

Country Name	Project for Improvement of Living Standard through Promotion of the Farming Production in the Indigenous / Ethnic-Communities of Puerto Cabezas
Republic of Nicaragua	

I. Project Outline

Background	Due to the civil war for over 10 years since 1979, the Nicaraguan economy was battered and poverty reduction has been a principal issue for the government of Nicaragua. In particular, the situation in the Atlantic region including the North Atlantic Autonomous Region (RAAN) was severe as 76% of the population was in poverty (2001). In RAAN, most of the habitants have been indigenous people and they have been engaged in agriculture. Attributed to the disease and insect damages and monoculture cropping, the production was limited even for the self-consumption. However, no technical support was provided to RAAN since the agricultural sector was not given priorities. In such circumstances, the government of Nicaragua requested technical cooperation to the government of Japan for Puerto Cabezas Municipality in RAAN as a pilot municipality.													
Objectives of the Project	Through the establishment of the Committee for Rural Development (CDR) and implementation of the model projects for new agricultural techniques and life improvement in model areas in the Municipality of Puerto Cabezas, the project aimed at increasing the model farmers' production and improving the livelihood, thereby contributing to the extension of the introduced model to other areas in the municipality and other municipalities. Overall Goal: 1. The living standards of farmers in the Puerto Cabezas Municipality is improved through agricultural extension established by the model farmer groups; 2. Agricultural extension activities are disseminated among indigenous areas outside of the Puerto Cabezas Municipality. Project Purpose: The living standard of the farmers of model groups is improved.													
Activities of the project	<ol style="list-style-type: none"> Project site: 3 areas (Llano Norte, Llano Sur and Tasba Pri) in Puerto Cabezas Municipality Main activities: Establishment of CDR, training of the community promoters on agricultural technologies and life improvement approach, training of the model group farmers through the trained promoters, etc. Inputs (to carry out above activities) <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Japanese Side</td> <td style="width: 50%;">Nicaraguan Side</td> </tr> <tr> <td>1) Experts: 6 persons</td> <td>1) Staff allocated: 9 persons (technical counterpart)</td> </tr> <tr> <td>2) Training in Japan: 12 persons</td> <td>2) Land and facilities: Office space, equipment, etc.</td> </tr> <tr> <td>3) Equipment: Vehicles, PCs, motorcycles, etc.</td> <td>3) Operation cost for staff salaries, office utilities, etc.</td> </tr> <tr> <td>4) Operation cost for hiring local consultants, travel expenses, facility rental, etc.</td> <td></td> </tr> </table> 				Japanese Side	Nicaraguan Side	1) Experts: 6 persons	1) Staff allocated: 9 persons (technical counterpart)	2) Training in Japan: 12 persons	2) Land and facilities: Office space, equipment, etc.	3) Equipment: Vehicles, PCs, motorcycles, etc.	3) Operation cost for staff salaries, office utilities, etc.	4) Operation cost for hiring local consultants, travel expenses, facility rental, etc.	
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Ex-Ante Evaluation	2007	Project Period	February 2008 to February 2013 (Extension period: February 2012 to February 2013)	Project Cost	(ex-ante) 250 million yen (actual) 313 million yen									
Implementing Agency	Municipality of Puerto Cabezas													
Cooperation Agency in Japan	None.													

II. Result of the Evaluation

< Special perspectives considered in the ex-post evaluation >

- The first Overall Goal was "the living standards of farmers in the Puerto Cabezas Municipality is improved through agricultural extension established by the model farmer groups." However, the indicators were those which verify the agricultural extension. In the ex-post evaluation, if the farmers apply the techniques introduced by the project and increase the production, it was interpreted that the farmers improved the living standard.

- In the Indicators 1-2, 1-3 and 1-4 of the first Overall Goal of PDM, 1,500 farmers were targeted. In Puerto Cabezas, it was confirmed that there are 1,500 farmers engaged in agriculture and fishery in 86 communities at the time of the ex-post evaluation, though the breakdown data of the numbers was not available. 780 farmers in 32 communities receive support from the municipality, due to the limitations of human and financial resource of the municipality and its vast area. In the ex-post evaluation survey, the data was available only for the 780 agricultural farmers, and therefore, the achievement level was verified based on these 780 farmers. As well, though the whole municipality was targeted in the Indicator 1-5, the achievement level was verified based on that the 32 communities.

1 Relevance

<Consistency with the Development Policy of Nicaragua at the time of ex-ante evaluation and project completion>

The project was consistent with the Nicaraguan development policies, as the indigenous autonomous area on the Atlantic Coast including RAAN has been regarded as an area of poverty which needs a special attention regarding the regional characteristics in the National Development Plan (2006-2010) and the National Plan for Human Development (2012-2016).

<Consistency with the Development Needs of Nicaragua at the time of ex-ante evaluation and project completion >

In Nicaragua, 45% lived in poverty and especially, the poverty ratio in the Atlantic Region including RAAN was as high as 76% (2001). The people are engaged in agriculture, but the productivity was low. There have been great needs for technical support for extension services until the time of ex-post evaluation.

<Consistency with Japan's ODA Policy at the time of ex-ante evaluation>

In the Country Assistance Program for Nicaragua (2002), one of the priority areas was agricultural and rural development for the next five years.

<Evaluation Result>

In light of the above, the relevance of the project is high.

2 Effectiveness/Impact

<Status of Achievement for the Project Purpose at the time of Project Completion>

The Project Purpose was achieved. More than 80% of the model farmers who introduced the appropriate agricultural technologies for the area increased the production of the dominant crops such as rice, beans and root crops. The crops were diversified, as more than 80% of the model farmers newly introduced more than three vegetables. Besides, more than 50% of them continued to apply the life improvement technique.

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

The project effects have mostly continued in the model areas since the project completion. 95% of the interviewed 43 model farmers have increased the production of the dominant crops such as tomatoes and chiltomas, by using the technologies introduced by the project such as soil improvement and citric graft. 69% of the farmers have introduced more than at least one new crop (e.g. tomatoes, chiltomas, carrots, etc.). With regard to the life improvement, 72% of the model farmers have continued the techniques such as healthy diet and decent housing.

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

With regard the first Overall Goal (improvement of the living standard of the model farmers), it has been partially achieved. In other words, CDR has not functioned as a coordinating agency for the agricultural extension in Puerto Cabezas. However, the member organizations of CDR (Municipality of Puerto Cabezas, University of Autonomous Region of North Atlantic (URACCAN), Bluefields Indian & Caribbean University-Inter University Center of Morava Church (BICU-CIUM) and PANAPANA (local NGO)) have their own plan of the extension services and conduct training and follow-up visits for the farmers. As a result, 448 farmers (57% of the farmers supported by the municipality in 32 communities) have applied at least one technology introduced by the project and 717 (92%) have improved the production of the dominant crops. And, 269 farmers (34%) have introduced more than three new crops. As for the second Overall Goal (extension to outside Puerto Cabezas), it has been achieved. Not CDR but the member organizations have conducted workshops for exchanging farmers' experience in the municipalities of Rosita, Bonanza, Waspan and Prinzapolka.

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

Firstly, among the interviewed 138 farmers in Puerto Cabezas, 53% considers that their cooperation has been strengthened, 49% increased surplus crops for business, and 54% increased the agricultural income. Second, more women (77%) have come to participate in agriculture activities much or to some extent than before, according to CDR. The project had activities in which the women could be involved easily, such as housing improvement, training on organization, etc.

No negative impacts on the natural and social environment caused by the project have been observed.

<Evaluation Result>

In light of the above, the Project Purpose was completed and its effects have continued in some areas in the Municipality of Puerto Cabezas. However, the Overall Goal has been achieved partially, or, the project experience has not been fully extended to the other areas in the municipality. Therefore, the effectiveness/impact of the project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) The living standard of the farmers of model groups is improved.	1. 50% of the model farmers who introduced the appropriate agricultural technologies for the area increase the production of the chief crops.	(Project Completion) <u>Achieved</u> . - More than 80% of the model farmers who introduced the appropriate agricultural technologies for the area increased the production of the dominant crops (rice, frijoles and root crops). (Ex-post Evaluation) <u>Continued</u> . - 95% of the interviewed model farmers have increased the production of the dominant crops with the technologies introduced by the project.
	2. 50% of the model farmers introduce more than 3 new agricultural crops (diversification of the crops).	(Project Completion) <u>Achieved</u> . - More than 80% of the model farmers introduced more than 3 new agricultural crops (vegetables). (Ex-post Evaluation) <u>Partially continued</u> . - 69% of the interviewed model farmers have grown at least one crop introduced by the project.
	3. 50% of the model farmers sustainably apply learning from the training on the life improvement.	(Project completion) <u>Achieved</u> . - More than 50% of the model farmers sustainably have applied learning from the training on the life improvement. (Ex-post Evaluation) <u>Continued</u> . - 72% of the interviewed model farmers have applied at least one life improvement technique introduced by the project.
(Overall goal) 1. The living standards of farmers in the Puerto Cabezas Municipality is improved through agricultural extension established by the model farmer groups.	1-1. The plan of CDR is revised periodically and implemented.	(Ex-post Evaluation) <u>Not achieved</u> . - CDR has not functioned. It has not prepared the annual plan or implemented any programs.
	1-2. 1,500 small farmers in 50 communities of Puerto Cabezas Municipality apply the technologies introduced by the project.	(Ex-post Evaluation) <u>Partially achieved</u> . - Among 780 farmers in 32 communities currently attended by the municipality, 448 (57%) have applied at least one technology introduced by the project.
	1-3. 1,500 small farmers in 50 communities of Puerto Cabezas Municipality improve the production of the dominant crops (rice, frijole, root crops, etc.).	(Ex-post Evaluation) <u>Mostly achieved</u> . - Among 780 farmers in 32 communities attended by the municipality, 717 (92%) have improved the production of the dominant crops.

	1-4. 1,500 small farmers in 50 communities of Puerto Cabezas Municipality introduce more than 3 new agricultural crops (diversification of the crops).	(Ex-post Evaluation) <u>Not Achieved</u> . - Among 780 farmers in 32 communities attended by the municipality, 269 (34%) have introduced more than three new crops.
	1-5. In the whole Puerto Cabezas Municipality, the diffusion system of the life improvement functions appropriately.	(Ex-post Evaluation) <u>Achieved</u> . - Each of the Municipality of Puerto Cabezas, URACCAN, BICU-CIUM and PANAPANA has conducted diffusion activities on the life improvement through direct visits, training workshops and students' practice in 32 communities in Puerto Cabezas, according to the interview with each organization.
2. Agricultural extension activities are disseminated among indigenous areas outside of the Puerto Cabezas Municipality.	2-1. The exchange among the farmers of indigenous communities outside Puerto Cabezas Municipality is conducted each year in 3 neighboring municipalities.	(Ex-post Evaluation) <u>Achieved</u> . - Workshops or training for exchanging farmers' experience were conducted in Rosita Municipality (by URACAAN in 2013), in in Bonanza and Waspan Municipalities (by BICU from 2014 to 2016) and in Siuna, Rosita, Bonanza Prinzapolka and Waspan (by the Ministry of Family, Community, Cooperatives and Association Economy (MEFCCA) in 2016).

Source: JICA internal documents, Terminal Evaluation Report, CDR, Puerto Cabezas Municipality, interview for model famers.

3 Efficiency

Both of the project period and cost exceeded the plan (ratio against the plan: 125% and 125%, respectively). Due to the Hurricane Felix in 2007 and assault to the project office, some project activities were delayed and had to be redesigned. Also, there were internal conflicts within the municipality which caused the delay of some activities. Approximately half of the excess of the project period was due to force majeure. The project efficiency is fair.

4 Sustainability

<Policy Aspect>

Development of the Caribbean Coast is considered as an important theme in the country's poverty reduction strategy in PNDH (2012-2016). Objectives set in the Development Strategy of the Caribbean Coast (2012-2016) include the improvement of the socio-economic well-being of the residents.

<Institutional Aspect>

CDR was established by the project with involvement of the Municipality of Puerto Cabezas, URACCAN, BICU-CIUM and PANAPANA. CDR's responsibilities are mentioned in the municipality's internal regulation, such as planning and implementation of agricultural projects and inter-institutional and inter-sectoral coordination for agricultural development. However, since the project completion, it has not fulfilled the roles such as preparation of the annual plan, extension services for the farmers, monitoring, diffusion of the experiences, etc. This is because the member organizations have their own duties and also limitations on human and financial resources for carrying out their responsibility as CDR. The other reason is that when the personnel changed, necessary handover was not carried out in these organizations. Since the project completion, CDR has not prepared the annual plan or implemented any programs. Instead, each of the Municipality of Puerto Cabezas, URACCAN, BICU-CIUM and PANAPANA have independently conducted the extension services as per each plan. For example, URACCAN and BICU-CIUM conducted training for the new farmers based on the project experience. The number of the extension workers at the Municipality, URACCAN and BICU-CIUM is not sufficient to cover all the needs in Puerto Cabezas. Promoters trained by the project are still working in 13 among the interviewed 19 communities to diffuse the introduced techniques and life improvement approach and the nearby farmers can receive technical support from them upon necessity.

<Technical Aspect>

Since the project completion, the extension workers have had training opportunities provided by URACCAN and BICU-CIUM and experience sharing with the ex-trainees of JICA training courses on the life improvement approach, and 80% of the interviewed extension workers consider that they have sufficient knowledge and skills for supporting the farmers. 59% of the interviewed promoters answered that the training given by the project was useful to train other farmers in the community. Some promoters still have training opportunities from various institutions including the Ministry of Economy of Family, Community, Cooperative and Association, Ministry of Education, NGOs, etc., related to the model developed by the project. New promoters have been selected and trained in 19% of the interviewed communities. The training manuals developed by the project have been utilized by about half of the extension workers and promoters.

<Financial Aspect>

Since CDR is not a legally established organization, no budget has been and will be guaranteed. The budget of the Section of Natural Resources of the Municipality of Puerto Cabezas which is in charge of agricultural extension has been increasing (5,150 thousand Córdoba¹ in 2013 to 7,373 thousand Córdoba in 2016), but it is to cover also issues of water, hygiene, forestry, and solid waste and therefore it is not sufficient for the agricultural activities. Financial data were not available from URACCAN, BICU-CIUM and PANAPANA, but they answered that currently the budgets are not sufficient for the extension and follow-up activities.

<Evaluation Result>

In light of the above, slight problems have been observed in terms of the institutional and financial aspects of the implementing agency. Therefore, the sustainability of the effectiveness through the project is fair.

5 Summary of the Evaluation

The Project Purpose was completed and its effects have continued. Concretely, the model farmers applied appropriate agricultural technologies, diversified the crop production, and increased the production of the dominant crops. And, they introduced the life improvement technique. These effects have continued in some areas including model areas in Puerto Cabezas. However, the project experience has not been fully extended to the other areas in the municipality. Regarding the sustainability, CDR established by the

¹ One Nicaraguan Córdoba is equivalent to 3.84 Japanese yen in March 2017, according to JICA Exchange rate (available at JICA website).

project for coordination of the agricultural extension services substantially has not functioned. Instead, each member organization has implements its own extension services, but its budget is not sufficient for the extension and follow-up activities. As for the project efficiency, both of the project period and cost exceeded the plan, due to the damages brought by the hurricane, assault to the project office, internal conflicts in the municipality.

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

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- CDR functions have been suspended since the project completion, and it seems to be difficult to reactivate as it was during the project period. However, the member organizations have continued the extension activities for the farmers. In this situation, it is recommended to the Municipality of Puerto Cabezas to act as a facilitator for exchanging the information and experience among these member organizations and connecting them with other related organizations such as the Regional Government, National System of Production, Consumption and Commerce, and international donors. In the annual or semiannual meetings, the members can share their work plan and achievement so that the meeting participants can implement more effective and systematized activities for the farmers. It is effective to invite the extension workers and promoters in the model areas to the meetings to share their experience. Also, the media can be invited for further dissemination of the project experience.

Lessons learned for JICA:

- In the project, a committee was newly organized for coordination of the extension services with participation of the municipality (implementing agency), two universities and local NGO. However, since the project completion, the committees has nominally existed but not fulfilled the roles. This is because the member organizations have their own duties and also limitations on human and financial resources to carry out their responsibilities as a committee. The other reason is the personnel change without necessary handover. These are probably caused because the committee has not been given an officially legal status. Currently, extension services have been independently conducted by each member organization under their respective program. In the projects in which it is planned to establish a new organization, it is necessary to carefully consider whether any existing organization can take the responsibility beforehand. If it is decided to establish a new one, it is desirable to guarantee the organization's status, clarify the functions of the members, and prepare the action plan during the project period with the secured budget, for at least the first year after the project completion. Or, it can be effective to strengthen the network mechanism between the farmers and technicians trained by the project rather than to establish a new coordination organization.



A farmer showing the vegetable seedling grown with the techniques which he learned from the project



Improvement of the kitchen environment with the life improvement techniques