

Summary of Final Evaluation

1. Outline of the Project		
Country: The Republic of the Philippines		Project title: Capacity Development Project on Water Quality Management
Issue/Sector: Environmental Management		Cooperation scheme: Technical cooperation
Division in charge: JICA Philippine Office		Total cost: 754Million Japanese Yen
Period of Cooperation	January 2006 – January 2011 (5 years)	Partner Country’s Implementing agencies: DENR-EMB
		Supporting Organization in Japan: N/A
		Related Cooperation: N/A

1.1 Background of the Project

The activities for the economic growth have lead to the unsustainable exploitation of the environment in the Philippines, despite of 30 years effort of the Government of the Philippines. The constraints in budget and manpower for adequate sanitation, urban drainage, and pollution control have resulted in the degradation of surface as well as groundwater quality, which caused the adverse effect on public health, fisheries, and tourism. The enactment of the Clean Water Act (CWA) in 2004 is recognized as the dramatic shift in water quality management in the Philippines. The Act adopts various incentives mechanism and set of policy instruments were introduced to maximize economic efficiency and effectiveness of pollution control. Furthermore it adopted “command and control” in conventional water quality management.

However, due to the lack of the experience and expertise on the CWA and its requirements and provisions, the enforcement of the CWA is almost impossible without several interventions. The lack of the institutional and legal framework to materialize the concepts and methodologies, which were newly adopted in the Act, requires the Environmental Management Bureau (EMB) to develop policy frameworks and technical and procedural guidelines. Furthermore, the Act mandates the Bureau to cooperate and coordinate not only with government agencies but also with Local Government Units (LGUs), private sectors and civil society in the water quality management and monitoring, which is a totally new scheme for the EMB and its staff. The EMB Regional Office (RO) staff as well as the Central Office (CO) staff has to be provided with the training opportunities on the provisions of the Act.

In this context, the Government of the Philippines requested the Government of Japan to undertake a technical cooperation project to capacitate the Department to enforce the CWA. In response to the request, JICA and the Philippine authorities held continuous surveys and discussion, and agreed on October 24th, 2005, to implement the technical cooperation project “Capacity Development Project on Water Quality Management (hereinafter referred to as “the project”). The project was launched in February 2006 on the arrival of Japanese experts.

1.2 Project Overview

The target of the Phase I (January 2006 - March 2008) is the capacity enhancement of EMB CO, and the target of the Phase II (April 2008 – January 2011) is the capacity enhancement of EMB RO.

(1) Overall goal:

Under initiatives of the Water Quality Management Are (WQMA) Governing Boards (GBs), industries commercial entities, LGUs, and other public organizations take necessary actions for achieving the water quality goal established in the WQMA Action Plan.

(2) Project purpose:

Capabilities of EMB Central and regional offices to implement priority actions mandated under the CWA IRR are strengthened.

(3) Outputs:

- 1) Integrated policy framework for Water Quality Management (WQM) based on the CWA is established and supported by adequate procedural guidelines and training for EMB staff
- 2) Capacity of EMB central office to lead and support the regional offices is strengthened
- 3) Capability of EMB regional offices to establish and support WQMAs and related institutions is strengthened in three pilot regions
- 4) Overall capability of EMB regional offices in water quality management is strengthened in three pilot regions.

1.3 Input Japanese side: (Total: 754 million Japanese Yen) Experts: 3 long-term experts, 6 short-term experts Equipment: Provision of laboratory equipment Local consultants Short-term training in Japan: 4 counterpart personnel Philippine side: Assignment of counterpart personnel: 26 Budget allocation for travel and transportation costs incurred for pilot activities Allocation of office space and utility costs for Japanese expert team		
2. Evaluation Team		
Members of Evaluation Team	Japanese members: (1) Mr. Kenzo Iwakami, Senior Representative, JICA Philippine Office (2) Mr. Senro Imai, Senior Adviser (Environment), JICA Head Office (3) Mr. Naoto Kuwae, Representative, JICA Philippine Office (4) Mr. Kaneyasu IDA, Senior Consultant, Tekizaitekisho Organization (5) Mr. Kessy Reyes, Program Officer, JICA Philippine Office Philippine members: (1) Ms. Lilihua V. Garcia, Project Evaluation Officer, Project Monitoring and Evaluation Division, Foreign Assisted and Special Project Office, Department of Environment and Natural Resources (DENR) (2) Ms. Nenita R. Zabala, Policy Studies Division, DENR (3) Ms. Febes Melaya, Project Development and Evaluation Division, DENR	
Period of Evaluation	September 17 - October 9, 2010	Type of Evaluation: Final evaluation
3. Summary of Evaluation		
3-1 Result of Cooperation (1) Achievement at the Output level The main achievements of the Project in accordance with the Project Design Matrix are as follows: Output 1 is achieved as scheduled. Indicator 1: Publication of the policy framework that clearly specifies: water quality goals and targets, period of compliance, water pollution control strategies and techniques, water quality information and education program, and human resource development program - Final draft of Integrated Water Quality Management Framework (IWQMF), which specifies the framework of water quality management and roles and responsibilities of each national/local government agency, has been submitted to DENR. Final revision is now being made based on the comments from DENR. Indicator 2: Publication and dissemination of the supporting procedural guidelines - All necessary guidelines and manuals to operationalize WQM have been drafted. Two types of guidelines and manuals have been already officially approved. The other documents are at their very final stage of development (fine tuning or incorporating comments from higher authorities). Indicator 3: Completed orientation-training programs on the policy framework and supporting procedures - Orientation workshops were organized annually (four times). A cumulative total number of 870 CO/RO staff members including non-pilot regions were trained on policy framework and procedural guidelines and manuals. Output 2 is achieved as scheduled Indicator 1: Water quality model in pilot regions, operational water quality and pollution source database, internet-based information and communication network were established. The first national water quality status report was published, and project proposals to generate fund for non-pilot regions were prepared. - Advanced modeling techniques were applied to develop WQMA action plans. Database on water quality and pollution sources has been devised and made operational through the modifications of modules and data formats. Also, user manuals have been produced.		

Indicator 2: CO WQMS staff provided with equipment and trained in the use of equipment.

- Equipment was provided to EMB CO laboratory. Laboratory staff members have been trained through annual trainings conducted by EMB CO laboratory.

Indicator 3: CO effectively coordinating the implementation of CWA administrative and technical procures in the 3 pilot regions.

- EMB CO communicated and coordinated with ROs through regular meetings and conferences to receive feedback and keep the ROs updated on the outcomes and lessons learned from testing the guidelines in the pilot regions. EMB CO also assisted ROs in the technical matters such as identifying water bodies from classification and designation of WQMA.

Output 3 is achieved as scheduled.

Indicator 1: The WQMAs established have functional Governing Boards, Technical Secretariats, Multi-sectoral action groups, Area fund management system and Reporting system.

- According to the guidelines, after WQMA is designated, GB in charge of the WQMA will be established, and the water quality management activities will be implemented based on the action plans that the GB will formulate. The GB for three WQMAs began their meetings in mid or late 2008, and they were officially established in November-December 2009 right after the approval of guidelines.

Indicator 2: At least one WQMA in each pilot region is established with action plan prepared.

- Twenty one to twenty five members, representing LGUs, other line agencies, NGOs, Academics, local industries, water utility corporations, indigenous people were nominated as permanent GB members for the 3 WQMAs in the pilot regions. Technical Secretariat was established in each GB. In the secretariat, it is necessary for Technical Secretariats to have resource persons as members for each of technical/legal and financial aspects. At this moment, selection for appointment of appropriate personnel for the Technical Secretariat is being done for Region 3 and Region 12, while all the necessary resource persons have been appointed for Region 6. Also, all the 3 GB are holding regular meetings, and the minutes of meeting is prepared for each GB meeting, and then approved at the next GB meeting. So far, GBs formulated and approved action plans and established Multi-Sector Group (MSG) to implement the water quality monitoring activities. Guidelines on National and Area Water Quality Management Funds are now being revised.

Output 4 is almost achieved as scheduled

Indicator 1: Major point pollution sources in pilot regions are complying with the discharge permitting/charge system, including the SMR system, and supported by database of point and non-point sources, functional system for assessment, collection and accounting of pollution charges and reward/incentive system

- The ROs have conducted inventory of pollution sources within their WQMA. Database on WQ information is now operational (except the database on PCO which was established but needs some modification for use). The ROs will be able to strengthen enforcement activities once the guidelines on discharge permit and waste water charge system as well as WQMA fund guidelines are officially endorsed.

Indicator 2: First regional water quality status report for each of the 3 pilot regions published.

- Based on the guidelines, the pilot ROs (Region 3, Region 6 and Region 12) prepared the reports on water quality situation. These reports are disclosed on the website of EMB.

(2) Achievement at the Project Purpose level

Project Purpose is almost achieved

Indicator 1: EMB CO and 3 pilot ROs assisted by the Project are efficiently and effectively implementing their mandates under CWA IRR through adequate WQM procedures in conformity with CWA requirements, WQMS staff trained in WQM procedures, adequate equipment and information systems, and linkages with related WQM agencies and concerned stakeholders.

- The EMB CO has been well versed in the procedures and the whole process of WQMA under CWA. Three ROs have also obtained the knowledge and know-how on the whole process of operationalization of the CWA/IRR. The web-based database linking with regional offices is mostly operational. The EMB CO is able to provide necessary support to other non-pilot regions based on their experiences in the three regions.

Indicator 2: Capacity of the staff in charge of water quality management in non-pilot ROs is strengthened through participation in the learning process, in activities such as orientation/workshop conducted in the project, adequate understanding on the procedures and guidelines on the CWA enforcement, and familiarization with the experiences of 3 pilot regions on the WQMA designation and action planning through various types of communication

- All the procedural guidelines and manuals have been shared and disseminated to the regional offices at orientation workshops. The non-pilot regional offices have gained understandings on the procedural guidelines and manuals by participating in orientation workshops and management conferences regularly held by EMB CO.

3-2 Summary of Evaluation Results

(1) Relevance: High

- The direction of WQM was consistent during the Project duration. The operationalization of the CWA/IRR was one of the highly prioritized agendas. Therefore, the Project's objective and approach were clearly in consistent with the policy of DENR/EMB.
- Degradation of water quality is a quite serious issue in the Philippines. A study conducted by the Blacksmith Institute in 2007 listed Meycauayan City and Marilao (one of the three pilot sites in the Project) as one of the top thirty most polluted places in the world. In Region 3, the Provincial Government of Bulacan took initiatives to tackle the problem and formed a council. However, the magnitude of the problem was not addressed by the LGUs due to lack of institutional framework to involve stakeholders. In Regions 6 and 12, LGUs and other stakeholders are increasingly aware of the problem of the water quality in their areas. WQMA action plans developed by the Governing Boards have incorporated priority agendas of LGUs. Therefore, the Project's implementation approach and its scope are very much relevant to the local needs.

(2) Effectiveness: High

- The intended objective of the Project was to develop an enabling environment for the operationalization of WQMA under the CWA/IRR by (1) preparing guidelines on WQMA, (2) showcasing successful WQMA activities and (3) improving the EMB's overall capacity to facilitate WQMA activities. It is judged that the enabling environment has been well developed and entrenched as intended, and it is expected that the project purpose will be mostly achieved.

(3) Efficiency: High

- The Project activities were conducted almost as scheduled. The EMB and the Project Team will complete the remaining activities, which are currently at their final stage of development, such as final draft of Procedural Manual on Non-Attainment Area and WQMA Action Planning and LGU Compliance Scheme.
- All the guidelines and manuals have been drafted. The drafted guidelines and manuals have been or being pilot tested; therefore, the finalized versions will be suited to local conditions.
- Inputs from JICA were judged as effective based on the interviews and questionnaire survey. The equipment provided for the EMB CO and RO laboratories was well used for water sampling and analysis. Particularly, the capacity of the RO 12 laboratory has been significantly enhanced in terms of the number of parameters. (Before the implementation of the Project, ROs had to send samples to CO laboratory for some test items, but ROs themselves are now able to conduct testing of such items.)
- Most of the local consultants made good contributions. In the Phase I, among many local consultants employed, there were some cases where some local consultants failed to deliver expected performance/outputs. In the Phase II, remedial measures were taken and the quality of outputs was successfully improved.

(4) Impact: Moderate

The impacts recognized at the time of final evaluation are as follows, and it is expected that the Overall Goal will be achieved.

- The procedural guidelines developed under the Project are used to classify water bodies and designate WQMA. EMB CO identified three water bodies for classification in other regions (Albay Gulf in Region 5, Toledo - Balamban Coastal Waters in Region 7, Macajalar Bay in Region 10) for WQMA activity. In addition, EMB CO identified sixteen priority water bodies for WQMA designation.
- DENR has so far designated 6 WQMAs including three under the Project. Officially classified water bodies and designated WQMAs facilitated external assistance. For example, the Silway River WQMA is now supported by the World Bank.

- The EMB has set a policy to establish at least one WQMA for each region, and allocate budget of one million pesos annually for such regions which already have established WQMAs. All EMB regional offices have already been trained on the designation of WQMA and are very much willing to designate WQMAs. They have identified their candidate WQMA in their respective jurisdiction. The core members of the EMB CO, experienced in supporting and guiding the WQMAs in three regions are able to extend their support to non-pilot regions, utilizing the working knowledge of the staff members in the pilot regions and expertise of the local consultants. It is expected that WQMA implementation will be greatly facilitated when funds from the Government or other sources are made available.
- For non-pilot ROs, such activities as establishment of database/information systems, information sharing on the project outputs and experiences of the pilot ROs and practical trainings. Through the Project, the non-pilot ROs could obtain knowledge to some extent on the area water quality management especially the actions in the WQMAs. It is necessary to learn practical know-how through actual actions in the regions.

(5) Sustainability: Moderate

<Policy Aspect>

- Throughout the Project period, CWA and implementation of its IRR have been the priority agenda of EMB, and assistance in policy aspect continued. The new medium-term Philippine Development Plan is going to be publicized by the end of 2010. WQM is mentioned by the President and the DENR Secretary as the priority agenda of the current administration. It is unlikely the current policy direction would be significantly changed. At present, the policy support for the operationalization of the CWA/IRR is consistent.
- The integrated policy framework and the procedural guidelines for WQMA fund management are at the finalization stage, but have not been officially approved. The endorsements of these documents are indispensable to involve all the stakeholders in WQMA activities and scale up WQMA to other classified water bodies and WQMAs. Sustainability of the Project outcome will be ensured once these documents are officially approved.

<Institutional Aspect>

- The EMB has 16 ROs nation-wide. The selection of pilot regions was appropriate and effective because one site from Luzon, Visayas and Mindanao was selected to effectively disseminate and demonstrate outputs to other non-pilot regions. Also, the three WQMAs were selected in consideration of geographical conditions and socioeconomic settings.
- Although the GBs in the pilot regions are at a rudimentary stage of organizational development, the organizational and institutional sustainability of GB and MSG activities are high as the member organizations are increasingly involved in GB meetings and MSG members are willing to conduct sampling activities. The regional offices are able to handle regular activities and logistic arrangements. Approximately 1 million pesos per WQMA is allocated from the EMB CO. The EMB CO and ROs need to monitor the following points (under Technical Aspect) in order to ensure the sustainability of the GB activities.

<Technical Aspect>

- LGUs need to officially endorse the compliance scheme in order to facilitate the implementation of WQMA Action Plan. Also, in order to strengthen the compliance, the approval process should be given a high priority.
- The regional offices are likely able to maintain their current functions to manage meetings and logistic arrangements. However, they are understaffed and they may be overloaded when WQMA activities are expanded. Also, currently, the GBs are closely coached by local consultants. The EMB ROs need to take over such a role after the end of the project duration.

3-3 Facilitation Factors

1. Planning Stage

(1) GB/MSG

The Project proves the effectiveness of the approach stipulated under the CWA/IRR to foster local initiative and mobilize local resources for WQM activities through the formation of GB and MSG. This is vitally important because actual implementation for WQM is a mandate of the LGU. Many of the participating LGUs in the three WQMAs have been committed to provide inputs for GB and MSG activities and implement prioritized WQMA action plans.

(2) Participation of counterparts in all the necessary processes for WQM

Staff of EMB CO accumulated enough knowledge and know-how on the formulation/operation of policy documents/guidelines through participation in the all processes of classification of water bodies, designation of WQMA, establishment of GBs and formulation and implementation of action plans.

2. Implementation Process

(1) Consensus building on approach

At the very early stage of the Project, there were different ideas on the definition and scope of WQMA between the JICA technical assistance team and the EMB. This issue was critically important to develop procedural guidelines, and were continuously discussed and eventually, reached a consensus. After that, this helped them to develop procedural documents based on clear and common understanding.

(2) Process of activities in the pilot regions

The pilot activities were conducted through the following process in each region: (1) designation of the target WQMA, (2) organizing public hearing and presenting delineated WQMA and non-attainment areas, (3) nominating GB members based on guidelines and (4) organizing regular GB meetings to confirm progress and achievements and make decisions for next steps. Through this process, WQMA action plan and the first WQMA status report were produced, a MSG was formed and its WQ monitoring plan was developed and actual water quality monitoring started.

(3) Role of local consultants

It is very important for EMB to have local resources that can provide quality services for WQMA activities. The Project extensively utilized local consultants that constantly supported the EMB CO and the three ROs in technical aspects and institutional development. This helped enhance their capabilities to support the EMB.

3-4 Impeding Factors

(1) Planning Stage

none

(2) Implementation Process

none

3-5 Conclusion

As described above, it is expected that the scheduled project objective will be achieved before the completion of the Project. In the light of 5 project evaluation criteria, it is evaluated that the Project was properly implemented.

3-6 Recommendations

- The EMB and the JICA technical assistance team should ensure that the remaining tasks listed in 4-3 should be completed in order to fully accomplish the project's objectives so that the EMB will be able to operate without external technical assistance after the project duration.
- The joint evaluation team recommends that EMB and DENR should make their best effort to expedite the approval of the developed procedural guidelines and manuals.
- The GBs and their WQMA activities in three pilot regions are going to be used as the model for other non-pilot regions. The EMB and JICA should closely monitor their performance and extend support if necessary after the end of the project duration.
- Currently, the regional offices are understaffed and staff members are compelled to take multi-tasking functions. This negatively affects the roles of the regional offices to take the lead role in WQM. Therefore, it is recommended that EMB and DENR should make their best effort to increase the number of staff as well as align the functions of the regional office.

3-7 Lessons Learnt

- The project duration was divided in two phases. By the end of the Phase I, all the guidelines and manuals for WQMA had been drafted; therefore, the three EMB regional offices were able to start pilot activities as planned. This arrangement can be effective to secure a sufficient time for field operations.
- At an early stage of the project duration, there was a conceptual difference between the JICA technical assistance team and EMB on the definition and the scope of WQMA. Yet, after a series of discussions, they had a clear, common understanding. This helped them develop procedural documents based on the common understanding. Full mutual understanding between the counterpart organization and the

JICA technical assistance team on definitions, scope of work and specifications of outputs and deliverables is critically important to produce satisfactory results as well as to set common goals and directions.