

Terminal Evaluation

Asia

1. Outline of the Project

Country:

Republic of the Philippines

Project title:

The Project for Enhancement of Capabilities of Flood Control and Sabo Engineering of DPWH, Stage I

Issue/Sector:

Social Development

Cooperation scheme:

Technical Cooperation Project

Division in charge:

First Technical Cooperation Division,
Social Development Cooperation Department

Total cost:

315 million yen

Period of Cooperation 10 January 2000 - 19
January 2003

Partner Country's Implementing Organization:

Department of Public Works and Highways (DPWH), Flood Control and Sabo Engineering Center (FCSEC)

Supporting Organization in Japan:

Ministry of Land, Infrastructure and Transport

Related Cooperation:**1-1 Background of the Project**

The Republic of the Philippines suffers from consequences of floods and mud slides due to typhoons. They lose more than 700 people and eight billion pesos, 2.2% of annual revenue, annually. However, the Department of Public Works and Highways (DPWH) which held jurisdiction over disaster-prevention projects such as floods and mud slides did not have a department or section exclusively in charge of disaster-prevention projects, and the disaster-prevention project was in insufficient conditions in both quality and quantity.

To improve the situation, the government of the Philippines requested the government of Japan for the cooperation to settle "Flood Control and Sabo Engineering Center (FCSEC)" under DPWH and to improve the techniques of flood control and sabo (soil erosion control) engineering through developing technical standards and implementing techniques.

1-2 Project Overview

To cope with the disaster-prevention problems such as floods and mud slides in the Philippines, the project implemented cooperation activities such as developing techniques for flood and mud slide disaster-prevention. This was carried out to increase the capability of planning and designing of flood control and Sabo engineering facility constructions to the engineers that worked for local offices and local engineering offices of DPWH who implement flood control and Sabo engineering by local funds.

(1) Overall Goal

The capability of the DPWH in planning, design, construction and maintenance of flood control and Sabo facilities will be enhanced in order to cope with water-induced disasters.

(2) Project Purpose

The capability of the DPWH in planning and design of flood control and Sabo facilities will be enhanced in order to cope with water-induced disasters.

(3) Outputs

- 1) Basic functions, organizations and institution of the FCSEC will be established and secured for sustainable activities.
- 2) The technical standards (on survey, planning and design) in the field of flood control, Sabo, slope failure, and urban drainage will be upgraded and be made available for use.
- 3) A sufficient number of the personnel of the DPWH will be trained.
- 4) A basic information system for profiling damages occurring on disaster prevention structures will be established.
- 5) Research and development functions of the Flood Control and Sabo Engineering Center (FCSEC) will be established.
- 6) The DPWH will form an internal system to extend the technical standards and other outputs of the project, throughout all relevant offices of the DPWH for the effective implementation of services.

(4) Inputs

Japanese side:

Long-term Experts	4	Equipment	57 million yen
Short-term Experts	13	Local Cost	33 million yen
Trainees received	10		

Philippines' Side:

Counterparts	10		
Land and Facilities			
Local Cost	31 million yen		

2. Evaluation Team

Members of Evaluation Team

Team Leader: Junji TAKAYANAGI, Director, First Research Department, Japan Water Resources Environment Technology Center
Sabo: Masato JOGASAKI, Inspector, Ministry of Land, Infrastructure and Transportation
Evaluation Planning: Nobuko NISHIMURA, Social Development Cooperation Department, JICA
Cooperation Planning: Toshihisa HASEGAWA, Staff, Social Development Cooperation Department, JICA
Evaluation Analysis: Tuneo KUWAHARA, Nippon Giken Inc.

Period of Evaluation	24 June 2002 - 10 July 2002	Type of Evaluation:	Terminal Evaluation of the Project Stage 1
-----------------------------	-----------------------------	----------------------------	--

3. Results of Evaluation

3-1 Summary of Evaluation Results

(1) Relevance

As the priority of flood control and drainage was stated in the Medium-Term Philippine Development Plan (1999-2004) and the enhancement of the function of FCSEC was part of the policy, the relevance of the project is confirmed. Since the budget for flood control project by local funds (the target of the project) is approximately half of the entire flood control budget (four billion pesos), the implementation of the project contributed to the efficient implementation of flood control.

(2) Effectiveness

The programs by the local fund were implemented by regional/district offices of the DPWH (local offices and local engineering offices). There was much demand from local community to flood control, and target groups were narrowed down to the engineers of regional/district engineering offices which were contributed to enhance the effectiveness of the project. However,

the number of facilities planned/designed during the cooperation period according to the technical standards which are indicators to the level of achievement of the project purpose will be limited at the termination of the project, so the effectiveness of the project could not highly be evaluated.

(3) Efficiency

Although most of the inputs were evaluated to be used effectively, the overall efficiency of the project was not high enough, especially in the initial stage due to the insufficiency of the inputs from the Philippine side in terms of the quality and quantity of the counterpart personnel and their experiences.

As for the budget, the total annual budget from the Philippine side was much less than required and the allocation of the annual budget was delayed several months, which brought about tremendous negative factors for achieving efficiency.

(4) Impact

The DPWH had started to revise the technical standards on all the projects in its hand, however in advance to the revision, the technical standards in the fields of flood control and Sabo engineering were revised, and the methods were referred to in the revision of technical standards in other fields.

The capability of the techniques enhanced during the implementation of the project is expected to contribute to the effective introduction of small scale flood control projects as well as large scale flood control projects by foreign aids.

(5) Sustainability

The sustainability of the project at stage of the terminal evaluation was not very high. The training was carried out as the main activity for the enhancement of techniques and it had just started in June 2002. This left the lecturers without enough experience. However, the technical sustainability will be largely enhanced through accumulating experience by continuous efforts to give training, and through the feedbacks for improving the contents of the training which would be attained in the conducts of training with the support of experts.

3-2 Factors that promoted realization of effects

(1) Factors Concerning the Planning

N/A

(2) Factors concerning the Implementation Process

When the technical standards (policy) were revised, the project was progressing simultaneously with efforts to revise the works of technical standards in the other fields than flood control and Sabo engineering which were looked after by DPWH. As a result, the approval process of technical standards within the Philippines was promoted.

3-3 Factors that impeded realization of effects

(1) Factors Concerning the Planning

N/A

(2) Factors concerning the Implementation Process

1) The flood control and Sabo engineering scheme implemented by local budget of local/regional engineering offices described in the preliminary survey by the DPWH main office was largely different from the actual situation of the local/regional engineering offices. Therefore, it took time more than expected to understand the situation which was fundamental for the implementation of the project activities.

2) The information on the facilities that suffered from disasters was not fully recognized even within the DPWH local/regional engineering offices, and the Japanese experts and counterpart personnel had to directly conduct a time consuming survey to gather the necessary information.

3) As the budget allocation for the project was not systemized, there was a significant lack of funds.

4) The related personnel and counterpart personnel of the DPWH did not have a full understanding of the project-type technical cooperation in the beginning.

3-4 Conclusion

It was highly appreciated that the project activities were implemented steadily for the enhancement of the DPWH in terms of technical and management capacities, in spite of the fact that the project had problems in its implementation such as the

insufficient baseline data and the chronic lack of budget from the Philippine side. It was confirmed that some outputs of the project was not achieved at the terminal evaluation, however with continuous cooperation, the formulating outputs would be settled and developed. As the relevance of the project was quite high and the measuring standards and training curriculum were established which acted as the basis of enhancing its techniques, the effectiveness and sustainability of the effects of the project could be enhanced by continuing the training activities and utilizing the enhanced techniques in daily works.

3-5 Recommendations

(1) As the inputs from the DPWH side were not fulfilled to the level of achievement in terms of its quality and quantity, the DPWH should continue to make further efforts to accomplish the project purpose and improve the sustainability of the project.

(2) As a result of the terminal evaluation, it became clear that the project purpose would not easily be accomplished by the termination of the project. Therefore to improve the quality of the project, the cooperation period should be extended and activities should mainly be implemented to utilize the training outputs, which were already observed to be realized.

(3) It should be recommended to take the following measures to enhance the project outputs to the appropriate level.

1) It is recommended to take every measure for the sustainability of the FCSEC, including obtaining the approval of a permanent organization.

2) It is recommended to improve the training curriculum so that the participants understand the phenomenon of flood and sediment movement, which are crucial for the design of flood control and Sabo structures. It is also crucial to implement training utilizing laboratory facilities as well as introducing follow-ups simultaneously to monitor the continuous applicability of training results in the actual work.

3) It is recommended to allocate researchers for the DPWH to implement research activities with one particular method on the basis of the project achievements.

3-6 Lessons Learned

It is necessary to take enough time to gather enough information for the enhancement of project achievements, to grasp the actual situation and to formulate the detailed plan of operation. Especially when the capabilities of an implementing organization in terms of their personnel are evaluated and target groups are narrowed down during the cooperation period, there is a possibility that it takes a long time to simply grasp the actual situation.

3-7 Follow-up Situation

Upon the above recommendation, the activities on planning/designing flood control and Sabo engineering facilities implemented for stage I of the project was extended by eighteen months with additional activities on construction/maintenance and management of flood control and Sabo engineering facilities. The extended project was to complete in two years. In other words, the project period was extended by two and a half years in total, and the project Stage 2 (January 2003 to June 2005) is now under implementation.