**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 PFI
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, PFI/ 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 PFI/ 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

<table>
<thead>
<tr>
<th>Evaluation Indicators (Operation and Effect indicator)</th>
<th>Indicator</th>
<th>Original</th>
<th>Target (2017)</th>
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<tbody>
<tr>
<td></td>
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<td>[2 years after completion]</td>
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<tr>
<td>Sub-loan</td>
<td>Total amount of sub-loan (million yen)</td>
<td>Total loan amount of sub-loan</td>
<td></td>
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<tr>
<td></td>
<td>Percentage of amount of overdue unpaid credit (%)</td>
<td>Standard value of the Central Bank of the Philippines (BSP) during the period of disbursement (5.1% as of Dec. 2007)</td>
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<tr>
<td></td>
<td>Percentage of number of overdue unpaid credit (%)</td>
<td>8.3%</td>
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<tr>
<td>Water Supply</td>
<td>Population served (person)</td>
<td>To be determined at approval of sub-loan</td>
<td>Increase from the original value</td>
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<tr>
<td></td>
<td>Amount of water supply (m³/day)</td>
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<td></td>
<td>Percentage of population served (%)</td>
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<tr>
<td>Sanitation</td>
<td>Population treated (person)</td>
<td>To be determined at approval of sub-loan</td>
<td>Increase from the original value</td>
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<tr>
<td></td>
<td>Amount of wastewater treated (m³/day)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of population served (%)</td>
<td></td>
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<tr>
<td>Renewable Energy</td>
<td>Capacity factor (%)</td>
<td>To be determined at approval of sub-loan</td>
<td></td>
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<tr>
<td></td>
<td>Maximum output (kw)</td>
<td></td>
<td></td>
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<tr>
<td>Industrial Pollution Control</td>
<td>Amount of pollution</td>
<td>To be determined at approval of sub-loan</td>
<td>Decrease from the original value in accordance with the Philippine legal standards</td>
</tr>
<tr>
<td>Waste treatment</td>
<td>Solid waste treated (kg/day)</td>
<td>To be determined at approval of sub-loan</td>
<td>Increase from the original value</td>
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<tr>
<td></td>
<td>Hazardous waste treated (kg/day)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wastes collected (kg/day)</td>
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</table>

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 (m³/day), percentage of population served with water supply system (%)

   (3) Population treated with sewage system (person), amount of wastewater treated (m³/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