

## 終了時評価調査結果要約表（英文）（当初協力期間）

<b>I. Outline of the Project</b>		
Country : República de Nicaragua		Project title : Project for Improvement of Living Standard through Promotion of the Farming Production in the Indigenous / Ethnic-Communities of Puerto Cabezas
Issue/Sector : Agriculture sector		Cooperation scheme : Technical cooperation
Division in charge : Rural Development Dept. Field Crop Based Farming Area Division 1		Total cost : 190million Yen (at the end of JFY2010)
Period of Cooperation	(R/D): Feb. 2008 to Feb. 2012	Partner Country's Implementing Organization :
	(Extension): (F/U) : (E/N) ( Grant Aid )	Municipality of Puerto Cabezas Supporting Organization in Japan : N.A.
Related Cooperation : N.A.		
<b>1. Background of the Project</b>		
<p>The Republic of Nicaragua has an area of 129,000 km<sup>2</sup> and a population of 5,140,000 inhabitants (Census 2005). Per capita GDP is U.S. \$1,096 (Report of the Central Bank of Nicaragua, 2009). Due to the internal conflicts that plunged the country into economic crisis and continued for over a decade since 1979, Nicaragua had fallen to the second poorest country in the region after Haiti. In particular, the Caribbean Coast region that includes the North Atlantic Autonomous Region (RAAN) is considered the poorest with 76.7% of its population in poverty, presenting as a national challenge that demands action for resolution. The RAAN occupies 24.6% of the country area mainly inhabited by ethnic groups such as indigenous Miskito and developmental delays due to less support both by the government and international donors.</p> <p>Most residents are devoted to extensive agriculture and forestry by means of shifting cultivation. In the coastal area, artisanal fishing is the main activity. Fertile land plots are largely limited, and agriculture is inefficient as the farming lands are far from community. In general, soil fertility is low due to lack of organic matter, and many problems of pests and diseases are caused in their crops because of undeveloped techniques, while communities not having access to technical support on issues of agriculture and rural development. This situation leaves occasional shortage of grains even for family consumption, and only a small quantity of surplus crops can be sold. Markets in the municipality of Puerto Cabezas sell agriculture products that are brought nearly 100% from the country's capital and local producers are failing to use the market as a source for cash income.</p> <p>The municipality of Puerto Cabezas is positioned to fulfill a role of assisting the communities. To counter the above problems, however, their activities are insufficient due to lack of resources and techniques. Local NGOs and donors extend support on a small scale, but they mainly assist in the field of microfinance and healthcare or other social development, having no agricultural technical assistance in spite of being an eminently agricultural region. In the municipality of Puerto Cabezas, there is no office of Instituto Nicaragüense de Tecnología Agropecuaria (INTA), a government institution responsible for agricultural research and extension, which creates a situation of not having enough agricultural support services. Thus, the municipality has needs for extension system that takes advantage</p>		

of locally available resources.

Under this circumstance, to alleviate poverty in the indigenous communities of this region, the Government of Nicaragua requested the Japanese government a technical cooperation to support the improvement of livelihood of these communities by strengthening their production system with technical guidance focused on agriculture and rural development. This "Project for Improvement of Living Standard through Promotion of the Farming Production in the Indigenous / Ethnic-Communities of Puerto Cabezas" has been implemented with a project term from February 2008 to February 2012. The counterpart institution (C/P) is the municipality of Puerto Cabezas, and the implementation agency, Comité de Desarrollo Rural (CDR), has been organized by the municipality, two universities (BICU-CIUM and URACCAN) and a local NGO (PANA PANA).

## 2. Project Overview

### (1) Overall Goal

- 1) The standard of living of farmers in the municipality of Puerto Cabezas is improved by the agricultural extension system established through approach of the model farmer groups.
- 2) Agricultural extension activities extend to the indigenous areas outside the municipality of Puerto Cabezas.

### (2) Project Purpose

The standard of living of the model farmer groups is improved.

### (3) Outputs

- 1) The CDR functions according to prescribed rules and mandates of its member organizations.
- 2) The model farmer groups introduce techniques taught.
- 3) The CDR establishes a mechanism for implementing the sustainable agricultural extension.

### (4) Inputs

Japanese side:

Long-term Expert: 3 persons in total	Equipment: 3.6 million Yen
Short-term Expert: None	Local cost: 51.2 million Yen
Trainees received: 6 persons in total	
	Total Cost: 1.93 million Yen

Nicaraguan side:

Counterpart: 6 persons	Local Cost: 58,000 US\$
Land and Facilities: Office and demonstration farming plots	

## II. Evaluation Team

Members of Evaluation Team	Leader: Hideyuki Maruoka, Deputy Director General, Rural Development Dept., JICA Agriculture Development Policies: Hiroshi Kidono, Senior Advisor, JICA Evaluation Analysis: Toyomitsu Terao, Fisheries Engineering Co., Ltd Interpreter: Saeko Takahama, Japan International Cooperation Center
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Period of Evaluation	1 Sept. 2011 to 24 Sept. 2011	Type of Evaluation : Terminal Evaluation
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### III. Results of Evaluation

#### 1. Summary of Evaluation Results

##### (1) Relevance: high

According to “Plan Nacional de Desarrollo Humano de Nicaragua” (NHRP), the RAAN, targeted by the project, is one of the regions with the highest priority for the national development. Moreover, the "Development Plan for the Caribbean Coast (2009-2012)" lists, as one of 12 objectives to be met until 2012, a support “to provide production capacity to 10,000 families in communities indigenous and of extreme poverty”. The Strategic Development Plan 2003 -2012 of the municipality of Puerto Cabezas cites the need to deploy a technical assistance program for agricultural and livestock raising development. This project therefore contributes to implementation of both the central government's national policies that place priority on supporting the Caribbean coastal region and development strategies by the local municipalities.

In the whole area of the three target areas, the beneficiaries depend on agriculture, forestry or fishing as a means of livelihood. Besides the limited fertile land, very little assistance has been made for development in these areas to date, so the agricultural extension services to be developed by the project meet the needs of target groups.

Under the “program to support poverty alleviation in rural areas” that is defined in the medium term cooperation plan in Nicaragua made by the Japanese government (prepared in August 2010), as of 2011, six projects in Nicaragua including this project are ongoing, based on the various cooperation schemes. This project contributes to implementation of the program, meeting 3 areas among the program objectives (poverty reduction, improvement of living standards in rural areas, improvement in income and job creation, and promotion of local industries).

##### (2) Effectiveness: moderate

External conditions have caused a significant delay in training of the promoters in the second group. This delay made it difficult to extend the technical guidance to their model farmers by end of the project in consideration of timing of the rainy season. Since most of the model farmers will come from the second group, it cannot be expected to achieve the project within remaining 6 months. By this reason, it is hard to judge that the effectiveness of the project is high.

In the communities run by the promoters in the first group, though a number of promoters and model farmers raises or falls over time, the promoters have deepened settlement of the techniques and delivery of the techniques to model farmers have progressed steadily. Especially in some communities in the territory of Tasba Pri, we can see many effects of the project, which include stable or increased crop production through securing of fertilizer by producing composts and introduction of new crops of vegetables such as tomato or pepper as well. It is also important that the introduction of ram or hand pumps are opening a further step towards diversification in the cropping pattern, previously limited to the rainy season. The pump units can be driven without electricity and assembled using the materials available in local shops. These developments in the first group indicate that by making the extension services available to the second group, the effectiveness of the project would be increased significantly.

(3) Efficiency: moderate

Especially in the first half of the project term before January 2010, there existed a critical situation to jeopardize the safety of the experts and the project counterpart personnel. As a result, the geographic coverage of the project was greatly reduced, and the demonstration farms had been retreated to only one place situated in suburb of Bilwi. In the initial stage, though an extension approach is oriented to extension to be done by the extension agents, accompanied with applying of the PDM (ver.1) in January 2010, the approach was change to extension to be done by the project implementation team, which resulted in suspension of some activities that include formulation of the "extension plan". In the first half of 2010, the start of training the promoters in the second group was delayed, due to withdrawal of demonstration farms from the communities. Taking into consideration the rainy season, this caused delay in activities for output 2 that is not expected to be achieved by end of the project. Among all the causes referred here, nonattainment of output 2 is the major factor that lowers the efficiency of the project.

(4) Impacts: expected to be moderate

To facilitate the achievement of the overall goal 1), the CDR should be able to function as an implementation and coordination agency for extension services in the municipality of Puerto Cabezas first above all through achievement of the project purpose. The examples that the project has given an impact aside the target communities already may include a case of an extension agent who resides in the neighboring municipality of Waspám who has taken a training course. It is most likely that the agent uses the experience of training for his/her extension efforts. This therefore indicates a process that leads to generation of the overall goal 2).

(5) Sustainability: expected to be moderate

1) Policy Issue

The RAAN is cited as one of the prioritized regions in the NHRP and the "Development Plan for the Caribbean Coast". Especially the agricultural sector, on which the people depends their livelihood, has a higher priority. The government projects have also been implemented with focus on the agricultural sector, as shown in the program of "Hambre Cero" by MAGFOR and the micro-loans provided by Instituto de Desarrollo Agrario (IDR). It is considered that the Nicaraguan government policies to support the RAAN will continue further. In addition, the Strategic Development Plan of the municipality of Puerto Cabezas emphasizes the development of technology for agricultural production. In February 2009, the municipality thus established a technical division in charge of agricultural production in the Department of Natural Resources and Environment. In this way, the municipality is to strengthen their support for the agricultural sector.

2) Organizational and financial aspects

The CDR, which is responsible for reproducing the project benefits, has been approved by the municipality council as a permanent committee. At the same time, the strategic plan of CDR (2012 to 2017) has been approved. However, to fully deploy its required functions, it will be needed that the roles among the municipality, educational institutions and NGOs are clearly identified in order to maximize their capacities with based on the sustainable agriculture extension plan, and that they actually fulfill their due roles according to the program.

### 3) Technical aspect

Many of the techniques transmitted through training courses and guidance given in the demonstration farming plots, as like composting and assembling of ram pump, use materials or resources available in local. To make farmer to farmer extension easy and feasible, simple farming techniques that require less investment were selected as well. Among the promoters in the first group, there are some who have digested the introduced techniques. Sustainability of the technical aspect of the project would thus be ensured as long as maintaining on-site technical guidance.

## **2. Factors that promoted materialization of effects**

### (1) Factors concerning to the Implementation Process

Soil conditions and selection of technologies: Of the 3 territories under the project, Tasba Pri is the most advanced in the extension activities. This territory has soil suitable for agriculture and growth of crops is relatively good, which has helped out the project activities easier than in other two territories.

On the other hand, in the two territories of Llano where most of the land has unsuitable soil for agricultural production by low fertility, the project aims to disseminate agricultural techniques applicable even in low soil fertility that include introduction of organic fertilizer. It has been found in the level of experiment that such techniques can grow and harvest different types of crops in these difficult conditions. It is reported that in the territories of Llano there is a greater reluctance to use chemical fertilizer for cultural reasons, and in this sense the project has managed to grab the interest of farmers, as fertilizer introduced by the project utilizes the natural resources available in communities.

## **3. Factors that impeded materialization of effects**

### (1) Factors concerning to the Implementation Process

Outer conditions: Hurricane Felix passed north of the RAAN in September 2007 prior to the initiation of the project caused grave economic damage, such as destruction of houses and fruit trees, in the communities of North Llano and other target territories. Another factor is the precarious social order faced by the municipality of Puerto Cabezas. The incidents cited include the attack to the municipal office on public disturbance in Bilwi in May 2008 and the armed assault in April 2009, which directly impacted on the development of the project. These are followed by the other disturbance in the municipality (November 2009), blocking major roads (April 2010) and the airport and the Wawa River barge (June 2010), protests against rising fuel prices and the problem of land tenure (March 2011) and strikes by students of the University URACCAN (September 2011). In this way, so far the social unrest of various scales has continued within Bilwi and its surroundings.

As a result of the assault which occurred in April 2009 and subsequently increased security level, the demonstration farms were limited to operate in vicinity of Bilwi. This slowed for a time the community activities. Although the limitation of the activities has been eased afterwards, the incident generated the significant delay in progress of the project.

## **4. Conclusion**

This project was begun soon after the project target areas were widely devastated by a hurricane of an extraordinary magnitude, rarely seen in Nicaragua. While other projects invested large amounts of emergency relief supplies, the project continued to provide ordinary and constant support over 3 and a half years to build self-reliant efforts in communities. In the first half of the project term, the project

was directly influenced by the worsened security that caused difficulty in implementing the activities. Even under these conditions, in the third year, the project has succeeded in building of a practicable extension system that can meet the actual situations, and as results of guidance and advice of the extension services, it is now able to see some forms of developed farming in advanced communities. Though it is difficult, because of the backwardness of the activities, to attain the project purpose by end of the project, it can be judged that the project team and farmers involved have been duly performing their role in rather limited conditions.

## **5. Recommendations**

To Project team:

- (1) Formulation of the guideline and the sustainable agriculture extension plan by December 2011
- (2) Introduction of simplified information collection and monitoring by December 2011 for purpose of continued tracing of development in agriculture production and livelihood in the project sites
- (3) Hosting of a seminar or workshop by January 2012 for disseminating and extending outcomes of the project under participation of local governments in RAAN, government agencies that work in the region, donors and NGOs, with coordination with Secretaría de Desarrollo de la Costa Caribe.

To Nicaraguan organizations:

- (1) Timely and appropriate formulation by CDR of an action plan for the next year, together with agreement in the related organizations for necessary investing, budget allocation necessary in each organization; appropriate budget allocation for the project term as preparatory measure
- (2) Reviewing of the participation in CDR of the organizations such as Ministerio de Agropecuario y Forestal (MAGFOR) and the RAAN government
- (3) Enhanced support for livestock, marketing, seed securing and others
- (4) Promotion of coordination with activities of other donors
- (5) Research promotion to be made mainly by 2 universities with regard to experience, outcome, and defect of the project; ways of recognition of the farmers at every ethnic territory; difference of desirable approach, and others

To Both Japanese and Nicaraguan sides:

- (1) One year extension of the cooperation term considering natural disaster and incidents that impacted on the development of the project.
- (2) Revise of PDM to version 3.

## **6. Lessons Learned**

In case of development projects with rural villagers as key actors, especially in communities where residents are accustomed to receiving donations or where they show reluctance to outsider's intervention, the first advance activities that promote the initiative in them, such as those focusing livelihood improvements, can develop a good foundation for implementing other components of the project.

## **7. Follow-up Actions**

One year extension of the cooperation term was recommended by the Joint Evaluation Committee.