

**Ex-Post Project Evaluation 2013:
Package I-6
(Cambodia, The Philippines)**

June 2014

**JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)**

IMG Inc.

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Preface

Ex-post evaluation of ODA projects has been in place since 1975 and since then the coverage of evaluation has expanded. Japan's ODA charter revised in 2003 shows Japan's commitment to ODA evaluation, clearly stating under the section "Enhancement of Evaluation" that in order to measure, analyze and objectively evaluate the outcome of ODA, third-party evaluations conducted by experts will be enhanced.

This volume shows the results of the ex-post evaluation of ODA Loan projects that were mainly completed in fiscal year 2011, and Technical Cooperation projects and Grant Aid projects, most of which project cost exceeds 1 billion JPY, that were mainly completed in fiscal year 2010. The ex-post evaluation was entrusted to external evaluators to ensure objective analysis of the projects' effects and to draw lessons and recommendations to be utilized in similar projects.

The lessons and recommendations drawn from these evaluations will be shared with JICA's stakeholders in order to improve the quality of ODA projects.

Lastly, deep appreciation is given to those who have cooperated and supported the creation of this volume of evaluations.

June 2014

Toshitsugu Uesawa

Vice President

Japan International Cooperation Agency (JICA)

Disclaimer

This volume of evaluations, the English translation of the original Japanese version, shows the result of objective ex-post evaluations made by external evaluators. The views and recommendations herein do not necessarily reflect the official views and opinions of JICA. JICA is not responsible for the accuracy of English translation, and the Japanese version shall prevail in the event of any inconsistency with the English version.

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Kingdom of Cambodia

Ex-Post Evaluation of Japanese Technical Cooperation Project
“Capacity Development of Provincial Rural Development in Northern Provinces”

External Evaluator: Maki Tsumagari, IMG, Inc.

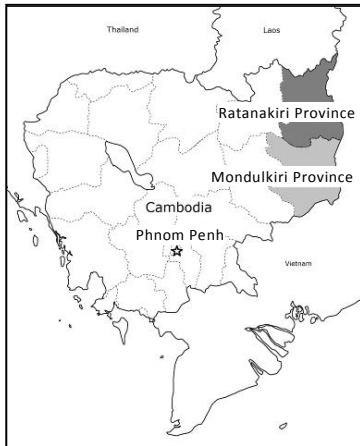
0. Summary

This project was conducted for the Ratanakiri Province and the Mondulakiri Province, both of which are ranked the lowest in terms of development levels within the country, to help strengthen the administrative capacity of local authorities in order to achieve sustainable regional development. The project was highly relevant to Cambodia’s developmental policy, developmental needs and Japan’s ODA policy; thus, its relevance is high.

This project was aimed at target groups that had not been subject to an approach of executing development projects in the context of the region wide development plans. The goal was to develop capacity for the target groups in the following way: (1) examining development plans that are in line with development goals, strategies, operations and activities, and establish priorities; (2) planning and implementing pilot projects; and (3) integrating the experience from managing such pilot projects into the Report of Recommendations on Formulation of District Development Plan and District Investment Project. Furthermore, some of the proposals in the aforementioned recommendation report were incorporated into the national version of the district development planning guideline, thereby achieving the Project Purpose. Following the completion of the project, however, the delivery of the district/khan¹ development funds, which would fund the expansion of the development project, was delayed, and there have been no new development projects to utilize the knowledge and experience gained from the cycle of planning, implementation, monitoring, and evaluation that was cultivated under the project. Thus, the effectiveness/impact is fair. In terms of the outputs, the period of the cooperation was within the original plan; however, project costs were higher than initially planned since development activities commenced simultaneously in two remote provinces in Cambodia, and the efficiency is thus evaluated as fair. Furthermore, the aforementioned delay in delivery of funds limited opportunities to maintain and pass on acquired technologies. Therefore, the sustainability in benefits generated by this project is fair. In light of the above, this project is evaluated to be partially satisfactory.

¹ Refers to “ward.”

1. Project Description



Project Location



Pilot Project's District Meeting Hall

1.1 Background

While Cambodia's two northeastern provinces (Ratanakiri Province and Mondulakiri Province) are areas with abundant natural resources such as natural forests, they are remote mountainous regions with poor access to urban areas. There are also numerous indigenous people who have not changed their traditional way of living, and these provinces are thus ranked at the bottom within the country in terms of their development levels according to the report on the Cambodian Millennium Development Goals (2003). There has also been a lack of a system to foster talent and train the people concerned with development administration. For that reason, the Cambodian National Government asked Japan in 2004 to conduct a development study to formulate a comprehensive development plan for the northeastern provinces and to provide technical cooperation to assist the Provincial Rural Development Committee (hereafter, PRDC). In response, the Japan International Cooperation Agency (JICA) fielded three project formulation missions in 2004 and 2005. Based on the recommendations of these missions, the Cambodian government requested assistance for a technical cooperation project for the development of human resources in the northeastern provinces. This led to the start of the Capacity Development of Provincial Rural Development in Northern Provinces by JICA from October 2007, which was scheduled to last 3.5 years, with the Ministry of Interior and the Executive Committee of the PRDC (hereafter, ExCom) in Ratanakiri Province and Mondulakiri Province as the counterpart personnel (hereafter, C/P) institutions.

1.2 Project Outline

Overall Goal		Provincial development is actively and strategically undertaken by the local governments.
Project Purpose		The capacity of the targeted local governments for promoting sustainable rural development is strengthened ² .
Outputs	Output 1	Capacity of local government officials in developmental research and analysis is strengthened.
	Output 2	Capacity of local government officials in rural development planning is strengthened.
	Output 3	Capacity of local government officials in implementing and managing rural development projects is strengthened.
	Output 4	Capacity of local government officials in monitoring and evaluation is strengthened.
Inputs		<p>Japanese Side:</p> <ol style="list-style-type: none"> 1. Experts 1 for Long-Term, 9 for Short-Term (Regional Development Planning/Chief Advisor, Rural Development/Social Survey 1 · 2, Rural Infrastructure, GIS, Monitoring and Evaluation, Participatory Development, Training, Coordinator 1 · 2, Local Governance/Coordinator) Total 107.76MM 2. Equipment 12 million yen 3. Local Cost 103.6 million yen <p>Cambodian Side</p> <ol style="list-style-type: none"> 1. 22 Counterpart Personnel 2. Land and Facilities, project office, utilities
Total cost		366 million yen
Period of Cooperation		October, 2007 – March, 2011
Implementing Agency		Ministry of Interior (MoI), PRDC/ExCom of Ratanakiri Province and Mondulakiri Province, Local Government Offices at the Provincial and District levels
Cooperation Agency in Japan		IC Net Limited, Nippon Koei Co., Ltd.

² The target for capacity development was set as district offices for Ratanakiri Province (narrowed down to Andoung Meas District and Koun Mom District as pilot districts after the mid-term review) and provincial sector offices for Mondulakiri Province (Agricultural Office and Tourism Office as pilot offices after the mid-term review). The arrangement was due to the relative capacity limitation of administrative officers at the onset of the project, as the 2003 start of development activities in Mondulakiri's PRDC/ExCom was behind by 7 years compared to Ratanakiri.

Related Projects	JICA Technical Cooperation Project “The Project on Improvement of Local Administration in Cambodia” (2007-2010); “The Project for Capacity Development for Implementing the Organic Law at Capital & Provincial Level” (2010-2015)
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1.3 Outline of the Terminal Evaluation

The following is the summary results of the terminal evaluation conducted in October 2010.

1.3.1 Achievement of Overall Goal at the time of the Terminal Evaluation

Based upon prioritization of needs identified from a needs survey and situation analysis, development plans were formulated for districts and provincial sector departments, followed by the implementation of pilot projects. In the process, the basic knowledge required by district officers and provincial sector department officials to conduct projects was improved through training in proposal writing, documentation of contracts, accounting, and computer proficiency. In accordance with a decision of The National Committee for Sub-National Democratic Development³'s (hereafter, NCDD) Secretariat Office, the recommendations from the Project⁴ have been incorporated into the district development planning guideline⁵ which are used within the nation, and the level of achievement of the Project Purpose was thus evaluated as satisfactory.

1.3.2 Achievement of Project Purpose at the time of the Terminal Evaluation

In achieving the project's overall goals, the priority objectives in the Project Design Matrix⁶ (hereafter, PDM) was set on a long-term perspective of 5–10 years after the end of the project; it was thus assessed that it would be difficult to evaluate the project achievements at that time.

1.3.3 Recommendations at the time of the Terminal Evaluation

The followings are recommendations proposed by the terminal evaluation (seven in total) and the measures taken by the time of the ex-post evaluation study.

³ An institution established under the Organic Law on Administrative Management of Capital, Provinces, Municipalities, Districts and Khans that has the highest decision-making authority at a national level in relation to decentralization and deconcentration reforms that transverses central government ministries and agencies.

⁴ Such as the simplification of the development plans, the need for analytical methods, relevance of the development plan for the area, the creation of cooperative relationships with Non-Governmental Organization (NGO), and the need for introduction of a gender perspective.

⁵ Final draft stage at October 2010.

⁶ Refers to PDM version 3.

Recommendations made by the terminal evaluation	Measures taken
(1) By the end of the Project	
To distribute “Feedback from Pilot Development Projects at Provincial and District Level in Northeastern Provinces” through MoI in order to disseminate project effects to the other districts/sectors, as well as to institutionalize them at the national level.	Efforts were made to disseminate project effects as recommended, through MoI led distribution of print materials produced by the project.
In view of the attainment prospect within 3-5 years after completion of the project, to reformulate the Overall Goal, Objectively Verifiable Indicators, and Assumptions, based on realistic assessment of the existing Project environment in Cambodia.	Revised (to PDM4) as recommended, and approved at the final JCC meeting (4th) in March, 2011.
To incorporate method of capacity development adopted by the project into the project’s products, to be explained and presented clearly to the relevant authorities of Cambodia as well as to the other parties concerned.	Prepared as recommended, capturing the essences of the project effects into a report ⁷ .
To provide appropriate management/maintenance advice to ensure sustainability of pilot projects, including that on repair work of structures where such needs are already identified.	Responded as recommended, by the project confirming at the 4 th Joint Coordination Committee (JCC) meeting the entities that became responsible for the further maintenance and upkeep of the pilot projects by the project. The already identified repair needs that had been responded were also recorded at the JCC.
(2) After Project completion	
The Provincial Governments of the 2 provinces are requested to support dissemination activities of the project	The dissemination of project knowledge in the two provinces is being absorbed and integrated into the implementation process

⁷ "Report of Recommendations on Formulation of District Development Plan and District Investment Project" (April 2010)

<p>learning within each Province.</p>	<p>for the National Program for Sub-National Democratic Development ⁸ 3-Year Implementation Plan ⁹ (hereafter, IP3), which is the initial three years of the detailed plan of the national program that started in 2010, i.e., the National Program for Sub-National Democratic Development (hereafter, NP-SNDD) (2010–2019). Consequently, the dissemination of project knowledge anticipated in the terminal evaluation has not occurred independently.</p>
<p>MoI is requested to look into the staffing arrangement and work environment of local government personnel under the new structure of the Provincial Government, including expense allocations and their benefit arrangement.</p>	<p>In both Provinces, MoI has appropriately managed to retain instrumental project C/Ps in the new local government structure. However, staff benefit and expense allocations are matters that are dealt at the level of NCDD, a joint organization between ministries established as the highest decision-making authority on a national level in relation to D&D reform, i.e. outside of the independent mandate of MoI, thus MoI specific responses have not been made.</p>
<p>The implementers of the pilot projects are requested to look into possibilities of support by Provincial Government, central government, NGO and/or other donors for follow-up activities to ensure sustainability of the developmental effects of the pilot project¹⁰.</p>	<p>The basic law to establish the district/khan development funds that provide resources for the development projects for local governments below the district level¹¹ was enacted in 2012, which led to the provision of direct budgets to districts and areas as development project funds. The delay in</p>

⁸ A 10-year (2010–2019) national program to create local governments (provinces, municipalities, districts, and khans) prescribed under the Organic Law on Administrative Management of Capital, Provinces, Municipalities, Districts and Khans, which was enacted in 2008.

⁹ The initial 3 year detailed implementation plan of the NP-SNDD was aimed at establishing and strengthening the local and central government system with particular focus on local governments for municipalities, districts and khans.

¹⁰ This project’s pilot development projects consist largely of the following activities: administrative procedures and health promotion; non-infrastructure pilot projects such as rice cultivation training; and infrastructure pilot projects such as the construction of bridges, culverts, and office meeting hall. This recommendation on accessing additional support from other donors in order to sustain the benefits achieved by the project was assumed to seek funding required for the maintenance of infrastructure.

	<p>preparing the regulations, manuals, and formats concerning the management of these funds in turn delayed the actual funding; however, funds had arrived in some areas as of the ex-post evaluation location survey, and distribution of budget grants are close for some district secretariat offices. The district development plans have already been submitted to provincial governments for validation. Therefore, the groundwork has been laid to allow for development project activities to proceed based on the priority ranking at the location, ensuring sustainability of the pilot project.</p>
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2. Outline of the Evaluation Study

2.1 External Evaluator

Maki Tsumagari, IMG, Inc.

2.2 Duration of Evaluation Study

Duration of the Study: September, 2013 – March, 2014

Duration of the Field Study: November 21 – December 11, 2013; February 19 – March 4, 2014

2.3 Constraints during the Evaluation Study

In terms of efficiency, a comparison of the planned project costs (i.e. the initial budget) and the actual costs (with the expenses itemized) enables examination of whether the budget has managed to meet the needs of the project and how the respective breakdown of costs had translated into outcomes; moreover, by assessing trends in the actual costs, examination on whether inputs have been consistent with the project's progress can be drawn. In the ex-post evaluation, the evaluator was provided with documentation from JICA as well as the project's expert teams, and examined a breakdown of the gross amounts of the initial budget estimates and the actual costs. However, the acquired data did not allow a comparison between the itemized expenditures, which limited analysis of the project's efficiency.

¹¹ The Sub-Decree on the Establishment and Functioning of the District/Municipal Fund.

3. Results of the Evaluation (Overall Rating: C¹²)

3.1 Relevance (Rating: ③¹³)

3.1.1 Relevance to the Development Plan of Cambodia

The Organic Law on Administrative Management of Capital, Provinces, Municipalities, Districts and Khans (hereafter, Organic Law) based on the Strategic Framework for Decentralization and Deconcentration (hereafter, D&D) Reforms approved by the Council of Ministers in June 2005 was formulated during the planning stage of the project. This law was aimed at strengthening provinces and districts in order to promote delegation of authority and decentralization of operations from the central government to administrators below the provincial level. Therefore, the implementation of this project was in line with the national development policies at the start of the project. The enactment of this law in 2008 resulted in the establishment of the 10-year (2010–2019) NP-SNDD, the main purpose of which was the creation of local governments prescribed under the law. The implementation of IP3, which corresponded to the detailed plan for the initial three years, commenced two months prior to the end of the project (January 2011). The knowledge gained from this project was absorbed and integrated into the IP3 implementation process and referenced in the formulation of the district¹⁴ development planning guideline. As such, it was well aligned with the development policies of Cambodia when the project ended.

3.1.2 Relevance to the Development Needs of Cambodia

One of the aims of decentralization in Cambodia when the project was planned was “to promote regional development and eliminate poverty.” There was also an awareness of the urgent needs in the northeastern provinces that had lagged in receiving development support compared with other regions. These provinces lacked the number of personnel and capacity needed to strengthen the local government function. These regions also had a large number of indigenous minorities, which led to issues such as language barriers and education levels that needed to be addressed. Therefore, training of local government officials capable of strategic planning and implementing government services at the provincial and district level was an urgent issue when the Organic Law was being formulated. Even at the end of the project, the provinces that were the subject of the

¹² A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

¹³ ③: High, ②: Fair, ①: Low

¹⁴ District governments formulate district development projects; however, its project staff is responsible for administrative procedures. As such, the technical issues regarding the formulation and implementation of the plan rely on technical support from the technical officer of the sector office, a branch office of the province’s central sector ministry. The district governor, much like the provincial governor, is nominated by the Ministry of the Interior.

project remained at the lower end of the ranking in aggregate scores of all provinces in terms of the Millennium Development Goals (hereafter, MDGs) calculated by a score using various socio-economic data as tools to manage their achievements. There was a high requirement to further boost the capacity of government officials to plan and implement projects. In particular, the approach of strengthening the capacity for implementing specific projects by the district government focused on transfer of knowledge to sub-government bodies under the district government, which had not been targeted by other donors in the past, and this remains an issue that still needs to be addressed even after the end of the project.

3.1.3 Relevance to Japan's ODA Policy

According to JICA Country Assistance Policy for Cambodia (2005), the principle of Japan's ODA policy to Cambodia when the project was planned was: to "safeguard human security by contributing to economic growth and poverty reduction through human resources development, institutional building, and infrastructure enhancement." As for one of the key areas of focus of Japan's ODA policy "to promote good governance", the protracted civil war within the country meant that there was a lack of mid-level human resources to support the administration, and the subsequent education and training system was lacking. It was further noted that it was difficult for the administration to effectively and efficiently manage so as to provide widespread and appropriate administrative services to its citizens. The northeastern provinces, which were the subject of this project, were in the region defined under the Cambodia - Laos - Viet Nam Development Triangle Master Plan adopted at the 2004 Cambodia, Laos, Vietnam (CLV) and Japan Summit. Japan has proactively supported this plan. The implementation of this project was closely aligned with Japan's ODA policy, as a case to contribute to the capacity building of local government officials, who are indispensable for responding to the region's urgent need to eliminate poverty.

This project has been highly relevant to the country's development plan, development needs, as well as Japan's ODA policy. Therefore, its relevance is high.

3.2 Effectiveness and Impact¹⁵ (Rating: ②)

3.2.1 Effectiveness

3.2.1.1 Project Output

The following 4 Outputs were determined as necessary outputs to achieve Project Purpose.

¹⁵ Sub-rating for Effectiveness is to be put with consideration of Impact.

1) Output 1

Output 1 was “capacity of local government officials in developmental research and analysis is strengthened.” The indicators for measuring the achievement of Output 1 were that “provincial situation survey reports are prepared based on data analysis and survey results,” “at least one module training course on problem analysis is provided, and significant improvement is demonstrated between pre-test and post-test,” and “usage of quantitative data to verify development priority in target areas is observed in Development Plans.”

All three indicators were achieved before the terminal evaluation, and the target group became familiar with the knowledge to analyze theoretical problems and gained experience in handling quantitative data for planning. Thus, it can be said that Output 1 was achieved. The ex-post evaluation survey for beneficiaries¹⁶ asked whether participants had previously experienced similar training and approximately half the participants (48% of the 60 valid responses) responded that, as part of the regions entire development plan, they had not even been familiar with the approach to formulate, implement, and monitor development projects as well as make adjustments when needed. Therefore, the existing baseline of the trainees was extremely low in terms of the target to provide training of development methodologies. The output had considerable significance for many participants, not so much as an opportunity to “boost” analysis and research capacity, but as an introduction to “foster and acquire” certain capabilities.

2) Output 2

Output 2 was “capacity of local government officials in rural development planning is strengthened,” and the indicators for measuring the achievement of Output 2 were that “district development plans of the pilot districts are drafted by local government officials in Ratanakiri,” “sector development plan(s) of (a) prioritized sector(s)¹⁷ is/are drafted by local government officials in Mondulkiri,” “development projects are planned and prepared by local government officials,” and “reports on improvement of the development

¹⁶ In this project, a variety of capacity development training and on-the-job-training (hereafter, OJT) activities were conducted for officials (who belong to two districts offices of Ratanakiri Province and three sector departments of Mondulkiri Province) who were formed into “target groups.” In addition to those target group government officials who were continuously concerned with the project’s capacity development activities, there were people who participated in the project’s training as they were concerned with its pilot activities. These include local government staff members at Veun Sai District Office, Ratanakiri Province, as well as those at district offices of Mondulkiri Province. Furthermore, there were administrative officials, through working with project experts, who received opportunity for capacity development. The ex-post evaluation survey targeted all of these people concerned with the project and received 76 responses. The ex-post evaluator, together with the local consultants, visited each office where respondents are stationed, confirmed content of the survey, provided complementary explanation, and administered the Khmer translated questionnaire into which each person was asked to fill in their replies on the spot.

¹⁷ Agriculture and tourism sectors.

planning process are formulated.”

This project was aimed at target groups that had not been subject to an approach of executing development projects in the context of the region wide development plans. The goal was to develop capacity for the target groups in the following way: (1) examining development plans that are in line with development goals, strategies, operations and activities, and establish priorities; (2) planning and implementing pilot projects¹⁸; and (3) integrating the experience from managing such pilot projects into the Report of Recommendations on Formulation of District Development Plan and District Investment Project. Some recommendations (such as the need to simplify development plans, improve analytical methods, align with commune development plans, build cooperative relationships with NGOs, and implement a gender perspective)¹⁹ were reflected in the final draft of the district development planning guideline created by the NCDD. Therefore, Output 2 was achieved with the inclusion of all 4 indicators.

To ensure achievement of the Project Purpose that were concentrated on the selected target regions and target groups, the Mid-term Review restricted the scope of each respective target to two pilot districts in Ratanakiri Province and to government officials that were pursuing development in high priority sectors in Mondulakiri Province. Such changes also led to changes in the output indicators compatible with the situation for the respective provinces. There was feedback from related parties at the provincial level, which were in control of each province, that these changes would provide a smoother transition for development of the project thereafter from the perspective of specificity, practicality, and relevance; thus, the change was considered appropriate in terms of project effectiveness.

3) Output 3

Output 3 was “capacity of local government officials in implementing and managing rural development projects is strengthened,” and the indicators for measuring the achievement of Output 3 were that “development projects are managed by local government officials,” “target officials’ knowledge for implementation is improved,” and “reports on improvement of the implementation process of development projects are formulated.”

Pilot projects based on a regional development plan in Ratanakiri Province during the term of the project were implemented in three cycles²⁰. During the implementation of this

¹⁸ In Ratanakiri Province, a total of 38 pilot development projects (22 non-infrastructure projects and 16 infrastructure projects) were conducted, while in Mondulakiri Province the total number of pilot development projects were 35, consisting of 22 non-infrastructure projects and 9 infrastructure projects.

¹⁹ In the Report of Recommendations on Formulation of District Development Plan and District Investment Project

²⁰ A “cycle” refers to the implementation, monitoring, and evaluation of a pilot project based on a regional

process, practical application of various contractual arrangements, account management, and operational management (such as preparing planning documents, contracts, and other reports as well as project management) were performed. Similarly, projects based on regional development plans were also implemented in Mondulkiri Province that enabled officers to acquire basic project execution skills through contract management and repeated management of operations. Improvement in participants' post-test scores over pre-test scores was achieved in all the administered tests as a result of training provided during the implementation of all of these projects. In addition, the Report of Recommendations on Formulation of District Development Plan and District Investment Project incorporated the lessons and recommendations concerning improvements in the implementation process for development projects; that is, all indicators were satisfied and Output 3 was achieved.

4) Output 4

Output 4 was “capacity of local government officials in monitoring and evaluation is strengthened,” and the indicators for measuring the achievement of Output 4 were that “monitoring and evaluation plans for pilot projects and other projects are formulated,” “monitoring and evaluation on pilot projects are conducted based on the plans above,” “target officials’ knowledge for monitoring and evaluation is improved,” and “reports on improvement of methods and systems for monitoring and evaluation of development projects are formulated.”

During the term of the project, the target group created monitoring and evaluation plans for the pilot projects in both provinces under the guidance of project experts for multiple cycles. In terms of monitoring by the target group, it was initially difficult for them to find the time because of the effort being put into managing the pilot project itself. Yet, by the third business cycle, the target group was able to undertake a series of activities, such as (i) setting indicators; (ii) creating monitoring and evaluation plans for pilot projects through the acquisition of baseline data for the set indicators; and (iii) monitoring and evaluating all the pilot projects utilizing tools such as monitoring sheets and checklists introduced for the project. The accumulation of such experience was evident in the data with an 11.14% improvement in the average pre-post test scores for questions on knowledge about monitoring and evaluation. Lessons learned and recommendations made during the implementation of the pilot project concerning the method and design for monitoring and evaluation are incorporated into the Feedback from Pilot Development Projects at Provincial and District Level in Northeastern Provinces. Since such processes resulted in all the indicators being met, Output 4 was achieved.

development plan.

However, in terms of fostering the capacity to amend set indicators in line with the pilot project's activity goals and strategy, the terminal evaluation assessed that it was not sufficiently covered during the term of the project.

3.2.1.2 Achievement of Project Purpose

The Project Purpose was that “the capacity of the targeted local governments for promoting sustainable rural development is strengthened,” and three (3) set of indicators were specified. The following is an assessment of the achievement of the respective indicators.

1) Indicator 1

Indicator 1 was for Andong Mea District and Korn Mom District, Ratanakiri Province, and consisted of “district development plans with sustainable rural development activities, including non-infrastructure projects that have received relatively little attention so far, that meet the local needs are formulated and implemented,” and “rural development activities are monitored and evaluated by local government officials.”

On the basis of the needs survey, 22 non-infrastructure pilot projects and 16 infrastructure pilot projects were implemented during the term of the project in the subject districts, which were monitored by the target group. The target group that experienced this process achieved this indicator during the course of reporting and sharing the results of monitoring and evaluation with the team of experts and C/P and advancing measures based on the lessons learned.

2) Indicator 2

Indicator 2 was for Mondulkiri Province, and consisted of “sector development plans with sustainable rural development activities, including non-infrastructure projects that have received relatively little attention so far, that meet the local needs are formulated and implemented,” and “sector development activities are monitored and evaluated by local government officials.”

On the basis of the needs survey, 26 non-infrastructure pilot projects and 9 infrastructure pilot projects were implemented during the term of the project in the priority areas for the province (agriculture and tourism sectors), with monitoring by government officials from the sector departments and districts. The use of monitoring and evaluation tools introduced by the project for all the pilot projects led to monitoring and evaluation that had not been done prior to the project, which eventually led to the achievement of this indicator.

3) Indicator 3

Indicator 3 was set for the national level as “lessons learnt from the project are reflected in guidelines and/or manuals in order to institutionalize findings of the project.”

The knowledge gained from this project and the recommendations that followed were incorporated in the district development planning guideline (Output 2), the Report of Recommendations on Formulation of District Development Plan and District Investment Project (Output 3), and the Feedback from Pilot Development Projects at Provincial and District Level in Northeastern Provinces (Output 4). By reflecting some of the project recommendations (such as simplifying development plans, improving analytical methods, relevance with development plans for lower level sub-national administrative bodies, building cooperative relationships with non-government organizations, and the need to implement a gender perspective)²¹ in the district development planning guideline formulated by the NCDD’s Secretariat Office, the knowledge of the project has been incorporated into the national level guidelines and achieved this indicator.

Therefore, the project purpose has been achieved.

All the activities planned under the project were undertaken and the four outputs were achieved in line with the plan as noted in 3.2.1.1.

The implementation of this project, when there was still no improvement in the education and training system to educate public servants, meant that the local government officials in both provinces were able to gain a better understanding of the provincial development and planning, implementation, and evaluation cycle for priority projects through on-the-job application of the pilot project cycle. The direct or modified application of the methods introduced by the project was also used for monitoring and evaluation. Therefore, the incorporation of everyday administrative practices within the framework of the provincial development indicates that all indicators were met, and the Project Purpose “to strengthen the local administrative capacity for sustained regional development in the targeted provinces” was achieved.

3.2.2 Impact

3.2.2.1 Achievement of Overall Goal

The Overall Goal which should be achieved three to five years after the project termination was that “Provincial development is actively and strategically undertaken by the local governments.” Four (4) indicators were set to assess the achievement of the Overall Goal.

²¹ In the Report of Recommendations on Formulation of District Development Plan and District Investment Project

1) Indicator 1

“Sustainable district development projects including projects having received relatively little attention so far such as non-infrastructure are continuously formulated in accordance with local needs and implemented in Andong Meas and Korn Mom districts. Other districts also commence the development projects with the similar approach” was set as Indicator 1, for Ratanakiri Province.

2) Indicator 2

“Rural development activities are continuously monitored and evaluated by the local government officials in Andong Meas and Korn Mom districts. Other districts also commence monitoring and evaluation with the similar approach” was set as Indicator 2, for Ratanakiri Province.

3) Indicator 3

“Sustainable rural development projects to meet the local needs are continuously formulated and implemented in the sectors of rice cultivation and tourism. Other sectors/departments also commence sustainable rural development projects with similar approach” was set as Indicator 3, for Mondulkiri Province.

4) Indicator 4

“Sector development activities are continuously monitored and evaluated by local government officials in the field of rice cultivation and tourism. Other sectors/departments also commence monitoring and evaluation with similar approach” was set as Indicator 4, for Mondulkiri Province.

The Overall Goal of this project was to facilitate implementation of independent and strategic development projects by the local government officials²² at respective administrative bodies using the resultant improved administrative capacity. The implementation of projects based on the provincial development plan and the consequent review and improvements under this project provided local government officials with a clearer understanding of the scope of their responsibility in the various operations for regional development and strengthened their confidence in their skills. Consequently, those officials appear to have taken a more active role in operations, which was also

²² Technical officers at provincial sector offices for Mondulkiri Province, and officers tasked with development activities at district offices for Ratanakiri Province.

evident from the responses to the ex-post evaluation survey²³. The administrative methods and processes implemented under the project, such as preparing accounting documents and creating various reports for higher levels of government using computers, particularly the ground-breaking measures for the target group at the district level, have become the foundation for managing the cycle from planning to implementation, monitoring, and evaluation.

To leverage the results following the end of the project, it is vital to secure the operational budget that enables implementation of development plans by Sub-National Administrations. The PDM also affirmed that securing a budget was one of the important assumptions necessary to achieve the overall goals²⁴. However, the delay in implementing Cambodia's D&D policy affected the preparations for formulating the detailed regulations concerning the management of the "district/khan development funds" that was legislated in 2012. Funding was delayed, and as of February 2014, when this second in-country study for the ex-post evaluation was conducted, new development projects under the Provincial Development Guidelines, which was formulated by the district that believed funding was imminent, had not started²⁵. Therefore, the sustained output at the time of the ex-post evaluation was limited to monitoring the pilot project in response to request from the community for maintenance of the water well, ambulance, and library constructed under the project's pilot project and transferred thereafter to the community.

The targets under this project were restricted in the Ratanakiri Province to improving the capacity of district government officials and in the Mondulakiri Province to similar activities for government officials of the provincial sector departments. In the case of the Ratanakiri Province, where the target was to improve the capacity for projects at the district level, the roles and the allocation of responsibility of the related parties during the term of the project continued after the project ended. This led to a cycle of monitoring with the support from provincial government C/Ps to the district government, i.e., the main entity for planning and implementation. In other words, the hierarchy for formulating and implementing the regional plans by existing local administrators was

²³ Regarding how participation in the project organized training affected one to enlarge his/her views, 40% responded as "confidence in technical handling of the duties", 46% as "clearer link between on-the-ground rural development activities and upper level (district/province) development plans", and 26% as "larger view of development work conducted by the office I belong (e.g. District, Province)." (76 valid responses with multiple responses accepted)

²⁴ There were a total of six important assumptions, i.e., "no major change in the policy or direction of decentralization," "no change in the NCDD framework," "implementation of IP3 on schedule," "the budget for provincial and district development projects to be secured," "the provincial and district governments function as the main entities for regional development," and "provincial and district government employees work continuously."

²⁵ At the time of ex-post evaluation, funds had reached some khans and the focus was on support of the khans by the district governments. There was also confirmation that technical assistance for formulation and implementation of regional development plans at khans had already commenced. In addition, since funding to the district offices was imminent, district development plans had already been submitted to and were in the process of confirmation by provincial governments.

more stringently followed.

On the other hand, the scope of responsibility for government officials differs at the provincial and district levels. Particularly in the case of provincial sector departments, the main duties have, thus far, been to provide technical advice as a branch office of the national sector ministry, and the contribution of their knowledge to provincial and district development plans has thus been limited to input from a technical perspective. The recipients of their technical input have also differed by sector. For example, in the case of the Monduliri Province Tourism Department, the number one issue from the perspective of the national tourism policy was to attract foreign tourists. The pilot project was to support the establishment of a tourist promotion committee with relevant parties in the corporate sector that were pursuing the local tourism business (hotels, restaurants, etc.) and install billboards welcoming tourists, but such pilot projects inherently lacked follow through. In contrast, in the case of that Province's Agriculture Department, the pilot projects involved activities such as training farmers for rice cultivation in a region with extensive cultivation of rice, and monitoring the result of such training for selected pilot farms. Therefore, there was a higher need for ongoing support for the pilot farms even after the project ended. Consequently, even though pilot projects involved the same province's sector offices, comparing the activities for the Tourism Department with the Agriculture Department, for example, indicates a difference in ongoing impact, i.e. the lack of stimulus to sustain monitoring and evaluation and subsequent improvements.

From the above, parties related to the project assumed that the district/khan development funds would fund the implementation of development projects after the project ended, and had even formulated development plans and prioritized the projects; however, it did not actually incorporate the processes of implementation, monitoring, and evaluation as prescribed by the overall goal indicator of this project. Thus, the Overall Goal has not been achieved.

3.2.2.2 Other Impacts

The pilot project was first and foremost implemented to provide an OJT opportunity for the target group. This led to development benefits such as improvements in transportation, health, and hygiene in the regional communities in the two provinces. In particular, in Veun Sai District, Ratanakiri Province, some pilot projects from the perspective of preventing the spread of cholera and diarrhea that followed flooding were implemented in time such as the installation of a common well and awareness raising on hygiene were implemented. The active maintenance for the community's joint facilities, such as the rotation system for cleaning, also took root within the community.

This project has achieved the Project Purpose with the inclusion of all indicators. However, achievement of the Overall Goal has been partial, due to delay in the allocation of district/khan development funds, that has put on hold the implementation of new development activities utilizing the project capacitated planning, conducting, monitoring, and evaluation cycle management skills. Therefore effectiveness/impact of the project is fair.

3.3 Efficiency (Rating: ②)

3.3.1 Inputs

Inputs	Plan	Actual
(1) Experts	Maximum 4 experts covering: Chief Advisor, Regional Planning, Rural Infrastructure, Monitoring and Evaluation, Local Governance, Coordinator	1 for Long-Term 8 for Short-Term (Regional Development Planning/Chief Advisor, Rural Development/Social Survey 1・2, Rural Infrastructure, GIS, Monitoring and Evaluation, Participatory Development, Training, Coordinator 1・2, Local Governance/Coordinator) (96.3MM in total)
(2) Equipment	(amount not mentioned)	12 million yen
(3) Local Cost	Expenses for conducting development work as for On the Job Training (OJT)	103 million yen
Total Project Cost	327 million yen	366 million yen
Total Local Cost	(amount not mentioned)	Utility charges

3.3.1.1 Elements of Inputs

Inputs were provided as planned, both from Japan and Cambodia.

Regarding dispatch of experts, the terminal evaluation considered the duty station of long-term expert being Phnom Penh as a factor that “reduced the project’s efficiency as almost all activities were the capacity development activities for the target group, including the implementation of pilot projects conducted in the two provinces.” It was

imperative to concentrate information centrally in order to ensure the status and conclusion of the project given the on-going national debate about decentralization. Particularly in the final stages of the project, the lessons accumulated from the practical application of the provincial development plan and pilot projects were submitted to the NCDD's Secretariat Office in Phnom Penh. The expert positioned in Phnom Penh was there to ensure that the project recommendations were reflected when the Secretariat Office was formulating the district development planning guideline to be used by all districts across the country. It was vital for the project outputs to contribute to the formation of a national program, and such input was therefore important and appropriate.

The main equipment acquired for the project from Japan was everyday use office equipment, such as PCs, photocopiers, telephones, and cabinets, and they are still in use today. In particular, there were places within district governments where the PCs supplied by the project were the only PCs, and they are being used very carefully with the generators supplied under the project to ensure minimal damage. Apart from office equipment, one motorbike was provided to each of the pilot district governments. They are still being used today; however, their use has not been limited to monitoring the pilot project, and they are used for everyday operations at the district governments.

The ex-post evaluation in-country study confirmed that apart from the allocation of C/Ps and the provision of working space for experts, the input from the Cambodian side during the term of the project was mainly utility charges.

3.3.1.2 Project Cost

The project cost was higher by 39 million yen than planned (112% of the plan), inclusive of local consultant cost of 55 million yen, which was unbudgeted at the time of project start. In terms of dispatch of Japanese experts, experts were dispatched in a succession of short periods, and there were periods when there were no experts on the ground. This resulted in the local consultant, who had been employed as the national coordinator, taking charge of activities such as the management of progress for the target group's pilot projects while maintaining close contact with experts. Since it took an entire day to transfer between the two provinces, the geographic distances resulted in hiring two of the aforementioned national coordinators to manage the activities in the two provinces at the same time with one located in each province.

3.3.1.3 Period of Cooperation

The cooperation period was 42 months, which was as planned (100% of the plan).

Although the project period was within the plan, the project cost exceeded the plan.

Therefore, efficiency of the project is fair.

3.4 Sustainability (Rating: ②)

3.4.1 Related Policy towards the Project

The NP-SNDD framework to promote decentralization was finally realized when the project ended, and the NCDD, as a joint organization between ministries, was established as the highest decision-making authority on a national level in relation to D&D reform and as the institution for implementation and management of the NP-SNDD. Furthermore, the enactment of IP3, the detailed plan for the first three years of the D&D reform program, started from January 2011. Therefore, it was the time when a common national framework was firstly used to promote Cambodia's decentralization. The accumulated knowledge and lessons²⁶ from the regional development planning and implementation by the project in the two northeastern provinces were reflected in the district development planning guideline formulated by the NCDD's Secretariat Office and used nationally. Subsequently, IP3 was implemented in earnest on a national level. Consequently, the Project contributed to institutionalizing the development decisions and implementation policies performed by the sub-national administrative bodies under Cambodia's decentralization by providing a wealth of accumulated, preceding experience. On the other hand, the experience accumulated from this project was not systematically incorporated among the activities listed in the IP3. There is no sign of application or transfer of knowledge or skills to the implementation of the IP3, which suggests scope for improvement.

IP3 started as a plan for the initial three years of NP-SNDD (2010–2019), but a decision to extend this by one year was already made in 2013. While the details to be built into the next phase will be decided on the basis of achievements during the extension period, the NP-SNDD is expected to act to establish and institutionalize a regional and central administrative system. Accordingly, the sustainability of the policy on strengthening local government organizations and government officials is also expected as secured.

The main point of IP3 is for the local government organizations to “function” with transparency and responsibility in promoting local development and providing public services. This project improved the capacity of the local government officials of the targeted provinces to strategically plan and implement regional development projects. This was achieved through the cycle of implementation, supervision, monitoring, and evaluation of projects that are in dire need; the development plans for these projects had

²⁶ Needs such as the simplification of development plans, introduction of analytical methods and relevance to the development plan for the area, the creation of cooperative relationships with NGOs, and the need for introduction of a gender perspective.

been formulated on the basis of a situation analysis, for which the plans had been regulated. This led to a goal in the IP3 of improving the function of the local government organizations.

3.4.2 Institutional Aspects of the Implementing Agency

The C/P ExCom was dissolved in December 2010, and the terminal evaluation confirmed the merger with the provincial government; however, in actuality, ExCom continued until the end of the project. Under this project, ExCom was the C/P institution; the district offices²⁷ and sector departments were the implementing agencies of the pilot projects, undertaking activities to promote capacity building of the target groups, i.e., the district offices and sector departments. ExCom was dissolved after completion of the project in accordance with the Organic Law to revise local government organizations, and its function was transferred to a Sub-national Administration. There was a movement of personnel at the time, and project managers²⁸ on this project were subsequently appointed to responsible positions within the provincial government. In addition, many members of ExCom also remained in the provincial government.

With regard to the provincial sector departments, it is possible that they will be merged with the provincial governments as D&D reforms progress; however, at present, they continue to exist as a branch office of the central ministry and provide technical support for each of the sector departments within the provinces. Consequently, the Agriculture Department and the Tourism Department of Mondulkiri Province, for which the project targeted as capacity building, function as the provincial sector's technical divisions even today. As for the Agriculture Department, it responds to requests for technical assistance from the district government including hands on guidance to farmers. Regarding the Tourism Department, the main focus is cooperation with businesses and NGOs jointly involved in the tourism in the local areas, and there is no direct cooperation with the lower sub-national administrative bodies.

The role of the district government is expected to be strengthened by the enactment of the 2008 Organic Law and be the subject of future capacity building. The district governor, who is still appointed by the Ministry of Interior, can change every few years; however, the governors of the district governments, which were subject to this project, remain in those positions at the time of this ex-post evaluation. In addition, the district government officials are employed locally, and there has been virtually no change in personnel.

²⁷ After ExCom was dissolved, in parallel to the provincial governments, district offices became district governments.

²⁸ Represents C/P and administer day-to-day operation of the project. For PRDNEP, 2 Project Managers were appointed, each representing Ratanakiri and Mondulkiri Provinces.

Therefore, even with organizational reforms of the C/P institutions as part of decentralization, the personnel that gained experience from the project will remain the core of any new organization. With the focus on strengthening the function of the sub-national administrative bodies, the organizational conditions allows government officials to perform a greater active and strategic demonstration of their strategic planning and implementation of administrative services, which was aimed at the project.

3.4.3 Technical Aspects of the Implementing Agency

The district government officials, who are the target group, joined the administrative services with junior high school and high school level educational backgrounds and had virtually no experience in project management. This meant that they acquired new knowledge one step at a time through the pilot projects. This ex-post evaluation confirmed that the project has given these district government officials an awareness of when and what action is required (including the timing and the details of requests for technical assistance from upper level organizations) and of their own role in relation to the administration as a whole. In the ex-post evaluation survey, 92% (61 valid responses) of the target group said that their learning from the project is useful even today. The target group cited reasons²⁹ confirming an awareness of their priorities based on an understanding of the entire picture, rather than reacting only to the immediate tasks.

On the other hand, as noted later, the national government's delay in granting the district/khan development funds that were to finance the implementation of the development projects means that no new development projects have started. There has been no "repeated rotation" from one cycle of planning based on a situation analysis of the regional development plan, implementation, monitoring, and evaluation to the next with using the strategic know-how cultivated under the project. From amongst the skills they acquired from training to comprehending the fundamental knowledge needed to implement the development project, many government officials state that the skills³⁰ with higher practical application to administrative operations were more useful and utilized in everyday operations. However, the format used to plan development projects, utilizing the district/khan development funds, is the same as that used in this project. Thus, the skills cultivated under the project continue to be the foundation for dealing with plans for future development projects; this was evident from the comments made by district government officials.

District governments without a technical officer need to continue seeking technical assistance from the provincial government while maintaining a good relationship with

²⁹ On the examples of application of project experiences, see the footnote 22.

³⁰ Such as accounting procedures and PC based document preparation.

them. Interviews with both parties for this ex-post evaluation confirmed that the district government had coordinated with officials at the relevant department of the provincial government since the formulation stages of the development plan. In this regard, the district government makes use of the pilot project's experience to maintain a line of communication with the relevant provincial department for requesting technical assistance on their own initiative.

3.4.4 Financial Aspects of the Implementing Agency

The budget sources for sub-national administrative bodies rely on grants from the central government; the situation is the same for both provincial and district governments. While there have been fluctuations, following the end of the project in 2010, the development budget in Ratanakiri Province has amounted to 6,000–8,000 million riel (156–208 million yen) per annum and in Mondulakiri Province 170–2,300 million riel (4.4–60 million yen) per annum. However, such budgets are either for activities in those provinces from donor programs/projects or the provincial allocation of sector budgets set by the sector ministries and are not allocated for independent projects operated by the province. The same is true for district governments, with current budgets relying on grants from the central government. These development budgets have been funding from the district/khan development funds. Consequently, “active” and “strategic” implementation of development projects based on a district level's own development plans which would demonstrate the skills and capacity cultivated under this project would not become a reality till the budgets arrive; however, such budgets would not be available until such funds reach the district. Therefore, as of the in-country study for the ex-post evaluation, there has not been a similar process to the project's OJT for a new project in the districts.

However, at the district level, the equipment procured by the project has continued to be used in the interim. Also, benefits from the project are maintained, while administrative functions sustained and activity implementation managed within the scope of current budgets (for example, the implementation of works on the outer walls of an office in Veun Sai District, Ratanakiri Province that was built in conformity to the project's standards and processes). Apart from everyday office equipment such as PCs, photocopiers, telephones, and cabinets, the main equipment supplied was the generator used in the office and one motor bike to each pilot district government. The maintenance of these pieces of equipment is provided for in the current budget, but any new purchases would likely require a separate budget allocation.

Some problems have been observed in terms of the financial aspects of the

implementing agency, limiting opportunities for the project enhanced technical capacities to be further maintained and succeeded. Therefore, sustainability of the project effects is fair.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

This project was conducted for the Ratanakiri Province and the Mondulakiri Province, both of which are ranked the lowest in terms of development levels within the country, to help strengthen the administrative capacity of local authorities in order to achieve sustainable regional development. The project was highly relevant to Cambodia's developmental policy, developmental needs and Japan's ODA policy; thus, its relevance is high.

This project was aimed at target groups that had not been subject to an approach of executing development projects in the context of the region wide development plans. The goal was to develop capacity for the target groups in the following way: (1) examining development plans that are in line with development goals, strategies, operations and activities, and establish priorities; (2) planning and implementing pilot projects; and (3) integrating the experience from managing such pilot projects into the Report of Recommendations on Formulation of District Development Plan and District Investment Project. Furthermore, some of the proposals in the aforementioned recommendation report were incorporated into the national version of the district development planning guideline, thereby achieving the Project Purpose. Following the completion of the project, however, the delivery of the district/khan development funds, which would fund the expansion of the development project, was delayed, and there have been no new development projects to utilize the knowledge and experience gained from the cycle of planning, implementation, monitoring, and evaluation that was cultivated under the project. Thus, the effectiveness/impact is fair. In terms of the outputs, the period of the cooperation was within the original plan; however, project costs were higher than initially planned since development activities commenced simultaneously in two remote provinces in Cambodia, and the efficiency is thus evaluated as fair. Furthermore, the aforementioned delay in delivery of funds limited opportunities to maintain and pass on acquired technologies. Therefore, the sustainability in benefits generated by this project is fair. In light of the above, this project is evaluated to be partially satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

Decentralization reforms are currently being conducted on a national scale, and

sub-national administrations below the provincial levels are facing a period of major change, making it difficult for them to know where they stand in the overall picture. The project's theme to "develop the capacity of local government officials engaged in regional development" has been reflected in the IP3, which is the current 3-year plan for the NP-SNDD. The NP-SNDD, at the core of such reforms, is aimed at improving the function of sub-national administrative bodies. However, there is no systematic arrangement within the activities of the IP3 to incorporate the knowledge and experience accumulated under this project, such as the application and transfer of knowledge and skills. There is thus still scope for improvement. Consequently, to the provincial governments that succeeded the function of the project's C/P institution (ExCom), it is recommended that attention be paid to the project trained officers in the districts of the two target provinces, as they possess perspectives to manage development administration based on a cycle, starting with situation analysis (overall development) to plan formulation (an important part of development planning) to project implementation and management, and to monitoring/evaluation, which is highly relevant perspective for the training by IP3. Specifically, when implementing related training within the province under the sub-program 5 of the IP3 "5.1 Developing the Planning Systems of SNAs (Sub-national Administrations)," the project trained officers could be tasked to share their project experiences on cycle management by performing functions such as assistants to the IP3 trainers and/or resource persons. The involvement of the project trained officers, through the arrangement as mentioned above, will contribute to turning this series of individual courses into integrated and interconnected training process, thus making a difference to the institutional improvement of the public administration. As of the time of this ex-post evaluation, a one-off training "event," structured into a series of individual courses, such as training in data collection, formulating an investment program, etc., constitutes the bulk of the training program planned by the NCDD. The consultants employed under the IP3 are located within the provincial governments, so it is hoped that the former project managers of the project who are still working at both provincial governments will be offered the opportunity to provide suggestions within the provincial government.

4.2.2 Recommendations to JICA

None

4.3 Lessons Learned

(1) Implementation of pilot projects focused on improving the target's existing capacity

There were three cycles of pilot projects during the 3.5 year term of this project.

Through this process, local government officials became familiar with various contracts and procurement conditions, and in order to boost their management capacity, took on application of regional development planning and management into practice through implementation of pilot projects. Local government officials initially needed to become accustomed to the first new cycle, and unequal effort had to be put into implementation, leaving less than sufficient room for monitoring. However, by the third cycle, they were able to set the indicators, create a monitoring plan that incorporated baseline data that have been obtained, and engage in managing the development project cycle (the project's Project Purpose). On the other hand, the flexibility required in the process of linking one cycle to the next, such as adjustments to the indicators in line with the activity goals and strategic target, was not sufficiently covered during the term of the project.

Consequently, there were issues about the allocation of time to balance between the management of the overall implementation of the development projects (the overall cycle) and focus on each phase of implementation (planning, implementation, monitoring, evaluation, and efforts to make linkages to the next cycle).

It is advisable that the pilot project cycle planning and implementation is carefully timed, ensuring the capacity development target group to be able to allocate time to reflect on the lessons learned from the process. When pilot projects are conducted in a limited time frame, completion of each cycle then becomes the priority due to pressures to complete activities within the budgeted time. Once this happens, it could lead to increased involvement by the project team instead of focusing on the capacity development target group.

An important point when considering the commitment balance between the project team and the target group is the formulation of a project plan that pilot project cycles can be managed by capacity development target group for itself from the stage of planning to implementation, monitoring, to evaluation within the scheduled time frame. Pilot projects need to be formulated while taking into consideration whether the intended purpose of the project can be achieved within the given time constraints (in the case of this project, such intended purpose was to ensure that each stage of the project cycle, i.e., the implementation, monitoring/evaluation, and feedback to the next development plan was established by the capacity development target).

(2) Choice of pilot projects that allow for sustained involvement by capacity development target group

This project chose to narrow down the target, by re-focusing target regions and target groups with the goal of increasing the certainty of achieving the Project Purpose. The pilot project activities for the selected capacity development target group were aligned

with the needs of the “respective target provinces” at the time. However, the chosen projects by nature were not necessarily led to favorable output that would continue after the project by the capacity development target group.

For example, the main role of the Tourism Department, which was the target sector in Mondulkiri Province, was to play a part in the country’s tourism policy. The pilot project chosen was to support the establishment of a tourist promotion committee with relevant parties in the corporate sector that were pursuing the local tourism business (hotels, restaurants, etc.) and installing billboards welcoming tourists. In the case of the Agriculture Department, which was the other sector department targeted in that province, the selection for the pilot project was made to implement activities such as training farmers for rice cultivation in a region fertile for rice crop, and monitoring the result of such training for selected pilot farms. In the latter case, there was an even higher need for ongoing support for that process after the project ended, so the subsequent monitoring, evaluation, and continuing encouragement for improvement has been maintained by the capacity development target group. On the other hand, in the case of the Tourism Department, measures were temporary and lacked a medium to long-term time horizon in its engagement scope. In addition, no new projects have been planned because of the lack of budget, so there continues to be a lack of opportunity for the target group to utilize the knowledge and skills cultivated through the project after its completion.

While there is a major assumption that pilot projects are undertaken to meet the needs of the capacity development target group, it is advisable that pilot projects should be planned on the basis that they provide opportunities for capacity development target group to contribute to regional development utilizing the knowledge and skills gained by the project even after the project has ended.

BOX: Implications from the results of the ex-post evaluation related to the planning and implementation of capacity development projects for local government bodies

Japan International Cooperation Agency (JICA) has implemented a number of technical cooperation projects aimed at improving public services through the enhancement of local governance functions. In an effort to provide a highly relevant reference for use in the planning and implementation of projects in similar fields, a cross-sectional comparison of the ex-post evaluation results of two recent projects was conducted; namely the “Local Governance and Rural Empowerment Project for Davao Region (LGREP)” (2007–2010) conducted in the Philippines; and the “Capacity Development of Provincial Rural Development in Northern Provinces (PRDNEP) (2007–2011)” project conducted in Cambodia. The projects were carried out to enhance the capacity of local governments that had assumed greater responsibility for the provision of public services to the community

under national policies that promoted decentralization, and both were implemented in target regions that faced many development challenges. By time of the projects' completion, each had achieved its Project Purpose of ensuring that C/Ps had acquired, by means of hands-on training, the skills deemed necessary to allow them to carry out their public administration duties. However, after completion of the project, LGREP sustained the effect (capacity cultivated by the project in public service provision), whereas in PRDNEP, partly because no budget has been allocated for development projects since the project completion, there has not been new development project implementation using the knowledge and experience learned during the project. Below is a gist of the contrasting elements of both projects that affected the sustainability/further succession of outputs by the C/Ps themselves after the projects' completion.

- LGREP focused on the “capacity to provide services” in small water supply and established improved techniques. On the other hand, PRDNEP worked to foster a new initiative in the locale; namely, the “capacity to formulate development plans.” In the case of PRDNEP, the capacity development target group had a wide range of duties, and as a result, there were no strong overarching links built to their various day-to-day duties.
- LGREP assessed the capacity of stakeholders (other than those already included in the project's target) who were necessary to ensure the solid achievement of its objectives. Part way through the project, it added these stakeholders as its target as well as added a new output (Small Scale Water Supply Group) accordingly. Similarly, part way through the project, PRDNEP tried to refine its target. However, for the differences in the levels of government tiers at the two provinces that formed the target groups, and for the varied nature of the services provided by each target group even within one province, the project's aim to work on multiple sectors inevitably required individual responses to different service field. As a result, the effort did not lead to streamlining the scope of the capacity that needed to be enhanced.
- With the LGREP, training was conducted and consolidated in line with C/Ps' specific, everyday tasks, such as developing groundwater and organizing communities, which in turn led to the ability to apply their knowledge to the daily operations after the project completion. However, in the case of PRDNEP, on the whole, primary focus went to experiencing cycles of pilot project implementation and less of it to acquiring the necessary basics that would lead them to apply their training to the individual tasks needed during each phase of the cycle.
- LGREP, in order to achieve the goals, as stated above, added an additional target

to the project, which led to forming an integrative process for the implementation of the water supply projects that connected each of the relevant departments in the local government—a process that was carried forward and sustained to the time of the ex-post evaluation. PRDNEP targeted multiple levels of government and sectors, and the business and duties that fell within the jurisdiction of these government bodies and sectors were not involved in commonly shared implementation procedures. Consequently, scope for within the organization formulation and establishment of implementation process for development projects was limited.

Republic of the Philippines

Ex-Post Evaluation of Japanese Technical Cooperation Project
“Local Governance and Rural Empowerment Project for Davao Region”

External Evaluator: Maki Tsumagari, IMG, Inc.

0. Summary

This project raised the capacity of Local Government Units (hereafter, LGUs) in the Davao region to improve the service provision of water supply through human resource development training to those LGU staff tasked with carrying out the relevant work. This initiative is well aligned with development policy and needs in the Philippines, as well as Japan’s ODA policy. Thus, the relevance of this project is high.

Prior to the project, the staff had designed facilities based on approximate, rule-of-thumb estimates and empirical rules. These staff learned how to evaluate ground source water quality and calculate potential reserves and changed the method of analysis for designing optimal water supply facilities to one that applied a pipe network calculation formula. Furthermore, the project fostered the capacity of the staff to facilitate community organizing by providing technical assistance on how to establish community organizations that manage the maintenance of small water supply throughout the post-operational stage. Procedures for the water supply service, which were carried out under a framework of cooperation with local residents, based on the experiences above and the scientific measurements, were established in the form of a set of guidelines. By the time it was completed, the project had achieved its Project Purpose and satisfied all its indicators. Since then the small water supply services have been implemented using the improved techniques, and thus the effectiveness/impact of the project is high. Meanwhile, although the project outputs were achieved on schedule, the actual costs exceeded initial project estimates due to the inclusion of an additional Output during the project implementation stage; as a result, the efficiency is fair. The improved water supply services introduced in this project have been established as each LGU having instituted small water supply project implementation procedures, where no financial concerns have been observed. Therefore, sustainability of the effects realized by this project is high.

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

1. Project Description



Project Location: 4 provincial and 6 city LGUs in the Davao Region Water level meter demonstration

1.1 Background

With the establishment of the Local Government Code of the Philippines in 1991, decentralization has progressed across multiple sectors, and many LGUs in the country have made efforts to effectively execute the authority and administrative duties that have been delegated to them. The formation of a federation or cluster of neighboring LGUs is also an example of such efforts¹. The Davao Integrated Development Program (hereafter, DIDP) relates to an LGU cluster that handles common issues and needs. The LGU cluster encompasses four provinces and six cities in the Davao region and is one of the consortiums formed by neighboring LGUs. The authority and obligations delegated to the LGUs under the Local Government Code included the provision of various basic services to the community. Among these was the provision of water, which could either be led by the LGU setting up water projects of all levels² and sizes or via the coordination of other agencies involved. Specifically, the LGUs are responsible for the supervision of water supply services deemed to be profitable to the water utilities, run by the Water Districts (hereafter, WD), typically in cities where population density is high; they assume more direct responsibilities by installing new systems and supporting community organizations

¹ In connection with the subsequent change in the administration division that took place during the project period, the following 10 LGUs became LGREP participating LGUs: Davao Oriental Province, Compostela Valley Province, Davao del Norte Province, Davao del Sur Province, Mati City, Tagum City, Panabo City, Davao City, IGACOS (Island Garden City of Samal), and Digos City.

² Level 1 refers to water supplied through point source by hand pumps; Level 2 to water supplied using storage pump delivered to communal faucet; and Level 3 refers to water delivered to the faucets at individual households.

on maintenance of the installed water supply system, where remoteness and limited payment capacity of the local residents make provision of water supply services as independent utility operations difficult.

Before the start of the project, 58% of the total population in the DIDP region (including Davao city) were supplied with water that relied on the less refined Level 1 and Level 2 systems; moreover, 40% of the region’s population was not guaranteed access to safe water. Each LGU established departments that are engaged in water supply services to meet demand from local residents for the drilling of wells. However, inadequate technology and equipment meant that data was not measured scientifically; consequently, drilling was carried out on the basis of past experience. Further, there was a lack of awareness regarding guidance and how to organize the community to maintain the water taps. As a result, many residents still did not have access to safe water after water supply facilities were transferred to the community organizations, as a large number of water supply projects failed to be maintained or supported.

Of all the basic services delegated to LGUs, the issue of “water supply” was a common requirement of the LGUs and local residents and, against this background, the Government of the Philippines asked Japan to carry out this project for the purpose of developing administrative capacity of LGUs in the Davao region and enhancing local communities via improvements in water supply services.

1.2 Project Outline

Overall Goal		The Local Government Unit (LGUs) that participated in the project deliver the improved water supply service in line with the guideline that was developed by the project.
Project Purpose		The capacity of LGUs for delivering water supply services is improved.
Output(s)	Output 1	Present situation of small water supply is analyzed.
	Output 2	Human resources for groundwater development are developed.
	Output 3	Human resources for facilitating community organizations to maintain small water supply facilities are developed.
	Output 4	Human resources for small water supply are developed.
	Output 5	The improved procedure of delivering the water supply services is compiled in a form of guideline.
Inputs		<p>Japanese Side:</p> <ol style="list-style-type: none"> Experts 6 for Short-Term (Chief Advisor, Deputy Chief

	Advisor/Small Water Supply Planning, Hydrogeology, Community Development/Local Governance, GIS/WEB, Coordinator/Water Supply Facilities) (45.89MM in total) 2. Equipment 17.4 million yen 3. Local Cost 152 million yen Philippines Side: 1. 104 counterpart personnel 2. Local Cost 3.5 million Philippine Pesos 3. Facilities project office, utilities
Total cost	280 million yen
Period of Cooperation	August, 2007 - July, 2010
Implementing Agency	Davao Integrated Development Program (DIDP)
Cooperation Agency in Japan	None
Related Projects	“Capacity Enhancement Program of Metropolitan Iloilo-Guimaras Development Council (MIDC) and Banate Bay Resource Management Council Inc.” (2007 – 2010, Technical Cooperation) “The Project for Enhancement of Local Governance and Community Empowerment in Micro-Watersheds in Misamis Oriental” (2009-2011, Technical Cooperation)

1.3 Outline of the Terminal Evaluation

The following is the summary results of the terminal evaluation conducted in June – July 2010.

1.3.1 Achievement of Project Purpose at the time of the Terminal Evaluation

The technological and management know-how acquired by the counterpart personnel (hereafter, C/P) during the course of the project has been put to practical use in pilot projects. For example, the operation, maintenance and management are better under the Barangay³ Waterworks and Sanitation Association (hereafter, BWSA)⁴ constituted as part of the project’s initiatives than those in place under the pre-existing BWSA. In addition, the Guidelines for Small Water Supply Project, which was developed based on

³ Refers to the smallest administrative division in the Philippines and is the native Filipino term for a village, district or ward.

⁴ This is a beneficiary cooperative of resident representatives set up to collect usage fees, manage book-keeping, as well as carry out maintenance tasks. It also acts as a point of contact with the LGU when it makes its monthly accounting report to the LGU officer in charge of community organizations.

the outcomes of this project, were adopted by 7 out of the 10 Chief Executives of LGUs (hereafter, LCEs) participating in DIDP. As a result of these facts, the project was evaluated as having largely achieved its Project Purpose.

1.3.2 Achievement of Overall Goal at the time of the Terminal Evaluation

The project’s outcomes need to be properly publicized among the LCEs in the DIDP, as well as in the regional assemblies and lower tier LGUs (at town and barangay level) in order to increase the prospect of achieving the Overall Goal. However, the likelihood of achieving the Overall Goal had been assessed as fair, since the decision to implement LGU guidelines for small water supply projects was left to the regional assemblies and the LCEs, and the nature of instructions given to their staff accordingly.

1.3.3 Recommendations at the time of Terminal Evaluation

Recommendations made by the terminal evaluation	Measures taken
(1) By the end of the Project	
There are potential wells which were identified in the selection process of pilot projects. Its ownership should be clarified and transfer should be properly done by the end of the project.	The transfer process of the two production wells was completed to the respective jurisdiction LGUs (Mati City and Davao Oriental Province) who agreed on the responsibility for overseeing operation and maintenance as per agreement between DIDP-PMO and the respective LGUs (July 2010).
In order to increase the prospect of achieving the overall goal and super goal ⁵ , it is important that the content of the project prepared guidelines “Guidelines for Small Water Supply Project” is widely disseminated to DIDP member LGUs as well as referred in implementation of activities. In the remaining period of the project, it is desirable that DIDP Project Management Office (hereafter, DIDP-PMO ⁶) and project team consider the specific measures to address this issue.	Joint seminars were held, with attendance by members from each LGU. The project team subsequently visited each LGU, presented the project outputs and recommendations for the LGUs to the LCE and/or assembly, and discussed on the possibility of application of project outputs after the completion of the project.

⁵ “The capacity of Local Government Units for delivering basic public services is improved.”

⁶ A secretariat established to coordinate DIDP member LGUs (four provinces and six cities) whose office is located in Davao City.

<p>In order to provide high quality small water supply services, it is indispensable to promote collaborative implementation among staffs in charge of groundwater, community organizing, and small water supply (who belong to different departments/units of LGUs). The project established Project Management Unit (PMU) ⁷ in the respective LGUs, members of which were drawn from the three Groups. It is important for the parties concerned to examine the best way to keep the function of small water supply team, where respective staffs in charge can cooperate after the project completion.</p>	<p>At the final joint seminar, there were discussions on measures to ensure the continuation of PMUs in each LGU after the termination of the project. The DIDP-PMO requested each of the LGU stakeholders to consult on the potential for PMUs to survive as one of the institutions involved in the decision-making process in each respective LGU⁸.</p>
<p>(2) After Project completion</p>	
<p>Five BWSAs were established through the pilot projects. Each BWSA has its own strength and weakness, and also have common problems. It is highly recommended to create opportunities where the five BWSAs can convene to share experiences, challenges, solutions to problems. It would be also meaningful for these project induced BWSAs to report to the other, non-project associated BWSA in the region on cooperative regulations, experiences, and learning, for the benefit of the other BWSA to reflect into their operation.</p>	<p>During the course of the project, there was the opportunity to discuss this recommendation, but it was concluded that such opportunity was not covered under the ordinary DIDP budget, and so the meeting did not take place.</p>
<p>Various databases were developed through the project activities. It would be necessary for LGUs and DIDP-PMO to discuss how to maintain, update and utilize them.</p>	<p>The proposal that DIDP-PMO provides a server to which the respective LGU could upload data was discussed. However, as each LGU, as an individual organization, independently</p>

⁷ Groundwater Group, Small Water Supply Group, and Community Organizing (for maintenance and operation of the facility) Group.

⁸ In October 2013, task forces were set up by government decree in Tagum City to assist in the development of the main sectors, and some of those involved in the project also took part in the task force for the water sector. In addition, in IGACOS and North Davao Province, there were already decrees in force pertaining to the installation of PMU during the course of the project. However, the relocation of PMU members and lack of an independent budget have led to an awareness that government decrees alone are not necessarily sufficient.

	<p>managed its own data including the data developed under this project, so the direction for small water supply related data management after the project completion was left to each LGU to separately handle.</p>
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2. Outline of the Evaluation Study

2.1 External Evaluator

Maki Tsumagari, IMG, Inc.

2.2 Duration of Evaluation Study

Duration of the Study: September, 2013 - March, 2014

Duration of the Field Study: November 3 - 20, 2013; February 8 - 18, 2014

2.3 Constraints during the Evaluation Study

In terms of efficiency, a comparison of the planned project costs (i.e. the initial budget) and the actual costs (with the expenses itemized) enables examination of whether the budget has managed to meet the needs of the project and how the respective breakdown of costs had translated into outcomes; moreover, by assessing trends in the actual costs, examination on whether inputs have been consistent with the project's progress can be drawn. In the ex-post evaluation, the evaluator was provided with documentation from the Japan International Cooperation Agency (JICA) as well as the project's expert teams, and examined a breakdown of the gross amounts of the initial budget estimates and the actual costs. However, the acquired data did not allow a comparison between the itemized expenditures, which limited analysis of the project's efficiency.

3. Results of the Evaluation (Overall Rating: A⁹)

3.1 Relevance (Rating: ③¹⁰)

3.1.1 Relevance to the Development Plan of the Philippines

The "Medium Term Philippine Development Plan (2004-2010) (MTPDP 2004-2010)," in effect at the project's planning stage, cited administrative reforms as a key policy with the enhancement of government organizations. In particular improving public services was highlighted as one of nation's most important issues. Gloria Arroyo

⁹ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

¹⁰ ③: High, ②: Fair, ①: Low

(President at the time) called for improvements in basic public services, with the focus mainly on LGU water supply projects, in her “10 Point Agenda” as one of the country’s most important challenges in terms of specific strategies to help eradicate poverty. Furthermore, the project’s target region, Mindanao Island, suffered from critical poverty issues and was a key development area for the Philippine Government¹¹. The MTPDP 2004-2010 was still in effect at the completion of the project, and the project goal of improving administrative capabilities and strengthening local communities via improvements in water supply services was well aligned with the development policies of the Philippines.

3.1.2 Relevance to the Development Needs of the Philippines

As part of the decentralization process, the supply of water to residents was defined as a public service that fell under the responsibility of LGUs. In response, LGUs decided to build, operate, and manage water supply facilities in collaboration with community organizations such as the BWSA, and developing the capabilities to address these matters had become a pressing issue for LGUs. When this project was planned, LGU personnel in charge of small water supply did not have the technology to drill wells using scientifically calculated data; rather, drilling was conducted on the basis of past experience. Moreover, there was a lack of knowhow regarding organizing and operating community organizations for operation, maintenance, and management of water supply facilities. Upon completion of the project, it was also recognized that highly accurate drilling by LGU staff and support for community organizations were indispensable activities in order to provide water supply services in the region.

3.1.3 Relevance to Japan’s ODA Policy

Since 2000, the socio-economic development of the Mindanao region, a particularly challenged region of the country, has become a priority area of Japan’s ODA to the Philippines, based on the “Support Package for Peace and Stability in Mindanao.” The project is well aligned with this area in the sense that it supports the region by developing the capacity of the civil servants responsible for promoting decentralization.

This project has been highly relevant to the Philippines’ development plan, development needs, as well as Japan’s ODA policy. Therefore, its relevance is high.

¹¹ “Local Governance and Rural Empowerment Project for Davao Region Ex-Ante Evaluation Report.”

3.2 Effectiveness and Impact¹² (Rating: ③)

3.2.1 Effectiveness

3.2.1.1 Project Output

The following 5 Outputs were determined as necessary outputs to achieve Project Objective.

1) Output 1

Output 1 was “present situation of small water supply is analyzed.” The indicator for measuring the achievement of Output 1 was that “data of more than 360 Level 1 & Level 2 systems are consolidated in a Database.”

By the completion of the project, more than 1,000 pieces of information on water supply facilities had been consolidated in a database; these included data on barangays, water facilities, water sources, as well as Geographic Information Systems (hereafter, GIS). Groundwork on the specific issues related to the self-induced update, operation, maintenance, and management of the database by C/Ps had not been sufficiently well-laid by the time the project was completed. The reason for this was that data collection was the task of the project local consultants rather than the C/Ps, and the C/Ps’ opportunity to conduct this type of work was limited to the workshops where compilation of questionnaires and collection methods for various types of data were covered. Meanwhile, the aims established by the project had been met by the time it was completed, with LGU staff able to assess the current state of affairs to allow them to provide more effective public services by gathering and making use of the data needed to perform daily operations. The ex-post evaluation survey¹³ showed that, when beneficiaries of the project were asked to cite the database most relevant to their own line of work and were questioned on the degree to which they referred to such database at the time of ex-post evaluation, 95% (61 persons) of respondents replied that they used the databases in some form or another (see Table 1). This reflects the C/Ps’ value placed on the database which enable them to carry out the water supply services with high accuracy based on a more scientific data, which was not the practice of C/Ps prior to the project. It is also a reflection of the fact that the achievement of Output 1 laid out a foundation for C/P to further pursue project activities.

¹² Sub-rating for Effectiveness is to be put with consideration of Impact.

¹³ The survey had responses from 78 of the project’s direct beneficiaries, who included the C/Ps of LGUs in the DIDP who benefited from the capacity development training, as well as officers at lower tier local government bodies at town-level, with responsibility for implementing pilot projects. Although questionnaires had been previously distributed, when the ex-post evaluator visited individual LGUs with the local consultant, only very few of them had been completed. Consequently, the evaluator used the focus group discussion time for the beneficiaries to fill in the answers, using a method whereby each question was explained in English (or in the local language Cebuano as necessary) and each person was asked to fill in their replies on the spot.

Table 1 C/P referring to Project prepared Database

Type of Database	Barangay Information	Water Supply Facilities Information	Water Source Information	Community Organizing Related Information	Davao Region Statistics	Sub-Total
Number of C/P confirming it was the most relevant database	19	13	17	11	4	64
Out of which number of C/P not using the said database at all	1	1	1	0	0	3

Source: Ex-post evaluation survey

As described above, Output 1 had been achieved at the completion of the project.

2) Output 2

Output 2 was “human resources for groundwater development are developed,” and the indicators for measuring the achievement of Output 2 were that “participation rate to the training among the C/P of the Groundwater Group exceeds 80%” and “more than 70% of training participants are able to handle the electric prospecting device to obtain the accurate data.”

Prior to the project, the drilling locations for small water supply facilities installed by LGUs were decided on the basis of previous experience, with no precise examination of groundwater based on its evaluation or potential. In response to this, this project aimed to equip LGUs with the technical capabilities to enable a sustainable supply of safe water; bearing this in mind, this output was introduced to ensure the comprehensive training of staff to become capable of conducting searches for groundwater to allow the calculation of water reserves. The output targets were exceeded with an 83% attendance rate at the relevant training courses held during the course of the project and 80% of the participants having learned how to handle a resistivity meter. This was the first time that staff who had been engaged in small water supply projects in the LGUs were involved in selecting a project site using resistivity meters and scientific analysis. Time and time again, in the ex-post evaluation survey, LGU officials have mentioned how the ability to drill water wells with far greater precision has brought about a groundbreaking advance for the LGUs, an ability attributable to the knowledge and skills learned by the staff in the Groundwater Group during the project (such as utilizing hydro-geological maps,

evaluating groundwater potential of the prospective site, determining whether reserves are sufficient to meet demand, and drilling on these basis).

For the Output 1 related groundwater prospecting conducted under the guidance of experts as on-the-job-training (hereafter, OJT), C/Ps are now able to electronically search for water and suggest locations and depths for the drilling of pilot project wells, even without the Japanese experts; in addition, the practice of trying to blindly develop groundwater resources without measured data has disappeared among the former C/Ps. This means that this Output was achieved by the completion of the project.

3) Output 3

Output 3 was “human resources for facilitating community organizations to maintain small water supply facilities are developed,” and the indicators for measuring the achievement of Output 3 were that “participation rate to the training among the C/P of the Community Organizing Groups exceeds 80%” and “more than 70% of training participants are able to facilitate the formulation of Plan of Operation by BWSA for operation and maintenance.” The capacity to organize a community that was asked of C/Ps was incorporated as part of the project’s OJT and included a series of technical matters ranging from the establishment of the BWSA to its operation, maintenance, management, and accounting operations after establishment.

The rate of participation in training (80.8%) exceeded project indicator. In addition, the C/Ps from the LGU in Davao City and Island Garden City of Samal (hereafter, IGACOS) (the first cities that implemented pilot projects during the course of the project) used their course materials to help implement pilot projects in other LGUs. Exemplified by the effect of real practice oriented OJT approach to the guidance toward BWSA establishment as such, this Output was achieved by the time of the project’s completion. The C/Ps in charge of the LGU side, who were in the position of directly supporting BWSA community initiatives, were asked the significance and value of this Output in the ex-post evaluation survey of beneficiaries. Half of all Community Organizing Group C/Ps (18 of 36 valid responses) reported that prior to the project they had had no training or hands-on experience on community support and that the training received in the project was their first training on activities to organize the community. The project introduced simple accounting and methods for facilitating establishment and operation of BWSA. C/Ps practiced them through OJT in organizing BWSA and developed trusting relationship with the communities. The interviews conducted at the time of ex-post evaluation confirmed that the experience of the project’s OJT was extremely beneficial for the Community Organizing Group C/P to collaborate with local residents (the beneficiary of the public services).

According to the interviews held with BWSA executives who were involved in the post-project operation, maintenance, and management of the small water supply facilities established as pilot projects, the LGU officers in charge of community organizing guided them with preparation for establishing BWSA, action plan formulation, training on techniques required for operation, maintenance, and management, as well as book-keeping. Furthermore, up to the time of the ex-post evaluation, these officers have continued the practice of regular monitoring for early alert and response to the problems, the BWSA executives also noted.

4) Output 4

Output 4 was “human resources for small water supply are developed,” and the indicator for measuring the achievement of Output 4 was that “more than 60% of training participants are able to utilize the formats of hydraulic calculation introduced by the project for designing the small water facilities.” Because LGUs had had engineers in charge of work related to the installation of small water supply facilities, initially, the project did not assume inclusion of those engineers in the project’s capacity development initiatives. After the start of the project, the technical standards of these C/Ps were re-examined. It was then decided that it would be reasonable to set additional technical requirements in the form of an Output. This was a judgment made in order to fully attain the Project Purpose, and was thus an appropriate one.¹⁴ Through ordering construction work for the pilot projects and managing its process, both of which are activities under this Output, various knowledge was gained such as that on the problems that occur during construction, on process control, and on how to negotiate a balance between the opinions of landowners and those of stakeholders.

The engineers then participated in OJT with BWSA executives on the operation, maintenance, and management of the facilities (repairs and operation of the sterilization equipment etc.). This not only fostered their capacity to operate, maintain, and manage the facilities but also enhanced their capacity to offer guidance to BWSA that manage small water supply facilities in other part of the province.

This Output and its indicators were set after the project had confirmed the baseline of these C/Ps’ technical capacity. The idea of designing water supply facilities on the basis of figures obtained in a “pipe network calculation” was an idea that had not existed in LGUs before the project when such facilities were designed on rough estimates and previous experience. Thus, the pipe network calculation was an indispensable technical

¹⁴ The idea of introducing a full-time civil engineer for the project in each LGU was discussed during the ex-ante evaluation phase. However, this approach ran contrary to the concept of “enhancing pre-existing local administrative capacity,” which was an aim of the project. As a result, the project was started with the incumbent staff employed in the relevant tasks at the LGU.

element to improve the supply capacity of water services. This technique is separate from that for the development of groundwater incorporated in Output 2. It is a specialized technique that requires separate instruction and is thus addressed as a separate Output. This output was introduced after the Mid-term review, and as it needed to be achieved in a limited time period, focus was placed on the mastery of previously unlearned area for the C/P with even work experiences in small water supply projects. The acquisition of pipe network calculation skill was thus set as the target indicator for Output 4, which was achieved with “additional knowledge/skills.”

1) Output 5

Output 5 was “The improved procedure of delivering the small water supply services is compiled in a form of guideline,” and the indicator for measuring the achievement of Output 5 was that “a guideline on the small water supply is formulated, reflecting the experiences and learning from the pilot projects.”

By the time of the terminal evaluation, the “Guidelines for Small Water Supply Projects” had been completed. These guidelines split projects into three phases and recorded the procedures used in each phase; namely, (i) the planning phase of a small water supply project (holding meetings with stakeholders; determination of the various data that needs to be collected for groundwater development/design and the methods to be used in data collection, etc.); (ii) the implementation phase of the project (construction management; training on supporting the establishment of the BWSA, etc.); and (iii) the post-implementation phase (data management, networking with affiliated agencies, monitoring and evaluation, etc.). The contents also incorporated the lessons learned from the project activities by C/Ps through their involvement in the project; they provide suggestions for improvements and ways to address any problems that may arise in the future operation of small water supply facilities. Before completion of the project, the guidelines had been put into print and distributed to all the LGUs in the project; the signatures of the LCEs of 9 out of the 10 LGUs involved in the DIDP were obtained authorizing the adoption of the guidelines (the only signature not obtained in time for the project’s completion was that of the LCE of Davao City who was absent from his post; however, his signature was later obtained as expected). In the ex-post evaluation survey, of the 51 C/Ps involved in the compilation of the draft guidelines, 50 said that they had received the completed guidelines while the project was in progress. Thus, the guidelines, which were expected to be a guide on the provision of improved small water supply services even after the project’s completion, had been compiled on the basis of a series of lessons learned during the process of generating Outputs 1-4, and by the end of the project, Output 5 had been achieved.

3.2.1.2 Achievement of Project Purpose

The Project Purpose was that “the capacity of LGUs¹⁵ for delivering water supply services is improved,” and two indicators were set to measure the achievement. The following is an assessment of the achievement of the Project Purpose based on these indicators.

1) Indicator 1

“More than 70% of C/Ps become competent to apply the knowledge and skills obtained through their participation to the project” was Indicator 1. In a questionnaire distributed at the time of the terminal evaluation, 90.4% of C/Ps answered that they had gained the ability to apply the knowledge and skills learned during the project in practice. In addition, in the ex-post evaluation survey of beneficiaries, 92% of the 70 C/Ps who responded said that they felt the experience they had gained through the project training had sufficiently met the requirements for executing their duties right up to the time of ex-post evaluation. Thus, Indicator 1 was achieved by the time of the project’s completion.

2) Indicator 2

Indicator 2 was “Local Chief Executives (LCEs) in more than five (5) LGUs officially approve the guideline with their signatures.” All the LCEs of DIDP member LGUs, except Davao City LCE whose absence from the office delayed the process, signed to officially approve the guidelines by the completion of the project. Thus Indicator 2 was achieved.

Developing “supply capacity” in the Project Purpose refers to the improvement in the “technical capacity” of LGU staff, which was pursued through improvement in the small water supply project by LGUs. All the Outputs were achieved surpassing the levels set by the indicators to measure the achievement of the technical aspects of the Project Purpose. The project has established a system that allows the small water supply project initiatives of LGU staff to be implemented using improved methods, and has laid a foundation for impacts to emerge; as a result, the Project Purpose was achieved.

From the feedback obtained from C/Ps during ex-post evaluation interviews with DIDP-PMO, as well as from its survey, it was confirmed that the project had introduced improvements in the technical dimension of supply capacity of civil servants involved in small water supply projects in the regions targeted by the project. However, the degree to

¹⁵ Refers to 10 LGUs belonging to DIDP.

which these improved techniques are put to use for new water supply projects depend on the priority by each LGU on the sector including budget allocation to it. Consequently, whether increased supply capacity leads to actual growth in supply quantities require separate measures for evaluation.

3.2.2 Impact

3.2.2.1 Achievement of Overall Goal

The Overall Goal which should be achieved in three to five years after the project completion was that “The LGUs that participated in the project deliver the improved water supply service in line with the guideline that was developed by the project.” The indicator set to measure the achievement of the Overall Goal was that “at least one (1) water small supply project is implemented following the guideline in each of the LGUs where the guideline has officially been endorsed.”

With the exception of the LCE of Davao City, who was absent from his post and signed late, all the other LCEs (9 in total) of the DIDP member LGUs signed to endorse the guidelines compiled during the project before the project was completed. The ex-post evaluation has also confirmed that since the project completion, all the LGUs have implemented water supply projects in line with the project developed guidelines, based on scientific measurements and under collaborative schemes with the local community. In the ex-post evaluation survey carried out amongst C/Ps who had participated in the capacity development training or pilot projects (78 valid responses), 70% (55 C/Ps) said that not only did they personally carry out their duties related to small water supply projects in line with the guidelines, did they also recommend to any colleague or subordinate who had not had the chance to benefit from OJT to refer to the guidelines when they offer technical guidance or share data. As a result, by using the methods introduced during the project, even those who were not involved in the project were able to offer services with a greater degree of precision than they would prior to the project. For example, in Panabo City, which replied that the guidelines were put to frequent use, 20 of the 40 barangays in the city referred to the guidelines when enacting water management ordinances. Furthermore, when DIDP member LGUs are carrying out technical transfers to lower tier LGUs, they used the guidelines compiled by the project as training materials with the project’s C/Ps serving as instructors with the guidelines as their textbooks.

Written replies from all the LGUs confirmed that they had implemented small water supply projects, with a total of 302 such projects in the 10 LGUs. In addition, outside those counted as their own projects, DIDP member LGUs provide technical support on water supply projects (such as exploration of groundwater; water quality examination;

book-keeping training to the BWSA) which are budgeted and executed by lower tier LGUs at the town level. They result in the frequent, proactive implementation of community activities as an application of the capacity development activities conducted in the project. It is worth noting that some Water Districts¹⁶ have absorbed the BWSA in order to supply local communities with more convenient water supply projects,¹⁷ providing illustrative application of enhanced capacity developed through the project activities.

As described above, under the coordination of DIDP-PMO, all the participating LGUs have independently mastered the project improved methods and mechanisms¹⁸ which proceeded under the guidelines, with each of them implementing one, or more, small water supply projects; as a result the overall goal has been achieved.

3.2.2.2 Other Impacts

The techniques and know-how on organizing the local community learned in the project have been applied to help strengthen sectors other than small water supply (e.g. fishermen's unions; cooperative unions; health related initiatives, etc.). In particular, there is high demand from the barangays for technical training in simple book-keeping methods. In addition, when the Sarangani Province was planning the construction of a hospital in Sarangani Municipality lying adjacent to the project's target region Davao, a request was placed to make use of the groundwater exploration techniques for resistivity survey on the planned site. This example shows how the effects of improving practical abilities in small water supply projects achieved by the project have spread to other sectors.

The project has achieved the Project Purpose of "The capacity of LGUs for delivering water supply services is improved." The attainment of the Overall Goal of "The LGUs participated in the project to deliver the improved water supply service in line with the guideline that was developed by the project" has also been confirmed; the project effects have been realized as planned. Therefore, effectiveness/impact of this project is high.

¹⁶ In communities where Water Districts are able to secure profits in the supply of water, due to scale of population served and/or geographical and social conditions of the location, there are examples of the LGUs approaching the Water Districts and transferring the BWSA-managed water supply services to the Water Districts.

¹⁷ A case involving the Community Organizing Group of IGACOS LGU.

¹⁸ To assess and design water supply facility functions and drilling locations for groundwater sources in line with demand on the basis of scientific examination and surveys; and at the same time to implement initiatives to organize the local community group to operate, maintain and manage the facilities after construction, and to ensure that the community group can do so when the facility goes operational and operations are transferred to the community.

3.3 Efficiency (Rating: ②)

3.3.1 Inputs

Inputs	Plan	Actual
(1) Experts	Chief Advisor/Local Governance, Training/Coordinator, Hydrogeology, and Small Water Supply Planning as required; Community Organizing and IT Public Relations to be procured as local consultants.	6 for Short-Term Experts (Chief Advisor, Hydrogeology, Small Water Supply Planning, Community Development/Local Governance, GIS/WEB, Coordinator/Water Supply Facilities)(39.22MM in total)
(2) Equipment	Survey instruments for groundwater development, training materials, vehicles for research, computers to compile results and further analyze, etc. are to be provided.	Electric prospecting device and its associated equipment, computers, GIS server, etc. 17 million yen
(3) Local Cost	As per required for the implementation of the project	152 million yen
Total Project Cost	197 million yen	280 million yen
Local Cost	Counterpart budget	3.5 million Philippine Peso

3.3.1.1 Elements of Inputs

Inputs on both the Japanese and the Philippine side were made mostly as planned, with the exception of the fees paid to local consultants and NGOs who were employed as necessary.

The fact that the allocation plan of monthly dispatch of experts (M/M) was extremely limited had been cited as a constraining factor¹⁹; however, the experts devised ways to adjust local work periods with an understanding of the timing of the project activities which allowed C/Ps the maximum number of opportunities to benefit directly from expert

¹⁹ Information provided by JICA.

instruction²⁰. As a result, in answer to the ex-post evaluation survey of beneficiaries, 92% of C/Ps (62 C/Ps) who received direct, expert instruction said that they felt they had benefited from the high level technical abilities of the experts. C/Ps pointed out that the reason for their high evaluation of the expert instruction, time constraints notwithstanding, was the way that the experts carried out OJT on the basis of “enquiry” to increase the C/Ps’ critical thinking. In terms of the equipment provided, to date, the resistivity meters have been managed by DIDP-PMO and the loan system set up during the project, which allows the LGU to borrow the meters as required, is functioning. Demand is very high and the waiting list is already two years long. Although the resistivity meters have not needed to be serviced²¹ yet, rental fees have been set to ensure that any servicing costs can be met immediately when the need arises. The one vehicle that was provided to the DIDP-PMO was being used, for instance, to monitor the LGU at the time of the ex-post evaluation; and of the equipment procured to the individual LGUs, the GPS and water level meters were in frequent use across the board till the time of the ex-post evaluation. With regard to the PCs, there were variations between the LGUs; some LGUs replaced PCs when they stopped working, while others carried out repairs and continued using them. The GIS software was hardly being used at the time of the ex-post evaluation, since the training for the software was quite advanced, the C/Ps in the LGUs only partially covered the entire training contents, and thus the software use did not take hold in the LGUs. In addition, some equipment that was ordered exposed the project to delivery schedule delay, however, DIDP-PMO coordinated between the LGUs and the equipment suppliers, and the equipment was installed during the project period.

3.3.1.2 Project Cost

Project costs were higher than planned, with actual costs of 280 million yen, against the planned budget of 197 million yen (i.e. 142% of the plan). Expert inputs and equipment grants were in line with the plan, but it seems that consultant/NGO hiring that took place with the fee expense (which was 74.8 million yen) was responsible for the budget overrun (which had not included these costs in the original budget breakdown). When questioned on local consultants and NGOs in the ex-post evaluation survey of beneficiaries, 62 of the 78 respondents (79%) said that they had directly benefitted from their services during the course of the project, with most of them (60 C/Ps; 97%) admitting that local consultants and NGOs had played a substantial role in the project’s

²⁰ The experts’ names were frequently mentioned by C/Ps during focus group discussions and even in individual interviews, which implied that the initiatives deployed had fostered a sense of unity between them and the experts.

²¹ Inspection and repair work that involves stripping down the parts, cleaning, and reassembling the units so that they are as good as new.

implementation. After the mid-term review, the development of human resources necessary for the planning, design, and construction management of small water supply facilities was newly added in the form of Output 4, which resulted in the content of the project's initiatives increasing beyond the scope of the original plan. Given this, the inputs of local consultants and NGOs were a reasonable expense in the sense that they ensured the overall efficiency of the project by relieving, as far as possible, the added burden that would otherwise have been placed on stakeholders.

3.3.1.3 Period of Cooperation

The cooperation period was 36 months, which was as planned (100% of the plan).

Although the project period was within the plan, the project cost exceeded the plan in order to accommodate achievement of the additional Output. Therefore, efficiency of the project is fair.

3.4 Sustainability (Rating: ③)

3.4.1 Related Policy towards the Project

The current government's "Philippine Development Plan 2011–2016" cites the supply of safe water as a national priority, from the point of view for achieving the Millennium Development Goal (MDG) 7; the plan also recognizes the key role of LGUs as the authorities responsible for small water supply projects. The "Davao Regional Development Plan 2011–2016" also expects to achieve MDG 7 in the region as a whole, but it expresses concern with regard to the ongoing need for new facilities of Level 2 or above in the region's rural areas (i.e. those areas to which entries by the Water Districts are not probable, and where LGUs are responsible for water supply projects). As a reflection of this situation, national programs, such as the 20 Percent Development Fund²² and the SALINTUBIG²³ and PAMANA Funds²⁴, as well as the World Bank Mindanao Rural Development Program (MRDP), continue to contribute project development funds for use in small water supply projects in the region. It shows that the initiatives incorporated in this project, improving the supply capacity of water supply services and continuous implementation of improved water supply services, are of great importance

²² The budget given to each LGU every fiscal year from the central government in the form of internal revenue accounts.

²³ The full title of the program is Sagana at Ligtas na Tubig sa Lahat, and it is a national program run by the Ministry of Health that aims to ensure safe drinking water in line with MDG 7. The program is funded in accordance with the General Accounting Act (GAA) and Panabo City's LGU has received a payment.

²⁴ This is an aid program that targets regions suffering the effects of domestic conflicts and falls under the jurisdiction of the Office of the Presidential Adviser on the Peace Process (OPAPP). Eastern Mindanao lies within its target area and in 2011 the program contributed funds to the Davao Oriental Province LGU enabling the installation of five Level 3 facilities (including some that were upgraded from Level 2), as well as improvements and repairs in fifty-six Level 2 sites.

for the DIDP.

3.4.2 Institutional Aspects of the Implementing Agency

From 1993 to the time of ex-post evaluation, there has been no change in the structure of the DIDP, the institution that coordinates the LGU cluster in the Davao region. Three ex-C/Ps of the project (who were in charge of groundwater development, small water supply, and community organizing, respectively) form the heart of the institution's secretariat, the DIDP-PMO, and provide technical support on guidance and training to staff in the relevant departments at the 10 member LGU as well as to BWSA under the supervision of those LGUs. The set of resistivity meters provided to the DIDP are kept by the DIDP-PMO and lent out to the LGU as requested in accordance with the regulations on rental fees and the rental guidelines, either of which were created during the course of the project.

During the project, the Planning and Development Coordinator (one person per LGU), who was in charge of supervising the LGUs' Planning and Development Offices, acted as the project coordinator on the LGU side and liaised with the DIDP-PMO. Under the coordinator, staff in the related department within each LGU set up their own PMU and formed groups for groundwater, small water supply, and community organizing to participate in project activities. Each of the LGU included staff from the engineering office in the Groundwater Group and Small Water Supply Group. Community Organizing Group was drawn mainly from staff in the Planning and Development Offices responsible for overall management of LGU public service delivery²⁵.

Prior to the project implementation, no collaborative network existed among departments with C/Ps belonging to various departments, where principles on which department should take the lead role at which stage of the water supply project missing. At the completion of the project, therefore, it was hoped that each LGU form some kind of "Small Water Supply Team" to maintain a sustainable network of cooperation. However, this decision was left to the individual LGUs, as the opinions of the LCE differed with regard to the suitability of appointing a permanent task force and the priority of each LGU was different regarding any given project.

After the completion of the project, despite the fact that the details vary from LGU to LGU, the network formed between the individual C/Ps during the project implementation has led to the establishment and sustenance of a workflow between departments that is generally consistent with that described below, and there have been no problems observed in collaboration for the implementation of water supply projects. When the Planning and Development Office receives a request to install a small water supply facility, it first

²⁵ Health Office Staff was included in the case of Davao City.

decides where drilling should take place on the basis of the results of a water source analysis conducted by the Engineering Office (C/Ps assigned to the Groundwater Group in this project) using the scientific methods introduced by the project. Then, in the same manner, the Engineering Office (C/Ps assigned to the Small Water Supply Group in this project) takes over the process to work on the design of the water supply installation and its construction, based on the procedures introduced by the project. At the same time, the officer with responsibility for organizing the community (C/Ps assigned to the Community Organizing Group in this project) supports the preparatory phase of BWSA establishment by guiding the community on how to operate, maintain, and manage the small water supply facility after it is installed.

In addition to the original body of C/P that included focal persons in charge of the three areas, the project increased the number of C/P by adding alternate focal persons to each of these three areas, that led to a structure able to respond flexibly to personnel changes or retirements that might occur after completion of the project (at the time of completion C/Ps numbered 104 persons). From the project completion to the time of ex-post evaluation, nine of the former C/Ps transferred both within and outside the LGU, or retired. However, the human resources necessary for operations have since been secured and deployed by employing new recruits and making transfers to the departments concerned. The recruitment of personnel will continue after the ex-post evaluation and be managed by the LGU human resource departments. As with the DIDP-PMO, the procedural framework in each of the LGU is well-established to sustain the life of the project.

3.4.3 Technical Aspects of the Implementing Agency

At the time of the ex-post evaluation, no technical problems were observed in staff from the Engineering Office in individual LGUs using the materials and equipment provided by the project to check the condition of water sources and identify suitable sites for water supply facilities (Groundwater Group) and in those conducting the design and installation of water supply facilities (Small Water Supply Group) on the basis of supply reserves and the number of users and not on the basis of past experience alone. In addition, it was confirmed by the ex-post evaluation interviews with the communities supported by the pilot project for BWSA establishment that the officers in charge of organizing the community in the Planning and Development Office were carrying out their duties in accordance with the procedures introduced in the project, initiating support for the operation, maintenance, and management of the BWSA prior to the construction of facilities. The staff in charge of organizing the community maintains regular contact with the BWSA and accepts regular reports from them, including financial reports. Under the

system in operation, any technical problems are passed on to the officer responsible for small water supply installations in the Engineering Office who deals with any repairs that cannot be resolved by the technical capacity available at the BWSA; functioning of such system reflects in BWSA's trust in the LGU.

The water level meters and multi-parameter meters donated to each LGU continue to be used and maintained by the LGUs. Including how to handle equipment as mentioned above, further technology transfer to staff who did not participate in the project training and staff newly assigned to the LGUs are conducted during OJT as part of their work at the LGU. As a department wide effort with former C/P taking the lead, these new or transferred staff tasked with groundwater development and community organizing are made to accompany the former C/P to the site and community meetings; in the case of staff tasked with small water supply facilities, design and programming using the pipe network calculation formula are instructed.

In addition, DIDP-PMO makes regular visits to monitor the situation in member LGUs and ensures the opportunity for DIDP-PMO, the LGU, and the BWSA to share problems and examine solutions. DIDP-PMO also assists in planning OJT and implementing trainings to ensure that when LGUs are transferring the technology they learned during the project to other lower ranking LGUs, their instruction reflects experiences and knowledge gained in water supply projects already implemented in other LGUs.

From interviews held with LGU officials, they feel that these improved techniques and systematic approaches have led to more efficient operations when DIDP member LGUs are working on small water supply, and therefore the prospect of their continued use of the techniques introduced during the project is high.

3.4.4 Financial Aspects of the Implementing Agency

The implementing agencies for this project, DIDP-PMO and the LGUs, have secured ongoing funding for a small water supply budget (as described below, this is the total of a project budget allocated from the development funds and a current budget to be appropriated for operation, maintenance and management). Since the completion of the project, the average per LGU budget has been the equivalent of 5.9 million yen (2011); 21.7 million yen (2012); 5.6 million yen (2013); and 3.1 million yen (2014 estimate) The expenses on construction of new water supply facilities and large-scale improvement works are normally disbursed from the budgets paid to LGU for use in small water supply as a part of national programs coming mainly from the 20% Development Fund, or the SALINTUBIG or PAMANA funds. In addition, some LGUs have also been allocated budgets from the World Bank Mindanao Rural Development Program (MRDP) for its

drinking water component operations²⁶. In contrast, the operating budget allocated from the LGU's own budget is spent on repairs and simple improvement works that the BWSA cannot handle.

As with other regions within the Philippines, variations in the annual fiscal budgets are affected by the changes in the amounts allocated from national program contributions and development budget managed by the members of parliament. However, within the scope of these budgets, the individual LGUs are working on projects on a priority basis, and there have been no problems in LGU implementation of plans for small water supply projects carried out in each fiscal year. Furthermore, the BWSA have developed detailed regulations for the operation, maintenance, and management of the facilities constructed as pilot projects under this project. Water supply user fees are set to allow funds to be secured for repairs, and these fees are collected in accordance with BWSA regulations.

The DIDP-PMO finances the cost of its activities from membership fees paid by member LGUs, and it secures the costs for the monitoring of small water supply projects from the DIDP-PMO monitoring budget. DIDP-PMO manages the resistivity meters provided by JICA and charges a user fee when lending the meters to the LGU to cover the cost of repairs. The terms and methods of these loans as well as maintenance and repair plans are summarized in the guidelines prepared during the course of the project. In the three years after completion of the project, from August 2010 to December 2013, the meters had been loaned approximately 30 times, showing that the methods on water supply projects introduced by the project have become well established.

As shown above, C/P agencies have been on track to secure budgets for small water supply projects, as well as costs for monitoring and maintenance/repair of materials and equipment, and as a result, there is no concerns in the financial aspects.

No major problems have been observed in the policy background and the institutional, technical, financial aspects of the implementing agency. Therefore, sustainability of the project effects is high.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

This project raised the capacity of LGUs in the Davao region to improve the service provision of water supply through human resource development training to those LGU staff tasked with carrying out the relevant work. This initiative is well aligned with development policy and needs in the Philippines, as well as Japan's ODA policy. Thus,

²⁶ Mati City and Panabo City. The accuracy and speed that accompanied the preparation of design and specification document using the techniques developed by this project were noted by the external organizations, and granted Panabo City LGU with a priority status for budget allocation.

the relevance of this project is high.

Prior to the project, the staff had designed facilities based on approximate, rule-of-thumb estimates and empirical rules. These staff learned how to evaluate ground source water quality and calculate potential reserves and changed the method of analysis for designing optimal water supply facilities to one that applied a pipe network calculation formula. Furthermore, the project fostered the capacity of the staff to facilitate community organizing by providing technical assistance on how to establish community organizations that manage the maintenance of small water supply throughout the post-operational stage. Procedures for the water supply service, which were carried out under a framework of cooperation with local residents, based on the experiences above and the scientific measurements, were established in the form of a set of guidelines. By the time it was completed, the project had achieved its Project Purpose and satisfied all its indicators. Since then the small water supply services have been implemented using the improved techniques, and thus the effectiveness/impact of the project is high. Meanwhile, although the project outputs were achieved on schedule, the actual costs exceeded initial project estimates due to the inclusion of an additional Output during the project implementation stage; as a result, the efficiency is fair. The improved water supply services introduced in this project have been established as each LGU having instituted small water supply project implementation procedures, where no financial concerns have been observed. Therefore, sustainability of the effects realized by this project is high.

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

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

The following two recommendations are made to the DIDP-PMO.

(1) Enhancing the Role of the DIDP-PMO as Knowledge Manager

There is a wide range of LGUs that participate in the DIDP, from relatively modest cities to Davao City (the 3rd largest in the Philippines) and even some participating LGUs who represent individual provinces as a single unit. Therefore, the scope and degree of roles played by each LGU on small water supply projects vary. Consequently, although they may be provided with technical support and information from the DIDP-PMO, the LGU will respond in line with the situation in which they find themselves placed. For example, there was the initiative that the IGACOS LGU's Community Organizing Group became involved with, which showed a new trend in having the BWSA absorbed into the Water District in order to supply the local community with more convenient water supply operations. There is also the case of Panabo City's LGU that was able to access funding

from donor programs owing to its improved ability using techniques learned in the project to provide design/specification documentation with more accuracy and speed. To date, the main role of DIDP-PMO has been the provision of information and technology as a technical support hub. In the future, the DIDP-PMO will enhance its function by employing methods such as absorbing and organizing information on significant individual LGU initiatives, and then compiling databases to be posted on a website and publicizing the experiences of its member LGUs. This, in turn, could lead to further improvements in the capacity to supply small water services across the DIDP as a whole.

(2) To support member LGU, having taken into account improvements in access ratios to safe water across the region as a whole.

The main task of the DIDP-PMO is to provide technical assistance as requested by member LGUs. However, the obligation to supply water throughout DIDP area is to somehow ensure “access to safe water” in the region’s rural areas (i.e., those areas to which entries by the Water Districts are not probable and where water supply are run by LGUs). The Davao Regional Development Plan (2011–2016) has raised concerns on this very point. An objective of the Development Plan is to ensure access to safe water for 95% of the region’s population by 2016. This breaks down into access to Level 3 facilities for 40% of the population; access to Level 2 facilities for 35%; and access to Level 1 facilities for 20%. In other words, the calculations are based on approximately half of the target population having access to Level 1 and Level 2 water supply facilities, installed primarily by LGUs.

Under current practices, DIDP offers individual support to LGUs on the basis of the requests it receives and does not necessarily prioritize assistance to cases where it is more difficult to improve access rates. Using improved methods, the small water supply projects constructed by this project are able to deal with challenges in water supply in a more efficient and reliable manner. Consequently, in the future it is hoped that when DIDP is providing technical assistance to the BWSA or other similar organizations, it will prioritize LGU initiatives in areas where there are lower rates of access, and so contribute more directly to improving access rates in the region as a whole.

4.2.2 Recommendations to JICA

None

4.3 Lessons Learned

- (1) Effectiveness of the assistance well aligned to support the challenges/needs facing the implementing agencies in their day-to-day administration

The C/Ps who participated in this project and formed the target of the technology transfer were officials highly educated in the field, who had passed the civil service examinations and generally (although not applicable to all C/Ps) held careers in civil service of mid-rank or higher; and many of them were engineers. Nonetheless, it was pointed out at ex-ante evaluation phase of this project that it was common practice, when drilling wells for the purpose of constructing water supply facilities, to rely on past experience of those carrying out the drilling in the development of groundwater. To those LGU staff, the project introduced techniques such as deciding facility site locations on the basis of scientific measurements, designing facilities and instructing the local community on how to maintain and manage facilities, made them achieve remarkable efficiencies in comparison with the procedures used previously and enabled them to provide accurate, waste-free services to the community; all of which led to their enthusiastic participation in the project.

To date, those concerned with the project continue to feel its significance thanks to the applicability of learning C/Ps obtained from the project to their day-to-day operations. The project focused on civil servants' ability to provide small water supply and highlighted their performance improvement in a visible manner. As a result, this led to recognition on the part of the community in receipt of these public services, which further boosted motivation of the staff of local administration bodies. Although local administration encompasses a wide range, one of the reasons for the success of this project is that it focused on a sector with high demands/development issues and demonstrably improved the work processing capacity of the C/Ps. This should prove helpful for streamlining the outputs and initiatives of other projects.

- (2) An enquiry based approach to technical assistance that promotes “cultivating awareness for solidifying learning”

The experts themselves pointed out that the allocation plan of monthly dispatch of experts (M/M) for the project was limited, but all the C/Ps who responded to the ex-post evaluation survey of beneficiaries stated that the experts had made a significant contribution and that “being able to learn directly from experts with high levels of technical ability was extremely useful.” During OJT, the experts did not provide C/P with ready-made solutions; instead they taught and introduced topics by making a comparison of the procedures traditionally employed and new, improved methods. They asked C/Ps

“How should we tackle this situation?” and questioned them on the differences between the “improved methods” and their traditional approaches. When the experts were out of the country, the C/Ps and local consultants/NGOs continued to their practice, which ensured the opportunity for them to consolidate the lessons they had learned with the experts. Thus, OJT was organized so that the experts offered direct instruction to C/Ps to enhance their awareness, and, with the help of local consultants and NGOs, C/Ps could apply this awareness in practice when the experts were not around. This resulted in a system that maintained C/Ps’ level of interest in the project’s initiatives and ensured these levels did not fall. This type of integrated approach towards technical assistance, where experts cultivate awareness which is then consolidated by local consultants/NGOs, is not limited to local government projects and may well serve as a reference when examining implementation structure for other projects.

BOX: Implications from the results of the ex-post evaluation related to the planning and implementation of capacity development projects for local government bodies

Japan International Cooperation Agency (JICA) has implemented a number of technical cooperation projects aimed at improving public services through the enhancement of local governance functions. In an effort to provide a highly relevant reference for use in the planning and implementation of projects in similar fields, a cross-sectional comparison of the ex-post evaluation results of two recent projects was conducted; namely the “Local Governance and Rural Empowerment Project for Davao Region (LGREP)” (2007–2010) conducted in the Philippines; and the “Capacity Development of Provincial Rural Development in Northern Provinces (PRDNEP) (2007–2011)” project conducted in Cambodia. The projects were carried out to enhance the capacity of local governments that had assumed greater responsibility for the provision of public services to the community under national policies that promoted decentralization, and both were implemented in target regions that faced many development challenges. By time of the projects’ completion, each had achieved its Project Purpose of ensuring that C/Ps had acquired, by means of hands-on training, the skills deemed necessary to allow them to carry out their public administration duties. However, after completion of the project, LGREP sustained the effect (capacity cultivated by the project in public service provision), whereas in PRDNEP, partly because no budget has been allocated for development projects since the project completion, there has not been new development project implementation using the knowledge and experience learned during the project. Below is a gist of the contrasting elements of both projects that affected the sustainability/further succession of outputs by the C/Ps themselves after the projects’ completion.

- LGREP focused on the “capacity to provide services” in small water supply and established improved techniques. On the other hand, PRDNEP worked to foster a new initiative in the locale; namely, the “capacity to formulate development plans.” In the case of PRDNEP, the capacity development target group had a wide range of duties, and as a result, there were no strong overarching links built to their various day-to-day duties.
- LGREP assessed the capacity of stakeholders (other than those already included in the project’s target) who were necessary to ensure the solid achievement of its objectives. Part way through the project, it added these stakeholders as its target as well as added a new output (Small Scale Water Supply Group) accordingly. Similarly, part way through the project, PRDNEP tried to refine its target. However, for the differences in the levels of government tiers at the two provinces that formed the target groups, and for the varied nature of the services provided by each target group even within one province, the project’s aim to work on multiple sectors inevitably required individual responses to different service field. As a result, the effort did not lead to streamlining the scope of the capacity that needed to be enhanced.
- With the LGREP, training was conducted and consolidated in line with C/Ps’ specific, everyday tasks, such as developing groundwater and organizing communities, which in turn led to the ability to apply their knowledge to the daily operations after the project completion. However, in the case of PRDNEP, on the whole, primary focus went to experiencing cycles of pilot project implementation and less of it to acquiring the necessary basics that would lead them to apply their training to the individual tasks needed during each phase of the cycle.
- LGREP, in order to achieve the goals, as stated above, added an additional target to the project, which led to forming an integrative process for the implementation of the water supply projects that connected each of the relevant departments in the local government—a process that was carried forward and sustained to the time of the ex-post evaluation. PRDNEP targeted multiple levels of government and sectors, and the business and duties that fell within the jurisdiction of these government bodies and sectors were not involved in commonly shared implementation procedures. Consequently, scope for within the organization formulation and establishment of implementation process for development projects was limited.

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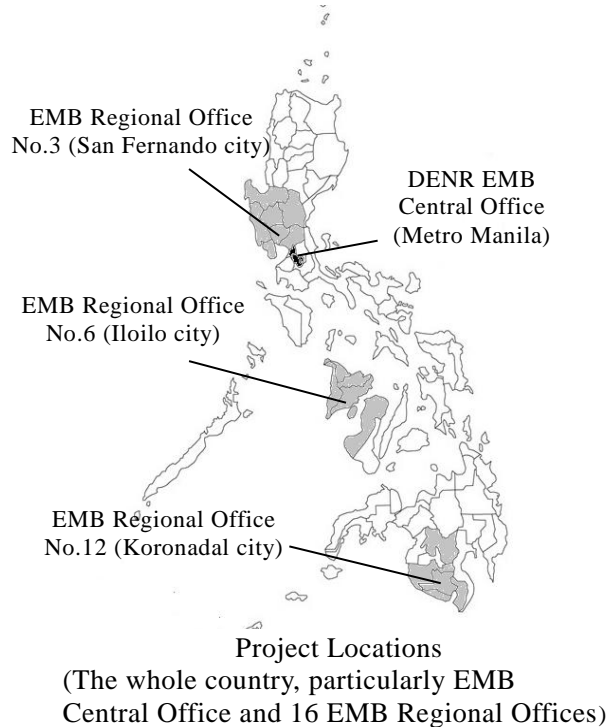
Ex-Post Evaluation of Japanese Technical Cooperation Project
“Capacity Development Project on Water Quality Management”

External Evaluator: Miku Watanabe, IMG Inc.

0. Summary

The Capacity Development Project on Water Quality Management (herein after referred to as “the Project”) aims at strengthening the overall capacity of the Environmental Management Bureau (herein after referred to as “EMB”) for water quality management required to implement the priority actions mandated under the Clean Water Act (herein after referred to as “CWA”) implementing rules and regulations. This project has been highly relevant to the Philippines’ development plan, development needs as well as Japan’s Official Development Assistance (herein after referred to as “ODA”) policy; therefore, its relevance is high. Through the Project, the Integrated Water Quality Management Framework has been formulated, and EMB Central Office’s capacity of supporting Regional Offices and the Regional Offices’ water quality management capacity were enhanced; therefore, the Project Purpose has been successfully achieved (The Central Office and Regional Office are hereinafter referred to as “CO” and “RO,” respectively). Since 11 of 16 ROs are at the stage of formulating the Action Plan and have yet to implement it, the Overall Goal has been achieved at a limited level; however, EMB ROs are equipped with Water Quality Management Section’s staff who have administrative and technical know-how, and the cooperation with other relevant agencies has been established. Therefore, effectiveness/impact is fair. Although the Project period was within the plan, the Project cost exceeded the plan. Therefore, the Project’s efficiency is fair. No major problems that affect the Project’s sustainability have been observed in the policy backgrounds or in the institutional, technical and financial aspects of the implementing agency. Therefore, the sustainability of the Project’s effects is high. In light of the above, this Project is evaluated to be satisfactory.

1. Project Description



Marilao River in the Province of Bulacan, which was designated as a Water Quality Management Area

1.1 Background

In the Philippines, water quality has been deteriorating due to population growth and the concentration of industries caused by economic development. The lack of well-maintained environmental infrastructures such as urban drainage systems and industrial waste disposal plants have made severe impacts especially on public health, and the fishing and tourism industries. In addressing the water pollution, the CWA was enacted in 2004 followed by its implementing rules and regulations in 2005. The Act stipulates the development of policy frameworks and supporting technical guidelines, the designation of Water Quality Management Areas (herein after referred to as “WQMA”), and the formulation of the WQMA Action Plan conducted in partnership with stakeholders with conflicting interests (Local Government Units [herein after referred to as “LGUs”], government agencies, commercial and industrial entities, Non-Governmental Organizations [herein after referred to as “NGOs”], local community groups, etc.) The development of EMB’s overall water quality management capacity including technical and policy aspects was a pressing issue in order for EMB as the implementing agency of the CWA to carry out its new duties and responsibilities required by the CWA. In this context, the Government of the Philippines requested the Government of Japan to undertake a technical cooperation project to develop the capacity of EMB. In response to the request, the Record of Discussion to launch the Project were signed on October 24, 2005.

1.2 Project Outline

Overall Goal		Under initiatives of the WQMA Governing Boards, industries, commercial entities, LGUs, and other public organizations take necessary actions for achieving the water quality goal established in the WQMA Action Plans ¹ .
Project Objective		Capabilities of EMB Central and Regional Offices to implement priority actions mandated under the CWA Implementing Rules and Regulations are strengthened.
Outputs	Output 1	Integrated policy framework for Water Quality Management based on the CWA is established and supported by adequate procedural guidelines and training for EMB staff.
	Output 2	Capacity of EMB Central Office to lead and support the Regional Offices is strengthened.
	Output 3	Capability of EMB Regional Offices to establish and support WQMAs and related institutions is strengthened in 3 pilot regions ² .
	Output 4	Overall capability of EMB Regional Offices in water quality management is strengthened in 3 pilot regions.
Inputs		<p>Japanese Side:</p> <ol style="list-style-type: none"> 1. Experts: 9 for Short-Term experts 2. Local consultant: 459.1 Man/Month (M/M) 3. Training in Japan: 4 Participants 4. Equipment Approx. 81 million yen <p>Philippine Side:</p> <ol style="list-style-type: none"> 1. 26 Counterpart Personnel (C/P) 2. Project Implementation Cost Maintenance fee of equipment, Utilities, C/P's travel expenses (gasoline, airfare) for attending Project activities
Total cost		758 million yen
Period of Cooperation		January 2006 – January 2011
Implementing Agency		The Environmental Management Bureau, The Department of Environment and Natural Resources (DENR)

¹ WQMA Governing Board consists of members of LGUs in WQMA, government agencies, industries and commercial entities, with DENR representatives (EMB regional directors in many cases) serving as the chair of the Board. The Technical Secretariat of the Board, consisting of EMB Regional officers, provides technical support for the Board.

² The three pilot regions are RO 3 (Marilao-Meycauayan-Obando River System WQMA in Luzon), RO 6 (Iloilo-Batiano River System in Visayas), and RO 12 (Sarangani Bay WQMA in Mindanao).

Cooperation Agency in Japan	N/A
Related Projects	Long-term Expert “Environment Policy Advisor”

1.3 Outline of the Terminal Evaluation

The results of the terminal evaluation carried out in November 2010 are presented below.

1.3.1 Achievement of Overall Goal at the time of the Terminal Evaluation

Using the procedural guidelines developed under the Project, EMB has been carrying out the classification of water bodies and the designation of WQMA. EMB CO has identified 16 priority water bodies as candidate sites for WQMA. EMB has set a policy to establish at least one WQMA for each region and has allocated funds for such regions that already designated WQMA. It was expected that WQMA implementation would be facilitated in non-pilot regions in a broader scale when water quality management funds become available. (The rating for the Project’s impact was moderate.)

1.3.2 Achievement of Project Objective at the time of the Terminal Evaluation

Through the Project activities, almost all the procedural guidelines and operational manuals for the implementation of the CWA have been formulated and piloted in pilot regions. Three pilot regions have carried out WQMA related activities based on the WQMA Action Plan in cooperation with LGUs and other relevant stakeholders. The results of the study conducted during the Project in 2006 and 2010 demonstrated the improvement of EMB CO’s and RO’s capacity in institutional, organizational and individual aspects compared with those in the Project’s outset. The Project Purpose has been thus achieved.

1.3.3 Recommendations at the time of the Terminal Evaluation

Five recommendations of the terminal evaluation and the status at the ex-post evaluation were described as below.

Recommendations From the Terminal Evaluation	Status At the Ex-Post Evaluation
The remaining tasks of technical assistance should be completed in order to fully accomplish the Project’s objectives during the Project period.	Planned technical assistance was completed during the Project period. The Project Purpose has been achieved by the Project completion.

EMB should make their best effort to expedite the approval process of the procedural guidelines and manuals developed under the Project.	While there are some guidelines pending approval at the time of ex-post evaluation, EMB has taken appropriate actions within its capacity including the timely revisions and reviews of guidelines.
EMB and Japan International Cooperation Agency (herein after referred to as JICA) should closely monitor activities of WQMA Governing Board in 3 pilot regions and extend support if necessary.	After the Project completion, DENR and JICA have been carrying out the Project Implementation Review Meeting 2-3 times every year and monitoring the activities of WQMA Governing Boards.
EMB should make their best effort to increase efficiency through restructuring the operations of Regional Offices and increase the number of staff.	EMB Regional Offices have conducted WQMA related activities in close coordination with staff in other sections. To address work overload of existing staff, the increase of ROs' personnel is expected during 2014.

2. Outline of the Evaluation Study

2.1 External Evaluator

Miku Watanabe, IMG Inc.

2.2 Duration of Evaluation Study

Duration of the Study: September 2013 – July 2014

Duration of the Field Study: November 3-19, 2013, and February 2-11, 2014

2.3 Constraints during the Evaluation Study

The Project sites are situated across the whole country, which are EMB CO in Metro Manila and the 16 EMB ROs. Due to time constraints, the evaluator made visits to EMB CO, 3 pilot ROs (i.e., Region 3, 6, and 12), and 1 non-pilot RO³. Information regarding the rest of the ROs was collected from interviews with EMB staff and documents or data provided by EMB CO.

³ One non-pilot RO (Region 1) was selected after consultation with the implementing agency using the criteria of carrying out exemplary WQMA activities and demonstrating good practices.

3. Results of the Evaluation (Overall Rating: B⁴)

3.1 Relevance (Rating: ③⁵)

3.1.1 Relevance to the Development Plan of the Philippines

In the Mid-Term Philippine Development Plan (2004-2010) at the time of the ex-ante evaluation, the Environment and Natural Resources Sector aims to “create a healthier environment for the population” (Thrust No.4) as one of the five major thrusts. As a specific strategy to achieve the thrust, it pursues ensuring “clean water resources for the entire country through full implementation of the Clean Water Act.” In the Philippine Development Plan (2011-2016) at the time of the Project completion, the Environment and Natural Resources Sector continues to pursue the “improved environmental quality for a cleaner and healthier environment” as its major goal with reducing “water pollution to improve water quality in priority rivers and other economically and ecologically important water bodies” as one of the strategies. The Project Purpose and Outputs aim at formulating policy and guidelines to implement the CWA and strengthening the water quality management capacity of EMB, which are aligned with the development plans of the Philippines.

3.1.2 Relevance to the Development Needs of the Philippines

In the Philippines, the quality of water has been deteriorating while the demand for water has been increasing. There was a strong need for the integrated and comprehensive management of water resources in order to achieve socioeconomic development and to strengthen international competitiveness. The implementation of the CWA aims at the improvement of water quality through enhanced self-help activities of LGUs, local communities and commercial industries. In implementing the CWA, it was necessary to establish a comprehensive institutional mechanism for the formulation of policy and a system of water quality management by EMB as well as for the implementation of the CWA at the field level. The need of the integrated water resources management and the capacity development of EMB has been recognized in the Mid-Term Philippine Development Plan (2004-2010) and the Philippine Development Plan (2011-2016). The needs for the establishment of the implementing structure for the CWA and the capacity development of EMB in the country have been high throughout the Project period, and the relevance to the development needs had been maintained.

⁴ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

⁵ ③: High, ② Fair, ① Low

3.1.3 Relevance to Japan's ODA Policy

The Japan Country Assistance Program for the Philippines (2000), at the time of the Project's ex-ante evaluation, set the assistance for the environmental protection and disaster prevention measures as one of the five priority areas of Japan's ODA. The Second Environment Sectoral Assistance Study Report (2001) by JICA underscored assistance in the development of environmental management technology as well as an importance of "capacity development" in such areas as implementing laws and regulations on the management of natural resources. The capacity development of EMB on the implementation of the CWA provided by the Project was in line with Japan's ODA policy.

This Project has been highly relevant to the Philippines' development plan, development needs, as well as Japan's ODA policy. Therefore, its relevance is high.

3.2 Effectiveness and Impact⁶ (Rating: ②)

3.2.1 Effectiveness

3.2.1.1 Project Output

Four Outputs and the level of achievement for each Output are described below.

1) Output 1

Output 1 is "Integrated policy framework for water quality management based on the CWA and is established and supported by adequate procedural guidelines and training for EMB staff." (Please refer to Attachment 1: Indicators for Outputs, the Project Purpose, and the Overall Goal and Levels of Achievement for indicators for each Output.)

On Indicator 1 for Output 1, EMB has formulated the draft Integrated Policy Framework in 2007, which specified water quality goals, the period of compliance, water pollution control strategies and techniques, water quality information and education program, and human resource development program. EMB submitted the draft framework to DENR for approval⁷. As general procedures for approving policy frameworks and guidelines, after the finalization of a draft by EMB, documents are reviewed and approved in turn by DENR's policy technical working group, the DENR Executive Committee which is composed of DENR and EMB officials, and the Secretary of DENR.

⁶ Sub-rating for Effectiveness and Impact is given with consideration of the assessment of "3.2.1. Effectiveness" and "3.2.2. Impact." Since the Project's Effectiveness was assessed to be ③(High) and Impact was ②(Fair), the sub-rating for Effectiveness and Impact was ②(Fair).

⁷ The draft policy framework which was formulated during the Project period specified all the items listed on the indicator 1 of Output 1; however, the approved framework does not include the water quality goals/targets and the period of compliance since they are specified in "the Procedural guideline for facilitating WQMA action planning by WQMA Boards and follow-on compliance planning by LGU" and the CWA Implementing Rules and Regulations, respectively.

The approval of the Integrated Water Quality Management Framework and supporting procedural guidelines required longer time than originally expected because of delays due to time required for DENR's review process as well as events such as appointments of a new Secretary and elections. The policy framework was approved as a DENR Administrative Order (DAO) 2013-008 on February 17, 2013, and published in the national newspaper. The method of announcement was appropriate since the framework was made available to the public using the medium of newspaper. Although the Integrated Water Quality Management Framework had not been published during the Project period, it is evaluated that Indicator 1 has been achieved since the draft policy framework was formulated with appropriate contents in 2007 and EMB has taken appropriate actions within its capacity including the timely revisions and reviews of guidelines.

Regarding the publication and dissemination of the supporting procedural guidelines on Indicator 2, all the draft supporting guidelines or manuals have been formulated by 2008 (Please refer to Attachment 2: CWA Supporting Guidelines and Manuals). EMB CO submitted draft guidelines to DENR after multiple revisions and consultations with ROs overseeing a variety of environmental challenges and water bodies at the Orientations/Workshops and EMB Management Meetings⁸. The Water Quality Monitoring Manual 1, 2 and Procedural Manual for Designating WQMAs were approved in 2008 and 2009, respectively. EMB CO distributed these manuals and required all the ROs to enforce adherence to the manuals accordingly. Following the guidance of EMB CO, ROs started water quality monitoring and the designation of WQMA based on the manuals. EMB CO also introduced other supporting guidelines and implementing procedures of the CWA to ROs using the case studies and experiences of 3 pilot regions at the Orientations/Workshops. The method of publication and dissemination were appropriate since ROs received DENR's approved guidelines from EMB CO and were trained on them at the Orientations/Workshops. Although not all the supporting guidelines have been approved during the Project period, it is evaluated that Indicator 2 has been achieved since the draft guidelines and manuals were formulated by 2008 and the guidelines were introduced to ROs including non-pilot regions at the Orientations/Workshops during the Project.

Regarding the orientation-training programs on the policy framework and supporting procedures on Indicator 3, the Orientations/Workshops were organized once a year, a total of 5 times, during the Project period. All the 16 ROs attended every workshop and the accumulated total of 870 participants (1-4 workshops) completed the

⁸ According to Project Design Matrix (PDM), the once-a-year training program for EMB personnel is called Orientation/Workshop.

training⁹. The implementing procedures of the CWA were introduced to ROs with case studies of pilot activities in 3 pilot regions at the Orientations/Workshops. The content of training was appropriate since ROs started carrying out the implementing procedures of the CWA such as designating WQMA and formulating WQMA Action Plans after attending the Orientations/Workshops. Indicator 3 was assessed to be achieved based on the five Orientations/Workshops organized between 2007 and 2010.

Output 1 has thus been achieved by the time of the Project completion.

2) Output 2

Output 2 is “Capacity of EMB Central Office to lead and support the Regional Offices is strengthened.”

Regarding the management system on Indicator 1, the water quality model based on the Water Quality Analysis Simulation Program (hereafter referred to as WASP) has been developed and operationalized at 3 pilot regions using the existing water quality data. Staffs of EMB CO and pilot ROs have been trained on the operating procedures for the water quality model and the methods of data input. The water quality model was effectively utilized for the formulation of the WQMA Action Plan in 3 pilot regions. The databases of water quality and pollution sources with the Geographical Information System (hereafter referred to as GIS) and an internet-based information network have been established and became operationalized. In 2007, the first national water quality status report presenting water quality data on the country’s water bodies between 2001 and 2005 was published. A project proposal stating the basic principal and implementing procedures was developed for extending support to the non-pilot regions. Considering the above, Indicator 1 has been achieved.

Regarding the provision of equipment on Indicator 2, the Project has provided water monitoring and sampling equipment as well as laboratory equipment to EMB CO¹⁰. Since the staffs of EMB CO and central laboratory were already familiar with the procured equipment, the training focused on reviewing the methods of operation, maintenance, and management of the procured equipment. Staff of the Water Quality Management Section of EMB CO conducted field sampling and water monitoring using the procured equipment while the central laboratory carried out water quality examinations with the equipment provided by the Project. Staff of EMB CO received

⁹ Training date, period, and the number of participants are as follows. The first session: 4 days in Feb-Mar 2007 (184 participants), The second session: 10 days from Nov 2007 to Mar 2008 (231 participants), The third session: 1 day on March 17, 2009 (231 participants), The fourth session: period unknown, Feb 2010 (224 participants), The fifth session: 4 days in Nov-Dec 2010 (the number of participants unknown)

¹⁰ Using the equipment provided by the Project, the central laboratory conducted water quality examinations and verified the test results submitted from ROs (once a year for each RO) as a reference laboratory.

training on procured equipment and conducted water quality monitoring using the equipment; therefore, Indicator 2 was achieved.

Regarding the coordination by EMB CO on Indicator 3, EMB CO shared information including the implementation procedures of the CWA-related guidelines and the progress of the Project activities with ROs through public consultations, WQMA meetings, and annual Orientations/Workshops. EMB CO provided assistance on the issues specific to each region at least 4 times a year through monitoring of the CWA implementing activities (e.g., classification of water bodies, designation of WQMA), request to mayors of LGUs for cooperation in WQMA activities, and attendance in meetings with local stakeholders to call for participation in WQMA. Considering the above, Indicator 3 was achieved.

Output 2 has therefore been achieved by the time of the Project completion.

3) Output 3

Output 3 is “Capability of EMB Regional Offices to establish and support WQMAs and related institutions is strengthened in 3 pilot regions.”

Regarding the designation of WQMA on Indicator 1, 4 WQMAs, including those in 3 pilot regions, have been designated by 2009. Further, WQMAs in 3 pilot regions formulated the Action Plan within the same year. Therefore, Indicator 1 was achieved.

On the management structures of WQMA described in Indicator 2, 3 pilot regions established WQMA Governing Boards and Multi-sectoral action groups consisting of local stakeholders including LGUs and industrial and commercial entities by the Project completion. According to each Governing Board’s rule, WQMA Governing Boards functioned as per its stated purpose by convening regularly. Each WQMA Governing Board set up the Technical Secretariat consisting of EMB RO officers. WQMA Governing Boards in all the 3 pilot regions adopted the reporting system in which the meeting minutes drafted by the Secretariat are circulated among the members for review and approved at the next regular meeting. The area water quality management fund was not established or operationalized by the end of the Project completion due to delays in review and approval of the Procedural Guideline for Managing the National and Area Water Quality Management Fund; however, the fund management system was virtually functional since EMB ROs have been collecting the pollution charges according to the waste load calculated by the quantity of discharge and the effluent concentration as specified in the CWA. Therefore, Indicator 2 is assessed to be achieved.

Output 3 has thus been achieved by the time of the Project completion.

4) Output 4

Output 4 is “Overall capability of EMB Regional Offices in water quality management is strengthened in 3 pilot regions.”

On the database on pollution sources and pollution charges stated in Indicator 1, each pilot RO conducted the site surveys of major pollution sources in WQMA and compiled the collected data on point and non-point sources in the database by the Project completion¹¹. EMB ROs have issued discharge permits to industrial and commercial entities that are major polluters and required these companies to submit self-monitoring reports. Regarding the system for assessment, collection and accounting of pollution charges, the Procedural Guideline for Pollution Load and Charge Computation in Support of the Discharge Permit System was pending approval at the time of Project completion. During the Project period, ROs developed a computation table for calculating the pollution load and pollution charges based on the existing effluent standards, linked the table with the developed databases on pollution sources, and carried out assessment, collection and accounting of pollution charges¹². Similarly, economic incentives including tax relief were not provided since the Guideline for the Enforcement of Water Quality Management Projects under RA 9275 (Reward/Incentive system) was pending approval; however, using the existing policy frameworks (e.g., Eco Watch Program, the Philippine Environmental Partnership Program), EMB provided incentives such as a 2-year exemption from legal sanctions and relaxation of self-monitoring requirements for industrial and commercial entities that improved the quality of discharges. Considering the above, Indicator 1 was assessed as achieved.

On Indicator 2, pilot ROs developed the regional water quality status report following the Guideline for the Preparation of the Regional and National Water Quality Status Reports for Public Information and Advocacy. EMB CO published the reports on EMB’s website in 2007. Indicator 2 was achieved.

Regarding the classification of water bodies on Indicator 3, the EMB CO intended to prioritize the classification of sea-coast and lakes that had not been classified in an appropriate method. As a result, the Albay Gulf (Region 5), Toledo-Balamban Coastal Area (Region 7) and Macajalar Bay (Region 10) were classified as priority water bodies according to the Procedural Guideline for Classifying Inland and Marine Water Bodies and Groundwater. Therefore, Indicator 3 was therefore achieved.

¹¹ The discharge permit is a system that requires operators of facilities that discharge effluents (e.g., wastewater treatment facility, commercial and industrial establishments) to comply with the effluent standards into a particular water body and to report on self-monitoring results. The pollution charges are imposed on the facilities that discharge effluents according to waste load calculated based on the quantity of discharge and the effluent concentration.

¹² CWA stipulates to apply the existing effluent standards (DENR AO 1990/1995-35) as tentative standards during the transitional period until the new effluent standards are established.

On Indicator 4, 3 pilot ROs formulated the WQMA Action Plan using the water quality model developed and set up by the Project. The water quality data including the results of water monitoring and information on pollution sources are managed in the database developed by the Project, which are utilized for information-sharing and reporting among EMB CO and ROs throughout the country. Indicator 4 was thus achieved.

Regarding the regional laboratory on indicator 5, the Project provided the necessary water monitoring and testing equipment for EMB regional laboratories in 3 pilot regions. EMB central laboratory provided training on the usage of provided equipment for the staff of regional laboratories (2-3 staff per laboratory including ones in 3 pilot regions) in the DENR Inter laboratory Comparison Exercise which was held annually. After the exercise, staff of pilot regions' laboratories started joint water quality monitoring with partner laboratories and information sharing on the methods of water quality testing, which resulted in the strengthened linkage with partner laboratories¹³. Indicator 5 was therefore achieved.

On Indicator 6, the Project provided field sampling and monitoring equipment to 3 pilot ROs. The staff of the Water Quality Management Section in ROs received training on the usage of the provided equipment and water testing techniques. After the training, each pilot RO carried out continuous water quality monitoring using the equipment provided by the Project. Indicator 6 was therefore achieved.

On Indicator 7, water quality management training was organized for the staff of ROs' Water Quality Management Section (2-3 staff per RO) as a part of annual Orientations/Workshops during the Project period. At the training, participants were introduced to the operational procedures of newly formulated guidelines and experiences of 3 pilot regions on the designation of WQMA. After the training, ROs started carrying out the designation of WQMA and the formulation of the Action Plan, which facilitated the compliance of the CWA guidelines¹⁴. Considering the above, Indicator 7 was achieved.

Output 4 has been thus achieved by the time of the Project completion.

3.2.1.2 Achievement of Project Purpose

The Project Purpose is that "Capabilities of EMB Central and Regional Offices to implement priority actions mandated under the CWA Implementing Rules and Regulations are strengthened." Two indicators of the Project Purpose and the level of achievement for each indicator are described below.

¹³ Partner laboratories refer to the private water testing facility recognized by DENR.

¹⁴ Please refer to Table 1 on the page 15 for the timing of WQMA designation and the formulation status of action plan.

1) Indicator 1

Indicator 1 is “EMB Central Office and 3 pilot ROs assisted by the Project are efficiently and effectively implementing their mandates under the Clean Water Act Implementing Rules and Regulations through: Adequate water quality management procedures in conformity with the CWA requirements; Water quality management section’s staff trained in water quality management procedures; Adequate equipment and information systems; Linkages with related water quality management agencies and concerned stakeholders.”

During the Project, EMB formulated the Integrated Water Quality Management Framework and supporting procedural guidelines for the CWA implementation and piloted the designation of WQMA and the formulation of Action Plans based on the developed guidelines. Staffs of EMB CO and pilot ROs received the opportunities for practical training through the pilot activities and enhanced the capacity of implementing their mandates under the CWA rules and regulations. As for the organizational aspects, the Technical Secretariats with well-trained staff of Water Quality Management Section (Approx. 2 staffs per RO) were established in each WQMA Governing Board of 3 pilot regions. EMB’s leadership in organizing the WQMA Governing Boards clarified the objective to address water quality issues in partnership with the regional stakeholders, which led to the participation of groups with conflicting interests including LGUs, government agencies, and industrial and commercial entities. Through the regular meetings, the linkages with related water quality management agencies and concerned stakeholders have been strengthened. In cooperation with local stakeholders, continuous water monitoring has been conducted using the equipment provided by the Project. The internet-based database on the results of water quality monitoring which links EMB CO and ROs were operational, which enabled EMB CO to monitor the results of the water quality testing and pollution source surveys carried out by all the ROs. Considering the above, Indicator 1 was achieved.

2) Indicator 2

Indicator 2 is “Capacity of the staff in charge of water quality management in non-pilot ROs is strengthened through: Participation in the learning process such as Orientations/Workshops to be conducted in the Project; Adequate understanding on the procedures and guidelines on the CWA enforcement; Familiarization with the experiences of 3 pilot regions on the WQMA designation and action planning through various types of communication.”

During the Project period, staffs of the Water Quality Management Section from all the ROs including non-pilot ROs attended the annual Orientations/Workshops (the

accumulated total of 870 persons). At Orientations/Workshops, in order to promote the understanding on the procedures and guidelines on the CWA enforcement, the procedural guidelines for the CWA implementation developed by the Project were introduced to the participants with the case studies and lessons learned from the WQMA designation in 3 pilot regions. The capacity of the staff in charge of water quality management in non-pilot ROs has been strengthened since, by applying the lessons learned from the training sessions, all 16 ROs began activities related to the WQMA designation based on the Procedural Manual for Designating WQMAs and the Water Quality Monitoring Manual during the Project. Considering the above, Indicator 2 was achieved.

Therefore, the Project Purpose has been achieved. The achievement of the Project Purpose was produced due to 4 Outputs generated by the Project.

3.2.2 Impact

3.2.2.1 Achievement of Overall Goal

The Overall Goal, which is expected to be achieved within 3-5 years from the Project completion is that “Under initiatives of the WQMA Governing Boards, industries commercial entities, LGUs, and other public organizations take necessary actions for achieving the water quality goal established in the WQMA Action Plans.” The present ex-post evaluation study assessed the achievement level of the Overall Goal, particularly the implementing status of the Action Plans stated in the PDM, focusing on the functions and roles of EMB CO and 3 pilot ROs, which primarily received capacity development by the Project and are specified as the “Means of Verification” in the PDM.

The three Indicators of the Overall Goal measure the implementation status of the Action Plan in addition to the presence of adequate EMB staff and the level of cooperation with other relevant agencies. Before the implementation of the Action Plans, EMB needed to conduct a series of CWA-related activities such as water monitoring and the establishment of the WQMA Governing Boards after the designation of WQMA; however, the PDM does not include the indicators to evaluate the attainment level of activities that precede the implementation of the Action Plans. Therefore, the degree of attainment until the achievement of the Overall Goal could not be assessed using the indicators set in the PDM.

The three indicators and the achievement levels of each indicator are discussed below.

1) Indicator 1

Indicator 1 is that “water quality improvement Action Plans are being implemented by WQMA boards and LGUs, and industrial and commercial entities are complying with discharge permit systems and water quality/effluent standards, with resulting improvement in ambient water quality¹⁵.” EMB CO set the target to designate at least 1 WQMA in each region by 2013. As a result, each of the 15 EMB ROs (all ROs but Region 7) designated at least 1 WQMA, and 17 WQMAs in total were established by February 2014¹⁶. WQMA Governing Boards have been holding regular meetings in each region and discussing ways to identify water quality issues and to formulate Action Plans to address the issues. Seven of 16 ROs have formulated at least 1 WQMA Action Plan, of which 5 ROs have started the implementation of the plan given EMB CO’s approval of the plan (Please refer to Table 1 below.).

Table 1 Year of WQMA Designation and Status of Action Plan Formulation

EMB Regional Office	Name of WQMA	Year of WQMA Designation As of Feb 2014	Status of Action Plan Formulation As of Feb 2014
NCR ¹⁷	San Juan River System	2012	Under planning
CAR ¹⁸	Balili River	2013	Approved
Region 1	Sinocalan-Dagupan River System	2011	Approved
Region 2	Pinacanauan de Tuguegarao River	2013	Under planning
Region 3	Marilao-Meycauayan-Obando River System	2008	Approved
Region 4A	Imus-Ylang-ylang-Rio Grande Rivers	2013	Under planning
Region 4B	Calapan River	2013	Under planning
Region 5	Lake Buhi Watershed	2013	Under planning
Region 6	Tigum-Aganan Watershed	2006	Approved
	Iloilo-Batiano River System	2009	Approved
	Jalaur River	Under review	—

¹⁵ Ambient water quality is a term for environmental water quality. The Philippines follows the Water Quality Criteria (DAO 34, series of 1990).

¹⁶ WQMA related activities in RO 7 were slightly delayed due to the resignation of core staff members of the Water Quality Management Section. Nevertheless, the proposal for the designation of WQMA has been submitted by November 2013. According to the EMB CO, the proposal will shortly receive the DENR’s approval.

¹⁷ NCR stands for National Capital Region.

¹⁸ CAR stands for Cordillera Administrative Region.

Region 7	Butuanon River	Under review	—
Region 8	Ormoc Bay	2013	Under planning
Region 9	Tumaga River	2013	Under review
Region 10	Cagayan de Oro River Basin and Adjacent Rivers	2013	Under planning
Region 11	Davao River	2013	Under review
Region 12	Silway River	2010	Approved
	Sarangani Bay	2009	Approved
Region 13	Taguibo River	2012	Under planning

Source: Documents provided by EMB CO

The discharge permit system has been implemented and the accumulated total of 21,402 permits was issued between 2007 and 2012 (4,303 permits in 2012) to the major industrial and commercial entities that discharge effluent into water bodies¹⁹. By obtaining the discharge permit, industrial and commercial entities are required to conduct self-monitoring on discharges while EMB ROs monitor their status of compliance with the effluent standards every month. According to EMB CO and pilot ROs, the cases of improvement in ambient or environmental water quality have been observed in pilot regions.

Although the industries' compliance with the effluent standards has been promoted by the discharge permit system, 11 of 16 ROs are at the stage of formulating the Action Plan and have yet to implement it. Therefore, the level of achievement of Indicator 1 is low.

2) Indicator 2

Indicator 2 is "DENR EMB enforcing legal requirements of the CWA, and have adequate staff equipped with administrative and technical know-how to perform water quality management functions." EMB made multiple revisions on the CWA-related guidelines so that they can fulfill legal requirements of the CWA. All ROs designated WQMA based on the Procedural Manual for Designating WQMAs and carried out water monitoring in partnership with LGUs and partner laboratories according to the Water Quality Monitoring Manual. It is evaluated that EMB has adequate staff equipped with administrative and technical know-how to perform water quality management functions since CWA-related activities are being implemented. Indicator 2 was thus achieved.

¹⁹ The discharge permits are renewed yearly. EMB aims at the annual increase of 5% on the number of permits issued in the previous year.

3) Indicator 3

Indicator 3 is “cooperation with other agencies involved in water quality management is established.” EMB, LGUs and partner laboratories are jointly conducting water monitoring for the designation of WQMA and the identification of pollution sources. Scientific data from water sampling and analysis at a number of sampling points covering broad areas over an extended period of time enhanced the stakeholders’ understanding of water quality issues specific to the areas and characteristics of pollution sources, which led to the cooperation in addressing the water quality issues. Public consultation and Orientations/Workshops organized as a part of the Project activities served as opportunities for government agencies (including EMB), LGUs, and industrial and commercial entities to regularly gather and discuss water quality issues and water management plans. Considering the above, it is assessed that cooperation with other agencies involved in water quality management has been established; therefore, Indicator 3 was achieved.

As discussed above, while Indicator 2 and 3 have been largely achieved, Indicator 1 has not been achieved due to the insufficient implementation status of the Action Plans. Therefore, the Overall Goal has been achieved at a limited level.

3.2.2.2 Other Impacts

In regards to other impacts of the Project, it was confirmed that the supporting guidelines developed by the Project were utilized by other donors when they assisted in ROs’ activities of water quality management, which leads to the implementation of water quality activities relevant to CWA with consistency across the country. For example, the World Bank assisted RO 12 and CAR in the designation of WQMAs under the Water and Sanitation Program and the Third Sewerage Project, respectively. By utilizing the Procedural Manual for Designating WQMAs, RO 12 designated the Silway River WQMA and CAR designated the San Juan River System WQMA. These cases indicate that the Outputs of the Project would be expanded and disseminated by EMB in the future.

The implementation of the Project has generated positive impacts; therefore, effectiveness/impact of the Project is fair. The Important Assumptions listed on the PDM have been fulfilled, and the factors that could hinder the achievement of the Overall Goal have not been observed.

3.3 Efficiency (Rating: ②)

3.3.1 Inputs

The following table presents the planned and actual inputs of the Project.

Inputs	Planned Inputs	Actual Inputs
(1) Experts	<ul style="list-style-type: none"> • 7 areas More areas to be added if necessary 	<ul style="list-style-type: none"> • 9 Experts (9 areas²⁰)
(2) Local Consultant	(not stated)	459.1 Man/Month (M/M)
(3) Trainees received	(not stated)	4 C/P
(4) Equipment	<ul style="list-style-type: none"> • Field sampling/monitoring equipment, vehicle, etc. • Laboratory equipment • Information management system equipment 	<ul style="list-style-type: none"> • Field sampling/monitoring equipment, vehicle, etc. • Laboratory equipment • Information management system equipment
Total Project Cost	Approx. 690 million yen	Approx. 758 million yen
Philippine side Operational Expenses	Administrative costs, maintenance and operational expenses	Administrative costs, maintenance and operational expenses

3.3.1.1 Elements of Inputs

The Inputs from the Japanese side were carried out mostly as scheduled while the assignment of C/P and the operational expenses for the Project activities were provided as planned. The equipment provision was deemed appropriate since the needs for water sampling and testing equipment was high in EMB CO and 3 pilot ROs. The provided equipment was mostly in use for water monitoring and analysis at the time of the ex-post evaluation study.

The Project hired local consultants to support EMB's tasks. The local consultants provided assistance primarily in the formulation of the CWA supporting guidelines and the development of databases. The local consultants also contributed to the dissemination of the CWA supporting guidelines to ROs by preparing the documents and presentations for Orientations/Workshops using maps generated by GIS and graphic charts. The assignment of local consultants promoted the completion of the Project activities in a

²⁰ The 9 areas are Team Leader/ Policy and Planning Specialist, Water Quality Management Specialist, Organizational and Institutional Specialist, Water Quality Monitoring, Pollution Source Control, Water Quality Information System, Water Quality Modeling, Wastewater Management and Coordinator. (The Project Completion Report Phase 2 Page E-1)

timely manner. Regarding the division of tasks, while local consultants developed drafts of guidelines following the CWA legal requirements, EMB reviewed and revised them from the technical and administrative perspectives and DENR reviewed them based on the sector strategy or plans and provided final approval. Since the roles and responsibilities of local consultants were clearly differentiated from those of DENR or EMB, there was no such case that local consultants assumed the tasks that should have been completed by EMB as a part of their capacity development. Therefore, the input of local consultants was appropriate.

3.3.1.2 Project Cost

The actual project cost of 758 million yen was higher than the planned cost of 690 million yen (Approx. 110% of the planned cost). This is primarily due to the additional services (9.1 M/M in 2008) by local consultants to make additional revisions on the drafts of the Water Quality Guideline and General Effluent Standards and the Procedural Guideline for Managing the National Water Quality Fund. This additional input was assessed to be appropriate since the CWA supporting guidelines were developed to be practical and suitable for the EMB's organizational structures and water quality environments.

3.3.1.3 Period of Cooperation

The period of cooperation was 5 years as planned (100% of the planned cooperation period).

Although the Project period was within the plan, the Project cost exceeded the plan. Therefore, the Project efficiency is fair.

3.4 Sustainability (Rating: ③)

3.4.1 Related Policy towards the Project

In the Philippine Development Plan (2011-2016), the Government of the Philippines aims at the "improved environmental quality for a cleaner and healthier environment" as its major goal in the Environment and Natural Resources Sector and laid out to "reduce water pollution to improve water quality in priority rivers and other economically and ecologically important water bodies" through the establishment of WQMA and the WQMA Governing Boards as a major strategy. Since it is EMB's mandate to implement the environmental laws including the CWA, EMB is required to implement the CWA throughout the country for achieving the improvement of environment for the future. Therefore, the policy aspects of the Sustainability is assured.

3.4.2 Institutional Aspects of the Implementing Agency

Upon the designation of WQMAs, the Technical Secretariat and WQMA Governing Boards were established in each WQMA with the participation and cooperation with local stakeholders including LGUs, government agencies, industrial and commercial entities, NGOs and local community groups. With the EMB regional director serving as the chair of the Governing Board, the board continuously organizes the regular meeting. The activities of water quality management such as joint water monitoring have been carried out in cooperation with EMB staff and Governing Board members. The results of water monitoring are presented at WQMA Governing Board meetings and shared with EMB CO and other ROs through the databases. The implementing structure of the CWA has been strengthened since the activities of water quality management have been promoted according to the CWA implementing rules and regulations and the system of information sharing and reporting between EMB CO and ROs and among local stakeholders have been established and made functional.

In order to address the overloaded work that are common in government agencies, some pilot ROs carried out the implementation of the CWA with the assistance of other sections during the Project period. The Government of the Philippines has been taking measures to address the overload of government agencies' personnel since 2004²¹. EMB has started the recruitment of staff and is expected to increase personnel in each of the 16 ROs within 2014.

3.4.3 Technical Aspects of the Implementing Agency

As a part of WQMA activities, EMB ROs have been conducting monthly water quality monitoring in cooperation with LGUs and partner laboratories. Although the second national and regional water quality status report has not been published, EMB has been continuously carrying out the monitoring on water quality status throughout the country and compiling the status of WQMA activities as a WQMA report every year. All the ROs have issued the discharge permits (4,303 permits in 2012) to the major pollution sources, required them to submit the self-monitoring reports and monitored their activities to comply with the effluent standards. EMB ROs have been carrying out several tasks of the CWA implementation including classifying major water bodies, issuing discharge permits, designating WQMAs, and formulating Action Plans based on the CWA supporting guidelines. EMB CO has been supporting the ROs' CWA implementation by providing them with the capacity development training and participating in the WQMA meetings after the Project completion²². As discussed above, EMB has developed

²¹ The measures (Rationalization Plan) are based on Executive Order No. 366.

²² Examples of the seminar/workshops on CWA implementation organized by EMB CO are as below. (1)

adequate technical capacity to implement priority actions mandated under the CWA, which has been maintained after the Project completion.

3.4.4 Financial Aspects of the Implementing Agency

EMB has been allocating budgets to all the ROs for the designation of WQMA and related activities since 2011. EMB distributed 50 million pesos to each EMB RO in 2011 while it distributed 100 million pesos in 2012 and 84 million pesos in 2013 to each WQMA. Additionally, 3 pilot regions together received 100 million pesos every year from 2009 to 2011. Since all the ROs, except for Region 7, designated at least 1 WQMA in each region and discharge permits have been issued throughout the country (4,303 permits in 2012), it is evaluated that EMB CO and ROs received the appropriate amount of budget for the implementation of the CWA at the time of the ex-post evaluation study. EMB central laboratory and regional laboratories appropriately maintained and operated the procured equipment, all of which was mostly in use for water monitoring and analysis at the time of ex-post evaluation study. According to interviews with EMB CO and ROs, an adequate budget was disbursed for the operation and maintenance of equipment. According to DENR, the EMB's general budget has been on the increase for the last few years. In particular, while DENR's budget (23.9 billion pesos) in the Fiscal Year 2014 remains almost the same as last year, EMB's budget in the Fiscal Year 2014 marked 1.3 billion pesos, which was a 19.8% increase from the previous year. Furthermore, since the implementation of the CWA is EMB's mandate, EMB is expected to actively promote the implementation of the CWA, for instance, aiming to designate 16 new WQMAs within 2014. Considering the above, it is expected that the budget of EMB CO and ROs for the implementation of the CWA will be secured.

No major problems have been observed in the policy backgrounds or the institutional, technical, and financial aspects of the implementing agency. Therefore, the Sustainability of the Project's effects is high.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

The Project aims at strengthening EMB's overall capacity for water quality management required to implement the priority actions mandated under the CWA

Workshop on database management and reporting system, May 8-11, 2012, (2) Workshop on the Integrated Water Quality Management Framework, application of effluent standards, water quality management funds, cooperation with local relevant stakeholders, the formulation of Action Plans and LGU Compliance Plan ,September 10-13, 2013, (3) Workshop on the improvement of water quality management information system, November 19-22, 2013. In addition, EMB CO provides advice to ROs individually at EMB management meetings and other workshops.

implementing rules and regulations. This project has been highly relevant to the Philippines' development plan, development needs as well as Japan's ODA policy; therefore, its relevance is high. Through the Project, the Integrated Water Quality Management Framework has been formulated, and the EMB CO's capacity of supporting ROs and the ROs' water quality management capacity were enhanced; therefore, the Project Purpose has been successfully achieved. Since 11 of 16 ROs are at the stage of formulating the Action Plan and have yet to implement it, the Overall Goal has been achieved at a limited level; however, EMB ROs are equipped with Water Quality Management Section's staff who have administrative and technical know-how, and the cooperation with other relevant agencies has been established. Therefore, effectiveness/impact is fair. Although the Project period was within the plan, the Project cost exceeded the plan. Therefore, the Project's efficiency is fair. No major problems that affect the Project's sustainability have been observed in the policy backgrounds or in the institutional, technical and financial aspects of the implementing agency. Therefore, the sustainability of the Project's effects is high. In light of the above, this Project is evaluated to be satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

The following recommendations are generated based on the analysis of the contributing factors for the designation of WQMAs and the establishment of the WQMA Governing Boards. For the further expansion of WQMA related activities throughout the country, it is advisable that EMB CO supervises and assists ROs in implementing the recommendations as priority tasks.

(1) Establishment of Partnership between EMB ROs and LGUs prior to the Designation of WQMA

In designating WQMA, the CWA stipulates water quality monitoring for at least 10 consecutive months. Prior to the designation of WQMAs in 3 pilot regions, EMB CO requested the mayors of LGUs cooperation in WQMA activities and EMB 3 pilot ROs conducted joint water sampling and monitoring activities with LGUs Task Forces. The joint monitoring activities facilitated the establishment of the partnership between EMB and LGUs and promoted the understanding on WQMA activities before the designation of WQMAs. When deemed necessary, EMB CO attended meetings organized by EMB ROs to call for LGUs' participation in WQMAs. This type of EMB CO's involvement in ROs' WQMA activities promoted better understanding about the objectives and activities of the WQMA Governing Boards prior to the WQMA designation and developed the partnership

with LGUs. The establishment of partnerships with LGUs at the early stages of WQMA-related activities is important for the smooth implementation of the following activities by WQMA Governing Boards, especially the formulation and implementation of the Action Plans.

(2) Development of Shared Understanding of Water Quality Issues Identified by the Results of Continuous Water Quality Monitoring

The participation of regional stakeholders with varied interests including LGUs, industrial and commercial entities, and local community groups was essential for the WQMA designation. Although some stakeholders hesitated to join the WQMA Governing Board at first, EMB's activities, especially holding regular consultative discussions based on the results of continuous water quality monitoring and developing shared understanding toward water quality issues among stakeholders, were effective in increasing stakeholders' participation. To identify pollution sources in WQMAs, EMB conducted the data collection at a number of sampling points covering diverse areas for an extended period of time and the comparative analysis of water quality test results with neighboring areas within WQMAs. The identification of pollution sources based on continuous water quality monitoring and scientific data helped regional stakeholders with varied interests to understand water quality issues that need to be addressed in the areas and clarify each organization's scope of responsibilities. Regular discussions among stakeholders led to the consideration and implementation of specific measures to improve water quality by each organization. In order to secure regional stakeholders' cooperation for overcoming water quality management issues, it is important for EMB to share the results of continuous water quality monitoring and to develop a shared understanding of water quality issues in the areas among the stakeholders.

4.2.2 Recommendations to JICA

None

4.3 Lessons Learned

The lessons learned produced by the Project are presented as follows.

(1) Two-Way Communication between the Central Office and Regional Offices of the Implementing Agency

The Project successfully disseminated the CWA-related supporting guidelines to all the ROs. In addition to the effective utilization of communication channels between EMB CO and ROs, EMB's efforts to reflect RO's views and ideas on the guidelines based on

consultations with ROs on a number of occasions contributed to the nation-wide dissemination of the guidelines. Based on a number of consultations with ROs, the EMB went through multiple revisions on the guidelines (e.g., method of setting WQMA boundary by focusing on polluted areas), which resulted in the completion of practical guidelines. For JICA's similar projects that aim at disseminating the outputs of the pilot activities to the whole country, it is important to set opportunities to attend to non-pilot areas' voices, particularly, whether or not the lessons learned gathered from the pilot areas are applicable to other areas with different conditions and sizes, and reflect their views flexibly into the procedures and guidelines.

(2) Establishment of Mechanism to Promote Cooperation and Participation of Stakeholders with Varied Interests

One of the keys to maintain sustainability of the Project was determined by how well the implementing agency develops partnership with stakeholders with varied interests (government agencies, LGUs, commercial and industrial entities, NGOs, community groups, etc.) and leads the activities for the improvement of water quality. A contributing factor for the achievement of the Project's outputs and the high sustainability is that the agency which is responsible for regulating discharge of polluted water and supervising water quality management activities serves as the Secretariat of the WQMA Governing Boards, which brought about the binding effects towards the implementation of specific measures for the achievement of water quality goals by stakeholders with different positions and objectives. Further, the establishment of WQMA Governing Boards reinforced the advantages of the regional mechanism to consolidate the individual efforts and efficiently address the water quality issues as a whole area. The advantages of establishing WQMA Governing Boards were recognized by stakeholders, which promoted building partnerships among stakeholders and enhancing coordination of activities. For JICA's similar projects that require the establishment of partnerships among stakeholders with varied interests, it is advisable that an agency which regulates and supervises stakeholders' activities takes the lead role in coordinating stakeholders, visualizes the advantages of stakeholders' cooperation and participation, and places a mechanism to promote their cooperation and participation.

(3) Securement of Budget until the Achievement of the Overall Goal

The study confirmed that the Project's effects have been disseminated in the whole country, for example, WQMA has been designated in all ROs except for Region 7 within 2 years after the Project completion. In addition to the implementing agency's setting feasible timeline and clear targets, securing a necessary budget to achieve the Overall

Goal could be considered as a factor that promoted the development of the Project's impacts. To ensure the continuance of the Project's effects after the Project completion, since the planning stage of the Project, JICA and DENR, which formulates the budget plan for the implementing agency, have been continuously holding discussions to secure a budget during the project period and even after the Project completion for the achievement of the Overall Goal. For JICA's similar projects that have the Overall Goal to disseminate the Project's effects from the pilot regional offices to the whole country, it is essential that JICA and the implementing agency (and/or agencies that formulate the budget for the entities carrying out policies) discuss the prospect of securing a necessary budget for the activities to accomplish the Overall Goal at the planning stage and during the Project period.

(4) Formulation of Indicators that Measure the Level of Accomplishment until the Achievement of the Overall Goal

Before "the implementation of the WQMA Action Plan" which is one of the indicators of the Overall Goal, EMB ROs were required to carry out a series of activities starting with water quality monitoring for at least 10 consecutive months for the WQMA designation, the identification of polluted water bodies and pollution sources, discussions with major stakeholders and the organization of consultation meetings followed by the designation of WQMA and the establishment of WQMA Governing Board. Nevertheless, the PDM did not specify the Overall Goal's indicators that measure the achievement level of the activities for the CWA implementation prior to "the implementation of the WQMA Action Plan." Due to the lack of the specific indicators for these activities, the achievement level of the Overall Goal could not be assessed properly even though EMB ROs including the non-pilot regions have been carrying out a number of activities related to the CWA implementation. It is necessary that JICA, the Japanese experts and implementing agency discuss and verify if the Overall Goal and its indicators can appropriately measure the level of continuity and achievement of the Project's effects. It is also important to clarify the roadmap from the Project's completion to the achievement of the Overall Goal during the Project's period and revisit indicators of the Overall Goal on the PDM to measure appropriately the achievement levels of the Overall Goal if necessary.

Attachment 1: Indicators for Outputs, the Project Purpose, and the Overall Goal and Levels of Achievement for Indicators for each Output

	Outputs and Indicators	Status of Achievement
Output 1	Integrated policy framework for water quality management based on the CWA is established and supported by adequate procedural guidelines and training for EMB staff.	Achieved
Output 1 Indicators	1. Publication of the policy framework that clearly specifies: <ul style="list-style-type: none"> • water quality goals and targets, • period of compliance, • water pollution control strategies and techniques, • water quality information and education program, • human resource development program. 	Achieved
	2. Publication and dissemination of the supporting procedural guidelines	Achieved
	3. Completed orientation-training programs on the policy framework and supporting procedures.	Achieved
Output 2	Capacity of EMB Central Office to lead and support the Regional Offices is strengthened.	Achieved
Output 2 Indicators	1. Management system in place, evidenced by: <ul style="list-style-type: none"> • Water quality model being set up and running in the pilot regions • Operational water quality and pollution source databases with geo-referencing capability (GIS) • Establishment of an Internet-based information and communication network • Publication of the first national water quality status report • Project proposals developed to generate additional assistance for the non-pilot regions 	Achieved
	2. CO Water Quality Management Section's staff provided with equipment and trained.	Achieved
	3. CO effectively coordinating the implementation of CWA administrative and technical procedures in the 3 pilots.	Achieved
Output 3	Capability of EMB Regional Offices to establish and support WQMA and related institutions is strengthened in 3 pilot regions.	Achieved

Output 3 Indicators	1. At least one WQMA in each pilot region is established, with action plan prepared.	Achieved
	2. The WQMAs established have functional: <ul style="list-style-type: none"> • Governing Boards • Technical Secretariats • Multi-sectoral action groups • Area fund management system • Reporting system 	Achieved
Output 4	Overall capability of EMB Regional Offices in water quality management is strengthened in 3 pilot regions.	Achieved
Output 4 Indicators	1. Major point pollution sources in pilot regions are complying with the discharge permitting/charge system, including the self-monitoring reporting system, and supported by: <ul style="list-style-type: none"> • Database of point and non-point sources, • Functional system for assessment, collection and accounting of pollution charges • Reward/incentive system 	Achieved
	2. First regional water quality status report for each of the 3 pilot regions published.	Achieved
	3. Principal/priority water bodies in pilot regions classified (or re-classified as needed).	Achieved
	4. Calibrated water quality model and database in regions are operational, linked to central information system, and are used for water quality status reporting.	Achieved
	5. Equipment of EMB regional laboratories in pilot regions upgraded, and linkage with partner laboratories established.	Achieved
	6. Water sampling and monitoring equipment for regional Water Quality Management Section's staff procured and staff trained.	Achieved
	7. Water Quality Management training courses for EMB RO staff completed.	Achieved

	Project Purpose and Indicators	Status of Achievement
Project Purpose	Capabilities of EMB Central and Regional Offices to implement priority actions mandated under the CWA Implementing Rules and Regulations are strengthened.	Achieved

Project Purpose Indicators	<p>1. EMB Central Office and 3 pilot ROs assisted by the Project are efficiently and effectively implementing their mandates under the Clean Water Act IRR through:</p> <ul style="list-style-type: none"> • Adequate water quality management procedures in conformity with CWA requirements; • Water quality management section's staff trained in water quality management procedures; • Adequate equipment and information systems; • Linkages with related water quality management agencies and concerned stakeholders. 	Achieved
	<p>2. Capacity of the staff in charge of water quality management in non-pilot ROs is strengthened through:</p> <ul style="list-style-type: none"> • Participation in the learning process such as Orientation/Workshop to be conducted in the Project; • Adequate understanding on the procedures and guidelines on the CWA enforcement; • Familiarization with the experiences of 3 pilot regions on the WQMA designation and action planning through various types of communication. 	Achieved

	Overall Goal and Indicators	Status of Achievement
Overall Goal	Under initiatives of the WQMA Governing Boards, industries commercial entities, LGUs, and other public organizations take necessary actions for achieving the water quality goal established in the WQMA Action Plans.	Partly underachieved
Indicators	1. Water quality improvement Action Plans are being implemented by WQMA boards and LGUs, and industrial and commercial entities are complying with discharge permitting system and water quality/effluent standards, with resulting improvement in ambient water quality	Partly underachieved
	2. DENR EMB enforcing legal requirements of the CWA, and have adequate staff equipped with administrative and technical know-how to perform water quality management functions.	Achieved
	3. Cooperation with other agencies involved in water quality management is established.	Achieved

Attachment 2: CWA Supporting Guidelines and Manuals

	Name of the Procedural Guidelines of CWA	Timing of Draft Completion	Timing of Official Approval	Approval Number
1	Procedural Manual for Designating WQMAs	March 2007	2009	DENR Memorandum Circular 2009-15
2	Guideline for the Endorsement of Water Quality Management Projects under RA9275 (Reward/Incentive System)	March 2008	2013	DENR Administrative Order 2013-17
3	Water Quality Guideline and General Effluent Standards	March 2007	-	Under review
4	Procedural Guideline for Classifying Inland and Marine Water Bodies and Groundwater	March 2007	-	Under review
5	Procedural Guideline for Facilitating WQMA Action Planning by WQMA Boards and Follow-on Compliance Planning by LGUs	March 2007	2013	EMB Memorandum Circular 2013-006
6	Procedural Guideline for Pollution Load and Charge Computation in Support of the Discharge Permit System	March 2007	-	Under review
7	Procedural Guideline for Managing the National Water Quality Management Fund	March 2007	2012	DENR Administrative Order 2012-06
8	Procedural Guideline for Managing the Area Water Quality Management Fund	March 2007	2013	DENR Administrative Order 2013-15
9	Procedural Guideline for Categorization of Industries, including Point and Non-Point Sources of Water Pollution	March 2007		Under review
10	Water Quality Monitoring Manual Vol 1, 2	March 2007	2008	EMB Memorandum Circular 2008-08
11	Guideline for the preparing of the Regional and National Water Quality Status Reports for Public Information and Advocy	March 2007	(No data)	EMB Memorandum Circular
12	Integrated Water Quality Management Framework	March 2007	2013	DENR Administrative Order 2013-08