances less than strong elements of the NARS: public-private links are disturbingly absent, and links between research entities public and private with the higher education sector are sparse and severely underexploited. The proposed project will seek to overcome some of the key constraints to increasing the efficiency and performance of the national agricultural innovation system.

The World Bank, IFAD and USAID have long supported the promotion of agricultural technology

and the delivery of extension services to farmers in Bangladesh. NATP-1, which closed in December 2014, is a key milestone in this long history of development partners' engagement. NATP-1, co-funded by USAID and IFAD, had been designed as the first phase of a national program whose medium-term objective is to increase income and reduce extreme poverty and hunger by improving agricultural productivity and the performance of the national agricultural technology system. NATP-1 has indeed achieved some such gains by increasing efficiency and effectiveness of the agricultural research and extension systems (see Annex XX for more on achievements and lessons learned from NATP-1), but there is yet much to be done to broaden and deepen such needed gains, as well as to add greater value to the output of the agricultural sector by strengthening its commercialization.

A key lesson learned from the implementation of NATP-1 is the need to look beyond productivity increase and focus equally on facilitating market linkages to ensure sustainability of farmer groups and in particular of producer organizations. Smallholders in Bangladesh are generally poorly integrated into post-harvest agricultural value chains, resulting in a large gap between the commodity value received by farmers and the ultimate retail value of these products (raw or transformed). Principal contributory factors to the limited price pass-through include, among other things: inordinately lengthy chains with multiple links/intermediaries, logistical challenges; poor linkages among chain participants and high information asymmetry; postharvest deterioration. The sector also suffers from food safety concerns that limit markets.

GoB is committed to addressing these challenges and is increasingly augmenting its food-security/yield-gap focus with a value-gap focus through facilitating improvements in smallholder farmers' access to markets. For example, NATP-1 piloted establishing linkages between smallholders and traders through commodity aggregation centers, which resulted in better prices of fruits and vegetables for small-scale farmers. There were also initiatives to link livestock farmers to dairy processors, and fruit and vegetable farmers to exporters and supermarkets. Although these initiatives have yielded valuable lessons, and better prices for the smallholders involved, they remain limited in the range/menu of activities covered, the number of farmers participating, and the geographical areas covered, and need to be scaled up in all these dimensions. Similarly, on the policy front, IFC is working with GoB to streamline the regulatory framework in agribusiness, especially those regulations relating to input markets, post-harvest infrastructure, food safety and standards, and contract farming.

Agricultural technology is prominently featured in the GoB's donor supported 2011 Bangladesh Country Investment Plan, CIP Program 1: Sustainable and Diversified Agriculture through Integrated Research and Extension. The National Agricultural Extension Policy (NAEP, 2012) and the Bangladesh Agricultural Research Council Act (BARC, 2012) provide the sector policy framework for the proposed NATP-2. NAEP advocates inter alia the development of decentralized, integrated, demand-driven agricultural research and extension services. Support is now required for the Department of Agricultural Extension (MoA) towards achieving the strategic objectives of the NAEP, and as well technical assistance for the Department of Livestock Services and the Department of Fisheries (both MFL) for the completion of their respective extension strategy/policy. The 2012 BARC Act aims at fostering the coherence of research activities conducted by the twelve NARS institutes, making BARC responsible for the allocation of resources among the NARS institutes and for the approval of the institutes' research programs. Implementation of the BARC Act remains a challenging process and requires additional financial and technical assistance. Further, there are some significant differences in the institutional capacity and performance among

the various NARS institutes (with livestock and fisheries lagging behind), and the project is expected to strengthen the research agenda and outcomes for livestock and fisheries given the increasing importance of these sub-sectors for rural economic growth, livelihoods and human nutrition.

II. Proposed Development Objectives

To increase the agricultural productivity of smallholder farms and improve smallholders' access to markets in selected districts.

III. Project Description

Component Name

Enhancing Agricultural Technology Generation

Comments (optional)

This component will contribute to achieving the PDO by helping improve the performance of the national agricultural research system (NARS) through the support to agricultural technologies development, and the strengthening of agricultural research institutions. Improving the performance of the agricultural research system is an essential ingredient for achieving higher farm yields and thus directly contributes to the PDO. NATP-2 will support a demand-driven and market-oriented approach to agricultural research that takes into account: (i) the multiplicity of actors involved in agricultural technology generation; (ii) the need for increasing agricultural output per unit of shrinking arable land while adapting to climate variability and longer-term climate change; (iii) the evolving domestic

Component Name

Supporting Agricultural Technology for Crops Development

Comments (optional)

Component 2 will contribute to achieving the PDO by increasing farm yields, diversifying agricultural production, and improving market linkages for smallholder farmers. To that effect, a comprehensive program of activities will be implemented under this component that will be geared at:

- (a) improving the outreach and quality of crop extension and advisory services by investing in public extension workers from DAE, promoting ICT in agricultural extension services and supporting farmer-to-farmer extension;
- (b) developing farmers' skills to scale-up the dissemination of Good Agricultural Practices (GAPs) including those developed under NATP, as well as identifying technologies for a sustainable production of safer food;
- (c) promoting farm and off-farm mechanization to increase crop product

Component Name

Supporting Agricultural Technology for Fisheries Development

Comments (optional)

This component will contribute to achieving the PDO by promoting an integrated approach to achieve productivity, quality and output increases through technology transfer, as well as a better access to market opportunities for fish farmers. To achieve the PDO, NATP-2 will provide support for the sustainable development of inland culture fisheries (small scale aquaculture ponds) and inland capture fisheries (open water fisheries in beel and haor). To achieve the component objective, the project will scale-up NATP Good Aquaculture Practices for the production systems prevailing in the project area, promote community-based fisheries management, support the participation of

fisheries CIGs and POs in value chains, reinforce research-extension-farmers linkages and strengthen the capacity of fishers

Component Name

Supporting Agricultural Technology for Livestock Development

Comments (optional)

This component will contribute to achieving the PDO by promoting an integrated approach to achieve productivity and output increases through enhanced technology transfer, service delivery, as well as a better access for livestock farmers to markets. To that effect, NATP-2 will focus on: (i) strengthening livestock institutions (including food and feed safety and quality, animal health), improving livestock extension services, and reinforcing the linkages between research, extension and livestock farmers; (ii) scaling up outreach programs to reach out to a larger number of farmers; and (iii) facilitating the participation of smallholder farmers in selected livestock markets. To achieve significant and lasting productivity development in the dairy and beef sector, NATP-2 will focus on improv

Component Name

Project Management

Comments (optional)

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 Bank and the project, as well as between the project and the GoB, and (iii) coordinate the implementation of selected overarching project activities with the support of external technical assistance.

IV. Financing (in USD Million)

Total Project Cost:	214.01	Total Bank Financing:	160.00
Financing Gap:	0.01		
For Loans/Credits/Others			Amount
BORROWER/RECIPIENT			6.42
International Development Association (IDA)			160.00
US Agency for International Development (USAID)			23.72
Bangladesh MDTF for Climate Change			0.00
International Fund for Agriculture Development			23.86
Total			214.00

V. Implementation

NATP-2 will be implemented under the responsibility of the Ministry of Agriculture (lead implementing agency) and the Ministry of Fisheries and Livestock. NATP-2 is a project fully integrated in the GoB administration and project implementation is designed to promote the use of existing GoB structures at central level, and when available, at decentralized levels. Where institutional capacity is limited and special skills are required, the project will reach out to outside expertise, including international technical assistance and consulting services. A Joint Steering Committee (JSC), composed of senior representatives from the agencies under MoA and MoFL involved in project implementation, will provide overall strategic guidance, approve annual budget and activity plans, monitor overall implementation progress, facilitate interagency coordination

required for smooth project implementation, and resolve any outstanding issues requiring high-level decision. Overseeing project implementation and coordinating among agencies will be delegated to a Project Management Unit (PMU).

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	x	
Natural Habitats OP/BP 4.04		x
Forests OP/BP 4.36		x
Pest Management OP 4.09	x	
Physical Cultural Resources OP/BP 4.11		x
Indigenous Peoples OP/BP 4.10	x	
Involuntary Resettlement OP/BP 4.12		x
Safety of Dams OP/BP 4.37		x
Projects on International Waterways OP/BP 7.50		x
Projects in Disputed Areas OP/BP 7.60		x

Comments (optional)

VII. Contact point

World Bank

Contact: Patrick Verissimo
 Title: Lead Rural Development Specialist
 Tel: 5764+4318 /
 Email: pverissimo@worldbank.org

Borrower/Client/Recipient

Name: Government of Bangladesh (MoFin/ERD)
 Contact: Kazi Shofiqul Azam
 Title: Additional Secretary
 Tel: 880-2-9180675
 Email: ksazam@gmail.com

Implementing Agencies

Name: Ministry of Fisheries and Livestock (MOFL)
 Contact:
 Title: Secretary
 Tel: (880-2) 716 1258
 Email: fishlivsec@pace-moe.gov.bd

Name: Ministry of Agriculture (MOA)
 Contact: S.M. Nazmul Islam
 Title: Secretary in charge
 Tel: 880-2-9540100
 Email: dmazmulislam@gmail.com

VIII. For more information contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: <http://www.worldbank.org/infoshop>