I. Outline of the Project		
Country: Vietnam		Project Title: The Project for Improvement of Extension
		System for Applying Better Farming System and
		Cultivation Techniques for Poor Farmers in the Mekong
		Delta, The Socialist Republic of Vietnam
Issue/Sector:Agriculture		Cooperation Scheme: Technical Cooperation Project
Division in Charge: JICA Vietnam Office		Total cost (as of the time of evaluation): 370,000,000 JPY
		Partner Country's Implementing Organization:
		The Ministry of Agriculture and Rural Development
		(MARD), Southern Horticultural Research Institute
		(SOFRI)
Cooperation Period	(R/D): 21 st of July, 2009	Supporting Organizaion in Japan:
	Five years (Oct. 2009 – Oct. 2014)	The Ministry of Agriculture, Forestry and Fisheries

Summary of the Evaluation

1.1 Background

The Government of Vietnam, in its five-year Socio-economic Development Plan, strengthens agricultural policy by putting emphasis on variety of crops, shifting its priority from rice growing to citrus cultivation in order to improve livelihood of farmers. The Mekong Delta region, which is also famous for many tropical fruits production including citrus, is expected to produce more variety of fruits. However, in reality, many farmers fail in management of citrus cultivation facing low yield and quality of fruits because of many issues such as lack of appropriate knowledge on disease control and effective cultivation techniques, lack of capital, limited market and so on.

In recent years, citrus greening disease has been seriously affecting more orchards than ever to such an extent that it threatens the livelihood of farmers. In this juncture, the Southern Horticultural Research Institute (SOFRI) under the Ministry of Agriculture and Rural Development (MARD) of Vietnam, has established the technology of producing citrus disease-free seedlings and cultivation techniques. Nevertheless, efficient and effective extension system has yet to be established, due to insufficient development of effective cultivation methods for farmers and inadequate ability of extension officers including provincial administrative agencies.

JICA has been implementing "the Project for Improvement of Extension System for Applying Better Farming System and Cultivation Techniques for Poor Farmers in the Mekong Delta" (hereinafter referred to as "the Project") aiming at improvement of extension system for effective citrus cultivation. SOFRI is the main counterpart agency and the duration is five years (from October 2009 to October 2014). Since the termination of the Project is scheduled for October 2014, the Terminal Evaluation Study was jointly conducted by JICA and the Vietnamese authorities concerned, as agreed in item V. of Record of Discussions of the Project.

1.2 Contents of cooperation

Target area: Five provinces in Mekong Delta Region, i.e., Tien Giang Province (Cai Be District), Vinh Long Province (Tam Binh District), Ben Tre Province (Mo Cay Bac District), Tra Vinh Province (Cau Ke District) and Soc Trang Province (Ke Sach District)

- (1) Outcome of the Cooperation
 - (i) Project Purpose: Extension system for applying better cultivation techniques on King mandarin with the resources of SOFRI is improved.
 - (ii) Overall Goal: The living standard of farmers in the target area is improved through productivity improvement of King mandarin in the area.
- (2) Outputs
 - (i) Model citrus farmers in the target area acquire necessary knowledge and skills of effective cultivation techniques on King mandarin.
 - (ii) Provincial and district DARD officials in the target area improve their ability to guide farmers in acquiring effective cultivation techniques on King Mandarin.
 - (iii)SOFRI can provide farmers, and provincial and district DARD officials with effective technical support to increase production of King mandarin.
- (3) Inputs
 - (i) Japanese side
 - Dispatch of Japanese Experts
 - 2 Long-term experts: Fruits cultivation techniques (Oct. 2009~Oct. 2014), Coordinator/Extension on cultivation technique (Oct. 2009~Oct. 2011, Oct. 2011~Oct. 2014)

Short-term experts (4 times) : Disease control (2012, 2013, 2014), Agricultural economics (2014)

- Machinery and equipment for cultivation, seedlings and others as needed
- Trainings in Japan on cultivation and disease prevention.
- Necessary expense for activities in the target area such as trainings and extension tools
- (ii) Vietnamese side
 - C/P including Project Director, Project manager and Project coordinator
 - Necessary staffs for project activities (DARD and other relevant organization in the target areas).
 - Office space and facilities
 - Provision of necessary information on relevant projects
 - Operation cost as required

II. Evaluation Team

2.1 Objectives and Methodology of the Study

<Objectives of the Study>

- (1) To assess the extent of achievement in regard to the Project Purpose and Outputs stipulated in PDM;
- (2) To clarify implementation process of the Project, such as if all activities have been conducted as planed or not and if activities are contributed to outputs or not.
- (3) To conduct evaluation by 5 criteria based on JICA Guidelines for Project Evaluation. Mainly to check 3 criteria against 5 including Relevance, Effectiveness and Efficiency.
- (4) To check counter activities for recommendations suggested by the Mid Term-review study. The recommendations were as follows;
 - (i) Expectation of High Yield with Proper IPM Practices and Close Monitoring
 - (ii) Necessity of Monitoring Efforts with Specific Indicators
 - (iii) Strengthening the Project Management
 - (iv) Engagement of C/P for Sustainability of the Project
- (5) To make recommendations for the remaining period and after completion of the Project

<Methodology of the Study>

- (1) Literature review of relevant documents
- (2) Interviews with project stakeholders (model farmers, DARD officers, SOFRI staff, Japanese Experts, etc.)
- (3) Site observation in five target provinces

The study results were presented at Joint Coordination Committee (JCC) held on 29th May 2014 in My Tho and shared among all stakeholders concerned.

- 2.2 Joint Terminal Evaluation Team Members
- (1) Japanese side

Team Leader: Mr. Sato Takeaki, Visiting Senior Advisor, JICA Headquarters

Fruit Tree Cultivation/Pest Control: Dr. Oto Yasuo, Senior Researcher, Incorporated Administrative Agency, National Agriculture and Food Research Organization

Evaluation Analysis: Ms. Fukushi Erika, Consultant, MOE Consulting Inc.

Planning and Management: Mr. Yamamoto Satoshi, Project Formulation Advisor, JICA Vietnam Office

(2) Vietnamese side

Team Leader: Ass. Prof. Pham Van Du, Deputy Director General, Department of Crop Production, MARD

Team Member: Ass. Prof. Mai Thanh Phung, Director of Southern Branch of National Extension Center,

MARD

Team Member: Mr. Le Van Thiet, Vice Head, Southern Office, Department of Plant Protection, MARD

2.3 Duration of the Study

From 11th May 2014 to 31st May 2014

III. Summary of Evaluations

3.1 Achievement

(1) Achievement of Outputs

Project activities have been carried out according to the current PDM and Plan of Operations (PO). Most of the activities were conducted as planned.

(2) Achievement of Project Purpose

Principal technology such as pruning and training and IPM has been adopted by ordinary farmers as expected. The widening planting distance is now being disseminated. Furthermore, technology transfer of SOFRI-Method to Vietnamese counterparts has been completed. Given these facts, the Project purpose will be almost achieved during the Project period.

(3) Implementation Process

The JCC has been formed consisting of management officers of MARD, SOFRI, representatives from provinces and JICA Vietnam Office. So far JCC meetings were held four times from 2010 to 2014, in which the progress and planned activities of the Project were shared. To manage the implementation of the Project smoothly, PMUs were established in respective provinces at the project commencement with the participation of the provincial and district DARDs. PMU members were selected from DARD officers. The Project organizes monthly meetings at SOFRI, monthly farmer's meetings in respective districts and officer's meetings held after the farmer's meetings. Through these regular meetings and daily work, the relationship among the stakeholders has been well established. After the Mid-term Review conducted in September, 2011, the Project developed the Farmer's Diary, which was utilized as a monitoring book to enhance the communication between farmers and technical officers. The PDM Version 2 (revised at the Mid-term Review) was well understood among the counterparts of SOFRI. The consultation study was conducted once in December 2009.

- 3.2 Summary of the Study Results
- (1) Relevance

Relevance of the Project is high.

 The Project corresponds to the National Socio-economic Development Plan of GOV, Japanese ODA policy and the needs of Target Group.

(2) Effectiveness

Effectiveness of the Project is moderately high.

- Some model farmers are very active and willing to disseminate their acquired knowledge and skills in KM cultivation to ordinary farmers. Many of the farmers who visited model farms had strong interest in the SOFRI method. Some of them have been practicing the new techniques such as pruning and training, and IPM.
- DARD officers have acquired the effective KM cultivation techniques and are confident to disseminate

the SOFRI method to ordinary farmers through mobile plant clinics and trainings.

Due to high infectious rate of greening disease and root-rot disease, ordinary farmers tend to plant KM trees in high density. They are more interested in yield in short period of time rather than life span of KM orchards and sustainable benefit from them. It may take more time for them to shift from traditional cultivation to the new cultivation techniques.

(3) Efficiency

Efficiency of the Project is high.

- There were appropriate inputs from Japanese and Vietnamese sides including dispatch of Japanese experts, provision of equipment, local expenses, trainings in Japan, assignment of counterpart personnel, provision of office space and facilities and operational cost etc.
- The visualized teaching materials including manual on KM cultivation and practical on-farm trainings based on scientific approach were found greatly helpful for farmers and DARD officers to acquire the SOFRI method.
- Combination of monthly farmers' meetings, exchange visits and close monitoring by DARDs with Farmer's Diary (monitoring book) made new techniques easy to understand and applicable.

(4) Impact

Some positive impacts were observed as described below. No negative impact was observed so far.

- The Project introduced new techniques that change the way of cultivation. Pruning and training are most appreciated techniques among farmers. The team observed that some ordinary farmers were applying pruning and training with other fruit trees such as pomelo.
- As productivity per tree is higher with the new method than that with ordinary method, increase in income by applying the new model has a great potential if the diseases are controlled.
- (5) Sustainability

Overall sustainability is moderately high.

- (i) Technical sustainability: high
 - Most of the model farmers and DARD officers are confident that they could apply what they have acquired from the Project after the termination of the Project. They will continue to disseminate the techniques to ordinary citrus farmers in the provinces by effectively utilizing the manual and "Farmer's Diary" (monitoring book).
- (ii)Organization sustainability: moderately high
 - Organizationally, there is a good extension system from the national extension center at central level to the extension centers/offices/stations at provincial, district and communal levels. However, effectiveness of team functionality may vary among the five provinces.
- (iii)Financial sustainability: moderately high

- So far, two of the five target provinces have started operating the provincial model farms of KM with their own budget and initiative.
- As close monitoring of the farms is one of the key activities, all provinces need to allocate enough budget particularly for technical officers (district and communes) function properly.
- 3.3 Conclusions

The Team confirmed that extension system for applying better cultivation techniques on KM with the resources of SOFRI has been improved. In terms of verifiable indicator of the Project purpose, principal technology such as pruning and training and IPM has been adopted by ordinary farmers as expected. The widening planting distance is now being disseminated. Furthermore, technology transfer of SOFRI-Method to Vietnamese counterparts has been completed. Given these facts, the Project purpose will be almost achieved during the Project period. Therefore, the Team concluded that the Project will be terminated in October 2014 as scheduled.

3.4 Recommendations

Based on the analysis described above, the following recommendations were made.

- (1) Dissemination of SOFRI method to ordinary farmers
- (2) Choice of optimum planting distance on the basis of situation of respective orchards
- (3) Obtaining National Recognition of the SOFRI method
- (4) Conducting cost-benefit analysis of the SOFRI method

3.5 Lessons Learned

The importance of following items was realized as the lessons learned from the Project.

- (1) Collaboration among stakeholders and strong directions given by provincial authorities
- (2) Cost-sharing of agricultural inputs with model farmers since the commencement of the project
- (3) Training of DARD officers prior to model farmers in order to provide good quality of monitoring
- (4) Strengthening of compliance of model farmers with project instructions and contract
- (5) Appropriate and flexible applications of the new method
- (6) Careful design of the project at the project formulation stage