

## Simplified Ex-Post Evaluation for Technical Cooperation Project

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Project Name	The Sustainable Agricultural Training and Extension Project in Rural Areas in the Republic of Panama	January 2010 – December 2010

### I Project Outline

Country Name	The Republic of Panama		
Project Period	January 2004-January 2007		
Executing Agency	Ministry of Agricultural Development (MIDA), National Agricultural Institute (INA)		
Cooperation Agency in Japan	N.A.		
Total Cost	238 million Yen		
Related Projects (if any)	Individual Long term expert (Strengthening agriculture producers) (2001-2004)		
Overall Goal	Farmers of the project target area increase their productivity through applying appropriate agricultural technology in harmony with the environment.		
Project Objective(s)	A sustainable extension model of appropriate agricultural technology is established for small-scale farmers. (In the PDM, it is stated as “A sustainable agricultural extension model is established for small-scale farmers.”)		
Output[s]	<ol style="list-style-type: none"> <li>1. The “pilot farms (*)” are established and strengthened.</li> <li>2. The training courses for “the participatory extension model of appropriate agricultural technology by farmers” are developed in INA.</li> <li>3. The appropriate agricultural technology demonstrated at the pilot farms are expanded by farmers to the neighboring communities.</li> <li>4. An agricultural extension service support system initiated by farmers is promoted.</li> </ol> (*) The “pilot farm” is a place where farmer groups can meet, to analyze their problems and practice appropriate technologies with the extension workers at farm field.		
Inputs (Japanese Side)	Inputs (Panamanian Side)		
Experts	3 for Long term, 4 for Short term	Staff allocated	9 persons
Equipments	1.5 million yen	Equipments	N.A.
Local Cost	35.5 million yen	Local Cost	N.A.
Trainees Received	4 trainees (counterpart training)	Land etc provided	Office space for Japanese experts and venue for the technical training were provided.
Others	N.A.	Others	N.A.

### II Result of the Evaluation

Summary of the evaluation
<p>This project was implemented so that the farmers could learn the appropriate agricultural technologies through the group activities at “pilot farms” (the Project formulated 4 pilot farms), and also the participatory extension model by farmers of the sustainable appropriate agricultural technologies was established. Here, the “participatory extension model by farmers of the sustainable appropriate agricultural technologies” is defined as a situation which satisfies the following three conditions; 1) the farmers put into practice the agricultural technology extension activities with the small-scale farmers in the poor area, 2) the farmer promoters are selected and fostered within the farmers’ group at pilot farms and 3) the promoters put into practice agricultural technology extension activities in the nearby communities.</p> <p>In the Republic of Panama, MIDA is the organization that usually is responsible for agricultural extension activities. However, MIDA was not active for the original responsibility of extension activities. . Therefore, instead of MINDA, INA, the agricultural educational institute, proposed the establishment of a “new extension model” by organizing extension training courses directly to farmers. In this context, the Project started by selecting INA as a counterpart with the idea of involving MIDA once a stable extension model had been developed. In the latter half of the Project, MIDA recognized the effectiveness of the this model, and introduced the methodology to another government program, entitled “Familias Unidas (the United Family)”</p> <p>This project is consistent with the Republic of Panama’s agricultural policy and Japan’s ODA policy. The participatory appropriate technology extension model by farmers satisfied the needs of the related Panamanian stakeholders. At the beginning, the Project ran behind its original schedule due to delays in counterpart staff assignment. However, by the assigning of extra staff by the Japanese side, the original project purpose was achieved by the Project’s end.</p> <p>After the completion of this project, it was expected that the “participatory extension model based on the farmers’ group activities at pilot farms”, which was established by the Project, would continue to be supported by INA, and that this model would be expanded nation-wide by MIDA. However, the INA president was replaced, and the new president, while admitting the effectiveness of this “extension model”, returned to the original organizational framework of MIDA and INA, which is “MIDA is responsible for extension activities, and INA is responsible for Education”. Therefore the exclusive INA support for the 4 pilot farms of this project was suspended. At the present, INA continues their technical support to the farmers, for example, information exchange meetings at the Exchange Centre. But now its target is the general farmers, and not the specific 4 pilot farmers assisted by this project. In addition to</p>

the INA policy change, at some pilot farms the landowners ordered the farmers to leave the fields, so now the farmers at these pilot farms have only been partially able to continue their group activities. Meanwhile, the extension workers at the MIDA regional office visit the pilot farms every three months to see if the agricultural methodologies brought by the Project are being implemented correctly. With the loss of INA's direct support and the loss the farm fields as the central place for group activities, the "participatory extension model based on the farmers' group activities" now faces an uncertain future.

On the other hand, it is reported that more than the half the farmers, (in and out of the pilot farms), who learned the appropriate agricultural technologies through this project still continue to apply the learned technologies. Moreover, other farmers groups, local NGOs, volunteers, and public organizations, who became acquainted with the appropriate agricultural technologies through the guidelines or site visits to the pilot farms, also currently utilize these technologies. The promoters and farmers currently on the pilot farms are still engaged in the extension service to the farmers in the nearby communities. Because of this, the project impacts partially continue.

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

<Recommendation to JICA>

1) In this project, considering the reality that in Panama of the relationship between MIDA and INA was not functioning well, INA proposed to establish the "new extension model by farmers" by organizing extension training courses directly to farmers, and thus, formulated the Project. In this context, the Project selected INA as a counterpart. Even though the project purpose and outputs were achieved within the project period, it was difficult that the effects of the Project would last after the completion of the Project. This project tried to introduce the new extension model of "participatory extension model by farmers with direct technical support by INA", which was new to Panamanian agricultural administration system. The introduction of new administration system would take time to be established and settled down. Taking this into consideration, in case of the similar project, it is recommended to secure the enough period so that the new administrative system, which the Project try to establish, to be fasten after the completion of the Project, by followed-up by another project and others.

2) For the similar projects, farm and land property rights confirmation is essential so that the farmers will have places to continue their group activities.

1 Relevance

(1) Relevance with the Development Plan of Panama

The Torrijos government (2004-2009) set a high priority on the "shrinking of income gaps and poverty alleviation in the country" as one of main political targets, and supports poor farmers and indigenous peoples who reside in the country's middle mountainous areas.

(2) Relevance with the Development Needs of Panama

"Strategic Plan of Agriculture 2004-2009" set the "sustainable rural development" and "improvement of agricultural productivity" as a strategy for the poverty alleviation in rural areas, including the promotion of organic agriculture. At the time this project was planned, farmers also agreed that "low productivity" was one of their problems. Now MIDA assesses the participatory extension model by farmers as effective.

(3) Relevance with Japan's ODA Policy

"ODA Charter" and "Japan's Medium-Term Policy on Official Development Assistance" highlights "the improvement of agricultural productivity to shrink the regional gap" and "the support to strengthen the community organization" as one of Japan's important aid policies. At the time of planning JICA's Country Assistance Program for Panama, the shrink of "economic and regional gap" and "the increase of economic capacity of the poor" were specified as the important cooperation issues. At the end of the Project, JICA still sees "the support for the improvement of the agricultural productivity for the rural farmers and fisheries" as significant areas to support in the assistance program.

This project has been highly relevant with the Panama's development plan, development needs, as well as Japan's ODA policy; therefore its relevance is high.

2 Effectiveness / Impact

(1) Achievement of Project Outputs and Project Objective(s)

At 4 areas, the pilot farms were established and strengthened with the formulation of the pilot farm management plan. More than 50% of appropriate agricultural technologies that were introduced to these pilot farms during the Project, were implemented at the time of completion of the Project at these 4 pilot farms (the target indicator of the application of technologies was "more than 50%", which is related to Output 1.). At INA, training courses for the extension workers and promoters were conducted 11 times (target was 9 times), and those for the farmers were conducted 43 times (target was 36 times). 224 extension workers and promoters, and 611 farmers participated in these courses (target number was 100 for all). Also the appropriate training materials were developed for 34 species (the target number was 30). With this progress, we can say that the training system to train farmers to conduct the participatory extension model was established in INA (These are related to Output 2). The exchange programs organized by farmers at pilot farms were not implemented at the planned frequency. However, the more content rich programs by farmers, not only introducing the technologies but teaching technologies, were organized 16 times (original target was 36 times). The extension activity technical guidance by farmers in the nearby communities was conducted less than once a month (which was target of the Project), but the farmers taught the technologies to farmers visiting the pilot farms (These are related to Output 3). At INA, about 800 persons (farmers, extension workers, promoters and others) a year participated in the INA Exchange program (the target number was 500). In January 2007, the participatory extension model by farmers guidelines were compiled, and a seminar on how to use them was conducted. The coordination meetings with the related extension organizations were organized for the efficient project operation, but not with the expected frequency (target was 12 times). However, due to well-organized small meetings with those stakeholders at the beginning of the Project, the support system for the efficient project operation to create the participatory extension model was prepared (These are related to Output 4). With the situation mentioned above, except for Output 3, most of the outputs were approximately achieved. The targeted 4 pilot farms succeeded in establishing the participatory extension model, satisfying the requisites defined above.

For the achievement of the project purpose, the extension activities delivered to the neighboring 23 communities, even not enough to

reach the targeted 25. The number of farmers groups and farmers who learned the appropriate agricultural technologies from those 4 pilot farms was about 50 to 80 each time (the target was 30). With the situation mentioned above, the project purpose was approximately achieved at the end of the project period.

#### (2) Achievement of Overall Goal, Intended and Unintended Impacts

After the completion of the Project, it was expected that, by 2012, the agricultural productivity would increase by 50%, compared with that of 2005, and the 3 new crops would be cultivated at 4 pilot farms. Among the the target pilot farms, at one farm, the rice and frijol beans productivity was increased by 20-30% in 2009 compared with that of 2005. With this pace of progress, we can expect that a “50% increase” can be achieved on this group farm by 2012. However, regarding productivity improvement of at the other 3 pilot farms, we could not obtain any information. Concerning the new crop production at the pilot farm mentioned above, 8% of the farmers cultivated the 3 new crops and in the other one farm, more than 50% of farmers presently produce the new 3 crops. However, at the other 2 pilot farms, no new crops are cultivated. With this information, the productivity improvement and the introduction of new crops, as a result of group activity at the pilot farms, have not reached to the target levels. Meanwhile, other than these 4 pilot farms, there are several farmers groups, local NGOs, volunteers, and public organizations who are currently applying the appropriate agricultural technologies, which they learned through the guidelines and by visiting the pilot farms. Also MIDA introduced this “participatory extension model by farmers of appropriate agricultural technologies”, which was introduced by this project, to another national program, “Familias Unidas (the United Family)”. In addition to these impacts, at some pilot farms out of 4, farmers are still teaching the appropriate agricultural technologies to the farmers in the neighboring communities. As mentioned above, we can continue to identify these partial impacts.

This project has somewhat achieved its objectives, therefore its effectiveness is fair.

### 3 Efficiency

#### (1) Outputs

As stated in “2. Effectiveness / Impact”, the expected outputs were achieved approximately.

#### (2) Elements of Inputs

The appropriate experts and equipments were delivered without delay, and they were used during the project period to achieve the expected outputs.

#### (3) Project Cost, Period of Cooperation

The project cost was reported 1.5 million yen for the equipment, and 35.5 million yen for local activities. We have no figures on the cost at the time of planning to compare with, but no negative remarks were noted related to the project cost in the terminal evaluation. The actual project period was 36 months as planned.

The inputs are appropriate for producing outputs and achieving the project objective therefore efficiency of the Project is high.

### 4 Sustainability

#### (1) Related Policy towards the Project

MIDA emphasizes the importance of strengthening of farmers organizations to enforce the competitiveness of small-scale farmers in the “Strategic Orientation for the Development of the Agro-fishery Sector 2010 – 2014 (Orientaciones Estratégicas para el Desarrollo del Sector Agropecuario 2010-2014)”.

#### (2) Institutional and Operational Aspects of the Executive Agency

It was expected that after the completion of the Project, INA would continue to supporting the 4 pilot farms for the maintenance of “participatory extension model by farmers of the appropriate agricultural technologies”, and MIDA would expand the model nation-wide. With this perspective, even though the counterpart was INA, the Project tried to involve MIDA in expanding the appropriate agricultural technologies through the participatory extension model by farmers. However, after the completion of the Project, the president of INA was replaced. The new president returned the original organizational framework of MIDA and INA, which is “MIDA is responsible for extension activities, and INA is responsible for Education” (Even he acknowledged the effectiveness of its model). The number of staff at Department of Extension and Community INA has increased from 5 to 6, but due to this policy change at INA, their support to the 4 pilot farms was suspended, and continues the restricted support for extension, such as organizing the information exchange meetings at Exchange Center to the general farmers. The staff assigned at INA by the Project has already left. But the extension workers at the MIDA regional office are visiting the pilot farms every three months, and observe the condition of application of appropriate technologies.

#### (3) Technical Aspects of the Executive Agency

The instructors at INA are maintaining their professional skills by participating in the training course held at main farm field at INA and by participating in the related conferences. However, these technical skills are not necessarily utilized to support the farmers at 4 pilot farms, supported by the Project. The extension workers at MIDA also have kept their professional skills. The promoters and farmers at 4 pilot farms also maintain their skills by participating in the training course offered by MIDA and other government agencies.

#### (4) Financial Aspects of the Executive Agency

The income and expenditure at INA increased consistently from 2007 to 2010; income increases from 189,793 B/ (Balboa) to 332,761B/, and expenditures also increased from 229,121B/ to 286,643. However, financial status of each fiscal year fluctuated between surplus and deficit during this period. However, as stated above, now that INA does not take the main role (supporting the 4 pilot farms), it has affected the pilot farm’s management negatively. Regarding the financial status of pilot farms, one farm is operating well with some surplus, borrowing some funds from NGO and selling their agricultural product, and livestock. The other 3 pilot farms did not show us their exact financial status, but they reported that they have a budget shortfall, and they are compensating for the deficit by sales of land and livestock, and other subsidies.

(5) Continuity of Effectiveness and Impact

One pilot farm continues their group activity at approximately same level as during the Project. However, 2 out of 4 four pilot farms were ordered to leave the fields by the landowner, and can only partially continue their group activities (such as group sales of farm product and livestock). For the remaining farm, due to the high acidity of the land, many of the farmers were obliged to leave it. However, many farmers are currently applying more than half of the appropriate technologies, either they continue to belong to the pilot farm, or they have had to leave the farm. The promoters and farmers who remain at the 3 pilot farms are still teaching the appropriate technologies to the farmers in the neighboring communities (even the number of the communities decreased from 23 to 11). Other than the activities mentioned above, the meetings of exchanging nursery and agricultural technologies are held once a month at INA Exchange Center, and the training courses for the general farmers (not specific to the farmers at pilot farms) are conducted at INA at present.

With the information referred above, major problems have been observed in the structural and financial aspects of the executing agency; therefore, sustainability of the project effects is low.