

# Terminal Evaluation

## Asia

### 1. Outline of the Project

**Country:**

Philippines

**Project title:**

The Pesticide Monitoring System Development Project

**Issue/Sector:**

Agriculture/General

**Cooperation scheme:**

Project-type Technical Cooperation

**Division in charge:**

Agricultural Technical Cooperation Division, Agricultural Development Cooperation Department

**Total cost:**

670 Million Yen

**Period of Cooperation**

31 Mar 1997 - 30 Mar 2002

**Partner Country's Implementing Organization:**

Bureau of Plant Industry (BPI), Department of Agriculture Fertilizer and Pesticide Authority (FPA), Department of Agriculture

**Supporting Organization in Japan:**

Ministry of Agriculture, Forestry and Fisheries of Japan, Ministry of Health, Labour and Welfare (MHLW)

**Related Cooperation:**

Grant Aid Project; "Improvement of Monitoring of Pesticide"

### 1-1 Background of the Project

The seeds of high-yielding rice were introduced to the Philippines in the 1970s, and the yield per unit area has increased. However, Large-scale cultivation of this high-yielding resulted in the heavy use of pesticides. Currently, insecticides and fungicides are mainly used, but the herbicide use has also been increasing. To ensure the safety of foods and protect the environment, the necessity for strengthening capacity to deal with the residual pesticides is becoming more apparent. Although the recommended standard (the Codex alimentarius) of the Food Standard Committee of FAO and WHO had been used as the provisional standard in the Philippines, it was necessary to set up an original standard in line with the circumstances in the Philippines. Against this background, the Government of the Philippines requested the Government of Japan to provide a Grant Aid Project to equip and improve the capacity of the Pesticide Analytical Laboratory (PAL) of the Bureau of Plant Industry (BPI). The Government of the Philippines later requested a Project-type Technical Cooperation from the Government of Japan to improve the pesticide administration of FPA in order to strengthen the activities of PAL and to ensure efficient utilization of analyzed data.

### 1-2 Project Overview

In order to establish a comprehensive monitoring system for pesticide residue and formulations, the Project transferred technology and skills to the staff of BPI and FPA and produced manuals.

(1) Overall Goal

Safe food within tolerable levels of residual pesticides is supplied to the market.

(2) Project Purpose

To develop a comprehensive system for monitoring residual pesticides and pesticide formulations.

### (3) Outputs

- 1) Capability in pesticide residue and pesticide formulation analysis is improved.
- 2) Methods and technology of Supervised Pesticide Residue Trials in crops (SPRT) are improved.
- 3) Methods of Pesticide Residue Monitoring (PRM) are improved.
- 4) Necessary information to establish MRLs and the safe use of pesticides are provided to the relevant agencies.
- 5) Activities to disseminate safe bundling and the proper use of pesticides are improved.

### (4) Inputs

Japanese side:

Long-term Experts	9	Equipment	118 Million Yen
Short-term Experts	13	Local Cost	53 Million Yen
Trainees received	17	Others	

Philippine side:

Counterparts 46

Land and Facilities

Equipment

Local Cost 54.9 Million Pesos (143 Million Yen)

## 2. Evaluation Team

### Members of Evaluation Team

Team Leader/General: Yoshiaki KANO/Managing Director, Tsukuba International Center, JICA  
Pesticide Analysis/Pesticide Trials: Yasuhiro KATO/Director of Chemistry Division, The Institute of Environmental Toxicology  
Safe and Judicious Use of Pesticides/Food Safety: Takashi WATANABE/Deputy Director, Environmental Fate and Behavior Inspection Division, Agricultural Chemicals Inspection Station  
Evaluation Analysis: Takashi KOJIMA/Manager, Overseas Environmental Planning Division, Agricultural Chemicals Inspection Station  
Evaluation Planning: Yuko ISHIZAWA/Staff, Agricultural Technical Cooperation Division, Agricultural Development Cooperation Department, JICA

**Period of Evaluation** 24 September 2001 - 5 October 2001

**Type of Evaluation:**  
Terminal Evaluation

## 3. Results of Evaluation

### 3-1 Summary of Evaluation Results

#### (1) Relevance

The Project Purpose "to develop a comprehensive system for monitoring pesticide residue and pesticide formulations" is relevant, as it contributes to food safety, one of the main objectives of the Food Security policy of the Philippines. The FPA and BPI are in a position to implement the Food Security policy of the Philippines. The organizations were established by the Government of the Philippines and are in charge of food security under the policy, so they are appropriate as the implementing agencies.

#### (2) Effectiveness

To achieve the Project Purpose "to develop a comprehensive system for monitoring pesticide residue and pesticide formulations", the following points should be taken into consideration: (1) the information on registered pesticides has been

collected and reserved, (2) the system of Pesticide Residue Monitoring has been improved, (3) the agencies concerned recognize the importance of continuous implementation of Pesticide Residue Monitoring and (4) the methods of SPRT have been improved, and the importance of utilization of the SPRT data has been recognized by BPI and FPA. As of this evaluation, BPI and FPA have yet to recognize the importance of utilizing the analyzed data and Pesticide Residue Monitoring has not yet been applied to crops across the country. However, the five outputs of the project have, for the most part, been completed, and the skill and knowledge on the main components of the pesticide monitoring scheme have already been transferred. As a result, the counterparts have learned how to analyze the pesticide residue data and how to examine pesticide residue by themselves. Therefore, it is considered that this project has accomplished the basics of its goal.

### (3) Efficiency

All of the inputs, such as the dispatch of the experts and the counterpart training have been effectively utilized, which contributed to the success of the Project. On the other hand, the administrator of the FPA was absent for the latter half of the Project, which limited the leadership of FPA against legislation addressing pesticide treatment in pesticide administration and establishing a penal regulations for the illegal use of pesticides. Moreover, the distance between FPA's head office and analytical laboratory lowers efficiency. The activities to set up valid guidelines for the maximum residue values were delayed to allow for adjustment of the prerequisites of the "appropriate management of pesticide registration scheme".

### (4) Impact

There were a number of important positive impacts. Since the role of FPA and BPI was positioned systematically through Project implementation, cooperation both ways became closer. It is difficult to say whether the role of FPA is sufficiently demonstrated, as the law scheme has not been sufficiently prepared, but the FPA understands the meaning of BPI's offering a scientific basis to support its functions. The farmers, pesticide sellers and farming extension workers have become more conscious of the usage of safe and appropriate pesticides.

### (5) Sustainability

The cooperation between the FPA and the BPI has been improved through the project, but it is necessary to maintain the relationship and apply the acquired skills and knowledge to the daily work. In the financial aspect, the Foreign Aid Project Fund (FAPF), which the government of the Philippines allocated, would be discontinued when the Project is terminated, while the ordinary budget of PAL is not sufficient to support activities, including the maintenance of equipment. It is necessary to consider the consignment project fees as a source of income, and to endeavor securing a budget through cooperation with FPA. From the technical point of view, even though the skills of the counterparts have reached a certain level, it is not high enough for them to learn new analytical methods by themselves. Therefore, continued support is needed. In addition, some of the counterparts were not regular employees of the agencies, so it is important to concentrate the transfer of knowledge and skills on to those in the organization.

## **3-2 Factors that promoted realization of effects**

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### (1) Factors concerning Planning

N/A

### (2) Factors concerning the Implementation Process

The implementing Organization was s two organizations rather than one, BPI and FPA, which hindered implementation of the Project at the beginning, but later the relationship between the two became closer, the members of the two organizations worked together as a team, holding meetings frequently to achieve the Five Outputs.

## **3-3 Factors that impeded realization of effects**

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### (1) Factors concerning Planning

Although the Philippine side explained that the necessary data for the maximum residue limit and schemes relating to pesticide administration had been adjusted prior to the Project, the data was actually insufficient and the schemes did not function well. The inadequacy of preliminary study was greatly lowered efficiency.

### (2) Factors concerning the Implementation Process

As the position of FPA administrator, who should be responsible for taking the initiative in pesticide administration, remained vacant during the latter half of the Project, organizational initiative was insufficient, which lowered both Impacts and Efficiency.

### **3-4 Conclusion**

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All of the Outputs are expected to be achieved by the end of the Project and the Project Purpose "to develop a comprehensive monitoring system", also, is expected to be achieved. To make the pesticide monitoring system more effective, continued Project activities and cooperation among the implementing organizations are necessary. In order to achieve the overall goal of ensuring a safe food supply, the accumulation of scientific data and enhancement of the coordination between BPI and FPA are necessary.

### **3-5 Recommendations**

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- (1) To ensure sustainability, it is necessary for BPI and FPA to undertake project activities as routine work.
- (2) The government of the Philippines should require that SPRT be conducted in the country when someone wishes to register a new pesticide. Thereafter, the label information should reflect the result of trials.
- (3) The Department of Agriculture (DA) should strengthen the linkage between and among its bureaus, attached agencies, and other stakeholders to sustain the gains from the Project.

### **3-6 Lessons Learned**

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- (1) Five working groups were established by members both from BPI and FPI for each of the five Outputs. This system is very effective in extending cooperation to more than one implementing organizations.
- (2) If contract workers are allocated as counterparts, it is necessary to take measures to settle the transferred skills in the organization, because the skills may be lost when those workers are discharged.
- (3) If the partner Government is providing special financial support for the project, it is necessary to secure an alternative budget after the project period to maintain achievements.
- (4) It is essential for smooth project management to take time to research the status of the target country, such as the actual management status of the schemes, before launching a project.

### **3-7 Follow-up Situation**

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N/A