### Ex-ante Evaluation

#### 1. Name of the Project
Country: The Republic of the Philippines  
Project: Agrarian Reform Infrastructure Support Project (Phase III)  
(Loan Agreement: December 18, 2007; Loan Amount: 11,802 million yen; Borrower: The Government of the Republic of the Philippines)

#### 2. Necessity and Relevance of JBIC’s Assistance

In the Philippines, as of 2003, the incidence of poverty remains high at 30% of the population, or 23.84 million. Among the poor, three out of four (73%, 2003) live in the countryside (mainly small and landless farmers, fishermen, etc.). The poverty incidence in rural areas is at a very high level of 46.6% (2000). Even today, the rural poor find it difficult to own land, get financing, make use of technical services, and access various infrastructure components, all of which contribute to keeping productivity low.

Since the days when the country was under the Marcos Administration, to support small and landless farmers who comprise the rural poor, the Philippine government has promoted agrarian reform with the view to helping farmers become economically self-reliant. Under the Comprehensive Agrarian Reform Program (CARP), which was launched in 1987, the government has (1) allotted land to landless farmers, (2) supported their post-allotment farming activities, (3) supported the establishment of Agrarian Reform Communities (ARCs), and (4) mediated in disputes over the allotment of land. CARP is regarded as the main poverty reduction instrument in the Medium-Term Philippine Development Plan (2004–2010), and completion of land allotment and support for beneficiary farmers, among other things, are prescribed as priority measures of the Department of Agrarian Reform (DAR), which is the executing agency of agrarian reform. As of June 2006, 83% of the goal of allotting 8.06 million ha of land was achieved, and the Philippine government, while considering the extension of CARP, has set as its goal the completion of farmland allotment by 2008. Meanwhile, extension of comprehensive assistance to farmers who have received land allotment is still delayed in terms of, among others, infrastructure, institutional formulation, financial and technical services, thus adding to the urgency of assisting farmers so that they will be able to improve their livelihood and increase their income.

Up to now JBIC has supported the Philippines’ agrarian reform by providing ODA loans for Phase I of the Agrarian Reform Infrastructure Support Project (loan agreement: 1995; loan amount: 6,151 million yen), the Rural Farmers and Agrarian Reform Support Credit Program (loan agreement: 1996; loan amount: 10,799 million yen), Phase II of the Agrarian Reform Infrastructure Support Project (loan agreement: 1999; loan amount: 16,990 million yen) and the Mindanao Sustainable Settlement Area Development Project (loan agreement: 2001; loan amount: 6,515 million yen).

Continuing the work carried out in the Phase II of the Agrarian Reform Infrastructure Support Project, this project will undertake infrastructure development targeting the ARCs across the Philippines, including installation of communal irrigation systems, thereby raising the income of residents in the project site and contributing to poverty reduction in rural areas of the Philippines. In Japan’s Country Assistance Plan for the Philippines (August 2000), the “correction of disparities (poverty alleviation and correction of disparities between regions)” is adopted as a priority area.
Additionally, in its Medium-Term Strategy for Overseas Economic Cooperation Operations (April 2005), JBIC advocates “poverty reduction” as a priority area, and in the Assistance Strategy for the Philippines (December 2006), it advocates “poverty reduction through agricultural and rural development” as a priority area. Thus, JBIC’s support for the project is highly necessary and relevant.

3. Project Objectives

The objective of this project is to raise the income level of residents in the project sites in 54 provinces across the Philippines through (1) support for infrastructure development such as installation of communal irrigation systems in 129 ARCs and (2) establishment of Agrarian Information Marketing Centers (AIM-C) that will promote exchange of information and wide-ranging cooperation between ARCs targeted by the project and the surrounding area, thereby contributing to poverty reduction in rural areas of the country.

4. Project Description

(1) Target Area
129 ARCs in 54 provinces across the country

(2) Project Outline
   (a) Support for infrastructure development in ARCs, etc.
      (i) Construction and rehabilitation of communal irrigation systems, construction of Post-Harvest Facilities, building of new market access roads, improvement of existing roads, construction of bridges, construction of portable water supplying system
      (ii) Institutional formulation and enhancement (Irricatores’ Associations, Water Users’ Associations, agricultural cooperatives, etc.)
   (b) Support for development of areas around ARCs
      (i) Establishment of information marketing centers
      (ii) Improvement of existing access roads
      (iii) Institutional formulation and enhancement
   (c) Consulting services
      (i) Construction management, etc.

(3) Total Project Cost / Loan Amount
17,037 million yen (Yen Loan Amount: 11,802 million yen)

(4) Schedule
January 2008–August 2014 (80 months). The definition of project completion is “when the transition of all components in the 129 targeted ARCs to the main constituent of operation and maintenance is completed.”

(5) Implementation Structure
   (a) Borrower: The Government of the Republic of the Philippines
   (b) Executing Agency: Department of Agrarian Reform (DAR)
   (c) Cooperating Agencies: National Irrigation Administration (NIA), Department of Public Works and Highways (DPWH), local governments
(d) Operation and Maintenance System: Local governments, agricultural cooperatives, ARCs, Irrigators’ Association, Water Users’ Associations

(6) Environmental and Social Consideration

(a) Environmental Effects / Land Acquisition and Resident Relocation

(i) Category: B

(ii) Reasons for Categorization
This project is not likely to have significant adverse impact on the environment due to the fact that the project does not fall under the category of large scale road sector under the “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations” (established in April 2002). In addition, the project characteristics are not likely to exert impact and the project is not located in a sensitive area under the said Guidelines. Thus this project is classified as Category B.

(iii) Environmental Permit
Preparation of the Environmental Impact Assessment (EIA) report related to the project is not required under the domestic laws of the Philippines. However, since some subprojects will be required to acquire the Environmental Compliance Certificate (ECC), those that will need to complete the necessary procedures before the project in question is implemented.

(iv) Anti-Pollution Measures
The executing agency will adopt measures to reduce noise, waste, etc. during construction, including installation of sound barriers, sorted collection and treatment of waste substances generated during construction, etc.

(v) Natural Environment
The project site is not located in or around sensitive areas, such as national parks, and so adverse impact on the natural environment is assumed to be minimal.

(vi) Social Environment
Since the project will be implemented at existing irrigation facilities, etc., there will be no resident relocation.

(vii) Other/Monitoring
The regional offices of the Environmental Management Bureau (EMB) will, based on the content of the ECC, monitor subprojects targeted for acquisition of the ECC issued by the Department of Environment and Natural Resource (DENR).

(b) Promotion of Poverty Reduction
The agrarian reform being implemented by the Philippine government supports the rural poor by selecting ARCs on the basis of their level of poverty. Among the ARCs selected by the government, the project selects ARCs that are especially poverty-stricken, as determined by the level of government revenue (levels 4–6 class\(^1\)) of the regions in which the said ARCs are located, as one of the selection criteria and provides support for infrastructure development, organizational development and information marketing. Thus this project is classified as an

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\(^1\) Local governments are classified in terms of their annual revenue. The criteria are as follows: Class 4: more than 20 million pesos and less than 30 million pesos; Class 5: more than 10 million pesos and less than 20 million pesos; Class 6: less than 10 million pesos.
anti-poverty project.

(c) Promotion of Social Development (e.g. Gender Perspective, Measure for Infectious Diseases including AIDS, Participatory Development, Consideration for the Handicapped, etc.)

This project will undertake formulation and enhancement of Irrigators’ Associations, Water Users’ Associations, agricultural cooperatives and federations of agricultural cooperatives. Additionally, irrigation facilities and information marketing centers will be operated and maintained by the beneficiaries on their own initiative, and water supply systems will be managed jointly by the beneficiaries and the local governments.

In the “Implementation Manual,” consultation in ARCs is scheduled at the planning phase. Also scheduled are the designing of a training program and the incorporation of items for consideration on the gender front in selecting people to participate in the training program, as well as the monitoring of participants in terms of their gender.

(7) Other Important Issues

Sustainability of the project’s effects is expected to be heightened by lessons learned from previous projects and incorporating components keeping in mind the development of areas surrounding ARCs targeted in the project.

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicator)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>Target (2016, 2 years after completion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net annual average farm income (pesos/year/household)</td>
<td>(Note)</td>
<td>30% more than the baseline</td>
</tr>
<tr>
<td>Area benefited by the irrigation project (ha)</td>
<td>–</td>
<td>21,845</td>
</tr>
<tr>
<td>Number of Irrigations Associations organized/strengthened (groups)</td>
<td>–</td>
<td>111</td>
</tr>
<tr>
<td>Average yield of rice per cropping season (ton/ha)</td>
<td>(Note)</td>
<td>5</td>
</tr>
<tr>
<td>Number of Agribusiness/Enterprises operational</td>
<td>–</td>
<td>129</td>
</tr>
<tr>
<td>Number of farmers trained</td>
<td>–</td>
<td>18,031</td>
</tr>
<tr>
<td>Travel time reduced to get the main destination including market, etc. (%)</td>
<td>(Note)</td>
<td>40% reduction</td>
</tr>
<tr>
<td>Transportation costs of agri-products (%)</td>
<td>(Note)</td>
<td>40% reduction</td>
</tr>
<tr>
<td>Number of households served by portable water supply facilities (households)</td>
<td>–</td>
<td>33,865</td>
</tr>
<tr>
<td>Number of Water Users’ Associations</td>
<td>–</td>
<td>81</td>
</tr>
<tr>
<td>organized/strengthened (groups)</td>
<td>Number of federations of agricultural cooperatives organized/strengthened (groups)</td>
<td>54</td>
</tr>
</tbody>
</table>

(Reference indicator) Incidence of poverty on a provincial level (%)
(Note) A baseline survey will be conducted for each subproject in the first year.

(2) Number of Beneficiaries
Around 68,000 (Number of beneficiaries of agrarian reform in the target ARCs)

(3) Internal Rate of Return
Based on the following conditions, the project’s economic internal rate of return (EIRR) is 18.5%.
- Cost: Project cost (excluding tax), operation and maintenance expenses
- Benefit: Improvement in productivity, improvement in price of agricultural products, reduction in production cost, reduction of incapable work hours due to illness, reduction of earning loss as a result of reduction of infant mortality, reduction of medical expense, reduction of time spent on drawing water
- Project Life: 30 years

(4) Qualitative Effects
- Improvements in the livelihood of residents in the project’s target area brought about by infrastructure development and higher incomes.
- Improvements in the distribution of goods and services in and out of the ARCs targeted by the project as a result of construction of new market access roads and repair of existing ones.
- Economic ripple effect on the project’s neighboring area triggered by the establishment of information marketing centers.
- Enhancement of women’s capacity and that of youths by ensuring that they participate in the formation and execution of the project.

6. External Risk Factors
Climatic factors that impact productivity, security situation, and staff members of organizations concerned leaving after receiving training under the project.

7. Lessons Learned from Findings of Similar Projects Undertaken in the Past
A lesson learned from similar past projects is that it is important to undertake projects that bring into view improvements in the livelihood of residents of neighboring areas. Based on this lesson, in the implementation of this project, regional information marketing centers will be established to benefit the farmers in the neighboring area.

8. Plans for Future Evaluation
(1) Indicators for Future Evaluation
   (a) Net annual average farm income (pesos/year/household)
   (b) Area benefited by the irrigation project (ha)
   (c) Number of Water Utilization Associations organized/strengthened (groups)
(d) Average yield of rice per cropping season (ton/ha)
(e) Number of Agribusiness/Enterprises operational
(f) Number of farmers trained
(g) Travel time reduced to get to the main destination including markets, etc (%)
(h) Transportation costs reduced of agri-products (%)
(i) Number of household served by portable water supply facilities (households)
(j) Number of Water Users’ Associations organized/strengthened (groups)
(k) Number of federations of agricultural cooperatives organized/strengthened (groups)

(2) Timing of Next Evaluation
Two years after project completion