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Viet Nam	The Project for improvement of Plant Quarantine Treatment Techniques Against Plut Plies on Plesh Pluts

I. Project Outline

Project Cost	206 million yen		
Project Period	March 2005 - February 2008		
Implementing	Post Entry Quarantine Center No. II (PEQC), Plant Protection Department (PPD), Ministry of Agriculture and		
Agency	Rural Development (MARD)		
Cooperation	Ministry of Agriculture Ecreatry and Eicharias		
Agency in Japan	Ministry of Agriculture, Forestry and Fisheries		
Related Projects	Japanese cooperation:		
(if any)	JICA Third country training on Plant Quarantine for Laos, Cambodia, Myanmar in 2009 and 2010		
Background	In Vietnam, agriculture sector accounts for 30% of Vietnam's export (2003). Among agricultural products,		
	tropical fruits such as dragon fruits, specialty fruits of Vietnam, are one of the most potential sources of foreign		
	currency revenue. However, export of tropical fruits was hampered by pest such as fruit flies in dragon fruits.		
	Thus, establishment of pest control was an urgent need. The plant quarantine system had already been		
	institutionalized, but disinfestation techniques were poor; thus, the government of Vietnam requested the		
	technical cooperation to JICA.		
	Japanese Side	Vietnam Side	
	1. Experts: 1 for Long term, 6 for Short term	1. Staff Allocated: 24 persons	
Inputs	2. Trainees Received: 10	2. Equipment: none	
	3. Equipment: 110 million yen	3. Local Cost: 1,238 million Vietnamese dong	
	4. Local Cost: 3 million yen	(77,000 US dollars)	
		4. Buildings and facilities	
Project Objectives	Overall Goal		
	Vietnamese staff is capable of appropriately applying disinfestations method on general tropical fruits.		
	Project Purpose		
	Vietnamese staff is capable of applying disinfestations techniques of fruit flies that complies with international		
	standard to improve Vietnamese dragon fruit's access to international market.		
	Outputs		
	Output 1: Rearing method for fruit flies in laboratory is established.		
	Output 2: Method for vapor heat treatment (VHT) disinfestations and its condition are determined.		
	Output 3: The system which stores examination data and analysis results is built and utilized by Vietnamese		
	counterparts		

II. Result of the Evaluation

Summary of the Evaluation In Vietnam, export of tropical fruits was hampered by pest such as fruit flies in dragon fruits. Thus, establishment of pest control was an urgent need. The plant quarantine system had already been institutionalized, and PEQC was responsible for it, but disinfestation techniques were poor.

This project has well achieved the successful conduct of necessary disinfestation tests for fruit flies on dragon fruits by PEQC researchers alone, for the project purpose of "Vietnamese staff is capable of applying disinfestations techniques of fruit flies". The test results led to the lifting of import ban of dragon fruits by several countries including Japan. Also, it is taking the first steps to achieve the overall goal by starting tests of other fruits such as mangoes and milk apples. As for sustainability, although a problem has been observed in terms of structural aspects due to insufficient decision-making power given to the executing agency, no problem has been observed in policy background, technical and financial aspects.

For relevance, the project has been relevant with Vietnam's development policy, development needs, as well as Japan's ODA policy. For efficiency as well, both the project period and the project cost were as planned.

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

1 Relevance

This project has been highly relevant with Vietnam's development plan (improvement of quality of export agricultural products as set in the Socio-Economic Development Plans and Five-Year Development Plan for Agriculture and Rural Development 2001-2005 and 2006-2010), development needs (improvement of disinfestations techniques for tropical fruits), as well as Japan's ODA policy "Country Assistance Program for Vietnam 2004", at the time of planning/ project completion. Therefore, its relevance is high.

2 Effectiveness/Impact

This project has achieved the project purpose of improving the counterparts' capability of disinfestations techniques of fruit flies as well as overall goal of applying disinfestations method on general tropical fruits.

At the time of the project completion, Vietnamese counterparts could exercise Vapor Heat Treatment methods, a disinfestation method identified as effective, of dragon fruit, without presence of Japanese experts. And at the time of the ex-post evaluation, the PEQC's capability of disinfestation is sufficient enough to extend its scope from dragon fruits to other fruits such as mangoes and milk apples (tests for mangoes have already been carried out, and those for milk apples are planned).

As a result, fruit-import countries including Japan have lifted a ban on import of dragon fruits, and Vietnam is rapidly increasing dragon fruits export.

In addition, disinfestation information and techniques have been disseminated from PEQC

to various interested parties, including the private sector and neighboring countries through various events, seminars and media. The JICA Third Country Training has also contributed to the dissemination. Therefore, its effectiveness/impact is high.



Both project period and project cost were mostly as planned (ratio against the plan: 74%, 100%) and inputs were appropriate for producing outputs of the project, and inputs were appropriate for producing outputs of the project. Therefore, efficiency of this project is high.

4 Sustainability

The project has some problems in structural aspects due to its insufficient decision-making power for timely purchase of spare parts and maximal use of their income (i.e., there is a risk that long approval process in the government, the decision-maker, may hamper timely purchase of spare parts and securing of self-income, which may cause shortage of operation and maintenance cost for testing equipment). However, no problem has been observed in policy background, technical and financial aspects of the executing agency. Having been supported by the current fruit export policy of Vietnam, PEQC staffs have maintained the reference documents and databases, trained new staffs, and applied the learned techniques and provided equipment for testing of mangoes. The government budget allocation can, though in a minimum way, maintain the activities established by this project. Therefore, sustainability of the project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- In order to further expand its activities, it is recommended that PEQC consider the following actions:
- PEQC should propose a concrete management plan in using spare parts so that they can predict to what time they can conduct experiments with remained spare parts provided by the project.
- -PEQC should consider a mechanism which allows them to find resources for both financial aspects (e.g. consultation fees) and technical aspects (maintain the equipment, develop knowledge for young researchers). It is suggested that if it is difficult to receive fees from private companies in return to technologies from PEQC because of procedure of the government, they can consider other mechanisms such as receiving maintenance services, sharing spare part when needed to conduct the test without any interruption.

Column: Positive Impacts on Private Sector

This project provided a lot of chances to private sectors. Before the project, private companies did not know the disinfestation techniques well, and it was prohibited to export dragon fruits from Vietnam to other many countries like Japan and Korea. Since the completion of this project, PEQC has conducted various seminars and workshops, as well as a JICA Third Country Training, to disseminate the acquired disinfestation techniques. These have led to new collaboration with private companies including Japanese ones. For example, a commercial scale disinfestation facility of a Japanese fruit importing company was established and operated in Binh Duong Province, and PEQC regularly provide them with technical support and monitoring. PEQC has also prepared management and technical guidelines for them. Another Japanese company also expressed their intention to receive technical transfer from PEQC.

Although, before the project, dragon fruit export was limited, the export volume reached 400 tons in 2010 and 300 tons in the first 6 months of 2011. Total export value is estimated at 1,5 million USD for the first 6 months 2011. Main importers are the US, Japan and Korea, where most of people were not easily able to eat dragon fruits a few years ago. This project has possibilities to make dragon fruits popular in these countries. Therefore it has positive influences on not only Vietnamese fruits farmers, but also import and export companies, and consumers in foreign countries.



Testing on mangoes (overall goal)