

Terminal Evaluation Summary Sheet

1. Outline of the Project	
Country: Republic of Cuba	Project Title: Project for extension and diffusion of technologies for certified rice seed production in the central zone of Cuba
Thematic Area : Agriculture	Cooperation Scheme: Technical Cooperation Project
Division in charge: Agricultural and Rural Development Group1, Team2, Rural Development Department	Total Cost: 420 million (JPY)
Project Period: (R/D): 15 December, 2011 April, 2012 – April, 2016 (4 years)	Counterpart Agency: Instituto de Investigaciones de Granos (IIGranos) / Grupo Agro Industrial de Granos (GAIG)
	Supporting Organization in Japan: N.A.
Related Cooperations: “The Study on Sustainable Technical Development for Rice Cultivation in the Central Area in the Republic of Cuba” (2003-2005)、 “Reinforcement of Certified Seed Production System for Popular Rice in the Republic of Cuba” (2008-2011)	
1-2. Background of the Project	
<p>In the Republic of Cuba, annual consumption of rice is 60 kg per person. However, rice self-sufficiency of the country has been severely limited around 36 % and the rest depends on import from overseas. In order to improve self sufficiency of the country, the government of the republic of Cuba put priority to increase staple food production as its policy.</p> <p>The Government of Cuba requested Japan for development assistance to enhance productivity of small-scale rice cultivation in five (5) provinces in the central region which accounted for forty percent (40%) of the rice-production in the country. The government of Japan has assisted the development study “the study on Sustainable technical Development for Rice Cultivation in the Central Area” from October 2003 to February 2006. As a result of the study, the basic policy and the action plans for sustainable production of freely distributed rice in five (5) provinces in the central region of the country were formulated. Nevertheless, utilization of certified seeds of the rice production for free distribution was limited as around 27% (2003).The study concluded that there was an urgent need to introduce breeds most suitable for the natural condition for each production area. Based on the proposal of the study on improvement of seed certification system for freely distributed rice, the Government of Cuba requested the Government of Japan a technical cooperation for production and popularization of certified seeds for freely distributed rice.</p> <p>In response to this request, the Government of Japan collaborated for the “Project for Reinforcement of Certified Seeds Production System in Popular rice” between March 2008 and November 2010 in order to strengthen the production process of the original seeds, pure seeds and registered seeds. The project completed with achieving the expected results, however, continuous effort is essential to increase rice production.</p> <p>Under the circumstances, the government of Cuba requested to the government of Japan for technical</p>	

cooperation, the “Project for Extension and Diffusion of Technologies for Certified Rice Seed Production in the Central Zone of Cuba” in order to develop and verify production technologies for certified seeds at IIGranos and develop extension system for seed producers through GEAgric. The request was accepted and the project has started from April 2012 for the period of 4 years.

1-2 Project overview

1) Overall Goal

The rice production is increased through improving productivity in the central zone of Cuba.

2) Project Purpose

The amount of certified seeds produced by leading seed producers, who are trained through the project, is increased in the Central zone of Cuba.

3) Outputs

- 1: Registered seeds production is increased and its quality is improved.
- 2: Extension activities on rice cultivation is strengthened.
- 3: Technical level of the leading seed producers is improved.
- 4: Technical knowledge on rice cultivation of SICS inspectors is improved.

4) Inputs

(Japanese side) Total costs of the Project: 420 million JPY

Dispatch of experts in total 88 M/M, Equipment and machineries 160 million JPY

5 participants in the training in Japan

(Cuban side) Assignment of project counterparts (total 15 persons), in-kind contribution such as office space for the Japanese experts, some running costs for the project implementation

2. Evaluation Team

Member of the Evaluation Team

Japanese side

Team Leader: Takashi Nishimura, Director, Agricultural and Rural Development Group1, Team2, Rural Development Department

Agriculture Extension: Mitsuo Numata, Technical advisor, JICA Tsukuba

Planning and Management: Yukiko Tomihisa, Agricultural and Rural Development Group1, Team2, Rural Development Department

Evaluation Analysis: Izumi Okata, KRI International Corp.

Translator: Fusako Yamawaki, translator, registered at JICA Mexico office

Cuban side

Member: Luis Enrique Rivero Landeiro, Director, cultivation management, IIGranos

Evaluation Period

8 November, 2015 – 3 December, 2015

Type of Evaluation:

Terminal Evaluation

3. Results of Evaluation

3-1. Project Performance

1) Overall Performance

The project in general has been implemented as scheduled and achieving the results expected. The activity 1-3, that is related to construction of post-harvest facility has been delayed due to customs clearance. In spite of possibility of unfinished construction of the post-harvest facility at the end of

project period, technology transfer on certified seeds production has been completed. Following-up for operation and management of equipment and machineries is necessary after closure of the project.

2) Achievement

Most of the indicators of each output has been achieved and/or expected to be achieved.

【Output1: Registered seeds production is increased and its quality is improved.】

Partially achieved (Substantially achieved)

Indicator1-1 (Quantity of production of registered seeds in IIGranos is increased from 7 tons to 25 tons)

Nearly 30 tons of rice husk were harvested in 2015. Although more than 25 tons of certified seeds were expected to be maintained by the post-harvest facility, achievement of this indicator became difficult due to delay in construction of the facility. Nevertheless, it was confirmed that IIGranos has technical capacity to produce more than 25 tons of certified seeds. Therefore, the outcome has been achieved substantially.

Indicator 1-2 (ratio of germination is increased from 80% to 90% in 2015)

The indicator has been already achieved, as the germination rate of the four varieties cultivated at IIGranos in 2014 was more than 90%.

【Output2: Extension activities on rice cultivation is strengthened.】

Achieved.

Indicator 2-1 (53 extension workers in the 5 provinces are trained and certified by the project)

89 extension workers (64 provincial extension workers in the central regions, 10 municipal extension workers, 15 extension workers from neighboring provinces) participated in the training and certified. In this regard, the output 2 has been already achieved.

Indicator 2-2(Manual for extension workers in the 5 provinces is produced)

The indicator has been achieved as the manuals were developed (1st edition in November 2013, and 2nd edition in September 2015).

Indicator 2-3 (Annual extension plan is produced)

The indicator has been achieved, being proved that IIGranos prepares the plans every year.

【Output3: Technical level of the leading seed producers is improved.】

Achieved.

Indicator 3-1 (116 leader seeds producers are trained and certified by the Project)

The indicator has been achieved as 194 leading seeds producers have participated in the training more than once and certified by the project (169 producers from the 5 provinces of the central region, 5 from 3 UBPC, and the rest is from neighboring provinces). Technical manuals prepared in the project were

distributed to the participants and utilized for their production even after completion of the Project.

Indicator 3-2 (Ratio of seed certification by SICS is increased from 60% to 80% in 2015)

More than 80% of the seeds in average are certified in 2013, although careful attention and improvement will be necessary as there are differences among provinces.

【Output4: Technical knowledge on rice cultivation of SICS inspectors is improved.】
Achieved.

Indicator 4-1 (30 inspectors of SICS in the 5 provinces are trained and certified by the Project)

The indicator has been achieved, as the training was carried out for 32 inspectors in February 2014 and certifications were provided. 2nd training is also organized in January 2016.

3) Prospect of achievement of the Project Purpose

【The amount of certified seeds produced by leading seed producers, who are trained through the Project, is increased in the Central zone of Cuba.】

Achieved.

Indicator (2,000 tons of certified seeds are produced in the Central Zone of Cuba in 2015)

It was confirmed in the mid-term review in November 2014, that the certified seeds (variety 1 & variety2) production has increased to 2,956 tons in 2013, and 9,824 tons in 2014, accordingly. Therefore, the project purpose has been already achieved. The amount of production in 2015 is still under calculation, which will be confirmed early 2016. As the draught affected the cultivation, the amount of production might be reduced.

The reasons for production four times higher than expected are as below in addition to the 3 points mentioned on the mid-term review (abolition of classification of free distribution rice and governmental rice, increase of seed renewal frequency from once a three cultivation to each cultivation, and UBPC also started to produce certified seeds in addition to production by leading farmers).

- ✧ Technical capacities of the leading seed farmers and extension workers have been improved through the series of trainings in the project.
- ✧ The motivation of seed producers has been increased due to increase in the price of certified seeds as a part of food security policy of the country.
- ✧ The motivation of producers to improve livelihood through agriculture production has been promoted due to change of socio-economic situation of the country.

3-2 Evaluation according to the 5 evaluation criteria

1) Relevance: High

The project purposes of increase of certified seed production and improvement of rice productivity is consistent with the agriculture development policy of Cuba, and contributes to food security which is priority issue of the country. That is also consistent with the needs of rice producers and other concerning population as well as Japan's Country Assistance Policy for Cuba. The project is recognized as the principle project among the assistance in the agriculture sector.

2) Effectiveness: High

Thanks to the policy support, the indicator of the project purpose has been already achieved, regardless of the difficulty to complete the construction of the post-harvest facility (output1). The production of certified seeds exceeded more than 4 times than expected.

3) Efficiency: Moderate

Apart from the excess of the construction cost of the post-harvest facility, and the delay of the schedule, other inputs have been efficiently utilized to conduct necessary activities to achieve the expected outputs, consequently the project purpose. In addition to the improvement of production capacity of the seed producers as a result of the trainings, government policies to encourage food security also accelerate the results of the project.

4) Impact:

The overall goal, which is about increase in rice production by 2018 will be achieved. Continuation of agriculture extension activities with encouraging policy supports may ensure its achievement. The initial indicator to measure the overall goal was "yield of rice production" as mentioned on the PDM (version01). However, it was concluded that it is better to change the indicator to "yield of certified seed production" in order to measure the impact of the project more accurately taking into account various factors that could lead to increase/decrease of rice production such as enlargement of the population who newly engaged in farming, climate influence, and others. Accordingly, the indicator was agreed to be changed from "20% increase of rice production yield comparing to that of before the project" to "15% increase of certified seed production yield comparing to that of 2015. The change was reflected on the PDM (version02) during the JCC.

5) Sustainability: Moderate

The government of Cuba gave priority to increase in rice production for food security, increase in certified seed usage and production among their important policies. It was confirmed that the policy will be continuously maintained which will support sustainability of the activities. Furthermore, the extension methods and system have been already verified and utilized and the ownership of the counterparts and target group is significantly high. The system is expected to be utilized and expanded even after completion of the project. For continuation of the activities, it is inevitable to secure the budget according to the middle-term production plan for certified seeds even after completion of the project. As it was confirmed that the counterpart agency has started to increase the budget, it could be evaluated that

the counterpart agency may secure the sufficient budget for sustainability of the activities.

3-3 Contribution Factors

(1) Issues related to activities planned

- The ownerships of IIGranos, extension workers at provincial and municipal levels, leading seed producers, SICS, CCS and so on are extremely high. Each of those stakeholders has been playing active role in order to achieve the project purpose.
- The government policies for accelerating food security, particularly rice production, enable to accelerate the actions for increase in certified seed production. In addition, incentive for learning technologies and the level of understanding of participants trained (leading seed farmers and UBPC officials) are quite high to increase the certified seed production. Furthermore, the commitment of rice producers to utilize certified seeds have been also recognized thanks to the policy support and promotion of its importance.

(2) Issues related to implementation process

- The relationship of trust developed through the long history of the collaboration between Cuba and Japan is one of the important factors to promote the project activities. In addition, collaboration of the large amount of ex-trainees of training in Japan (around 65 in total) is also contribute to the factor for successful project implementation.

3-4 Inhibition Factors

No particular inhibition factors are confirmed, except the delay of the construction of post-harvest facility.

3-5 Conclusions

- The project purpose was achieved higher than expected before starting of the project due to the strong initiatives of the government of Cuba. Therefore, project will be completed as scheduled without extension.
- It was confirmed that the construction of post-harvest facility (responsibility of Cuban side) will not be completed within the project period. On the other hand, technical capacity of IIGranos to produce more than 25 tons of registered seeds was also confirmed. Therefore, it was evaluated that the Output1 “registered seeds production is increased and its quality is improved” has been practically (substantially) achieved.
- To make sure that the post-harvest facility will effectively function after completion of the construction, it is inevitable to conduct technical trainings for its operation. The appropriate scheme for providing the necessary trainings will be examined.
- “Increase in yield of rice production” that is a former indicator of the overall goal has been remained as relatively low since 2012. The increase in production of certified seeds does not necessary linked to increase in yield of rice in the country/provincial levels. The main factor for this is the increase of newly engaging farmers. To measure the impact of the project more accurately, the indicator for the overall goal was reviewed and changed into “increase of the yield of certified seeds”.

- Expectation for support of the project is increasingly high.

3-6 Recommendations

- 1) Taking into account that the post-harvest facility will not be constructed by the end of the project, it is necessary to clarify the construction schedule, responsibilities of its construction, confirmation of operation, and so on, even after the completion of the project. It is requested to report to JICA office periodically.
- 2) It is important to pay attention to the quality of seeds in addition to increase in its production. For this purpose, it is recommended to centralize the production of registered seeds at certain institutes such as IIGranos, ETIGs and INCA.
- 3) It is necessary to proceed with procurement of materials, equipment and machineries effectively to be able to achieve the expected outputs with providing necessary inputs according to the Plan of Operation.
- 4) Promotion of usage of certified seeds through media will be effective.

3-7 Lessons learned

- 1) It is inevitable to take into account the difficulties with procurement for materials of construction, equipment and machineries in Cuba, at the stage of project formulation. It is also essential to clarify responsibility of the tasks and cost-sharing among stakeholders, and to indicate clearly on the PDM.
- 2) It is obviously important to set the clear project purpose and target indicators for each stakeholder to recognize their roles and objectives under implementation the project.
- 3) The series of training combining lectures and practices are effective for capacity development.
- 4) Utilization of media for agriculture extension is quite effective in Cuba, as the broadcasting fee is free of charge, and audience rating is high for the national program.

3-8 Following-up

The post-harvest facility would not be completed within implementation period of the project. Therefore, following-up activities are needed after completion of the construction to ensure appropriate utilization of the post-harvest facility.