

Republic of the Philippines

FY2019 Ex-Post Evaluation of Japanese ODA Loan Project

“Environmental Development Project”

External Evaluator: Tokiko Ito, Octavia Japan, Co., Ltd.

## **0. Summary**

This project was implemented with the goal of reducing emissions of environmental pollutants by providing Local Government Units (hereafter referred to as “LGUs”), private corporations, and Government Owned and Controlled Corporations (hereafter referred to as “GOCCs”), etc. with mid-to-long tenor loans for capital investment in the environmental sector throughout the Philippines through the Development Bank of the Philippines (hereafter referred to as “DBP”), thereby contributing to environmental protection and the improvement of living conditions. The relevance of this project is high given that the provision of concessional mid-to-long tenor funds in the environmental sector and environmental improvement and protection are consistent with the country’s development policy, development needs, and Japan’s official development assistance (hereafter referred to as “ODA”) policy, which prioritizes support for environmental protection measures. The project cost was almost as planned, although a part of the loan conditions and DBP’s co-payments were changed to meet the demand for lending. The project period exceeded the planned timeframe because it took more time than expected for various licensing procedures, so it was extended to disburse loans as much as possible; thus, the efficiency of the project is fair. At the time of the ex-post evaluation, many of the sub-loans had not matured. As for the quantitative effect indicators for the sub-projects, those indicators that achieved the target values were confirmed, but the target year setting was unclear, and there were projects where the construction and installation of the target facilities were incomplete. On the other hand, this project was recognized for its contribution to environmental improvement and protection as well as improvement of the living environment. At the time of ex-post evaluation, although it is difficult to evaluate the entire project, the project’s effectiveness and impact is judged to be fair based on the actual values of the indicators at the time of the ex-post evaluation. The sustainability of the project’s operation and maintenance is high because there are no particular problems with the structural, technical, financial, and operation and maintenance conditions of the organization.

In light of the above, this project is evaluated to be satisfactory.

## 1. Project Description



Project Location



Sewage Treatment Facility  
Developed by the Project

### 1.1 Background

The Philippines had been confronted with serious environmental problems including water shortage, water pollution, air pollution, and an increasing volume of waste due to its growing population and especially because of increasing economic activities centered in Metro Manila. The country's government had actively taken steps to deal with environmental degradation, mainly through the development of a legal and institutional framework. However, it had not been sufficiently enforced, and an urgent response to the rapid environmental degradation was needed. On the other hand, to promote capital investments in the environmental sector, providing mid-to-long tenor funds to private corporations is essential. However, due to the difficulty in generating returns and high investment risks from investment in environmental policy, private financial institutions (hereafter referred to as "PFIs") are reluctant to provide enough mid-to-long tenor fund. Hence, it is necessary to provide mid-to-long tenor funds through public financial institutions under the concessional loan conditions.

### 1.2 Project Outline

The objective of this project is to reduce emissions of environmental pollutants in the Philippines by providing LGUs, private corporations, GOCCs, water districts (hereafter referred to as "WDs"), and cooperatives/associations with the mid-to-long tenor funds through DBP, thereby contributing to the improvement of living conditions and environmental protection.<sup>1</sup>

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<sup>1</sup> The document supplied by JICA (Japanese language) states that this project "aims to reduce the emission of environmental pollutants and to improve the living environment, thereby contributing to the protection of the country's environment." In this study, it was revised based on the contract document (English) with the executing agency.

Loan Approved Amount/ Disbursed Amount	24,846 million yen/24,814 million yen	
Exchange of Notes Date/ Loan Agreement Signing Date	September 2008/September 2008	
Terms and Conditions	Interest Rate	Preferential Terms <sup>2</sup> /General Terms <sup>3</sup> /Consulting Service 0.65%/1.4%/0.01%
	Repayment Period (Grace Period	40 years/30 years/40 years 10 years/10 years/10 years)
	Conditions for Procurement	General Untied
Borrower/ Executing Agency	Development Bank of The Philippines (DBP)	
Project Completion	January 2017	
Target Area	All the country	
Main Contractor(s) (Over 1 billion yen)	N/A	
Main Consultant(s) (Over 100 million yen)	GHD Pty. Ltd. (Australia)/PADECO Co., Ltd (Japan)/Orient Integrated Development Consultants, Inc. (Philippines)/Engineering and Development Corp. of the Philippines (EDCOP) (Philippines) (JV)	
Related Studies (Feasibility Studies, etc.)	-“Special Assistance for Project Formation for Environmental Development Project” (2005) -“Special Assistance for Project Formation for Philippines Water Revolving Fund” (2006) -United States Agency for International Development (USAID) “Feasibility Assessment Study” (2005) -USAID “Design and Implementation Framework” (2006)	
Related Project	[(Japanese) ODA Loan] -“Environmental Infrastructure Support Credit Program Phase (I) (II)” (March 1996, December 1999) [Technical Cooperation Projects] -“Establishment of Ecological Solid Waste Management in three cities” (2007–2010) -“Master Plan on Solid Waste Management for Boracay Island and Municipality of Malay in the Philippines” (2007–2008) [Other Aid Agency] -Reduction of emission in Metro Manila, Sewerage improvement in provincial cities, Solid waste management for LGUs (USAID) (Before the start of this project, the official business name was unknown)	

## 2. Outline of the Evaluation Study

### 2.1 External Evaluator

Tokiko Ito, Octavia Japan, Co., Ltd.

<sup>2</sup> Applicable to the parts that contribute to the global environment (water supply and sewerage, new and renewable energy, industrial pollution control, and waste management) and poverty reduction.

<sup>3</sup> Applicable only to water supply excluding preferential terms.

## 2.2 Duration of Evaluation Study

This ex-post evaluation study was conducted according to the following schedule.

Duration of the Study: August 2019–July 2020

Duration of the Field Study: November 17–December 7, 2019, February 25–March 4, 2020

## 2.3 Constraints during the Evaluation Study

This study examines the ODA two-step loan project. At the time of the ex-post evaluation, there were 42 prematurity or outstanding loans out of 78 sub-loans. In addition, there were sub-projects that were under construction or during the trial period of facilities. Furthermore, no documents shared with the executing agency regarding the target year of the operation and effect indicators of the projects could not be confirmed. Based on the above, it was difficult to obtain actual values to measure the operation and effect indicators' degree of achievement and to make evaluation judgments through this study. Thus, evaluation judgment was made based on the actual values and information at the time of the ex-post evaluation.

## 3. Results of the Evaluation (Overall Rating: B<sup>4</sup>)

### 3.1 Relevance (Rating: ③<sup>5</sup>)

#### 3.1.1 Consistency with the Development Plan of the Philippines

At the time of the appraisal, the Philippine government's development policy, *Mid-Term Philippine Development Plan* (2004–2010), focused on environmental protection and appropriate supervision of natural resources. In addition, it advocated reliable implementation of environmental laws such as laws for air cleansing and water purification.

At the time of the ex-post evaluation, the Philippine government has identified infrastructure development and climate change response as important foundations in the *Philippine Development Plan* (2017–2022). The infrastructure development is oriented toward investing the government budget while also using official development assistance (ODA) and promoting public-private partnership (hereafter referred to as “PPP”). It also points out the importance of the environmental protection and the appropriate and reliable management of natural resources to strengthen capacity to respond to climate change and natural disasters.

Thus, the project is in line with the country's development policy given that it was a project that financed the field of environmental protection and pollution control.

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<sup>4</sup> A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

<sup>5</sup> ③: High, ②: Fair, ①: Low

### 3.1.2 Consistency with the Development Needs of the Philippines

Prior to the start of the project, the Philippines had serious environmental problems (water shortage, water pollution, air pollution, increased discharge of waste, etc.), especially in Metro Manila. Based on the country's environmental standards, 35% of all the rivers were classified as potable, and the sewerage coverage was 4% nationwide and 10% in Metro Manila; sewers caused severe water pollution in rivers and the sea. As for the air atmosphere, the concentration of pollutants in the air in urban areas was much higher than the country's environmental standard. Regarding waste, the collection rate of municipal solid waste generated throughout the country was 70% in urban areas and 40% in rural areas, and uncollected waste was illegally dumped and inadequate self-treatment without sanitary landfilling or incineration was carried out. Providing the mid-to-long tenor funds to private corporations was indispensable for promoting capital investment in the environmental sector to deal with these issues. However, the supply of the mid-to-long tenor funds by PFIs has not progressed much in investing in environmental measures, which generally generate little profit and have a high investment risk. Therefore, the mid-to-long tenor funds under the concessional loan conditions through public financial institutions was required.

Furthermore, at the time of the ex-post evaluation, according to the *Philippine Development Plan (2017–2022)*, in terms of water supply and sanitation, the quality of water resources by use has been deteriorating based on the country's environmental standard due to population growth and expansion of residential and industrial areas. It was shown that 14.5% of households do not have access to safe water and the sewerage coverage rate for general households is 4%. New and renewable energy facilities account for only half the capacity that can be discharged in the Philippines. Regarding air quality, there is concern that the number of private cars, the largest pollutant emission source, has increased sharply (44% increase from 2006 to 2015); however, a slight improvement was seen from 2011 to 2015 due to effective management such as monitoring and regulation by the government. Continuous management that does not loosen is required. Regarding waste, the amount of general solid waste generated throughout the country has been increasing, but only 37% of LGUs have sanitary landfills in accordance with the country's policies. One of the factors is attributed to LGUs' lack of funds, facilities, and technology. Furthermore, as for capital investment in the environmental sector, according to DBP and the end-users, it is said that although the supply of funds through PFIs is progressing, the supply of mid-to-long tenor

funds has not advanced much.<sup>6</sup> Thus, mid-to-long tenor funds under the concessional loan conditions through public financial institutions are required.

Therefore, through the appraisal and ex-post evaluation, the project was in line with the development needs because the measures for environmental issues have been needed, the funding other than the administrative budget and the participation of private corporations have been highlighted for this measure, and it provides mid-to-long tenor funds under the concessional loan conditions for environmental projects.

### 3.1.3 Consistency with Japan's ODA Policy

Japan identified “environmental protection and disaster prevention” as a priority in the *Country Aid Policy* (August 2000). Moreover, the priority areas were set as “supports for global issues” in JICA's *Overseas Economic Cooperation Operation Policy* (2005–First half of 2008) and “supports for environmental protection measures” in the *County Assistance Implementation Report* (2006). In addition, the Philippines is one of pilot countries for the *US-Japan Clean Water for People Initiative* (2002).<sup>7</sup> In this project, the Philippine Water Revolving Fund (hereafter referred to as “PWRF”), which is jointly established with the United States Agency for International Development (USAID) and DBP based on this initiative, was planned to finance the water supply and sanitation sectors.

The project provides mid-to-long tenor funds through public financial institutions that promote investment in the field of environmental protection and pollution control in the Philippines. Therefore, the project was in line with Japan's ODA policy.

### 3.1.4 Appropriateness of the Project Plan and Approach

During the implementation of the project, the loan interest rate of the project became less competitive compared to the lower interest rate of commercial banks (see “3.2 Efficiency, 3.2.1 Output 1), Sub-loan interest rate” below). In response, under the loan conditions set at the time of the appraisal, the borrowing of target end-users (borrowers) (LGUs, private corporations, GOCCs, WDs, and cooperatives/associations) did not progress as planned. With the concurrence of JICA, DBP has promoted lending by changing (1) the share of equity requirement of LGUs, WDs, and

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<sup>6</sup> Regarding the interest rate conditions for PFIs, a concrete answer from DBP or PFIs could not be obtained during the field survey.

<sup>7</sup> The governments of Japan and the United States confirmed the partnership between two countries, including cooperation on global issues, in the Japan-US *Partnership for Security and Prosperity* (2001). Based on this, at the “World Summit on Sustainable Development” (2002), this initiative was announced as a joint Japan-US effort on water supply to expand Japan-US cooperation in the development sector.

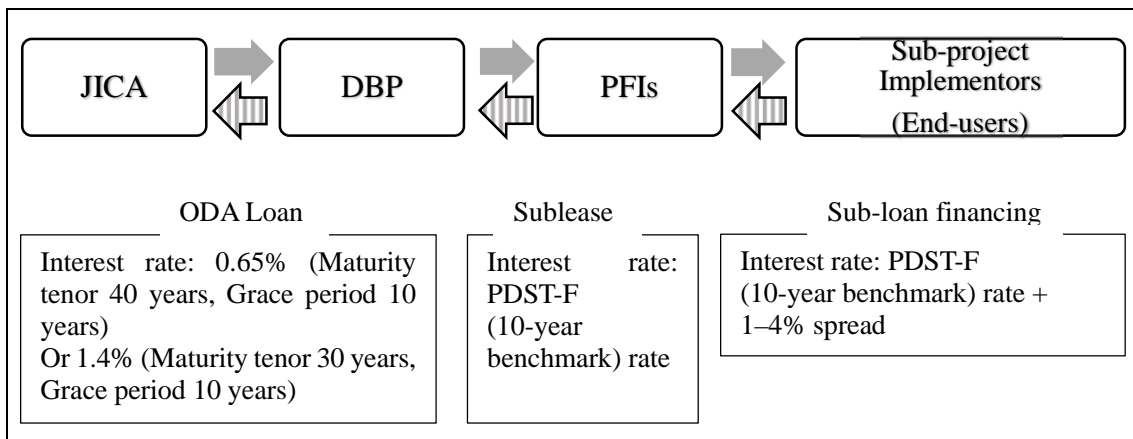
cooperatives/associations, (2) the loan conditions such as co-financing conditions, and (3) the fund allocation of the preferential conditions and the general conditions during the project implementation. These changes do not mean that the interest rate of the project was inferior at the time of the appraisal but rather that the market interest rate was affected by economic policy after the financing was started. In other words, it was an unavoidable event that the project faced in the circumstances surrounding the financing that had changed from the time of the appraisal. It is considered that appropriate and realistic measures were taken.

Based on the above, this project has been highly relevant to the country’s development plan and its development needs, as well as Japan’s ODA policy. Therefore its relevance is high.

### 3.2 Efficiency (Rating: ②)

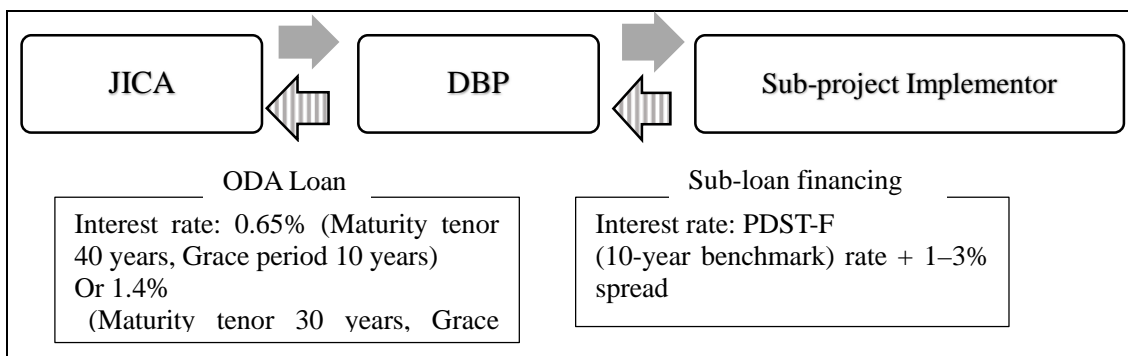
#### 3.2.1 Project Outputs

This project provided loans of the concessional mid-to-long tenor funds for capital investment in the environmental sector to LGUs, private corporations, GOCCs, WDs, and cooperatives/associations through DBP. The mechanisms of the financing schemes for this project are shown in Figures 1, 2, and 3.



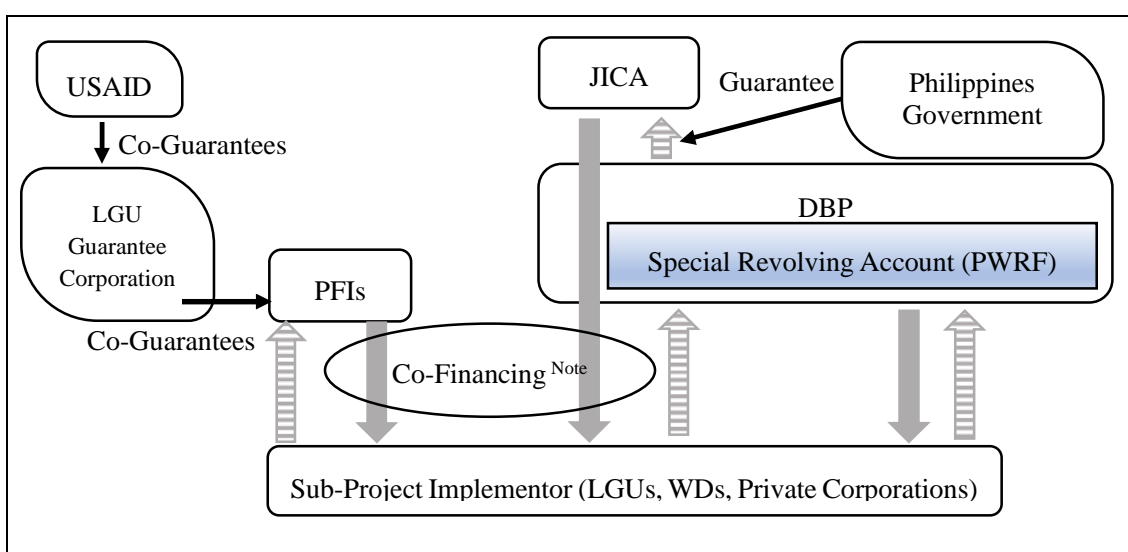
Source: Made by external evaluator based on the document provided by JICA

Figure 1: Mechanism of Wholesale Scheme



Source: Made by external evaluator based on the document provided by JICA

Figure 2: Mechanism of Retail Scheme



Source: Made by external evaluator based on the document provided by executing agency and JICA

Note: DBP: Financing 50%–75% of total project fund

Microfinance Institutions (MFIs): Financing 25%–50% of total project fund

Figure 3: Mechanism of Revolving Fund

The planned and actual output is shown in Table 1.

Table 1: Planned and Actual Output

Item	Plan (2008)	Actual (2019)
1. Two-Step Loan		
1) Eligible sector	Water supply and sanitation, new and renewable energy, industrial pollution control, solid/health care/hazardous waste management	As planned
2) Eligible Usage of the Sub-Loan	-Establishment and improvement of water supply and sewage facilities -Development of new and renewable energy and transaction costs for Clean	-Mostly as planned -CDM application procedures cancelled due to lower credit (emission



	<p>Development Mechanism (here after referred to as “CDM”)<sup>8</sup> application procedures</p> <ul style="list-style-type: none"> <li>-Installation and improvement of facilities that will prevent or reduce industrial pollution</li> <li>-Establishment and improvement of solid/health care/hazardous waste management facilities</li> <li>-Initial working capital pertaining to the above</li> <li>-Interest during construction</li> </ul>	allowance) prices
3) Eligible End-Users	Private corporations, LGUs, GOCCs, WDs, and cooperatives/associations	There was no participation from GOCCs. Probably because there were other ODA funds available with good lending terms.
4) Financing Scheme	<ul style="list-style-type: none"> <li>(i) Wholesale lending via PFIs or microfinance institutions (hereafter referred to as “MFIs”)</li> <li>(ii) Retail lending from DBP</li> <li>(iii) Co-financing by DBP and PFIs through PWRF (only for the water supply and sanitation sub-projects)</li> </ul>	<ul style="list-style-type: none"> <li>-Almost as planned (See Figure 1, 2 and 3)</li> <li>-(i) There were no loans from MFIs because no applications for sub-projects met the conditions for this project loan.</li> </ul>
5) Sub-Loan Interest	<ul style="list-style-type: none"> <li>(i) Wholesale lending: Philippine Dealing System Treasury Reference Rate AM (hereafter referred to as “PDST-R1”; 10-year benchmark) rate + spread 1–4%</li> <li>(ii) Retail lending: PDST-R1 (10-year benchmark) rate + spread 1–3%</li> <li>(iii) Co-financing of DBP and PFIs using PWRF: The loan conditions are the same as those of sub-projects in other sectors.</li> </ul>	<ul style="list-style-type: none"> <li>-Both (i) &amp; (ii) use PDST-Fixing (hereafter referred to as “PDST-F”)<sup>9</sup> for 10-year benchmark.</li> <li>-(iii) As planned</li> </ul>
6) Repayment Period of Sub-Loans	As for (i) & (ii), 3 to 15 years (within 20 years depending on cash flow of project funds; Grace period: up to 5 years), and as for (iii), up to 20 years (Grace period: up to 3 years)	As planned
7) Sub-Loan Limit Ratio	<ul style="list-style-type: none"> <li>-Private: 80% of total project cost</li> <li>-LGUs, GOCCs, WDs and cooperatives/associations: 90% of total project cost (DBP can eliminate the 10% capital quota of LGUs and WDs as necessary for (iii))</li> </ul>	<ul style="list-style-type: none"> <li>-LGUs, GOCCs, WDs and cooperatives/associations: 10% equity requirement was waived with JICA’s concurrence.</li> <li>-(iii) Co-financing facility</li> </ul>

<sup>8</sup> A mechanism in that the developed countries that have set greenhouse gas reduction targets seek to contribute to the sustainable development of developing countries by providing them with technologies and funds and jointly implementing projects that contribute to reduction and absorption of greenhouse gas emissions, as well as obtaining a certain amount of reduction and removal of greenhouse gas as credits (emission allowances). CDM can be applied to some of the greenhouse gas emission reduction targets of developed countries and can secure additional investment in the energy sector in developing countries. It was adopted at the Third United Nations Framework Convention on Climate Change (COP3) held in Kyoto (1997).

<sup>9</sup> PDST-F is used as a reference value after 2007 as instructed by the Ministry of Finance, Money Market Association of the Philippines.

	<ul style="list-style-type: none"> <li>-(iii) Co-financing facility (Total project cost excluding the above end-user's equity) <ul style="list-style-type: none"> <li>• 50–75% loan cap of total project cost from DBP and 25–50% loan cap of total project cost from PFIs/MFIs (100% of loan from DBP for fund under PWRP is not eligible)</li> <li>• 25% loan cap of the total amount of (iii) to private corporations.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Except for 5 loans less than 50 million PhP (10 in the process of appraisal), DBP funded 100% of the loan with JICA's concurrence.</li> <li>• 25% loan cap of total amount of (iii) to private corporations was waived with JICA's concurrence.</li> </ul>
8) Currency of Sub-Loans	Philippine peso	As planned
2. Consulting Service	Assistance in promotion/dissemination/marketing of the project, formulation of sub-projects, management of sub-projects (appraisal, implementation, monitoring and evaluation), coordination with concerned government agencies and other stakeholders, and training for DBP, PFIs, MFIs, and end-users	<ul style="list-style-type: none"> <li>-Almost as planned</li> <li>-Training for MFIs was not implemented because they did not participate.</li> </ul>

Source: Documents provided by executing agency

In this project, 78 sub-loans were released for a total of 73 sub-projects targeting the entire Philippines. The breakdown of the 68 end-users by type was 34 private corporations, 18 LGUs, seven WDs, and nine electric cooperatives.<sup>10</sup> The breakdown by sub-sector is shown in Table 2. Regarding the execution of these sub-loans, through the consulting service of this project, publicity and dissemination related to the financing of this project, including the purpose of strengthening cooperation, were carried out to the Environmental Management Bureau (hereafter referred to as “EMB”) of the Department of Environment and Natural Resources, the Local Water Utilities Administration (hereafter referred to as “LWUA”), other related organizations such as the League of Cities and the League of Provinces, and prospective customers. In addition, as sub-project management support, efforts were made to promote financing, such as revision of the environmental guidelines for DBP (Environmental Due Diligence Manual), preparation of various manuals, and holding of training seminars for DBP staff.<sup>11</sup>

<sup>10</sup> The number of end-users is not the same as the number of sub-loans and sub-projects, because the end-users may carry out multiple sub-projects or use multiple sub-loans.

<sup>11</sup> More specifically, more than 150 meetings were held with prospective customers nationwide, in addition to briefings for industry groups and explanations/discussions with relevant government agencies, including the purpose of strengthening cooperation. Through related organizations, publicity and dissemination were carried out to

Table 2: Actual Number of Loans of the Project

(Unit: Number)

Area	Luzon		Visayas		Mindanao		Total	
Sub-Sector	Sub-Project	Sub-Loan	Sub-Project	Sub-Loan	Sub-Project	Sub-Loan	Sub-Project	Sub-Loan
Water Supply and Sanitation	9	9	5	7	3	3	17	19
New and Renewable Energy	9	9	3	3	3	3	15	15
Industrial Pollution Control	11	11	7	7	3	3	21	21
Solid/Health Care/Hazardous Waste Management	6	7	6	8	8	8	20	23
<b>Total</b>	<b>35</b>	<b>36</b>	<b>21</b>	<b>25</b>	<b>17</b>	<b>17</b>	<b>73</b>	<b>78</b>

Source: Document provided by executing agency

Note: The number of sub-projects and the number of sub-loans are different because a single sub-project may be financed using different financing schemes and for different target facilities and equipment.



Photo 1: Water Supply and Sanitation Sector Small-scale Dam (Cebu, Visayas Area)



Photo 2: New and Renewable Energy Sector Hydroelectric Power Station (Laguna, Luzon Area)

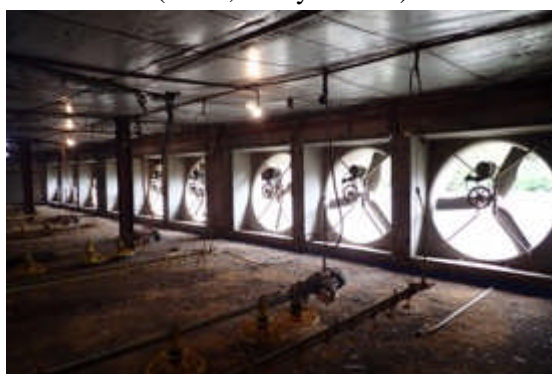


Photo 3: Industrial Pollution Control Sector Poultry Farm Exhaust System (Cebu, Visayas Area)

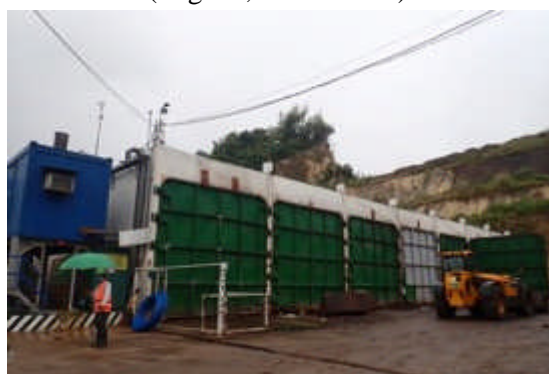


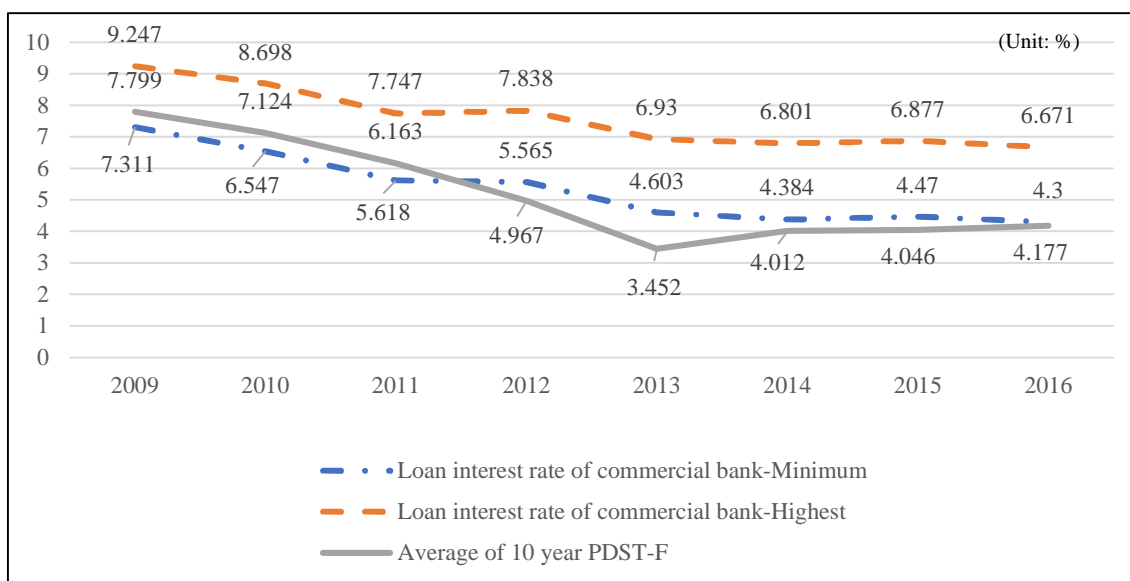
Photo 4: Waste Management Sector Biogas Production Facility using Waste (Cebu, Visayas Area)

representatives of LGUs, WDs, and local industry. As sub-project management support, in addition to revision of environmental guidelines, preparation of manuals on technical evaluation and monitoring for each sub-sector, holding of training seminars mainly for DBP head office staff, communication and exchange among the officers in the DBP head office, the sales officers and the consultants, circulation of materials to relevant departments, and study tours to environmental projects were held.

Points to note and changes, as well as reasons regarding the main outputs, are as follows:

### 1) Sub-Loan Interest Rate

During the implementation of this project, the Philippine government implemented economic policies such as active fiscal mobilization and interest rate cuts, and the commercial banks provided loans at the interest rates shown in Figure 4.



Source: Bangko Sentral ng Philipinas (Central Bank of Philippines)

Figure 4: Loan Interest Rates of Commercial Banks and Average 10-year PDST

During the project period (2008–2016), the average interest rate on sub-loans under the project was 7.93% (the loan interest rate distribution is 5.40% to 11.95%, median is 7.86%). In the year of appraisal (FY2008), the concessional aspects of the loan interest rate being almost equal to the interest rate of commercial banks and of the mid-to-long tenor repayment period of this project was competitive. In addition, this project had an advantage in providing loans to LGUs and WDs, which are hardly eligible for loans. However, during the implementation of the project, the advantage of the loan interest rate of the project diminished compared to the interest rate of commercial banks. The sub-loan amount per sub-project also decreased. Therefore, it is considered that the loan disbursement and loan applications of this project stagnated. To promote the financing of this project while ensuring the concessionability of its sub-loan without causing a loss, with respect to the sub-loan interest rate with spreads of DBP or PFIs, DBP has taken various measures (e.g., the spreads were made as low as possible within the range of terms of the

ODA Loan agreement to minimize the difference with the interest rates of commercial banks).

## 2) Sub-Loan Maximum Limit Ratio

As mentioned above, in response to a decrease in the market interest rates during the project period, DBP has agreed with JICA to change the loan cap ratio of sub-loans. During the implementation of the project, DBP removed the 10% equity requirement of the total cost of project of these end-users.<sup>12</sup> According to the officer in DBP's head office, it is heard that this change has allowed LGUs and WDs, etc., to implement flexible fundraising and easier loan applications. Half of the 68 end-users were LGUs, WDs, and electric cooperatives. Regarding the co-financing of the financing scheme (iii), PWRP, DBP has agreed that PFIs did not participate in five sub-loans of 50 million PhP or less and has provided 100% of the loan for this project. This is because the benefits of PFIs participating in co-financing have declined in response to the lower market interest rates. In addition, DBP has removed the loan cap ratio of 25% of the total amount of the loan from this project regarding the financing scheme (iii) for private corporations. Furthermore, DBP provided a mix (blending) of this project's loans and low-interest loan products of DBP's own cost to sub-projects. As a result, the participation of private corporations that implement capital-intensive projects and PPPs were promoted in this project. These flexible measures are considered to have enabled DBP to promote financing of this project even though the market interest rates declined during the project period.

## 3.2.2 Project Inputs

### 3.2.2.1 Project Cost

The total project cost at the time of the appraisal was planned to be 27,480 million yen (of which 24,846 million yen was covered by the ODA Loan). The actual total project cost was 27,697 million yen (of which 24,814 million yen was covered by the ODA Loan), which was almost as planned (approx. 101% of the plan). The project cost on the DBP side increased slightly compared to the plan. According to the lending official at DBP's head office, "At the time of appraisal, there was no particular basis for calculating the cost on the DBP side, and it was set at about 10% of the ODA Loan amount." Some of the sub-projects targeted by this project loan have raised funds of the total project amount by blending their own funds with DBP's and PFIs' funds in addition to the loans provided by this project. If DBP did not take measures such as blending loans, then

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<sup>12</sup> At the time of appraisal, in sectors other than water supply and sanitation, it was planned that "the loan cap ratio for LGUs, WDs and cooperatives/associations shall be determined according to individual projects."

it might be possible that the loan amount would not have increased.

Furthermore, as shown in Table 3, the breakdown of ODA Loan allocation by category was changed during the project implementation. The main reasons were that during the project implementation, (1) as mentioned above (Efficiency 3.2.1 Outputs), the financing was sluggish due to the lower interest rates of commercial banks, and (2) releasing the loans had been delayed because the acquisition of permits for the financing to LGUs and the environmental and energy development took time, and lending of Category B could not be executed as expected by the loan disbursement date. Regarding (2), after DBP decided upon financing based on the loan appraisals, the end-users had to obtain the necessary approvals for sub-loan borrowing and sub-project implementation by the loan disbursement deadline for this project. In particular, the borrowing of LGUs and WDs requires permission from the central bank's Monetary Board (hereafter referred to as "MB"), the borrowing of WDs requires the permission of the LWUA, and the installation of power generation facilities requires the approval of the Energy Regulatory Commission. DBP also provided support for the application, however, it took longer to obtain permits than expected at the time of planning. It is thought also to have affected the number of loans.<sup>13</sup> According to the sectoral officers in DBP's head office, "After the appraisal, the examination was stricter than before due to the government's instructions, and at the time of the appraisal, it could not be assumed that it would take time to obtain permission." Based on the above point and compared with the actual outputs, the project cost was slightly exceeded, but almost as planned, and it is considered that the changes of plan were appropriate.

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<sup>13</sup> It is said that the sub-projects, which were not approved before the loan disbursement deadline and were excluded from the financing of this project, have been financed using DBP's own funds.

Table 3: Planned and Actual Project Cost<sup>14</sup>

(Unit: Million Yen)

Item	Plan		Actual	
	Total	Of which ODA Loan	Total	Of which ODA Loan
Sub-Loan, of which General Terms (Category A: Applicable Mainly for PWRP)	1,650	1,500	8,290	7,600
Sub-Loan, of which Preferential Terms (Category B: Except A)	25,410	23,100	19,073	17,000
Total of Sub-Loan	27,060	24,600	27,364	24,600
Consulting Service (Category C)	246	246	214	214
Commitment Charges	174	0	119	0
Total	27,480	24,846	27,697	24,814

Source: Document provided by JICA and answers to the questionnaire by executing agency

## 3.2.2.2 Project Period

At the time of the appraisal, the project period was planned from September 2008 (signing of loan agreement) to September 2015 (completion is defined as completion of loan disbursement) (85 months). The actual project period was the 98-month period from September 2008 (signing of loan agreement) to October 2016 (completion is defined as completion of loan disbursement), exceeding the plan (approx. 115% of the plan). Table 4 shows the project's planned and actual period for each output.

Table 4: Planned and Actual Project Period Output

	Plan at Appraisal	Actual at Ex-Post Evaluation
Whole Project	Sept 2008–Sept 2015 (85 months)	Sept 2008–Oct 2016 (98 months)
Selection of Consultant	No information	July 2009–June 2010 (12 months)
Consulting Services	Oct 2008–Sept 2015 (84 months)	July 2010–Dec 2016 (78 months)
Lending from DBP	Oct 2008–Sept 2015 (84 months)	Mar 2009–Oct 2016 (92 months)

Source: Document provided by JICA and answers to the questionnaire by executing agency

As mentioned above (3.2.2.1 Project Cost), the cause for exceeding the designed project period was due to delays encountered by several sub-projects in securing permits which in turn affected the project's disbursement performance. Supported by those approved sub-projects, DBP

<sup>14</sup> At the time of appraisal, the exchange rates were 1 dollar = 101 yen, 1 PhP = 2.46 yen, and 1 dollar = 40.9 PhP (April 2018), but actually 1 dollar = 97.52 yen, 1 PhP = 2.18 yen (International Monetary Fund international financial statistics data (IFS Data) (average during the period 2008–2016)).

established (and JICA agreed) that loan disbursement would be maximized if the project is extended. With respect to the consulting services, the extension was likewise necessary for continued support to those sub-projects' pre-release compliances for timely sub-loan releases and attainment of full disbursement of the project within the extended period.

### 3.2.3 Results of Calculations for Internal Rates of Return (Reference only)

This project involves a two-step loan, and sub-projects could not be identified in advance. Thus, the internal rate of return was not calculated at the time of the project's appraisal, and therefore it was not recalculated in this survey.

#### [Summary for Efficiency]

Partial changes were made to the outputs of the project due to stagnant lending demand. The project cost was almost the same as the planned amount. The project period exceeded the plan due to extension of the project implementation period to achieve the planned loan amount. In light of the above, while the project cost was almost according to plan, the project period exceeded the plan, and therefore efficiency of the project is fair.

## 3.3 Effectiveness and Impacts<sup>15</sup> (Rating: ②)

### 3.3.1 Effectiveness

#### 3.3.1.1 Quantitative Effects (Operation and Effect Indicators)

Table 5 shows the target values of operation and effect indicators of the sub-loan planned at the time of appraisal and the actual values confirmed in this survey.

Table 5: Operation and Effect Indicators of the Sub-Loan

Indicator	Target <sup>Note 1</sup>	Actual (December 2019)
(1) Total Amount of Sub-Loan (million yen)	24,600	24,600
(2) Percentage of Amount of Overdue Unpaid Credit (%)	5.1 <sup>Note 2</sup>	4.1 <sup>Note 3</sup>
(3) Percentage of Number of Overdue Unpaid Credit (%)	8.3	4.4 <sup>Note 3</sup>

Source: Document provided by JICA and answers to the questionnaire by executing agency

Note 1: In this project, the target year was not shared with the executing agency. Indicator (1) is determined at the end of the project period, but regarding indicators (2) and (3), the target year is considered to be determined at the maturity of all sub-loans.

Note 2: At the time of appraisal, the target was set as "the standard value of the central bank of the Philippines during the loan disbursement period." At the time of the ex-post evaluation, the said value was not available, so the reference value (December 2007) provided by JICA is used.

Note 3: Actual value of 23 sub-loans out of 78 sub-loans that matured by December 2019.

<sup>15</sup> Sub-rating for Effectiveness is to be put with consideration of Impacts.



At the time of the appraisal, indicator (1), the target value of the total sub-loans was set as the loan approval amount. The amount of approved loans includes loans utilizing revolving funds. The lending was ongoing at the time of the ex-post evaluation, and it is not possible to judge whether the loan approval amount has been achieved until the sub-loan maturity. Therefore, the planned and actual amount of the portion covered by the ODA Loan was confirmed, and it was achieved. The actual of indicator (2), percentage of the amount of overdue unpaid credit and, indicator (3), the percentage of the number of overdue unpaid credit at the time of the ex-post evaluation are as shown in Table 5. This project is a concessional loan with mid-to-long tenor. By the time of the ex-post evaluation (December 2019), 23 out of 78 sub-loans had matured. 22 of them (17.2% of the total amount of sub-loans) were paid off. In addition, 13 sub-loans (6.6% of the total amount of sub-loans) were paid off before the due date.<sup>16</sup> In other words, 42 out of 78 sub-loans are pre-maturity, and 76.2% is the outstanding amount. The latest maturity of the sub-loan is March 2035 (loan made in October 2016), which was not completed at the time of the ex-post evaluation. More than half of the sub-loans and the outstanding amount remain at the time of the ex-post evaluation, and thus it is considered difficult to make an evaluation judgment of the entire project based on the achievement of the indicators.

For each sub-sector, at the time of appraisal, it was decided to select appropriate indicators at the time of sub-loan appraisal and finalize their standard values at the time of approval.<sup>17</sup> Table 6 shows the baseline, target, and actual values of sub-sector operation and effect indicators confirmed at the time of the ex-post evaluation. The operation and effect indicators finalized at the time of sub-loan approval were based on the end-users' loan applications and support by the consulting service, which were supported by the DBP officers based on the operational policy guidelines (hereafter referred to as "OPG"). In addition to manuals, the OPG is the detailed rules for financing of this project. They also include indicators that end-users normally use to operate and maintain facilities and equipment. According to the officers in DBP's head office, the target values were "based on the estimated value of the design capacity of the constructed and installed

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<sup>16</sup> According to the officers in the DBP's head office, the loans provided by the project tend to be repaid before maturity because the interest rate was higher than that of commercial banks. The number of completed cases includes three sub-projects handled by the DBP head office's Remedial Department due to project suspension, etc. (see footnote 25 for details).

<sup>17</sup> At the time of appraisal, typical examples of indicators were as follows. Water supply: population served (person), amount of water supply (m<sup>3</sup>/day), water supply coverage (%). Sanitation: population treated (person), amount of wastewater treated (m<sup>3</sup>/day), sewerage coverage (%). New and renewable energy: facility operation rate (%), maximum output (kW). Industrial pollution control: pollutant reduction rate. Waste management: solid waste treated (kg/day), hazardous waste treated (kg/day), waste collected (kg/day).

facilities of the sub-projects to be financed, with the loan maturity mainly as the target year.”<sup>18</sup> Some indicators are the sum of multiple sub-projects. According to the officer in DBP’s head office, “There are sub-projects whose indicators and target values have been finalized just before the completion of this project. DBP has not recalculated the target values when the construction details change (the OPG does not state that it needs to be revised each time).” In addition, if the facilities covered by this project are part of the entire project conducted by an end-user, then it may be difficult to separate the data for the facilities covered by this project from the entire project, so some data may be measured for the entire project. Therefore, there could be baseline values as of before the implementation of the sub-project.

Table 6: Operation and Effect Indicators of Sub-Sector (Baseline, Target, and Actual)

Indicator	Baseline (At the Time of Loan Approval)	Target	Actual <sup>19</sup> (December 2019)
<b>① Water Supply and Sanitation (PWRP)</b>			
1) Operation Indicators			
Increased water production (m <sup>3</sup> /year)	36,995,438.00	247,014,810.00	108,595,970.79
Pipe network (meters)	1,580,889.00	1,932,945.00	2,459,801.00
2) Effect Indicators			
Increased service connection	135,544	409,473	284,778
Reduction of non-revenue water (hereafter referred to as “NRW”) (%)	-	17	20.16
Water conserved from NRW (m <sup>3</sup> ) *	-	3,909,064.00	9,470,302.62
<b>② New and Renewable Energy</b>			
1) Operation Indicators			
Increased capacity in NRE (MW: megawatt)	0	21.73	7.47
Increased distribution capacity (MVA: mega volt-ampere)	0	61.90	36.90
Increase in transmission/distribution network (km)	0	39.28	23.85
2) Effect Indicators			
Reduction in fossil fuel (barrels/year) *	0	339,321	77,944
Increase in service connections	0	8,447	5,466
Reduced systems loss (KWH: kilowatt hour, for the period covered)	0	30,668	12,668
Greenhouse gas emission reduction (tons of CO <sub>2</sub> ) *	0	81,462	18,755

<sup>18</sup> At the time of setting and revising the indicators for the entire project, DBP had the documented concurrence of JICA. Following the recommendations of the JICA internal mid-term evaluation conducted in December 2015, indicators were added with the data availability of the indicators in mind.

<sup>19</sup> Same as Note 1 of indicators (2) and (3) in Table 5.

<b>③ Industrial Pollution Control</b>			
<b>1) Operation Indicators</b>			
No. of tunnel ventilated poultry buildings	8	34	34
Bird population	1,023,240	-	8,446,400
No. of LED streetlight systems installed	0	3,810	3,600
No. of drainage and vacuum cleaners operational	0	2	2
No. of analytical instruments of environment installed	1	-	9
No. of boilers using bagasse installed <sup>20</sup>	4 (Old)	1 (New)	1(New)
Bag filters/cyclones installed <sup>21</sup>	0	9	9
Total length of gabions & riprap installed (LM: Linear Meter)	0	750	750
Total length/area of ripraps constructed (m <sup>2</sup> )	0	10,510	10,510
Paper making/mill machine parts installed (set)	1	1	1
<b>2) Effect Indicators</b>			
Reduced mortality at poultry firm (%)	<10	<5	3.5
No. of reared birds saved	-	-	253,500
Savings in poultry (in million PhP)	-	-	19
Reduced energy consumption (kwh/hr)	324,000	47,498	47,448
Savings by reduced energy consumption (million PhP)	-	4.768	4.764
Volume of sludge removed (m <sup>3</sup> /month)	2,880	-	4,752
No. of environmental samples analyzed	2,000	6,000	10,470
Replaced bunker fuel per crop year with bagasse per year (l/year)	0	-	Bunker fuel 8000,000 L to Bagasse 210,000 L
Savings by replaced fuel (million PhP/crop year)	-	14.4	0.288
Avoided CO <sub>2</sub> emission from 800,000 L bunker fuel (MT CO <sub>2</sub> /year) *	0	2,382	2,382
Area of land erosion avoided (m <sup>2</sup> )	0	-	18,010
Value of property savings (by reducing soil erosion) (million PhP)	-	-	36.02
Raw materials collected from dust collectors <sup>22</sup> (TPD)	0	-	869
Value of raw materials saved (million PhP)	-	-	4.3
Recycled waste paper (MT) *	41,400	48,300	48,777
Recycled water (m <sup>3</sup> ) *	247,104	247,104	289,440

<sup>20</sup> Bagasse is the residue of sugarcane juice and raw material for non-wood paper and fuel. A boiler is a device that generates heat in the form of steam, hot water, etc., which has a combustion chamber (firebox) that burns fuel and a heat-exchange device that transfers the heat obtained from the combustion to water and converts it into steam or hot water.

<sup>21</sup> The cyclone type is a powder separation system that separates air and powder.

<sup>22</sup> A device that separates and collects dust, etc., from processing gases such as combustion exhaust gas.

<b>④ Solid Waste Management</b>			
<b>1) Operation Indicators</b>			
Landfill design capacity (m <sup>3</sup> )	0	9,058,279.00	6,986,185.97
Total truck volume capacity (m <sup>3</sup> )	61.49	38.60	738.50
Equipment (No., type, & capacity)	33	28	30
Total bin capacity (m <sup>3</sup> )	-	-	3,275.00
Temporary storage capacity of material recycling facility (m <sup>3</sup> )	20,669.95	213,130.80	424,144.55
Processing capacity of composting component (m <sup>3</sup> /batch) <sup>23</sup>	0	130,746.65	757,524.65
Feather meal processing capacity by rendering <sup>24</sup> (kgs produced/day)	0	3,000	2,400
<b>2) Effect Indicators</b>			
Volume of waste landfill (m <sup>3</sup> )	0	9,567,446.05	2,246,981.12
Volume of waste collected/transported (m <sup>3</sup> /day)	-	124,100.00	216,725.36
Operating hours for solid waste management (hours)	-	-	7d/w + 84h/w
Volume of waste stored/collected (m <sup>3</sup> /day)	-	2,065	2,065
Volume of waste recycled (m <sup>3</sup> ) *	-	9,818.50	529,321.13
Volume of waste composted (m <sup>3</sup> )	0	25,838.35	266,959.88
Volume of poultry feather waste processed (m <sup>3</sup> )	0	-	19,668.50

Source: Document provided by JICA and answers to the questionnaire by executing agency

Note: 7 indicators with "\*" are also considered environmental protection indicators, and they are used to judge the impact.

Regarding the actual value from the start of the sub-project operation to the time of the ex-post evaluation, data of indicators that enable evaluation judgement were not available for some sub-projects of which the construction and installation of the facilities targeted by this project have not been completed, have been completed but are still in the trial operation period, or have just started operation. According to the officer in DBP's head office, "The facilities targeted by the project are parts of the end-users' entire projects some of which may not be completed." In addition, depending on the indicators, the total value or average value of multiple sub-projects is set as the actual value of the indicator, so the achievement status will be affected by the operational status of each sub-project.<sup>25</sup> Furthermore, depending on the indicator, the information reported

<sup>23</sup> Compost is processed into organic fertilizer, etc., to reuse waste generated from daily life and economic activities.

<sup>24</sup> Rendering is the production of animal fats and oils, powdered fertilizers, and feed that is used as raw materials for detergents by high heat treatment of fats, bones, and inedible parts of the internal organs, which are generated when slaughtering livestock such as cows, pigs, and chickens.

<sup>25</sup> Regarding the "NRW rate" in the water supply and sanitation sector, looking at individual sub-projects, most of the sub-projects have reached the target value of the indicator. However, in one sub-project by WD A, the NRW ratio deteriorated because of equipment damage due to a natural disaster compared to before the project. As a result, the target value of the indicator was not reached because the average actual value of the NRW ratio for all of the target sub-projects was pushed up. In WD A, after that, the facility renovation project is being implemented with a loan provided by DBP's own budget.

by the end-users was incorrect or missing, so that the information for all sub-projects cannot be aggregated, and the baseline value, target value, and actual value are not stated. Among the sub-sectors, particularly for industrial pollution control and solid waste management, the contents of sub-projects are so diverse that it was not possible for DBP to reflect the indicators when changing the construction components at the time of construction and to confirm the lack of indicator data reported by end-users depending on the sub-project. Based on the above, if there is no target value, then judgement is attempted by comparison with the baseline value. If neither the baseline value nor the target value is stated, then the judgment is made according to the content of the indicator.

The achievements of each sub-sector are as follows. Regarding (1), water supply and sanitation (PWRP) sector, at the time of the ex-post evaluation, the officer in DBP's head office stated that "the target year was set to the maturity of the loan." The maturities of 19 sub-loans are 2022–2033. The actual values of "increased water production" and "increased service connection" that do not meet the target values are operation results according to the demand at the time of measurement regardless of the design capacity. In addition, although all sub-projects have been completed by the time of the ex-post evaluation, as mentioned above, they may be parts of large-scale projects by end-users. According to the officer in DBP's head office, "Regarding NRW ratio and volume, there is a possibility that the target value could not be achieved only with the facilities targeted by this project." Based on the above, it is considered that the water production of this sub-sector is capable of meeting demand, but it is difficult to judge whether the indicator for NRW is achieved. Regarding (2), new and renewable energy sector, actual values have not met the target values for all indicators. According to the officer in DBP's head office, as for "service connection," it is "because the actual construction content was changed from the design based on the demand for electricity." As for other indicators, at the time of the ex-post evaluation, eight out of 14 sub-projects<sup>26</sup> were under construction, installation, or trial operation. Therefore, it is considered premature for the evaluation judgement of this sub-sector. Regarding (3), industrial pollution control sector, at the time of the ex-post evaluation, most of the actual values of the indicators have achieved the target values or have improved from the baseline. It was confirmed that there were savings for each indicator related to the savings although there was no baseline value nor target value. The actual number of "LED streetlight systems installed" was slightly below the target value because the number of installations was reduced based on a survey after the project

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<sup>26</sup> One of the 15 sub-projects in this sector was found to have expanded the scale of the project described in the permit required for project implementation (see "Impacts on the Natural Environment" below) without permission. Authorization was revoked while the project was in progress and the project was suspended. By the time of the ex-post evaluation, the sub-loans had been paid off.

started. Regarding (4), solid waste management sector, at the time of the ex-post evaluation, most of the indicators had achieved their target values.<sup>27</sup> Regarding “feather meal processing capacity by rendering,” the decrease in the input amount of feathers affects the amount of output. According to the officer in DBP’s head office, the actual value of “volume of waste landfill” is lower than the target value because “there is a possibility that the predicted target value has not been reached because the end-user decides when to use the facility and has not yet utilized it.” On the other hand, “temporary storage capacity of material recycling facility,” as an indicator that the actual value greatly exceeds the target value, increased because the design was changed at the actual construction stage as the amount of waste for recycling was expected to increase in the survey before construction during the construction of the facility. As for “volume of waste recycled” and “volume of waste composted,” according to the DBP lending center officer and the end-user, “The project has expanded after the completion of this project. It is a total value because it is not possible to grasp the actual value separately for the facilities targeted by this project and other facilities.”

### 3.3.1.2 Qualitative Effects (Other Effects)

The qualitative effects were predicted as “environmental improvement” and “improvement of the ability of DBP, PFIs and MFIs to review and operate.” Interviews were conducted with the officers, including the lending officials and each sectoral official in the DBP head office, the local lending center officers<sup>28</sup> who are responsible for the loans, and the end-users of each sector<sup>29</sup> that received the loans from the project. The following information has been confirmed. Regarding “environmental improvement,” improvement of environment compared to before the project implementation was reported in all sub-sectors. The main comments included the following: “the amount of sanitary water supply has increased and covers a larger area,” “installation of LED streetlights has reduced power consumption in the target cities (324,000 kWh/month to 97,200

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<sup>27</sup> Private corporation B in the Luzon area, LGU A in the Mindanao area, LGU B (composting facility) in the Visayas area, and LGU C in the Luzon area have canceled sub-projects (sub-loan for LGU B) because of changes in local government policy, increased waste collection costs and decreased waste, lack of design support for natural disasters, and overdue payment of installment repayments, etc. The DBP head office’s Remedial Department is following up as the loan repayment contact.

<sup>28</sup> The target was 13 officers in the DBP head office, including loan officials and sectoral officials, and a total of 11 officers at five lending centers (in total, five men and 19 women).

<sup>29</sup> The 11 end-users of the sub-projects visited and interviewed are as follows: Water supply and sanitation (three projects): two private corporations in the Visayas area and one WD in the Mindanao area; new and renewable energy (two projects): one private corporation in the Luzon area and one private corporation in the Visayas area; industrial pollution control (three projects): one private corporation in the Luzon area and two private corporations in the Visayas area (one interview only); solid/medical/hazardous waste management (three projects): two LGUs in the Visayas area and one private corporation.

kWh/month) and greenhouse gas emissions by approximately 63%,” and “efficient collection has been promoted by promotion of sanitary landfills and waste segregation management and increase in collection vehicles, and waste in town has been deposited.” Cases of environmental improvements resulting from implementation of sub-projects in multiple sectors (water supply and sanitation and solid waste management) in neighboring areas were also reported. For example, on the island of one of the leading tourist destinations in the Philippines in the Visayas area, Private Corporation A is implementing water supply and sewage treatment through the financing of this project. In addition, all solid wastes in the target area of that sub-project are transported and processed at the sanitary landfill disposal site operated by the LGU due to the loan from this project. In some areas of other islands in the Visayas area, Private Corporation B is collecting solid waste through the financing of this project. Private Corporation C is implementing a water supply project for the WD that controls the target area of that sub-project with the loan provided by this project.

With regard to “DBP, PFIs and MFIs’ improvement of the ability to review and operate,” as mentioned above (3.2 Efficiency, 3.2.1 Output), DBP’s examination and operation capacity was strengthened mainly through consulting services. In addition, USAID conducted training, including to PFIs. The following comments were heard: “Especially becoming familiar with environmental laws, the awareness towards the sustainable financing with environmental and social perspectives has been raised,” “it became possible to have knowledge including project monitoring and evaluation,” and “PFIs also received technical training from USAID and learned how to finance in this project.” Based on the comments received, through the loans and consulting services of this project, it is considered that the officers in the DBP head office and lending centers have improved their operational capacities, including screening, monitoring, and evaluating new stakeholders in financing such as PFIs and private corporations, mainly for the environmental sector. PFIs are considered to have improved their lending methods, including revolving funds. In addition, DBP has received various awards related to the environment and sustainable financing for its loan.<sup>30</sup>

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<sup>30</sup> By the Association of Development Financing Institutions in Asia and the Pacific (ADFIP) awarded the water supply and sanitation project (2012), the waste recycling project (Merit Award; 2017) and the LED streetlight project (Winner; 2018) in the environmental development category. ADFIP also awarded the water treatment plant project (2015) and the new and renewable energy project (2016) in the local economic development category. Furthermore, in the awards of the international financial industry, financing for the water treatment plant project (2015) and the waste recycling project (2017) were awarded for outstanding sustainable project financing, benefits to local communities, and environmental protection.

### 3.3.2 Impacts

#### 3.3.2.1 Intended Impacts

##### 1) Environmental Protection

In this study, some indicators of the effectiveness are judged to be related to “environmental protection,” as shown in the note of Table 6. The following were used as quantitative impact indicators: “water conserved from NRW,” “reduction in fossil fuel,” “greenhouse gas emission reduction,” “avoided CO<sub>2</sub> emission from bunker fuel,” “recycled waste paper,” “recycled water,” and “volume of waste recycled.” A certain degree of judgment is made based on their actual values at the time of the ex-post evaluation. Based on these indicators, the sub-projects carried out by financing, including this project, have resulted in resource savings, waste reduction, and energy consumption reduction. Therefore, this project is considered to have contributed to environmental protection in the target area.

##### 2) Improvement of Living Environment

According to interviews with each sectoral officer in DBP’s head office, the lending center officers, and the end-users of the project, the main comments are as follows.<sup>31</sup> In Aklan Province in the Visayas area, “there is no need to go to get well water. The residents now have stable access to safe water. Water shortages in densely populated areas have been alleviated. The number of complaints about water leakage at the water supply corporations has decreased.” In Laguna Province in the Luzon area, “in some areas, new hydropower plants were opened to have enabled stable power supply to 45,500 households. Access to electricity has been improved for the target population and economic activities increased.” In Metro Manila, “the sewage treatment has improved health hazards of residents such as skin disease and diarrhea caused by sewage.” In Layte Province in the Visayas area, “the nighttime security has been improved with the installation of economically efficient and bright LED street lighting. The traffic safety of vehicles and pedestrians is thought to have improved and economic activity has become more active.” In addition, “The early restoration of street lighting during the disaster of typhoon Yolanda (2014) is believed to have contributed to the normalization of disaster victims’ lives by strengthening community safety more quickly.” In Cebu Province in the Visayas area, “the waste collection and establishment of sanitary disposal sites have reduced uncollected waste and illegal dumping,

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<sup>31</sup> This project covers 73 sub-projects of various scales nationwide. There are also sub-projects that have not been completed, and it is difficult to verify the causal relationship and correlation with this project based on quantitative data on the living environment. Therefore, qualitative information is used to confirm.



hygienic public spaces where jobs, commerce and leisure are promoted increased, and thus safe and comfortable areas increased.” In addition, “LGUs and residents who had been uncooperative to segregate waste before the project implemented experienced these improvement and became cooperative.” In light of the above, the project is believed to have contributed to the improvement of the living environment of the local residents in all sub-sectors.

### 3.3.2.2 Other Positive and Negative Impacts

#### 1) Impacts on the Natural Environment

This project was to finance sub-projects involving environmental protection and pollution control. Based on the *JBIC Guidelines for Confirmation of Environmental and Social Considerations* (April 2002) and the DBP’s environmental guideline, the *Environmental Due Diligence Manual*, in line with Philippine environmental laws, the project was implemented according to the category classification of individual sub-projects and necessary countermeasures. In accordance with the Philippines’ domestic environmental laws, the loan conditions required all sub-projects to obtain an Environmental Compliance Certificate (hereafter referred to as “ECC”) or a Certificate of Non-Coverage (hereafter referred to as “CNC”) from the EMB. At the time of the ex-post evaluation, it was confirmed that there was no Category A in the loan target sub-projects, and all sub-projects had acquired ECCs or CNCs. At the time of the loan appraisal, DBP conducted the environmental and social impact assessment for all sub-projects in accordance with the bank’s environmental guidelines and prepared the Project Evaluation Endorsement Reports. The end-users are to submit quarterly self-monitoring reports on the environment to EMB. During the loan repayment period of this project, the monitoring reports are to be submitted to DBP once a year. At the time of the ex-post evaluation, DBP has obtained annual monitoring reports from all sub-projects. At the time of this study, at the lending centers where the interviews were conducted, the monitoring reports of the sub-projects in charge were confirmed. The officers in the DBP head office and lending centers share the reports and visit the sites to monitor as needed. According to the officers at DBP’s head office who are responsible for all of the projects, if concerns about water quality, air quality, etc., arise, then they would be handled in cooperation with related organizations. However, no such environmental problems as air/water pollution, noise/vibrations, and effects on ecosystems have occurred during the project implementation and after project completion.

## 2) Resettlement and Land Acquisition

This project was implemented according to various guidelines as mentioned above. Moreover, it was confirmed that there was no resettlement in this project. Through interviews with DBP officers regarding the sub-projects for which lands were acquired, it was confirmed that government and private lands and vacant lots were acquired, no resettlement occurred, and thus no particular problems or complaints were raised.

## 3) Other Positive and Negative Impacts

Cooperation with other JICA projects was confirmed. A sanitary landfill was constructed with the loan from this project at the target area of “Establishment of Ecological Solid Waste Management in three cities.”<sup>32</sup> The revolving fund from the “Environmental Infrastructure Support Credit Program Phase (I) (II)” was utilized by DBP as its own fund for the blending loan to the sewage treatment project. The master plan by the “Master Plan on Solid Waste Management for Boracay Island and Municipality of Malay in the Philippines” was utilized for the construction plan of a sanitary landfill site financed by this project. This loan was introduced by that project’s personnel. Moreover, cooperation with other organizations was also confirmed. In the small-scale hydropower sub-project in the new and renewable energy sector, there was a project where the main facility had been improved by the loan of this project, and then equipment within the same facility was financed by the World Bank. On the other hand, there was a project<sup>33</sup> in which the loan provided by this project was used for the expansion of facilities constructed by a World Bank loan. In the industrial pollution control sector, there was a project that utilized the loan of this project as a financing source for the following phase of the project financed by the World Bank and the Land Bank of the Philippines.

### [Summary of Effectiveness and Impacts]

As for the quantitative effect indicators envisaged in this project, at the time of the ex-post evaluation, many sub-loans were before maturity in terms of the number and the amount. In addition, there were some sub-projects whose construction and installation of the target facilities were not completed or were under the trial period. Thus, for the new and renewable energy sector,

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<sup>32</sup> Because the loan approval process was delayed due to the delay in obtaining the environmental permit, the construction of the sanitary landfill was not in time for the project completion, and thus the level of achievement indicators of the project purpose was affected. At the time of the ex-post evaluation, according to the officer in DBP’s head office, “the sanitary landfill site is in operation.”

<sup>33</sup> Each project’s title could not be confirmed.

it was too early to obtain the actual values of all indicators. Furthermore, the target year of the indicators was not clear, and there were some indicators whose target values were not necessarily generated only by the sub-projects targeted by this project. Moreover, the overall project effect could not be analyzed because the baseline value was not known at the time of sub-loan approval, and there were indicators that it was difficult to judge whether or not the target was achieved because there was no target value set. However, with regard to the indicators confirmed at the time of the ex-post evaluation, it has been confirmed that the targets have been generally achieved or that the improvement of situation has been confirmed to have a certain effect. On the other hand, through interviews and other surveys, qualitative aspects were confirmed to have contributed to both effectiveness and impact. In light of the above, a certain degree of effect by the implementation of this project is observed, although it is a judgment based on the indicators that can be obtained at the time of the ex-post evaluation, and its effectiveness and impact are considered to be fair.

### 3.4 Sustainability (Rating: ③)

#### 3.4.1 Institutional/Organizational Aspect of Operation and Maintenance

DBP is the executing agency of this project. At the time of the ex-post evaluation, 43 out of 78 sub-loans were before maturity. The officers in DBP head office (Fund Sourcing Group and Project Development and Management Department; a total of 220 staff in related departments) and officers (tens of people) in charge of this project at lending centers located at 22 main branches throughout the nation continue to manage receivables and revolving funds, check environmental monitoring reports, and respond to end-users. The account officers of the lending centers are in direct contact with the end-users of this project and check the progress of sub-loans and sub-projects and receive annual environmental monitoring reports. The officers in charge of each environmental sector are assigned to the Project Development and Management Department of the head office. Those officers receive reports from and consult with the account officers of the lending centers, and they coordinate the progress of sub-loans and sub-projects. Depending on the size of the loan, there are sub-projects under the direct control of officers of the Project Development and Management Department of the head office. Even during the ex-post evaluation survey, it was confirmed that inquiries regarding each project were smoothly addressed and that a contact system between the head office and the lending center was established. It is said that the current number of staff can manage. Regarding this project's OPG, it has played a role in maintaining a common understanding of how the officers in the head office and the lending

centers operate the project. Some officers commented that it plays “a role like a bible.” It has also been in use at the time of the ex-post evaluation. Therefore, it is determined that a system according to the organization and business scale has been established.

In light of the above, the operation and maintenance system is believed to have no particular problem.

### 3.4.2 Technical Aspect of Operation and Maintenance

DBP is a governmental financial institution established to finance development projects and has ample experience, including financing to LGUs. Prior to this project, a two-step loan project was implemented.<sup>34</sup> When the market interest rates fell during the implementation of this project, the financing was promoted by various methods. At the time of the ex-post evaluation, DBP has managed the receivables. Regarding financing in the environmental sector, appraisal, monitoring, and evaluation methods have been acquired through the experience of this project. Of the officers who had worked during the project period, many of those in the head office have continued to manage the sub-loans during the repayment period. Eight sectoral officers in the head office have obtained the national Environmental Planners qualification and are regarded as experts in environmental issues. At the time of the ex-post evaluation, the OPG and various manuals were still being utilized. Periodic training is provided, mainly for general banking work (management of loans and receivables) for the staff, and training for new employees is required three times a year. The on-the-job training is being carried out by existing staff for newly appointed staff. Moreover, during the implementation period of this project, the project evaluation and endorsement report form to be filled by the DBP officers and the environmental performance/project performance report forms to be filled by the end-user for monitoring were created, while receiving support from the consulting services, project inspection, monitoring, and evaluation were managed. As mentioned above, JICA’s concurrence was taken when setting the indicators. The indicators’ values were set at the time of project approval. At the time of the ex-post evaluation, it was confirmed that there were some missing information on the sub-project indicators from some end-users, but DBP was not able to keep up with the information. The main reason for this problem is considered to be that some of the indicators set in this project were difficult for end-users to report.

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<sup>34</sup> DBP received a Good Practice Award for strategies to achieve outcomes from the Philippine National Economic Development Authority (NEDA) in 2017 for its institutionalization of environmental, social, and climate change considerations in project evaluation and monitoring in the credit process.

In light of the above, the technical aspect of the project's operation and maintenance is believed to have no particular problem.

Box: Roles and Contributions of Cooperation by USAID and JICA

This project was planned to utilize the PWRF established by USAID, DBP, and JICA to finance projects in the water supply and sanitation sector based on the *US-Japan Clean Water for People Initiative* (2002). Prior to the commencement of this project (October 2004), a memorandum of understanding was signed among the three parties. Through basic research, USAID prepared for co-financing with PFIs (mainly using PWRF) and promotion of private sector participation. During the implementation stage, USAID provided technical assistance training to the DBP and PFIs, issued credit guarantees, and promoted PFIs' participation in co-financing. Furthermore, USAID and JICA collaborated in negotiations with LWUA, which was urged to speed up issuing loan approvals to WDs. Another collaboration was made at the Philippine Development Forum (hereafter referred to as "PDF").<sup>35</sup> At that time, USAID and JICA were co-chairs of the Water Resources Sub-Working Group, which aimed at improving access to safe water and sanitation, and at which the issues of this project were also shared. The sub-working group dealt with the permissions from the MB and LWUA for this project's loans and with the improvement of application procedures for the MB. Moreover, four loans were introduced to the PWRF of this project. In this way, it is believed that both USAID and JICA also made use of the existing framework outside of this project to promote PWRF and contributed to the promotion of financing by this project.

### 3.4.3 Financial Aspect of Operation and Maintenance

Table 7 shows the indicators of the business status of the DBP.

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<sup>35</sup> Led by the Philippine government and the World Bank, the objective is to promote cooperation between international organizations and bilateral donors and to promote economic cooperation with the involvement of the Philippine government on important policy issues. Discussions are held with wide participation from the business community, academic societies, NGOs, civil society, and others. The Water Resources Sub-Working Group is within the Infrastructure Working Group, which is one of ten working groups.

Table 7: Financial Status of the Entire DBP

Year	2015	2016	2017	2018
Total Asset Balance (billion PhP)	504.05	536.28	592.36	669.58
Net Income (billion PhP)	4.71	4.44	5.49	5.72
Return on Equity (%)	11.67	10.72	11.78	11.44
Equity Ratio (%)	7.52	8.37	8.15	7.72
Percentage of Amount of Overdue Unpaid Credit (%)	3.25	1.99	2.01	1.95

Source: Answers to the questionnaire by executing agency

According to the questionnaire and interviews with the DBP, the total asset increased by approximately 166 billion PhP (32.84%; average 55 billion PhP [9.96%] annually) between 2015 and 2018. As shown in Table 7, the net income also increased by an average of 7.39% per year. The equity ratio averaged 7.94%. According to the officers in the DBP head office, “The reason the equity ratio fell in 2018 was a large increase in total assets.” Although it is slightly lower than the capital adequacy ratio standard (8% or more) of the Bank for International Settlements (BIS), the factors are clear and it is considered that no major problems exist with the business foundation. Moreover, during the same period, the percentage of the amount of overdue unpaid credit has been on a downward trend. At the time of the ex-post evaluation, the officer in DBP head office commented that “as of October 2019, the total assets are 730 billion PhP, and the business condition is progressing smoothly toward the corporate vision of becoming a 1 trillion yen bank in 2022.”

In light of the above, no particular issues were found in the DBP’s financial aspect, and no major problems were observed regarding the financial aspects of the project’s operation and maintenance.

#### 3.4.4 Status of Operation and Maintenance

Tables 8 and 9 show the management status of revolving funds up to December 2018.

Table 8: PWRF (Water Supply and Sanitation) Special Account

Year	2016	2017	2018
Number of Loans	6	1	1
Loan Amount (million PhP)	86	28	183
Ending Balance (million PhP)	26	190	133

Source: Answers to the questionnaire and document provided by executing agency

Table 9: Revolving Fund other than PWRF (Water Supply and Sanitation)

Year	2016	2017	2018
Number of Loans	20	18	13
Loan Amount (million PhP)	1,387	360	1,016
Ending Balance (million PhP)	1,218	1,106	464

Source: Answers to the questionnaire by executing agency

DBP has set up and operated two revolving funds for the water supply and sanitation (PWRF) and for the rest of the sectors, and it has facilitated these operations. DBP has submitted annual audit reports to JICA as agreed at the time of appraisal. At the time of the ex-post evaluation, the percentage of the amount of overdue unpaid credit was 4.1%, as described above (Effectiveness 3.3.1.1 Quantitative Effect). According to the DBP head office, “The recovery prospects are not particularly deteriorating based on the repayment status of each sub-loan.”

In light of the above, it is judged that there is no particular problem with the state of the project’s operation and maintenance.

In light of the above, no major problems have been observed in the project’s institutional/organizational, technical, financial aspects and current status of the operation and maintenance system. Therefore, sustainability of the project effects is high.

## 4. Conclusion, Lessons Learned and Recommendations

### 4.1 Conclusion

This project was implemented with the goal of reducing emissions of environmental pollutants by providing LGUs, private corporations, and GOCCs, etc. with mid-to-long tenor loans for capital investment in the environmental sector throughout the Philippines through the DBP, thereby contributing to environmental protection and the improvement of living conditions. The relevance of this project is high given that the provision of concessional mid-to-long tenor funds in the environmental sector and environmental improvement and protection are consistent with the country’s development policy, development needs, and Japan’s ODA policy, which prioritizes support for environmental protection measures. The project cost was almost as planned, although a part of the loan conditions and DBP’s co-payments were changed to meet the demand for lending. The project period exceeded the planned timeframe because it took more time than expected for various licensing procedures, so it was extended to disburse loans as much as possible; thus, the efficiency of the project is fair. At the time of the ex-post evaluation, many of the sub-loans had not matured. As for the quantitative effect indicators for the sub-projects, those

indicators that achieved the target values were confirmed, but the target year setting was unclear, and there were projects where the construction and installation of the target facilities were incomplete. On the other hand, this project was recognized for its contribution to environmental improvement and protection as well as improvement of the living environment. At the time of ex-post evaluation, although it is difficult to evaluate the entire project, the project's effectiveness and impact is judged to be fair based on the actual values of the indicators at the time of the ex-post evaluation. The sustainability of the project's operation and maintenance is high because there are no particular problems with the structural, technical, financial, and operation and maintenance conditions of the organization.

In light of the above, this project is evaluated to be satisfactory.

## 4.2 Recommendations

### 4.2.1 Recommendations to the Executing Agency

This project provided concessional loans with mid-to-long tenor loan periods. At the time of the ex-post evaluation, there is a sub-loan that leaves 15 years until maturity, and loan management and debt collection operations have been ongoing. In the future, it is expected that the officers in charge of this project in the executing agency might be transferred or retired in the executing agency. It is desirable to maintain the coordination among the officers involved and to monitor the project, including obtaining actual values of indicators and carrying out debt collection of the target sub-loans and sub-projects while thoroughly taking over the works and conducting training at the time when officers are transferred or retire.

### 4.2.2 Recommendation to JICA

This ex-post evaluation was conducted 2 years after the completion of the project (loan disbursement due date). However, at the time of ex-post evaluation, there were 43 loans (76.2% in face value) before the maturity of the sub-loans. By the time of the ex-post evaluation, some construction and installation of the facilities and equipment targeted by the loans were not yet completed or were in the trial operation period. In addition, although the loan of this project was intended to target facilities and equipment that are a part of the project implemented by the end-users, indicators for the entire project were set in some projects. Therefore, at the time of the ex-post evaluation, evaluation judgment was made using only the indicators and information obtained at that time. However, it is not the time when a substantive evaluation judgment of the entire project can be made. It is appropriate for the executing agency and JICA to mutually



confirm the progress to ascertain the status of sub-loans and sub-projects and to discuss correspondence, including the possibility of continuous verification of the status of effect development of this project.

#### 4.3 Lesson Learned

##### Setting Appropriate Indicators, Target Year, and Timing of Ex-Post Evaluation for the Evaluation Judgment in a Two-Step Loan Project

In this project, the target year was set to be 2 years after the completion of the project in the JICA documents. However, the document common to the executing agency and JICA regarding the target year and the timing of the ex-post evaluation could not be confirmed. The executing agency recognized that the target year was the loan maturity year. At the time of the ex-post evaluation, because more than half of all sub-loans were before the maturity date, the actual results of the indicators concerning loans (percentage of amount/number of overdue unpaid credit) for the overall performance of the project could not be grasped. Regarding sub-projects, some were undergoing construction or trial operation of facilities, and actual results could not be calculated at the time of the ex-post evaluation. In addition, there were some sub-projects for which indicators were set for the entire large-scale project other than the facilities and equipment covered by this project loan, and it was difficult to achieve the operation and effect indicators using only the target facilities and equipment. Furthermore, there were some sub-projects in which the executing agency did not change the target value of indicators even if the design scope had been changed after the executing agency's loan appraisal and during the project implementation. In addition, the data for indicators are reported by the end-users, and even if the content of a report is missing, DBP was not be able to keep up with the information. Therefore, at the time of the ex-post evaluation, it was not possible to confirm the baseline and target value, it was difficult to obtain the actual values, or it was difficult to make an evaluation judgment of the entire project based on the actual values of the obtained indicators. Originally, to more accurately understand the project's effects and impacts, conducting an ex-post evaluation after the maturity of all sub-loans had been desired, but it is not realistic if the loan is mid-to-long tenor, as in this project.

Based on this background, for a two-step loan project, it is recommended that in the future the executing agency and JICA concur on the indicators and their target years at the time of appraisal or at a predetermined time, and during the project implementation and after completion, they should set realistic indicators that can be obtained by the executing agency and confirmed by JICA. In addition, if setting the target year at the time of appraisal, then indicators that are

available at the target year and that can be measured by end-users (e.g., the actual loan amount and the percentage of the amount/number of overdue unpaid credit which meet maturity by 2 years after project completion, which is usually the timing of JICA's ex-post evaluation) are considered. Moreover, it is desirable to set indicators concerning the direct effects of sub-projects as much as possible. Furthermore, it is desirable to clarify the completion year and target year of sub-loans and sub-projects as much as possible when all sub-loans are decided and to clarify the timing of ex-post evaluation accordingly.

#### Setting Project Costs for a Two-Step Loan Project

In this project, the project cost of the executing agency exceeded the plan. During the implementation of this project, the market interest rates became lower and the loan interest rates of this project became higher than those of commercial banks. The executing agency promoted financing of this project by taking measures such as blending its own funds of lower interest rates and providing loans other than this project to the end-users' equity part. If all of these are considered as project cost, then it was possible that the project exceeded cost.

In light of this situation, regarding the setting of the project cost of a two-step loan, at the time of appraisal, it is worth considering for an executing agency and JICA not to include the executing agency's loan amount for the sub-project in the ex-post evaluation. Alternatively, it is worth considering the flexibility to clarify the eligible items of the project cost borne by the executing agency or to set the project cost borne by the executing agency during project implementation.

#### Flexible Changes and Responses in Lending Terms by the Executing Agency and JICA

During the project period, the advantage of sub-loans of this project declined due to the lower market interest rates. In addition, there was a delay in obtaining the permissions from related organizations for sub-loan lending and sub-project implementation. However, the loan amount of this project was almost as planned. During the implementation of the project, the executing agency, with the concurrence of JICA, implemented measures such as revising the sub-loan cap ratio, removing the terms of equity, and relaxing co-financing terms in revolving funds. In addition, the executing agency provided a blending of this project's loans and low-interest loan products at DBP's own cost to sub-projects. It is considered that these changes and responses facilitated the end-users' loan applications and loans to private corporations even in a situation where the loan demand for this project declined. In other words, the executing agency and JICA flexibly changed the sub-loan lending terms and responded according to the lending situation, which made it

possible to promote financing for this project. As a result, it is considered that PPP was also promoted.

In the future, in the case of a two-step loan project in which market interest rates might change due to the economic situation and many target sectors and related organizations are involved, it is considered necessary for the executing agency and JICA to keep track of the lending status and to take flexible measures even during the project implementation.

Comparison of the Original and Actual Scope of the Project

Item	Plan	Actual
<p>1. Project Outputs</p>	<p>a. Two-Step Loan 1) Eligible sector Water supply and sanitation, new and renewable energy, industrial pollution control, solid/health care/hazardous waste management</p>	<p>a. Two-Step Loan 1) Eligible sector As planned</p>
	<p>2) Eligible usage of the sub-loan -Establishment and improvement of water supply and sewage facilities -Development of new and renewable energy (geothermal power, wind power, hydraulic power, biomass, and solar energy) and installation of power generation facilities, installation of transmission and distribution lines that contribute to energy and energy resource conservation, and transaction costs for CDM application procedures -Installation and improvement of facilities that will prevent or reduce industrial pollution -Establishment and improvement of solid/health care/hazardous waste management facilities -Initial working capital pertaining to the above -Interest during construction</p>	<p>2) Eligible usage of the sub-loan -Mostly as planned -CDM application procedures cancelled due to lower credit (emission allowance) prices</p>
	<p>3) Eligible end-users -Water supply &amp; sanitation: LGUs, WDs, and private corporations -Other sectors: private corporations (with at least 70% of capital owned by the citizens of the Philippines), LGUs, GOCCs, and cooperatives/associations</p>	<p>3) Eligible end-users -Water supply &amp; sanitation: almost as planned -Other sectors: there was no participation from GOCCs</p>
	<p>4) Financing scheme (i) Wholesale lending via PFIs or MFIs (ii) Retail lending from DBP (iii) Co-financing by DBP and PFIs through PWRP (only for the water supply and sanitation sub-projects)</p>	<p>4) Financing scheme -Almost as planned. -(i) There was no participation from MFIs</p>
	<p>5) Sub-loan interest (i) Wholesale lending: Philippine Dealing System Treasury Reference Rate 1 (PDST-R1) for 10-year benchmark + spread 1–4% (the spread is determined by PFIs or MFIs based on credit risk of the end user) (ii) Retail lending: PDST-R1 for 10-</p>	<p>5) Sub-loan interest -Almost as planned -Both (i) &amp; (ii) used PDST-F</p>

	<p>year benchmark + spread 1–3% (the spread is determined by DBP based on credit risk of the end user)</p> <p>(iii) PWRF: The loan conditions are the same as those of sub-project in other sectors</p>	
	<p>6) Repayment period of sub-loans</p> <p>(i) (ii): 3 to 15 years (within 20 years depending on cash flow of project funds; grace period: up to 5 years)</p> <p>(iii): Up to 20 years (grace period: up to 3 years)</p>	<p>6) Repayment period of sub-loans</p> <p>As planned</p>
	<p>7) Sub-loan limit ratio</p> <p>-Private: 80% of total project cost</p> <p>-LGUs, GOCCs, WDs, and cooperatives/associations: 90% of total project cost (iii): DBP can eliminate the 10% capital quota of LGUs and WDs as necessary</p> <p>-(iii) Co-financing facility (total project cost excluding the above end-user's equity)</p> <ul style="list-style-type: none"> <li>• 50–75% loan cap of total project cost from DBP and 25–50% loan cap of total project cost from PFIs/MFIs (100% from DBP for fund under PWRF is not eligible)</li> <li>• 25% loan cap of the total amount of (iii) to private corporations</li> </ul>	<p>7) Sub-loan limit ratio</p> <p>-LGUs, GOCCs, WDs, and cooperatives/associations: 90% cap of total project cost (<u>10% equity requirement was waived with JICA's concurrence</u>)</p> <p>-(iii) Co-financing facility (total project cost excluding the above end-users' equity)</p> <ul style="list-style-type: none"> <li>• <u>Except for five loans of less than 50 million PhP (10 in the process of appraisal), DBP funded 100% of the loan with JICA's concurrence</u></li> <li>• <u>25% loan cap of total amount of (iii) to private corporations was waived with JICA's concurrence</u></li> </ul>
	<p>8) Currency of sub-loans</p> <p>Philippine peso</p>	<p>8) Currency of sub-loans</p> <p>As planned</p>
	<p>b. Consulting Service</p> <p>1) Assistance in promotion, dissemination, and marketing of the project</p> <p>2) Assistance in formulation of sub-projects</p> <p>3) Assistance in the management of sub-projects (appraisal, implementation, monitoring, and evaluation)</p> <p>4) Assistance in coordination with concerned government agencies and other stakeholders</p> <p>5) Training for DBP, PFIs, MFIs, and end-users</p>	<p>b. Consulting Service</p> <p>-Almost as planned</p> <p>-Training for MFIs was not implemented because they did not participate</p>
2. Project Period	<p>September 2008– September 2015 (85 months)</p>	<p>September 2008–October 2016 (98 months)</p>
3. Project Cost Amount Paid in Foreign Currency	<p>3,188 Million Yen</p>	<p>2,883 Million Yen</p>

Amount Paid in Local Currency	24,292 Million Yen	24,814 Million Yen
	(59,758 Million Philippine Peso)	(54,094 Million Philippine Peso)
Total	27,480 Million Yen	27,697 Million Yen
ODA Loan Portion	24,846 Million Yen	24,814 Million Yen
Exchange Rate	1 Philippine Peso = 2.46 Yen 1 USD = 101 Yen (As of April 2008)	1 Philippine Peso = 2.18 Yen 1 USD = 97.52 Yen (Average between 2008 and 2016) (Source: International Financial Statistics Data (IFS data) of IMF)
4. Final Disbursement	October 2016	