

Simplified Ex-Post Evaluation for Technical Cooperation Project

Evaluator, Affiliation	Junko Noguchi Foundation for Advanced Studies on International Development	Duration of Evaluation Study
Project Name	The Project on Conservation of the Environment and Rural Development with Farmers' Participation for the Mediterranean Dryland Zone of Chile in the Republic of Chile	January 2010 – December 2010

I Project Outline

Country Name	Republic of Chile			
Project Period	March 2003-February 2005 (extension period: March 2002-February 2007)			
Executing Agency	National Institute for Agricultural Research (INIA), Studies and Agrarian Policies Bureau (ODEPA), Regional Secretariat of Agriculture (SEREMI), Institute of Agricultural Development (INDAP), National Commission of Irrigation (CNR)			
Cooperation Agency in Japan	Ministry of Agriculture, Forestry and Fisheries of Japan, Forestry and Forest Products Research Institute			
Total Cost	798 million yen			
Related Projects (if any)	None			
Overall Goal	Sustainable agriculture and poverty alleviation will be promoted through a soil and water conservation program at small-scale watershed areas in an inland dry region.			
Project Objective	Integrated soil and water conservation technology for sustainable agriculture development will be verified at small-scale watershed in Ninhue County, Region VIII.			
Outputs	<ol style="list-style-type: none"> 1. Elaborating the appropriate agricultural development plan at small-scale watershed level 2. Improving techniques for soil/water conservation 3. Verifying the practical integrated technology for soil/water conservation 			
	Inputs (Japanese Side)		Inputs (Ecuadorian Side)	
Experts	11 for long term, 27 for short term		Staff allocated	13 counterpart personnel
Equipments	152 million yen		Equipments	N. A.
Local Cost	35,288,375 pesos (extension period: 10 million yen)		Local Cost	817,115,394 pesos
Trainees Received	27 trainees		Land etc provided	Office space, land for experimental farms, storage space for equipments
Others	N. A.		Others	Installation, transport and customs clearing of the procured equipment

II Result of the Evaluation

Summary of the evaluation
<p>This Project aimed to promote sustainable agriculture and poverty reduction, by developing techniques on soil and water management in the model area in the target county (Ninhue) and extending these techniques to other target areas. This is in line with government development plans and the needs of the rain-fed cultivation area in the Region VIII, where many poor people live. The Project was implemented in a participatory manner. It formulated a model development plan with farmer participation, and developed techniques not only by verifying them on an experimental farm but also by checking how the farmers applied them in the model area. The original objectives were achieved within the 5-year period, but some issues (water resources and non-plowing cultivation) remained and so the Project was extended by 2 years to work on these issues.</p> <p>After the Project, in 5 counties including Ninhue an agricultural development plan was prepared to promote the techniques developed by the Project, and these were applied by farmers. As a result, farmers increased some crop production and improved techniques for cultivation and farming.</p> <p>The National Institute for Agricultural Research (INIA) has a budget to operate the experimental farm was constrained but maintained other systems for extension of the techniques verified by the Project.</p> <p>In light of the above, this project is evaluated to be satisfactory.</p> <p><Recommendations to INIA></p> <p>The experimental farm is quite appropriate as the farmers learn necessary techniques in a participatory way. Therefore it is necessary to provide an adequate funds to operate the experimental fields, to continue the demonstrations to farmers, and when required, to verify the soil and management techniques.</p> <p><Recommendations to JICA></p> <p>This Project achieved the two target indicators for the Project Purpose within the original period and the effectiveness was evaluated comparatively high in the terminal evaluation study. However, some technical issues remained and so the period was extended. It is not easy to establish minimum indicators ensuring directness and accurateness, but it is desirable to manage projects with such indicators which also have technical aspects. It is necessary to thoroughly discuss this before the project begins and establish the necessary indicators. Even after the project starts, it is necessary to modify or add indicators as necessary.</p>

1 Relevance
<p>(1) Relevance with the Development Plan of Chile The “National Policy for Chilean Agriculture: 2000-2010” which has been in effect since the project commencement, describes the importance of (i) strengthening of international competitiveness of the agricultural and livestock industry, (ii) improving the livelihood of the small scale farmers, and (iii) developing agriculture and livestock using of natural resources. This Project aimed to verify and extend the techniques of soil/water conservation for sustainable agricultural development in a mediterranean dryland zone and this is in line with the national agricultural policy of Chile.</p> <p>(2) Relevance with the Development Needs of Chile According to the above mentioned policy paper, in Region VII (Project’s target), the agriculture and living level in the mediterranean dryland zone is lower than other zones; the policy aims to increase this level.</p> <p>(3) Relevance with Japan’s ODA Policy Based on the ODA Task Force survey in Chile and political discussions with the Chilean government in 2005, “environmental protection and health improvement” has been set as one of the four priorities in Japan’s assistance.</p> <p>This project has been highly relevant with the country’s development plan, development needs, as well as Japan’s ODA policy; therefore its relevance is high.</p>
2 Effectiveness / Impact
<p>(1) Achievement of Project Outputs and Project Objective By the end of the Project, the following outputs were generated: (i) agricultural development plans were prepared in 2 model micro-scale watersheds. The following outputs were generated: (ii) 6 techniques were developed or improved for soil and water conservation (water management for drip-irrigation system, non-plowing cultivation of wheat and bean, use of native trees, etc.); (iii) 4 manuals were prepared (study/planning/evaluation, irrigation/water resources, soil management, and farming/cultivation); and (iv) bulletins for farmers were prepared on 11 topics (small-scale irrigation, usage of the tractors, etc.). As a result of these outputs, the target farmers in San Jose began to use the soil conservation technology verified by the Project—68 farmers using non-plowing cultivation, 93 using drainage canales for prevention of rill erosion, 15 using small-scale tree planning, and 6 using dikes for prevention of gully erosion. Likewise, the small-scale irrigation technology was used by some farmers—10 farmers using a new irrigation facility, and 9 farmers using drip-irrigation. All these achievements exceed the targeted indicators. However, as mentioned bellow, the Project was extended to deal with some remaining tasks relating to water resources, and non-plowing cultivation.</p> <p>(2) Achievement of Overall Goal, Intended and Unintended Impacts The techniques developed or improved by the Project have been recommended in the agricultural development plan in 5 counties including the Project target. In these counties, the wheat production doubled compared to before the Project (35 quintals/ha in 2009) and the farmers now use newly cultivated beans. To avoid the environmental burdens, 80% of the farmers reduced the idling and burning of fields and now apply more appropriate fertilizers, according to the terminal evaluation study.</p> <p>There are also some spillover effects. Even since the Project was implemented, many farmers, research institutions, agricultural consulting companies have visited the experimental Project farm and learned to apply the non-plowing techniques in each farm. The farmers’ association organized by the Project still provides rental service to the farmers in other areas. INIA has presented the Project’s results in 11 national and international seminars and also introduces the Project’s outline on its website. Besides, the County of Yumbel, by agreement with INIA, has disseminated the techniques developed by the Project.</p> <p>This project has largely achieved its objectives; therefore its effectiveness is high.</p>
3 Efficiency
<p>(1) Outputs As mentioned above, the Project generated the outputs as planned: agricultural development plans elaborated, techniques improved for soil/water conservation, and related manuals developed.</p> <p>(2) Elements of Inputs There was a delay in the dispatch of a long-term expert but short-term experts made up for some work, and therefore the delay didn’t affect the activities implementation (Terminal Evaluation Study). Besides this, the necessary resources for the outputs were inputted, as planned.</p> <p>(3) Project Cost, Period of Cooperation The actual cost for the inputs was 798 million yen. The information regarding the planned cost was not available.</p> <p>The planned period of cooperation was 60 months and the actual duration was 84 months, longer than planed (140%). One of the reasons for the extension is that the Project needed a survey for assuring the water resource. Due to the Project’s efforts, the irrigation expanded and so the demand for water increased. However, the shallow well had unforeseen coliform contamination, and this is why the Project had to be extended for some period in order to search for alternative water resources.</p> <p>The project period was longer than planned; therefore efficiency of the project is fair.</p>

4 Sustainability

(1) Related Policy towards the Project

President Piñera in his Inaugural Message in March 2010 affirmed that one of the Chilean visions is a society full of opportunities, and regarding this, he made clear the necessity of increasing food production, export expansion, sustainable agriculture, job opportunities through agriculture, etc.

(2) Institutional/Operational Aspects of the Executive Agency

Even after the Project terminated, the staff was assigned to the management of irrigation and water resources, soil management, farming, the creation of public relations materials, and coordination with other outer organizations. And, INIA organizes regular meetings with other organizations and municipalities related to agricultural extension, maintaining the similar system to the Project.

(3) Technical Aspects of the Executive Agency

All 13 counterpart personnel of the Project still remain at INIA, and try to disseminate more appropriate watershed management techniques based on the survey results on water resources which was conducted in the extension period. All the important equipment provided by the Project are regularly inspected and functioning with one exception.

(4) Financial Aspects of the Executive Agency

The INIA budget increased in the year following the Project completion, but since then it has been decreasing. The budget for 2010 is 407 million US dollars, smaller than that of the last year of the Project. The special budget for disseminating the Project's effects had been allocated till 2009, but in 2010 that budget is not earmarked.

(5) Continuity of Effectiveness and Impact

Among 4 techniques developed or improved by the Project, 10 farmers newly apply the techniques on non-plowing cultivation every year. INIA disseminates the Project's effects via seminars and internet. Therefore it can be said that most of the Project effects, though not all, are continuing. INIA intends to use the experimental farm, but in 2010 due to the budget constraints, it is using the farm for other purposes such as on soil crack and erosion verification.

Some problems have been observed in the financial aspects of the executing agency; therefore, sustainability of the project effects is fair.