

Summary of the Evaluation Results

Date: November 20, 2009

Department in charge: Rural Development Department

1. Outline of the Project	
Country: Bolivia	Project Title: The Technological Center on Agriculture and Livestock in Bolivia (CETABOL) Phase II
Issue/Sector: Agricultural Development/ Rural Development	Cooperation Scheme: Technical Cooperation Project
Division in Charge: Field Crop Based Farming Area Division I, Field Crop Based Farming Area Group, Rural Development Department	Total Cost (as of the moment of this evaluation):406 million yen
Period of Cooperation	(R/D): April 1, 2005 – March 31, 2010
	Partner Country's Implementation Organization: Ministry of Rural and Land Development/ Plurinational State of Bolivia, Santa Cruz Department, Agricultural and Livestock Cooperative of Okinawa Colony (CAICO), Agricultural and Livestock Cooperative of San Juan (CAISY)
	Supporting Organization in Japan: None
<p>1-1. Background of the Project</p> <p>The Technological Center on Agriculture and Livestock in Bolivia (CETABOL) is a research and experiment station managed directly by Japan International Cooperation Agency (JICA). It was established in 1985, by integrating and reorganizing the San Juan Demonstration Farm established in 1961 and Livestock Demonstration Farm established in 1970 (later renamed the Okinawa Livestock Demonstration Center in 1971) which aimed at supporting Japanese descent (Nikkei) farmers in Okinawa Colony (established in 1954) and San Juan Colony (established in 1955) in Santa Cruz department, located in the east of Bolivia, to stabilize their agricultural activities.</p> <p>Santa Cruz department is an important farming zone in Bolivia, which produces 80% of the whole agricultural production of the country. In its earlier stage, the CETABOL was intended only for Nikkei farmers, but later in 1980s it started to cover directly and indirectly Bolivian communities in the Department as well. As a result, it attained certain achievement in the improvement of sustainable farming technologies in the Department, such as the dissemination of the no-tilling farming.</p> <p>Meanwhile, after 50 years of efforts since their first immigration in 1954, it is considered that the Japanese colonies have reached to the stage of maturation, experiencing the generation changes and the diversification in the forms of agricultural management among them. It was recognized that the earlier purpose of the Center, which was to support immigrants to settle down, was achieved already, and the Nikkei cooperatives will be able to manage the Center by themselves in the near future. Also, it was recognized through the discussion with Bolivian related organizations in February 2002 that it is appropriate to transfer the Center to the Nikkei cooperatives in order to develop and stimulate the sustainable agriculture in the Department. As a consequence, JICA agreed with the Bolivian Government on the implementation of a Technical Cooperation Project from 2001 to 2009, aiming at the preparation of human resource, organization as well as management system to transfer the Center smoothly to the Nikkei cooperatives in 2010. The Phase 1 of the Project on “The Technological Center on Agriculture and Livestock in Bolivia (CETABOL)” was carried out from 2001 to 2004. The Phase 2 of the Project has been implemented from 2005 to 2009, for the purpose of preparing the post-transfer management of the Center to be self-reliant.</p>	

Since the initiative of the Nikkei cooperatives is essential to maintain the activities after the transfer, it has been strengthening the organization and function of the Center during the Phase 2 by getting the cooperatives involved in the management of the Center and developing the human resources in the management areas in addition to the technical areas, in order to achieve the smooth transfer in 2010.

1-2. Project Overview

(1) Overall Goal: Sustainable agriculture techniques are disseminated in tropical humid area of Santa Cruz department.

(2) Project Purpose: The foundation is prepared in order that the CETABOL functions as a core center for improvement and extension of agricultural techniques in tropical humid area of Santa Cruz department.

(3) Outputs

1. The system of collection and verification on agricultural techniques and information is prepared.

2. The system of extension of verified agricultural techniques is prepared.

3. The system to provide tests, analyses and others of similar level as the certificated institution is prepared, and at the same time the personnel trainings are carried out.

4. The system for providing technical services on stable agricultural production is prepared.

(4) Inputs (as of the moment of this evaluation)

Japanese side:

Long term Experts: a total of 4 experts in 2 fields (Director/chief advisor, and Deputy director/Project Coordinator)

Short term Experts: a total of 4 experts from third counties in 4 fields (Control and Maintenance of HPLC, Quality Control of Agrichemical, Soil Analysis, Plants Nutrition)

Trainings: 6 Project Staff participated in the trainings of neighboring countries.

Provision of Equipment: equivalent to a total amount of approximately 63 million Japanese yen

Facilities: Main building, seminar house, laboratories, seed selection house, examination facility of cattle, cattle auction place, houses, warehouses, garage, etc.

Project Staff: 9 consultants and 10 workers (at the moment of October 2009)

Project Cost: approx. 209 million yen (as of September 2009)

Bolivian side:

Counterpart Personnel: 2 technicians from CAICO and CAISY as coordinators of the project activities (since 2007) *in actual project activities adequate persons in charge participated from each cooperatives.

Land from the Okinawa second settlement

2. Evaluation Team

Members of Evaluation Team	<p>Leader: Michiko UMEZAKI, Deputy Director General, Rural Development Department, JICA</p> <p>Planning and Administration: Yohei HASHIMOTO, Program Officer, Field Crop Based Farming Area Group, Rural Development Department, JICA</p> <p>Evaluation Analysis: Yuki OHASHI, Consultant, Interworks, Co., Ltd.</p>	
Period of Evaluation	October 23, 2009 - November 7, 2009	Type of Evaluation: Final Evaluation

3. Evaluation Results

3-1 Project Performance

(1) Achievement of Outputs

Output 1: The system of collection and verification on agricultural techniques and information is prepared.

Although the data collection for developing the fertilizer application curves has been delayed in the field of “farming”, in terms of the fields of “laboratory analysis” and “livestock” the system for collecting and verifying agricultural techniques and information related to the planned services for post-transfer management was mostly prepared.

Output 2: The system of extension of verified agricultural techniques is prepared.

The Project has mostly prepared the extension system of agricultural techniques, while improving the methods of guidance in those techniques such as fertilizer application. The technical information has been provided in the monthly meeting of the cooperatives, CETABOL’s public open day, and also through the technicians of each cooperative. The system to make the information available to those farmers who are interested has been established.

Output 3: The system to provide tests, analyses and others of similar level as the certificated institution is prepared, and at the same time the personnel trainings are carried out.

The laboratory has attained remarkable facilities, equipment and quality of analysis and has achieved the training of personnel. Although it can be already considered that its level is as high as the certificated institutions, the Project is preparing to obtain certifications available in the country in order to enhance reliability of the post-transfer laboratory services.

Output 4: The system for providing technical services on stable agricultural production is prepared.

While the activities of the Center were embodied, the main technical services to be provided after the transfer were decided to be the soil and agrichemical analysis and the reproduction of excellent pedigrees of beef cattle (mainly the artificial insemination and the semen production). The laboratory services were started at the beginning of the Project, and the first insemination service intended to individual producers was conducted in September 2009.

(2) Achievement of Project Purpose

The foundation is prepared in order that the CETABOL functions as a core center for improvement and extension of agricultural techniques in tropical humid area of Santa Cruz department.

As it was shown in the achievement of indicators, the operation plan for after the transfer has been already prepared. The foundation of the planned services, such as the technical dissemination in the soil control for farming and genetic improvement of beef cattle, which are intended not only to the Nikkei cooperatives but also to the other farmers and related organizations in Santa Cruz department, has been already prepared in general.

(3) Achievement of Overall Goal (perspective)

Sustainable agriculture techniques are disseminated in tropical humid area of Santa Cruz department.

The indicator of the Overall Goal is the amount/yield of agricultural production after the year of 2010. Looking into the changes of the productivity after 2005 for reference, the agricultural production of Santa Cruz department has been growing in spite of the risks such as drought and flood caused by El Niño and La Niña, the influence of worldwide depression in 2008, and the spread of soybean rust disease. Also, the beef production has been growing both in the number of carcasses and the value.

3-2 Summary of the Evaluation Results

(1) Relevance

The Project is highly relevant in terms of the consistency to the needs of target area and group, the agricultural policy of Bolivian Government, and the Japanese aid policy to Bolivia. **(2) Effectiveness**

The indicators of Project Purpose have been achieved since the operation plan after the transfer was prepared and approved by the recipient Nikkei cooperatives. Considering the technical aspect, the demand of the selected services to be provided after the transfer is high, and the technologies necessary for the provision of these services are prepared. Regarding the method of dissemination, although some services are still under improvement, it can be expected that the services will be utilized more by collaborating with the cooperatives under the post-transfer management. In addition, the main services, such as soil and agrichemical analysis and reproduction services of excellent pedigrees, have high demand and will be able to contribute not only to Nikkei colonies but also wider area in the department. In this regard, the effectiveness of the Project was identified sufficiently.

(3) Efficiency

Although some activities such as the collection of huge amount of data to develop the fertilizer application curves as well as the dissemination of the guidance in fertilizer application have been delayed, the outputs have been produced almost satisfactorily through each activity of the Project by establishing the necessary technologies and operation system to provide the main selected services. The sufficient inputs, including the equipment, project operation cost and human resources necessary to implement activities, have been provided. Also, the technical transfer has been carried out effectively by inviting experts from neighboring countries. Therefore, it can be said that the efficiency of the Project was high.

(4) Impact

The crop acreage and productivity in Santa Cruz department has been increased against baseline year. The Project will be able to contribute to the achievement of the Overall Goal after the year of 2010, since it has established its foundation by accumulating many technical exchanges with local producers' groups and collaborating with the 2 Nikkei cooperatives. Therefore, it is considered that the Project would produce sufficient impact.

(5) Sustainability

The discussion between the Committee for preparing operation and management of CETABOL Foundation and the Project has been continued in terms of the sustainability of CETABOL under the post-transfer management. The CETABOL Foundation has been certified its juridical personality in March 2009, has approved its operation plan after the transfer by the board, and has clearly identified its activities from April 2010. In financial aspect, the provision of services embodied though the Project will be the main income sources, and in order to improve the reliability and value-added as a service provider, it is applying for the public certifications. The expansion of the services has been incorporated in the operation plan, regarding the soil analysis which is considered to increase its demand in the future, and also the artificial insemination of beef cattle as well as the semen production which is also considered to have high potential as an income source. On the other hand, it is important to continue the authentication of technical level by foreign and domestic third parties, the invitation of experts and participation of trainings, and the maintenance of equipment, in order to maintain and update the technologies developed by the CETABOL. Also, since it is difficult to attain substitute for the actual technical personnel and it requires financial burden to improve the level of new personnel, a favorable employer-employee relationship will be a key after the transfer.

3-3. Factors promoting the production of effects

- The sufficient discussion and collaboration were maintained with both 2 Nikkei cooperatives in the project activities during the Phase 2.
- The technical transfer by inviting experts from neighboring countries allowed the Project to attain technologies which are appropriate in needs and level, and to obtain useful technical information.

3-4. Factors inhibiting the production of effects

- The resignation of various personnel who received technical transfer, and difficulties in finding new personnel.

3-5. Conclusion

The Project has embodied the operation system and activities to be continued after the transfer as a result of repeated discussions among 2 Nikkei cooperatives and the Project, produced expected outputs except some uncompleted activities, and achieved its Project Purpose preparing the foundation as a base of improvement and dissemination of farming technologies in Santa Cruz department. As a provider of necessary technologies in the department, its relevance to the needs of target area is high, and its effectiveness is also high in the sense that it has prepared for providing services to meet the needs. In the Phase 2, it has been focusing on preparing for the provision of selected services to be provided after the transfer by utilizing the facilities and technologies developed in the Phase 1, and the efficiency was mostly sufficient. As a result, it has prepared the foundation to be able to contribute to the achievement of Overall Goal. The sustainability under the post-transfer management has been considered in various meetings in terms of organizational, financial and technical aspects. It is expected to make efforts for the final preparation of the transfer in the last 5 months of the project period, by completing the remaining activities including the preparation of planned manuals, the remodeling of the laboratory facilities, the collection of data for creating fertilizer application curves, and the improvement of guidance in fertilizer application.

3-6. Recommendations

(1) Sustainability of CETABOL after the transfer

During the project period, the Project has realized activities focusing on those with high demand of Nikkei farmers as well as the other farmers in Santa Cruz department. It is expected to keep responding flexibly to the needs of whole target areas, and in this way it will be able to establish firmly its position as a center to contribute to whole department.

(2) Acquisition of local certifications in the agrochemical analysis and the production of frozen semen

Among the services to be provided after the transfer, SENASAG, a Bolivian governmental institution, provides certification of the agrochemical analysis and permission for the production of frozen semen. CETABOL is preparing for the acquisition of these public authentications from SENASAG. In order to establish its position as a certified institution and to obtain official permission as a provider of these services, it is expected to proceed with the procedures at an early point.