

## Ex-Ante Evaluation

### 1. Project

Country: People's Republic of Bangladesh

Name of the Project: Small and Marginal Sized Farmers Agricultural Productivity Improvement and Diversification Financing Project

Loan Agreement: June 16, 2014

Loan Amount: 9.930 billion yen

Borrower: The Government of the People's Republic of Bangladesh

### 2. Background and Necessity of the Project

#### (1) Current Status and Issues in the Agricultural Development Sector in Bangladesh

Agriculture is a key sector in Bangladesh, accounting for about 17% (2012) of the nation's GDP, and employing about 45% (2012) of the labor force. Arable land accounts for about half of the nation's total land area. In recent years, Bangladesh has achieved 190% (2011) in annual utilization ratio of its cultivated area and an almost 100% (2012) food self-sufficiency ratio, due to initiatives taken to promote the introduction of high-yield varieties, irrigation, and boro rice cultivation during the dry season. In order to meet the growing demand amidst the intensive utilization of land and the decrease of arable land area, it is critical to improve the productivity of arable land as well as crop diversity, by encouraging introduction of high-yield crops and the cultivation of crops with higher market value. In Bangladesh, small and marginal farmers account for approximately 80% (2008) of all farmers and about 50% (2008) of the country's total crop cultivation, but despite their dominant position, there is unmet potential for improving productivity of arable lands and the diversification of crops. This is mainly due to the limited access to finance for purchasing agricultural machinery and materials, and lack of sophisticated agricultural techniques, making cultivation of new crops, high-yield crops, or introduction of these machines and materials a difficulty.

In response, the Government of Bangladesh have expanded its agricultural productivity improvement and crop diversification loans under guidance of its central bank. There is a huge gap (about 347.0 billion taka) between the the national agricultural financing demand (about 512.0 billion taka as estimated by the central bank in 2014) and the total supply of agricultural finance (about 166.0 billion taka in 2013), the unmet demand acutely significant for the small and marginal farmers. In fact, bank institutions supply 90% of the agricultural finance, which could not be accessed by the small and marginal farmers due to the requirement of collateral. Microfinancing Institutions (MFIs) on the other hand have long played a leading role as a provider of financial commodities in agricultural villages. However, MFIs have focused on small and complementary loans, targeting households, small commercial

enterprises, or home-based manufacturing, and their mandate has not been focused on providing financial commodities (with examination periods, financeable amount, and payment methods) that satisfy the agricultural production cycles (planting, harvesting, and cultivation).

#### (2) Development Policy for the Agricultural Development Sector in Bangladesh and Priority of the Project

As the nation's primary development strategy, the 6th Five-Year Plan (2011/2012–2015/2016) and the National Agriculture Policy (2009) define the research, development, introduction, and promotion of high-yield variety seeds, improvement of farming techniques, increases in frequency of cultivation with the introduction of irrigation, and cultivation suitable for different soil environment. The Agriculture and Agricultural Village Financing Policy Program (2012) announced by the Central Bank of Bangladesh (Bangladesh Bank) identified the tasks of improving agricultural productivity in collaboration with MFIs. Therefore, this plan is in line with the program.

#### (3) Japan and JICA's Policy and Operations in the Agricultural Development Sector in Bangladesh

JICA Country Analytical Work for Bangladesh (April 2013) and the Japan's Country Assistance Program for Bangladesh (June 2012) identify "overcoming social vulnerability" as a priority issue, and "agriculture and rural development" as a development theme. From the perspective of poverty reduction and resolving regional disparities, the assistance policy for the development theme identifies the following implementation items: (1) further improvement of agricultural productivity in response to future population growth and (2) reinforcement of food security through diversification and production of products with higher added value. This project is thus consistent with Japan's and JICA's aid policies and analyses. Major assistance provided recently to the country is listed below:

- Loan assistance projects: The Small Scale Water Resources Development Project (SSWRDP, 2007), South-Western Bangladesh Rural Development Project (2010, and Northern Bangladesh Integrated Development Project (2013)
- Loan assistance projects: The Project for the Provision of Portable Steel Bridges on Upazila and Union Roads (I: 2005, II: 2006, and III: 2007) and the Project for Improvement of the Capacity of Public Food Storage in the People's Republic of Bangladesh (2012)
- Technical Cooperation projects: Capacity Development Project for Participatory Water Resources Management through Integrated Rural Development (2012-2017)

#### (4) Other Donors' Activity

The Asian Development Bank (ADB) has supported funds and agricultural

technologies targeting small and marginal farmers in the country's western parts, aiming to improve agricultural productivity and diversify crops. The Food and Agriculture Organization of the United Nations (FAO) and the Danish International Development Assistance (DANIDA) have provided technical support to small and marginal farmers, including production improvements (mechanization, spread of technologies, irrigation development, and equipment and devices), disease and insect control, high-quality seeds, and surface stream water management.

#### (5) Necessity of the Project

Enhancing MFIs' ability to provide loans for agricultural activities and supporting the spread of agricultural technologies to small and marginal farmers will significantly improve agricultural productivity and diversity. The MFIs play an important role in financing small and marginal farmers. This project aims to improve small and marginal farmers' access to financial services through a two-step ODA loan. Therefore, the aim of the project satisfies the development policies of the Government of Bangladesh as well as the support policies of the Japanese government and JICA. Consequently, JICA's support for this project is highly necessary and relevant.

### **3. Project Description**

#### (1) Project Objectives

The objective of the Project is to increase agricultural productivity and diversity of the small and marginal sized farmers of Bangladesh by financing agricultural loans and providing agricultural training services to farmers through Microfinance Institutions, thereby contributing to the sound development of agricultural finance and the agricultural sector of Bangladesh.

#### (2) Project Site/Target Area

Throughout Bangladesh

#### (3) Project Description

- 1) Agricultural Productivity Improvement and Diversification Financing Project for Small and Marginal Farmers: Loans are provided to finance the small and marginal farmers' activities aimed at contributing to agricultural productivity and diversification of crops through Participating Microfinancing Institutions (PMFIs). The Bangladesh Bank lends funds to PMIs in taka at an interest rate equivalent to or lower than the official bank rate with a maximum two-year repayment period. PMFIs then lend funds to small and marginal farmers in taka at an interest rate of 20% or lower, with a repayment period of three months to two years (including grace period of one to six months).
- 2) Consulting services Monitoring related to the screening of PMFIs, guidance in agricultural techniques, and support for project progress.

#### (4) Total Project Cost

Total Project Cost: 10.805 billion yen (Yen Loan Amount: 9.930 billion yen)

(5) Project Implementation Schedule

Planned between June 2014 and December 2019 (total of 67 months) Project completion is defined as completion of provision of the two-step loan.

(6) Project Implementation Structure

- 1) Borrower: The Government of the People's Republic of Bangladesh
- 2) Executing Agency: The Bank and Financial Institutions Division, Ministry of Finance (Note that the actual project is executed by the Bangladesh Bank as entrusted by the Ministry of Finance.)
- 3) Operation and Maintenance System: The project is executed by the Bangladesh Bank as entrusted by the Ministry of Finance.

(7) Environmental and Social Considerations, Poverty Reduction, and Social Development

1) Environmental and Social Considerations

- i. Category: C
- ii. Reason for Categorization: The Project is classified category C in accordance with JICA Guidelines for Environmental and Social Considerations (April 2010). There is no significant negative environmental and social impact caused by the Project both during the construction and operation phases.

2) Promotion of Poverty Reduction: The project provides agricultural loans at a low interest rate and longer repayment period to small and marginal farmers while providing guidance in agricultural techniques, thereby contributing to poverty reduction.

3) Promotion of Social Development (e.g. Gender Perspectives, Measures to Prevent Infectious Diseases Including AIDS, Participatory Development, Consideration for the Handicapped, etc.): MFIs which have been actively involved in promoting accessibility of women to financial services (more than half of MFI borrowers are women) are selected, thereby enhancing access of impoverished women to agricultural financing.

(8) Collaboration with Other Schemes and Donors: N/A

(9) Other Important Issues: In order to support agricultural productivity improvements and crop diversification from the perspectives of policy and institutions, a technical cooperation is scheduled for implementation via the Department of Agricultural Extension (DAE).

<b>4. Project Benefits</b>
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(1) Quantitative benefits

1) Evaluation Indicators (Operation and Effect Indicators)

Indicators (unit)	Baseline (2014 actual)	Target (2021) (two years after completion)
Loan collection ratio (%)	n.a.	98% or higher
Ratio of women borrowers (%)	n.a.	50% or higher
*Agricultural gross profit per farming household (taka/ha/year)	Survey is conducted on actual figures from the previous year when providing sub-loans.	Increased by 30% or more
*Per-area crop yields for each main crop (Kg/ha)	Same as above	Increased by 20% or more
*Variety of agricultural products produced per household (number of varieties/year)	Same as above	Increased by two varieties
Total agricultural training participants (persons)	n.a.	200,000 or more

\*The number of borrowing farmers is in the tens of thousands of households. Therefore, samples are used to checking indicators for target farmers.

## 2) Internal Rate of Return (IRR)

The IRR could not be calculated since sub-projects could not be identified.

## (2) Qualitative benefits

Enhancing agricultural finance and developing the agriculture sector.

## 5. External Risk Factors and Risk Control

Natural disasters including massive floods

## 6. Lessons Learned from Past Projects

### (1) Results of Evaluations of Similar Past Projects

In the ex-post evaluation of the Poverty Alleviation Microfinance Project for Sri Lanka, it was evaluated that, implementation of various social activities in addition to providing finance, such as educational campaigns, training, and capacity-building (including consultation) are critical to ensuring the efficiency of the project.

### (2) Lessons for the Project

Based on the lessons learned above, PMFIs in the Project provide not only to small and marginal farmers but also agricultural technique training programs that help improve agricultural productivity and diversify crops.

## 7. Plans for Future Evaluation

### (1) Indicators for Future Evaluation:

- 1) Loan collection ratio (%)
- 2) Ratio of women borrowers (%)
- 3) Agricultural gross profit per farming household (taka/ha/year)

- 4) Per-area crop yields for each main crop (kg/ha)
  - 5) Variety of agricultural products produced per household (number of varieties/year)
  - 6) Total agricultural training participants (persons)
- (2) Timing of Next Evaluation: Two years after completion