

Country Name	Project for Improving Livelihood of Small-Scale Farmers in Cajamarca
Republic of Peru	

I. Project Outline

Background	<p>The macro economy of Peru was growing steadily. On the other hand, the GINI coefficient, which indicates income distribution among the population, was as high as 0.48 (2010), and the gap between the rich and the poor was still large. Thus, poverty reduction was an important issue for the country. Cajamarca Region is located in “Sierra”, the mountainous areas and the poverty rate of the region was 64.5% (2007). Most of the population in the region was engaged in agriculture. Especially, a lot of small -farmers extensively produced traditional crops such as corn and potatoes under rain-fed conditions, for self-consumption and for sale in nearby markets. The average arable land of a household of the small-scale farmer was quite small. As a result, they had practically little cash income from agriculture.</p>												
Objectives of the Project	<p>Through established farmers’ groups, improved cultivation techniques of the target crops, strengthened production chain, and improved soil conservation in Cajamarca Region, the project aimed at establishing a model to increase the income of small farmers, thereby contributing to improvement of the livelihood of small-scale farmers and the practical use of the established model in the enlightenment area.</p> <p>1. Overall Goal: 1) To improve the livelihood of small-scale farmers in the target area. 2) The practical use of the established model by the Project in the enlightenment area. 2. Project Purpose: A model is created to improve the income of small farmers in the target area.</p>												
Activities of the project	<p>1. Project site: Provincial Municipality of Cajabamba, Cajamarca, San Marcos, San Miguel and San Pablo of the Cajamarca Region.</p> <p>2. Main activities: Creation and strengthening of farmers’ organizations, seed distribution of target crops (garlic, peas and purple corn), agricultural extension to farmers (sowing, fertilization, soil management, etc.), set-up of facilities for agricultural processing, support for marketing, training of farmers on soil conservation, awareness raising of the project model, etc.</p> <p>3. Inputs (to carry out above activities)</p> <table border="0"> <tr> <td>Japanese Side</td> <td>Peruvian Side</td> </tr> <tr> <td>1) Experts from Japan: 10 persons</td> <td>1) Staff allocated: 85 persons</td> </tr> <tr> <td>2) Training in Japan: 18 persons</td> <td>2) Land and facilities: Office space, experiment farm, etc.</td> </tr> <tr> <td>3) Equipment: Vehicles, motorbikes, PC, equipment for seed production, equipment for agricultural processing, etc.</td> <td>3) Local cost for agricultural materials, activity operation, etc.</td> </tr> <tr> <td>4) Local cost: hiring local consultants, etc.</td> <td></td> </tr> </table>			Japanese Side	Peruvian Side	1) Experts from Japan: 10 persons	1) Staff allocated: 85 persons	2) Training in Japan: 18 persons	2) Land and facilities: Office space, experiment farm, etc.	3) Equipment: Vehicles, motorbikes, PC, equipment for seed production, equipment for agricultural processing, etc.	3) Local cost for agricultural materials, activity operation, etc.	4) Local cost: hiring local consultants, etc.	
Japanese Side	Peruvian Side												
1) Experts from Japan: 10 persons	1) Staff allocated: 85 persons												
2) Training in Japan: 18 persons	2) Land and facilities: Office space, experiment farm, etc.												
3) Equipment: Vehicles, motorbikes, PC, equipment for seed production, equipment for agricultural processing, etc.	3) Local cost for agricultural materials, activity operation, etc.												
4) Local cost: hiring local consultants, etc.													
Project Period	July 2011 to July 2016	Project Cost	(ex-ante) 657 million yen, (actual) 736 million yen										
Implementing Agency	National Institute of Agricultural Innovation (INIA), Program of Compensations for the Competitiveness (AGRO RURAL), Government of Cajamarca												
Cooperation Agency in Japan	Nippon Koei Co., Ltd.												

II. Result of the Evaluation

1 Relevance
<p><Consistency with the Development Policy of Peru at the time of Ex-ante Evaluation></p> <p>As one of the strategic objectives was the “Agriculture Sector Strategic Plan” (2007-2011) was to ensure the access of the small-scale farmers to basic production services, the project was consistent with the development policies of Peru at the time of ex-ante evaluation.</p> <p><Consistency with the Development Needs of Peru at the time of Ex-ante Evaluation></p> <p>Although the country economy was growing steadily, the gap between the rich and the poor was still large, as indicated by the GINI coefficient being 0.48 (2010). Most of the population was engaged in agriculture in the poverty area, and improvement of the cultivation technology for gaining cash income were needed. Thus, the project was consistent with the development needs of Peru at the time of ex-ante evaluation.</p> <p><Consistency with Japan’s ODA Policy at the time of Ex-ante Evaluation></p> <p>In the “Country Assistance Program for Peru” (2000), one of the priority areas was poverty countermeasures. Related to this, it was described that assistance would be provided through projects for improvement of living environments in impoverished regions. Thus, the project was consistent with Japan’s ODA policy at the time of ex-ante evaluation.</p> <p><Evaluation Result></p> <p>In light of the above, the relevance of the project is high.</p>
2 Effectiveness/Impact
<p><Status of Achievement for the Project Purpose at the time of Project Completion></p> <p>The Project Purpose was achieved by the time of project completion. The "Guidelines for the Establishment of Commercial Agriculture for Small-scale Farmers" was prepared as a document that summarized the methodology and technology theory for improving the livelihood of small-scale farmers (Indicator 1), and it was approved by the Ministry of Agriculture and Irrigation. The guidelines explained the model for unifying product quality, stabilizing quantity, reducing production costs, by establishing a "systematic joint purchase, production and joint direct sales system" through collaboration among farmers and other stakeholders in the production chain.</p>

<Continuation Status of Project Effects at the time of Ex-post Evaluation>

The project effects have continued. The model for improving small farmers' income established by the project has been utilized in the target area (Provincial Municipality of Cajabamba, Cajamarca, San Marcos, San Miguel and San Pablo of the Cajamarca Region). INIA and the Regional Government (GORE) of Cajamarca have continued the technical assistance activities based on the model. Municipalities have hired technical staff who know the Model and have disseminated it within the communities. Farmer's associations have utilized the model to plan production, joint purchase (equipment, seed and fertilizer) and joint sales. According to a survey carried out by Agro Rural, 85% of farmers had a decrease in costs due to joint purchase of agricultural inputs and joint sale of their production.

<Status of Achievement for Overall Goal at the time of Ex-post Evaluation>

The Overall Goals have been achieved. The Overall Goal 1 was to increase the beneficiary farmers' income average. It was 394 Peruvian Soles (PES) during the growing period of corn (six months) in 2019, increased from 260 PES before the project, increasing by 52% (Indicator 1). According to a survey carried out by Agro Rural, out of the surveyed 65 farmers, 62 farmers (95%) answered that their income increased by more than 30% by applying the model introduced by the project, although heavy rainfall, frosts or droughts have affected their production.

The Overall Goal 2 was to diffuse the model in the enlightenment area. In the ex-post evaluation survey, it was confirmed that the model has been applied in at least 22 villages in Regions of Cajamarca, Ancash and La Libertad, where farmers' organizations have managed a production plot or growing organic purple corn (Indicator 2). INIA has conducted agricultural fairs and workshops for introducing the model in Cajamarca and also other regions including Ancash, Huancavelica, Ayacucho, Junín, La Libertad, Lambayeque and Amazonas, in cooperation with GORE Cajamarca and some local governments (district and provincial) of Cajabamba, San Miguel, San Marcos and Cajamarca. It also presented the model in the national and international events in Ecuador and Colombia. However, the model has not been applied yet as expected in other than the mentioned three regions (Piura, Amazonas, Junín, Huancavelica, Ayacucho and Huánuco). One of the possible factors is that the succeeding project for diffusing the model has not been started yet by Agro Rural. According to Agro Rural, due to the budget shortage, the pre-investment in final studies has been delayed. The project has been scheduled to start in 2021/2022, as the budget has been already allocated for the year. The model developed by the project have been applied in some areas of the two ODA loan projects, "Sierra-Natural Resources Management and Poverty Alleviation I, II, III (1997, 1999, 2000)" and "Sierra Small and Medium Irrigation Project" (2012), but expected synergy effects with these projects could not be confirmed in the ex-post evaluation. It was presumed as a reason that the project experience has not been much shared in the section in charge of the loan projects. Also, the infrastructure of irrigation has not been constructed in Cajamarca region as expected in the latter loan project, and the synergy effects have not been generated so much.

<Other Impacts at the time of Ex-post Evaluation>

Firstly, a positive impact related to gender was confirmed in the ex-post evaluation. Women have come more involved in agricultural activities including planning, production process, primary processing and trade activities, through the project efforts for inviting them to training events to provide them with technical information. Secondly, INIA's efforts for diffusing the model have increased authorities' interest in growing purple corn in other regions. Thirdly, discipline in the community work has been regained, as there used to be "minga" (collaborative work in the community), according to GORE Cajamarca.

There was no negative impact on the natural environment.

<Evaluation Result>

Therefore, the effectiveness/impact of the project is high.

Achievement of the Project Purpose and Overall Goal

Aim	Indicators	Results
(Project Purpose) A model is created to improve the income of small farmers in the target area.	1. Documents on technology and methodology for the improvement of the income of small-scale farmers are prepared.	<u>Status of achievement: Achieved (Continued).</u> (Project Completion) - The "Guidelines for the Establishment of Commercial Agriculture for Small-scale Farmers" was prepared and approved by the Ministry of Agriculture and Irrigation. (Ex-post Evaluation) - The established model has been utilized in the target area. INIA and GORE Cajamarca have continued the technical assistance activities based on the model. Farmer's associations have utilized the model to plan production, joint purchase (equipment, seed and fertilizer) and joint sales.
(Overall goal) a) To improve the livelihood of small-scale farmers in the target area. b) The practical use of the established model by the Project in the enlightenment area.	1. The income of beneficiary farmers increase by more than 30% from that of the project commencement. 2. Activities of the model are applied in 27 villages in the enlightenment area.	<u>Status of achievement: Achieved.</u> (Ex-post Evaluation) - Before the Project, the average of the beneficiary farmers' monthly income was 260 PES, and the monthly income was 394 PES during the growing period of corn (six months) in 2019. - According to a survey carried out by Agro Rural, 95% of farmers consider that their income has increased by more than 30% by applying the model. <u>Status of achievement: Achieved.</u> (Ex-post Evaluation) - In Cajamarca Region, the model has been applied in 19 villages which belong to 3 provinces (Hualgayoc, Chota and Cutervo). In the 19 villages, there are five associations that have applied planned production, joint purchase and joint sales. - In Ancash Region, a farmers' organization of Quenuayoc Village used the model during the 2017-2018 agricultural season and they managed a production plot. A small business owner has been working with INIA 601 purple corn and the model. - In Uchuy and Vista Florida villages, located in the province of Pataz of La Libertad Region, in cooperation with private companies, purple corn sowing were conducted during 2017/2018 and 2018/2019 agricultural seasons. There has

been a farmers' organization using organically-certified purple corn.

Source: Project Completion Report and information provided by INIA and Agro Rural.

3 Efficiency

Although the project period was as planned, the project cost exceeded the plan (ratio against the plan: 100% and 112%, respectively). The outputs were produced as planned. Therefore, the project efficiency is fair.

4 Sustainability

<Policy Aspect>

Promotion of the model established by the project or support for small-scale farmers have been prioritized in "Multiyear Strategic Plan of the Agriculture Sector" (2015-2021). It has been also based on the "Law for Strengthening Productive Chains and Business Conglomerates" (2006), "Law for Transforming Agricultural and Livestock Production" (2011), "National Strategy of Rural Development" (2004), "Law for Establishing Provisions to Support Productive Competitiveness" (2019) and "Regional Agricultural Agenda of Cajamarca" (2019).

<Institutional/Organizational Aspect>

There has been no change in INIA's organizational structure to promote the model developed by the project, and it has been functioning. INIA has coordinated activities with GORE Cajamarca, AGRO RURAL, local municipalities and farmers' organizations. It has also provided technical assistance so that local technical groups could support farmers in their area, and has carried out dissemination activities in Cajamarca and other regions. INIA and AGRO RURAL, together with: GORE Cajamarca, local governments of San Miguel Province and Matara District; have held monthly meetings to prepare the proposal of the succeeding project. The number of technical personnel of INIA of Cajamarca Region has not been sufficient to further promote the model in the region due to the budget shortage. On the other hand, AGRO RURAL has the sufficient number of technical personnel working for livelihood improvement in the rural areas.

<Technical Aspect>

INIA has not sufficiently sustained necessary skills to disseminate the model developed by the project. Although two experts from the Experimental Stations of Baños and Inca have worked for disseminating the model, due to budget restrictions, no new technical personnel have not been incorporated for the model diffusion, and some of the personnel who knew know-hows of the project have left the positions. On the other hand, AGRO RURAL has sustained necessary skills to disseminate the model. Its Human Resources Management Unit has strengthened their personnel's skills through the feedback for a better performance. The guidelines developed by the project have been utilized by INIA and AGRO RURAL, by distributing them to interested farmers and local governments as consultation documents, including "Manual of Commercial Production of Peas", "Manual of Commercial Production of Purple Corn" and "Guideline 'Model for establishment of the Commercial-oriented Agriculture for Increasing Farmers' Incomes through Collaboration of Stakeholders of the Productive Chain'". Some materials have been shared with the "Sierra Small and Medium Irrigation Project" (2012) for training and technical assistance activities.

<Financial Aspect>

Both INIA and AGRO RURAL have not secured sufficient budgets to disseminate the model developed by the project. However, as agricultural development covers various sectors, and in a program which has aimed at decreasing soil degradation in the Cajamarca Region, the model has been applied, according to INIA. AGRO RURAL, regardless its budget restrictions, has carried out rural extension activities incorporating the model. To start the succeeding project, the budget has been secured for 2021/2022.

<Evaluation Result>

In the light above, there have been slight issues in the institutional/organizational, technical and financial aspects. Therefore, the sustainability of the effects is fair.

5 Summary of the Evaluation

The Project Purpose was achieved by the time of project completion. The guidelines for improving the livelihood of small-scale farmers was developed, and the established model has been utilized in the target areas. Regarding sustainability, human and financial shortages have hindered the diffusion of the model, but the organizational structure to promote the model developed has been sustained. As for efficiency, the project cost exceeded the plan.

Considering all of the above points, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- It is recommended to INIA and AGRO RURAL to make use of the guidelines and other materials developed by the project in the succeeding project to accelerate the diffusion of the model in the enlightenment area in eight regions.
- It is recommended to INIA to promote the diffusion of the model in the eight regions of the enlightenment area, and also to take advantages of the sectorial budgetary programs in order to assign more personnel for further promotion of the model in the region.

Lessons Learned:

- Since the time of project completion, some of the personnel who knew know-hows of the project left their positions due to the internal rotations, which has led to institutional memory losses. In counties where personnel rotations occur frequently, it is necessary that some mechanism must be established to avoid losing institutional knowledge or experiences every time there are changes in management personnel. For example, it is necessary to establish an information system, by gathering the project's information and know-hows for sustaining the project effects, storing them in reports, technical guidelines, and list of personnel involved in the project, and handing over them to new personnel.
- For a technical cooperation project related to loan projects, it is important to make a mechanism where benefits of technical cooperation project will be shown more directly to loan projects. For example, it would be effective to set indicators which are directly related to loan projects and also to have committee or conference where related agencies of loan projects participate in order to know benefits of cooperation projects from the beginning of projects.



Production of purple corn



Farmers participating in the field day