Ex-ante Evaluation

I. Name of the project

Country: Republic of the Philippines
Project: Environmental Development Project
Loan Agreement: September 30, 2008
Loan Amount approved: 24,846 million yen
Borrower: Development Bank of the Philippines (DBP)

II. Necessity and Relevance of JBIC's Assistance

1. Present conditions and issues of the environment sector in the Philippines

The Republic of the Philippines is confronted with serious environmental problems including water shortage, water pollution, air pollution and increasing volume of wastes due to growing population especially in Metro Manila and significant increase in economic activities.

According to the classification of all the rivers in the country based on the environmental quality standards of the Philippines, the water of only 35 percent of the total rivers is drinkable. 48 percent of biological oxygen demand (BOD) derives from domestic wastewater emitted nationwide. The percentage of population served with sewage system is approximately 4 percent of the nation's population and only 10 percent in Metro Manila, thereby seriously aggravating the water pollution of rivers and oceans. As for air pollution, the concentration of air pollutants is far much higher than the country's environmental quality standards in urban areas. With respect to wastes, out of a volume of 30,000 tons' solid wastes emitted every day nationwide, 70 percent is collected in urban areas, whereas 40 percent are collected in rural areas. The wastes that are not collected are illegally dumped or insufficiently treated at home.

2. Development policies for the environment sector in the Philippines and the position of the project

The government of the Philippines has actively taken measures to address the problem of environmental deterioration focusing on the development of legal and institutional frameworks. In its Medium-Term Development Plan (MTPDP) 2004-2010, it delineates environmental protection that is essential for sustainable growth and employment creation, and proper management of natural resources as priority areas and moreover maintains that environment-related laws such as the Clean Air Act and the Clean Water Act are to be strictly enforced. Thus, the Plan clearly indicates the strong commitment of the government of the Philippines to environmental measures. Nevertheless, these plans and legal standards have not been sufficiently enforced. Hence, it is necessary to take urgent measures to address the issue of a rapidly environmental deterioration.

On the other hand, in order to promote capital investments in the area of environment, it is essential that medium and long-term fund be provided to private corporations. However, due to the difficulty in generating returns and high investment risks, private financial institutions are reluctant to provide enough medium and long-term funds to this area. It is, hence, necessary to provide medium and long-term funds through public financial institutions in concessional lending terms.

In this project, individual projects for the water supply and sanitation sector are financed through the Philippine Water Revolving Fund (PWRF) which is established jointly with JBIC, USAID and DBP based on the Japan-U.S. Clean Water for People Initiative. The Initiative was announced at the World Summit on Sustainable Development held in Johannesburg in 2002 based on the Japan-US Partnership for Security and Prosperity announced by then Prime Minister Koizumi and President Bush in 2001. The Philippines is one of the pilot countries of the Initiative, and it is expected that private funding will be

enhanced to the development of water supply and sanitation systems through PWRF.

3. Assistance policy and performance of JBIC in the environment sector

The JBIC includes "assistance for global issues" as a priority area in its Medium-term Strategy for Overseas Economic Cooperation Operations (FY2005—first half of FY2008). The priority is also given to "assistance for environmental conservation measures" in its Assistance Strategy for the Philippines (2006). The assistance provided by this project is in accord with these strategies.

Thus JBIC's support for this project, which aims to protect the environment in the Philippines, is highly necessary and relevant.

III. Project Objectives

This project aims to reduce emissions of environmental pollutants by providing local government units, private corporations, government owned and controlled corporations, water districts and cooperatives/associations with medium and long-term funds through DBP, thereby contributing to environmental protection and the improvement of living conditions.

IV. Project Description

1. Target Area

Nationwide in the Philippines

2. Project Outline

(1) Two-step loan

(a) Eligible sector

Water supply and sanitation, new and renewable energy, industrial pollution control, solid/health care/hazardous waste management

(b) Eligible usage of the loan

(i) Sub-loans

- Establishment and improvement of water supply and sanitation facilities {to be lent through PWRF to be established in collaboration with the co-guarantee system of USAID and Local Government Unit Guarantee Corporation (LGUGC)}
- Development of new and renewable energy (geothermal power, wind power, hydraulic power, biomass and solar energy) and transaction costs for CDM projects
- Installation and improvement of facilities that will prevent, reduce or control industrial pollution
- Establishment and improvement of solid/health care/ hazardous waste management facilities
- Initial working capital pertaining to the above
- Interest during construction

(ii) Consulting service

(c) Eligible end-users

Private corporations (with at least 70% of whose capital is owned by the citizens of the Philippines), local government units (LGUs), government owned and controlled corporations (GOCCs), water districts (WDs) and cooperatives/associations

(d) Lending scheme

(i) Wholesale lending via private financial institutions (PFIs) or microfinance institutions (MFIs)

(ii) Retail lending from DBP

(iii)Co-financing by DBP and PFIs through PWRF (only for the water supply and

sanitation sub-loans)

(e) Sub-loan interest

(i) Wholesale lending: Philippine Dealing System Treasury Reference Rate 1 (PDST-R1) for 10-year benchmark + spread (The spread is determined by PFIs or MFIs based on credit risk of the end user.)

(ii) Retail lending: PDST-R1 for 10-year benchmark + spread (The spread is determined by DBP based on credit risk of the end user.)

(iii)PWRF: The lending terms are same as those of sub-loans in other sectors.

(f) Repayment period of sub-loans

3 to 20 years (Grace period: up to 5 years)

(g) Currency of subloans

Philippine peso

(2) Consulting service

Assistance to promotion/marketing of the project, assistance in formulation of sub-projects, assistance in the management of sub-projects (appraisal, implementation, monitoring and evaluation), assistance in coordination with concerned government agencies and other stakeholders, and training for DBP, PFIs, MFIs and end-users

3. Total Project Cost/Loan Amount

27,48 million yen (Yen Loan Amount: 24,846 million yen)

4. Schedule

October 2008 to September 2015 (84 months in total): Project completion is defined as the completion of disbursements.

5. Implementation Structure

(1) Borrower: Development Bank of the Philippines (DBP)

(2) Guarantor: Government of the Republic of the Philippines

(3) Executing Agency: Same as (1)

(4) Operation and Maintenance System: Under the control of Fund Sourcing Department of DBP, the lending units implement the project from the financial point of view and Program Development Department implements the project from the technical, environmental and profitable points of view. DBP and PFIs/MFIs monitor compliance with the environmental quality standards of the equipment and facilities financed by each sub-loans and the measures taken by each end-user.

6. Environmental and Social Consideration

(1) Environmental Effects/Land Acquisition and Resident Relocation

(a) Categorization: FI

(b) Reason for Categorization: This project provides funds to financial intermediaries. As sub-projects cannot be specified prior to JBIC's approval of the funding, the project is classified under the category of FI based on the "JBIC Guidelines for Confirmation of Environmental and Social Considerations" (enforced in April 2002).

(c) Others/Monitoring: DBP confirms the categorization and necessary measures based on the environmental and social impact of each sub-project in accordance with the DBP's Environmental Due Diligence Guidelines and the JBIC's Environmental Guidelines with support from the consultant to be employed by the ODA loans.

(2) Promotion of Poverty Reduction

When selecting a sub-project of the water supply and sanitation sector, a requisite is to confirm poverty rate. Some of the proposed water supply and sanitation sub-projects

will be implemented in an area where its poverty rate is higher than the average national poverty rate. Through funding a sub-project that targets an area with a high poverty rate, it is expected to provide benefits to the poor and promote poverty reduction.

(3) Promotion of Social Development (e.g. Gender Perspective, Measure for Infectious Diseases including AIDS, Participatory Development, Consideration for the Handicapped, etc.):
None

7. Other Important Issues
None

V. Outcome Targets

Evaluation Indicators (Operation and Effect indicator)

Indicator	Original	Target (2017) [2 years after completion]
Sub-loan		
Total amount of sub-loan (million yen)		Total loan amount of sub-loan
Percentage of amount of overdue unpaid credit (%)		Standard value of the Central Bank of the Philippines (BSP) during the period of disbursement (5.1% as of Dec. 2007)
Percentage of number of overdue unpaid credit (%)		8.3%
Water Supply		
Population served (person)	To be determined at approval of sub-loan	Increase from the original value
Amount of water supply (m^3/day)		
Percentage of population served (%)		
Sanitation		
Population treated (person)	To be determined at approval of sub-loan	Increase from the original value
Amount of wastewater treated (m^3/day)		
Percentage of population served (%)		
Renewable Energy		
Capacity factor (%)		To be determined at approval of sub-loan
Maximum output (kw)		
Industrial Pollution Control		
Amount of pollution	To be determined at approval of sub-loan	Decrease from the original value in accordance with the Philippine legal standards
Waste treatment		
Solid waste treated (kg/day)	To be determined at approval of sub-loan	Increase from the original value
Hazardous waste treated (kg/day)		
Wastes collected (kg/day)		

Note: A typical indicator is noted for each subsector in the above. DBP selects an appropriate indicator for each sub-project at the time of appraisal and decides its original value at the time of approval in light of the availability of data with support of the consultant to be employed for the Project.

VI. External Risk Factors

There is a possibility that the financial condition of PFIs, MFIs or the end-user deteriorates due to influence of the world economy (for instance, high interest rates caused by global credit squeeze), downturn of Philippine economy or any other reasons.

VII. Lessons Learned from Finding of Similar Projects Undertaken in the Past

A lesson learned from the past similar ODA loan projects is that it is important to strengthen educational and information campaign for private corporations which will lead to identifying environmental investment needs. Based on this lesson, assistance to DBP, PFIs and MFIs in capacity-building of appraisal and monitoring activities and assistance to end-users in awareness-raising and project formulation will be provided through consulting services.

VIII. Plans for Future Evaluation

1. Indicators for Future Evaluation

(1) Total amount of sub-loan (million yen), percentage of amount of overdue unpaid credit (%), percentage of number of overdue unpaid credit (%)
(2) Population served with water supply system (person), amount of water supply (m^3/day), percentage of population served with water supply system (%)
(3) Population treated with sewage system (person), amount of wastewater treated (m^3/day), percentage of population served with sewage system (%)
(4) Capacity factor (%), maximum output (kw)
(5) Amount of pollution
(6) Solid waste treated (kg/day), hazardous waste treated (kg/day), waste collected (kg/day)

Note: Typical indicators are noted in the above. DBP selects an appropriate indicator for each sub-project at the time of appraisal and decides its original value at the time of approval in light of the availability of data with support of the consultant to be employed for ODA loans.

2. Time of Next Evaluation

Two years after project completion