

Summary

I. Outline of the Project	
Country : Dominican Republic	Project title : The sustainable watershed management project in the upper area of the Sabana yegua Dam in the Dominican Republic
Issue/Sector : Environment	Cooperation scheme : Technical Cooperation Project
Division in charge : Global Environment Dep. Forestry and Nature Conservation Division 2	Total cost : 79,702(thousand)_yen Share of Japan's Contribution: <u>88</u> %
Period of Cooperation	(R/D): 28/4/2006~31/3//2009 (Three years)
	(Extension): 1/4/2009-31/3/2010 (one year)
Partner Country's Implementing Organization : Secretariat of State of Environment and Natural Resources (SEMARENA), Sur Futuro Foundation(FSF)	
Supporting Organization in Japan : Forestry Agency, Ministry of Agriculture, Forestry and Fisheries	
Related Cooperation Project :	N/A
<p>1 Background of the Project</p> <p>In the 1940's, some 70% of the national land of the Dominican Republic was covered by forests. According to the Forest Resource Survey by the SEMARENA, the forest coverage had dropped to as low as 14% during the 1980s, and 28% in 1997, due to commercial felling, development of ranches and farmland and forest fires, although it slightly recovered to 32% in 2003. Also in the upper area of the Sabana Yegua Dam, steep slopes have been converted to farmland by poor farmers. The resulting progress of soil erosion has been causing the severe deposition of sediment in the dam. The participatory watershed management project aimed at stopping watershed devastation because of poverty and facilitating forest restoration and soil conservation compatible with the local as well as national needs. Under such condition, the technical cooperation project, the Sustainable Watershed Management Project in the Upper Area of the Sabana Yegua Dam (hereinafter referred to as 'the Project'), has been implemented since April 2006, based on the R/D including the Project Master Plan. In July 2007, JICA's Consultation Study Team reviewed the achievement of the project activities and made a recommendation on revision of PDM, then the revised PDM (Annex 1, hereinafter referred to as 'PDM Version 2') was finally agreed with definitions of terms and indicators in the PDM and Terms of References (hereinafter referred to as 'TOR') of each organizations in July 2007.</p> <p>Four (4) months prior to the Project completion, the Joint Evaluation Team (hereinafter referred to as "the Team") was formed for this Terminal evaluation.</p>	

2 Project Overview

(1) Overall Goal

The forest resources in the Project Area will be handled suitably by the villagers using techniques they assimilate through the technical support provided by the staff of FSF and SEMARENA.

(2) Project Purpose

The staff of FSF and SEMARENA will improve their technical capacity in Watershed Management and administrative capacity in project management.

(3) Outputs

1. Environmental, natural resource, and socio-economic baseline data of the Project Area will be organized.
2. Agroforestry and handy irrigation agriculture will be introduced suitably by the staff of FSF and SEMARENA with a view to enhancing their awareness of forest conservation issues in general according to the Agroforestry and Handy irrigation agriculture Annual Plan formulated in the Project.
3. It will be possible for the staff of FSF and SEMARENA to formulate a reforestation plan that addresses the needs of the villagers and to carry out activities and evaluation.
4. The system for forest fire prevention and control in the Project Area will be strengthened.

(4) Inputs (as of November 2008)

-Japanese side : (Total 69,820 (thousand) Yen) (Except for wages and travel expense for JICA experts)

Expert ;46.89 man-months of experts

Equipment*; 8,758 thousand Yen

Local cost **; 69,820 thousand Yen

Trainees received ; 8 participants

(* Not including irrigation-related cost)

(** 'Local cost' includes Equipment cost.)

-Dominican Republic's Side : (Total 9,882 (thousand) Yen)

Counterpart ; 9 counterpart personnel

Land and Facilities(including office equipment); 1,094,633 RD\$ (3,329 thousand Yen)

Local Cost*** ; 3,249,663 RD\$ (9,882 thousand Yen)

(* **Local cost includes facilities and their maintenance cost.)

II. Evaluation Team

Members of Evaluation Team

1. Toshio OGAWA (Leader), Deputy Director General, Forestry and Nature Conservation Group, Global Environment Department, JICA
2. Takao NAGUMO (Planning and Evaluation), Program Officer, Forestry and Nature Conservation Team 2, Global Environment Department, JICA
3. Kiyoko HITSUDA (Evaluation Analysis), Consultant, Japan Development Service Inc.

Period of Evaluation; 2/11/2008~ 23/11/2008

Type of Evaluation : Terminal Evaluation

III. Results of Evaluation

1 Project Performance

(1) Outputs

-The indicator for Output 1 is completely achieved at the time of terminal evaluation.

-It will be difficult to meet the planned output of “the suitable introduction of handy irrigation agriculture by staff of the FSF” which forms part of Output 2 and the full achievement of this output is not assured. Because of the project delay due to hurricanes, however, sufficient guidance on farming associated with irrigation will not have been provided by the time of project completion.

-As for Output 3, although the planted area fell short of the indicator level as mentioned in the achievement result of Indicator 2-1, the reforestation system has been firmly established at the FSF and SEMARENA with a reliable prospect of its continuation in the coming years.

-The Project achieved all indicators of Output 4.

(2) Project Purpose

The Project purpose will have been successfully completed when it ends except the part relating to irrigated farming. However, whether or not the handy irrigation system introduced under the Project will actually contribute to forest conservation significantly depends on the outcome of irrigated farming. Therefore, the successful development of irrigated farming poses a major challenge to achieve the project purpose.

(3) Overall Goals

It is likely that the Overall goal will be successfully achieved. The villagers in the Project Area have been highly recognized the importance of reforestation, and newly assigned Minister of the SEMARENA designated reforestation activities as a Priority Issue providing solid preparation including budget required. As the FSF is operating reforestation throughout the entire upper area of the Sabana Yegua Dam with the assistance of other donors.

2 Summary of Evaluation Results

(1) Relevance

The Project can be described as a project which embodies a long-term perspective and strategy for forest policies in the Dominican Republic. Moreover, the forest restoration and poverty reduction measures conform to Japan’s aid policy from the viewpoint of “environmental conservation” for the former and “human security” for the latter. Furthermore, the Project is compatible with the environmental and development policies of the recipient country.

(2) Effectiveness

The intended outputs of the Project have been virtually achieved as the activities designed to produce certain

outputs have actually produced the intended outputs except in a few cases. At the time of terminal evaluation, C/Ps can do the activities by themselves or with little support by Japanese experts, and the level of satisfaction among local residents with the services offered by the FSF and the SEMARENA has increased. However, the effectiveness of the Project has been somewhat reduced because of the insufficient time devoted to the Project by the C/Ps from the FSF, and damage from hurricanes (Important Assumption).

(3) Efficiency

The Japanese inputs have generally been adequate in terms of the quantity, quality and timing. The C/Ps have a very high level of basic capacity. Their specialist fields are appropriate as they correspond to those of the Japanese experts except in the field of handy irrigation. However, the efficiency of the expert has been lower than expected in regard to handy irrigation, partly because of the insufficient assignment of the C/P and partly because of the withdrawal of the original plan to use a local NGO to honour the intention of the FSF. The intended outputs would have been more efficiently achieved if the above mentioned shortcomings did not exist.

(4) Impact

The villagers participating in the handy irrigation agriculture project or the agroforestry project have completely abandoned slash and burn agriculture. The motivation of farmers to conserve forests and to plant trees has been strongly enhanced through activities, including a painting contest for local primary school pupils, designed to raise their awareness of the need for reforestation and forest fire prevention. There is a good prospect of achieving the overall goal provided that no large unpredictable disaster due to a hurricane or something else strikes the area.

(5) Sustainability

As described below, the sustainability of the Project is quite high and the FSF is expected to continue to provide technical support for local residents.

- Political/administrative aspect

The newly appointed Minister for the SEMARENA is the original proposer of the National Reforestation Plan (Plan Quisqueya Verde) and he has expressed his intention of energetically promoting reforestation in the coming years, especially in the Project Area.

- Financial Aspect

The mechanism of a revolving fund has been introduced under the Project so that the FSF can continually implement the handy irrigation project. As the FSF has already implemented its own micro-credit project, its reliability and stability in terms of continual fund management are very good.

- Organizational Aspect

The FSF has a strong relationship with the SEMARENA, and it is highly plausible that the skills transferred

under the Project will be firmly rooted and efficiently used by the FSF although an increase of the technical staff needed will be required for project extension.

- Technical aspect

The C/Ps for the Project have a high level of technical and project management capability because of their involvement in various projects and their capability is expected to constantly improve through their future work. Nevertheless, the technical staff of the FSF are not very familiar with the techniques of irrigated agriculture in the dry season and further assistance will be required to ensure the sustainability of the Project.

3. Factors promoting better sustainability and impact

(1) Factors concerning to Planning

In terms of the revolving fund which was introduced to the Project, factors capable of facilitating sustainability are that a large profit will be produced by the irrigated agriculture to pay off loans from the revolving fund, and that handy irrigation agriculture will be introduced in other villages.

(2) Factors concerning to the Implementation Process

During the early period of the Project, efficiency of various activities was low due to the insufficient communication and collaboration between C/Ps and Japanese Experts and poor C/P personnel deployment. In the second year of the Project, however, the efforts of both sides such as newly holding weekly meeting, etc. improved the situation.

4. Factors inhibiting better sustainability and impact

(1) Factors concerning to Planning

N/A

(2) Factors concerning to the Implementation Process

The effectiveness of the Project has been somewhat reduced because of the insufficient time devoted to the Project by the FSF's C/Ps due to their concurrent involvement in other projects and also because of the transfer and temporary absence of the C/P in charge of the construction of the handy irrigation facilities.

5. Conclusion

The Project is highly relevant in terms of consistency with the policy at national level in the Dominican Republic, with the Japanese ODA policy, and with the needs of the target area. The delay of the Project, particularly the handy irrigation agriculture project, due to hurricanes (Important Assumption) has made it difficult to provide sufficient guidance on irrigated farming (including marketing) in the dry season which constitutes an almost new farming practice for the C/Ps and villagers. Such insufficient guidance has delayed the achievement of Output 2, in turn hampering the achievement of the project purpose. In regard to impacts,

positive impacts have already emerged. As the sustainability has been established in terms of policy, finance and technology, there is potential for an extremely high level of sustainability provided that the FSF continues to strengthen its technical staff.

6 . Recommendations

(1) Implementation of handy irrigation agriculture

The relevant activity under Output 2 will be extended for another one (1) year in order to strengthen the capacity of the C/P through its experience of irrigated farming in two dry seasons. For the continual development of irrigated farming, the maintenance of the facilities by members of the irrigation cooperatives will be essential. For this reason, the FSF must provide guidance for members of the cooperatives to enhance their capacity to manage irrigation water, maintain irrigation facilities, manage finance, cultivate crops, raise funds and market agricultural products. After the termination of the Project, the FSF must provide guidance for members of the cooperatives to enhance their capacity to manage irrigation water, maintain irrigation facilities, manage finance, cultivate crops, raise funds and market agricultural products for the continual development of irrigated farming

(2) Increase of manpower

It will be necessary for the FSF to swiftly increase the number of staff members equipped with basic skills relating to handy irrigation agriculture.

(3) Revolving fund

The FSF should formulate a revolving fund recovery plan and a plan to implement new handy irrigation projects for the next 10 years by the completion of the Project. A memorandum on the use of the revolving fund should be exchanged between the FSF and the JICA Office. The FSF should continually recover the funds in an adequate manner and should re-invest the recovered funds in the handy irrigation project in accordance with the memorandum on the use of the revolving fund concluded with the JICA.

(4) Agroforestry

A soil erosion prevention method should be actively employed and ways to extend the practice and to educate farmers should be examined to facilitate the entrenchment of agroforestry to benefit many more farmers in addition to the expansion of the demonstration farms.

(5) Reforestation

While upholding the process of establishing a consensus for the reforestation project, active efforts should be made to secure reforestation sites involving large landowners to respond to the need for reforestation and to provide tending guidance at existing reforestation sites.

(6) Collaboration with other organizations to secure sufficient budget and human resources

To secure a sufficient budget and human resources, the FSF should intensify its efforts to ensure the assistance of and collaboration with other organizations, including donors, international aid organizations, private companies, local NGOs and the Dominican authorities concerned.

7. Lessons Learned

- (1) Strengthening the connection between the Project objective and activities
- (2) Methodology suitability
- (3) Importance of communication and mutual understanding in an international cooperation project
- (4) Importance of consensus and ownership sense in a participatory project
- (5) Importance of appropriate material assistance

END