

## Summary

<b>I. Outline of the Project</b>	
<b>Country :</b> The Republic of Vanuatu	<b>Project title :</b> The Project for Promotion of the Grace of the Sea in the Coastal Villages in the Republic of Vanuatu
<b>Issue/Sector :</b> Rural Development	<b>Cooperation scheme :</b> Technical Cooperation Project
<b>Division in charge :</b> Paddy Field Based Farming Area Division III <b>Dept. Division:</b> Paddy Field Based Farming Group, Rural Development Department	
<b>Period of Cooperation</b>	<b>(R/D):</b> March, 2006-March, 2009 <b>(Extension):</b> <b>(F/U) :</b>
	<b>Partner Country's Implementing Organization :</b> Vanuatu Fisheries Department <b>Supporting Organization in Japan :</b> Fisheries Research Agency (Incorporated Administrative Agency) Okinawa Prefectural Fisheries and Ocean Research Center
<b>Related Cooperation :</b>	None

### 1 Background of the Project

The Republic of Vanuatu (hereinafter referred to as "Vanuatu" ) is one of the small island developing states (SIDS) with forms archipelago of eighty-three islands in the South Pacific.

Due to its limited natural resources, the main industries are agriculture and stockbreeding while tourism is the major service industry. A difficulty in transportation on and between the islands hinders economic performance. Under such circumstance, the GNI remains US\$1,600 (2005, World Bank). Its economy depends on foreign-affiliated industries, such as beef, copra, and tourism and Vanuatu is categorized as a Least Developed Countries (LDC) by the United Nations. Poverty and disparities among regions are major development issues. There is a substantial income differential between the urban and the rural. Moreover, the remoteness of the islands is a major problem with about half of the population in rural areas living on an income of less than US\$1.00 per day.

Access to food, depending on the area, can be limited. As a consequence, problems of malnutrition occur in some areas. The proportion of the population that lives near stockbreeding areas can access to animal protein but the population in coastal areas depends on coastal resources such as shellfish and crustaceans for protein. The coastal resources provide an important source of income. Some of these resources have been depleted or exhausted through overfishing. To encourage the recovery of these coastal resources is, therefore, an urgent need. This issue can be tackled through seeding and the maintenance of the environmental conditions for fishing with the re-establishment of a community-based coastal resources management systems.

To challenge above-mentioned issues, the Project, to improve the techniques of the propagation and/or culture of important species and to put these into practice under a community-based coastal resources management system, commenced in March 2006 based on the request from the Government of Vanuatu, with the duration of three years with the Fisheries Department (hereinafter referred to as FD) as a counterpart organization.

### 2 Project Overview

Promotion of Community-based coastal resources management (CBRM) through improvement in technique of FD as well as establishment of CBRM in model sites is aimed.

#### (1) Overall Goal

Livelihoods of coastal communities are improved through the community-based resources

management at the model sites and the resource propagation effect of the target species infects around the model sites.

**(2) Project Purpose**

Community-based coastal resources management is practiced at the model sites in the target area.

**(3) Outputs**

Output 1: Appropriate technique of seed production and intermediate culture of the target species are transferred.

Output 2: Extensive culture and propagation of the target species by the coastal community are promoted at the model sites.

Output 3: Livelihood improvement method of the coastal communities at the model sites is suggested.

**(4) Inputs**

**Japanese side :**

**Short-term Expert**        9  

**Local cost**    56,250,000    Yen

**Trainees received**        6  

**Provision of equipment** **18,900,000 Yen**

**Egyptian's Side :**

**Counterpart**               16 

**Facilities (Office for Japanese Experts, hatchery, etc.)**

**II. Evaluation Team**

<b>Members of Evaluation Team</b>	Mr. Hayato SHIRASE      Team Leader Senior Advisor to the Director General, Rural Development Department, JICA
	Mr. Hiroyuki TANAKA      Project Management Assistant Director, Paddy Field Based Farming Group, Rural Development Department, JICA
	Ms. Noriko FURUTANI      Evaluation Analysis Senior Researcher, Global Link Management Inc.
<b>Period of Evaluation</b>	<b>13/Oct/2008~ 30/ Oct/ 2008</b>
	<b>Type of Evaluation :</b> <b>Terminal Evaluation</b>

**III. Results of Evaluation**

**1 . Project Performance**

**-Inputs and Outputs**

The Project has mostly fulfilled the input along with the plan stated in the R/D and PDM. Some delays have been observed for equipment provision at the beginning of the Project.

Output 1 has been achieved. Appropriate technique of seed production and intermediate culture of the target species are transferred. Indicator 1-1: The following number of seeds of the target species has been produced: Giant Clam *T.squamosa* 110,000 (Target 5,000), Giant Clam *T.maxima* 20,000 (Target 5,000), Green Snail 4,000 (Target 3,000), Trochus 5,000 (Target 3,000). Indicator 1-2: The survival rates of seed production of the target species is getting close to the target figure, 1%. And the trend of this figure is increasing. Indicator 1-3: The counterpart personnel in charge of seed production acquired the basic techniques in seed production of target species and became capable of conducting such seed production by themselves. It is challenge for them to accumulate further experiences in production process in future. Indicator 1-4: “The Giant Clam Seed Production Manual Targeting for the Aquarium Pets Markets” and “Giant Clam Seed Production Manual” were prepared. “Green Snail seed production manual”, “Hatchery Management Manual”, and “Trochus seed production manual” are in progress and will be completed by the end of the Project.

Output 2 has been achieved at the time of the terminal evaluation based on the following indicators.

Indicator 2-1: 4 Reports of the profile of current resource status on Giant Clam (*T.squamosa*, *T.maxima*), Green Snail, and Trochus have already been completed. Indicator 2-2: The suitable habitat for each species has been identified in each model site (Mangaliliu, Lelepa).

Indicator 2-3: Majority of the targeted figure will be achieved when the activities of spawners of Green snail and Trochus will be introduced through the coming activities during the current implementation period as shown below.

		Broodstock		Seeds	
		Achievement	Target	Achievement	Target
Giant Clam	<i>T.gigas</i>	400 (Future broodstock)	400	————	————
	<i>T.squamosa</i>	15	20	0 (Expected 5,000 through coming activities)	5,000
	<i>T.maxima</i>	-----	-----	0 (Not yet release time, Surviving 20,000)	5,000
	Green Snail	745	1,000	0 (Expected 3,000 through coming activities)	900
	Trochus	279 (Expected 1,000 through coming activities)	2,000	0 (Expected 5,000 through coming activities)	200

Indicator 2-4: Management Plan, as a rule, has been in progress in each model site. Therefore, two management plans in total, will be prepared. They are expected to be completed soon since all the contents of them were basically agreed among related actors including the local residents in Mangaliliu and Lelepa. Indicator 2-5: “A manual to organize workshop to formulate CBRM Action Plan” and “Green Snail release manual” were already prepared. Moreover, the contents of “monitoring manual” and “CBRM manual” will be prepared by the end of the Project.

Output 3 has been achieved based on the following indicators. Indicator 3-1: The number of suggestion for livelihood improvement is more than two. Shell Craft, Giant Clam Ocean Nursery for aquarium pet market, Involvement in Eco-tour by showing CBRM sites, have been suggested. Indicator 3-2: The total number of all livelihood improvement workshop is 138. Indicator 3-3: “Manual for Socio-economic survey” and “Giant Clam Seed Production Manual ---Targeting for the Aquarium Pets Market” were prepared. And “Manual for Ocean Culture of Aquarium Pet Giant Clams” for local residents will be prepared by the end of the Project.

### **-Project Purpose**

At the time of terminal evaluation, the project purpose is mostly achieved and will be achieved by the end of the Project. Thus, community-based coastal resources management is practiced at the model site in the target area.

Indicator 1: 239 villagers in total participated in various workshops on resource management.

Indicator 2: Resources management system on all kinds of targeted Giant Clam, Green Snail and Trochus have partially been introduced and implemented.

Indicator 3: According to the result of group interview conducted at Mangaliliu and Lelepa, the local residents there reported that they regularly practice monitoring every week. Their records will be more systematic ones with better assistance from FD/JICA by the end of the Project. Also the interview with Japanese experts revealed that some persons from each model site, who are steadily motivated and perform with responsibility, have been appearing, although some challenges, such as accuracy and continuity of monitoring, remain.

### **-Implementation Process**

The Project has been conducted properly based on the PDM and the implementation process was generally appropriate. The followings are the major points to be observed;

- Continuous efforts for the collaboration between the research section and the extension section were made.
- The number of model sites was decreased from 4 to 2 due to the unexpected land dispute.
- The delay in hatchery renovation and equipment installation led to the delay in seed production.
- The C/P training in Japan was conducted in the crucial period for technology transfer in Vanuatu.
- Promotion of the Project was conducted involving media and Police successfully.
- Joint monitoring every 6 months has not been conducted.

## **2 Summary of Evaluation Results**

### **(1) Relevance**

The relevance of the Project is very high. As shown in the national development policy: “Priorities and Agenda”, the Vanuatu Government has set community-based management on coastal and reef fishery resource as one of its main priorities in the development policy in the fisheries sector. JICA emphasizes “livelihood improvement by rural development” in Country Implementation Plan for Vanuatu. Thus, the project purpose and overall goal are consistent with the policy of Vanuatu and the Japanese Official Development Assistance policy. Also, the Project meets the needs of direct beneficiaries of the FD and the coastal communities.

### **(2) Effectiveness**

The effectiveness of the Project is high. Because, the project purpose has mostly been achieved and will be achieved by the time of the complete termination of the Project. All the outputs have been contributing to achievement of the project purpose. Although Output 3 is closely related to Overall Goal, the local residents, who motivated by identifying income generation (Output 3), made the Community-based coastal resources management activities (Output 2) advanced.

### **(4) Efficiency**

The Project produced the satisfactory results. Compared the magnitude of the Project outcome to the relatively limited inputs, the efficiency level of the Project is sufficient. Consequently, it can be said that the inputs for the Project were efficiently utilized.

### **(5) Impact**

Impact of the Project is expected to be not high enough but is large as follows:

Overall goal is an intended positive impact. The Project has two aspects in the overall goal, which are firstly improvement in livelihood through community-based resource management and secondly, resource propagation. Realization of both requires quite some time, approximately more than five (5) years according to the opinion of the related actors. It also depends on the actions to be taken by FD from now on. If the external condition is met and the appropriate support from FD is provided to the model sites, improvement in livelihood as well as resource propagation through community-based resource management could be realized within several years after the Project. However, some response to the Project is international as seen in the case of eco-tour that the private sector started by including project site for sight-seeing. Beside it, local residents’ obtaining the additional income from such eco-tour and promotion of the environmental education activities by the collaboration with U.S Peace Corps are the unintended positive impacts. As for negative impacts, the Project implementation came to be the trigger of the land dispute between Tassiriki and Sunae although land dispute is quite common in Vanuatu.

### **(6) Sustainability**

The sustainability of the Project can be secured if certain conditions are met, because of the following reasons. The organizational sustainability of FD as a government body to extend CBRM to all over the country is very high based on the high priority by GOV. Actually, its structure has recently been revised and strengthened. However, financial sustainability of FD will be confirmed only if they continue to make efforts in actual allocation of the budget to cover the increased staff. Capacity of the counterpart personnel both in research/aquaculture section and extension/resource management section have been strengthened through the Project activities. Those who are involved in aquaculture became capable of basic techniques of seed production/intermediate culture. Moreover, the retention rate of FD is high. Thus, technical

sustainability is becoming stable if those who are involved in the Project on contract basis are employed as permanent. On the other hand, the technical sustainability of local residents in model sites, is secured if they practice and accumulate their experiences in monitoring and full implementation of the Management Plan.

### **3 . Factors promoting sustainability and impact**

#### **( 1 ) Factors concerning to Planning**

- Proposal towards life improvement (Output 3 related activities) promoted the motivation of local residents and contributed to pace up the activities for Output 2.
- Concentration of the rather limited inputs into the streamlined number of model sites led to produce the outputs steadily.

#### **( 2 ) Factors concerning to the Implementation Process**

- The efforts for the collaboration between research section staff and the extension section staff of FD was the promoting factor to pace up the community-based activities for CBRM.
- Some tangible items such as a T-shirt and the inauguration ceremony of the taboo area inviting the Police and media have contributed to good recognition of the Project from FD and other relevant government organizations.

### **4 . Factors inhibiting sustainability and impact**

#### **( 1 ) Factors concerning to Planning**

- There was the delay in seed production caused by the delayed hatchery renovation and equipment installation. And such delay has hindered the progress of all activities related to Output 2.

#### **( 2 ) Factors concerning to the Implementation Process**

- Joint monitoring every six months has not been conducted and the monitoring reports were not completed on a timely basis.

### **5 . Conclusion**

The project purpose is mostly achieved and will be achieved by the time of termination of the Project, judging from the indicators in PDM2. Firstly, 239 villagers in total participated in various workshops on resource management (indicator1). Secondly, resources management system on all kinds of targeted Giant Clam, Green Snail and Trochus has been introduced and implemented (indicator 2). And periodical monitoring by the motivated local residents has been conducted in model sites (indicator 3).

At the time of terminal evaluation, the relevance of the Project is high due to the consistency with both the policies and needs of target groups. The effectiveness of the Project is also judged as high because of the achievement level of the project purpose, resulted from the produced outputs. The efficiency can be said as sufficient from the viewpoint of outcome magnitude compared to the input. Impact is large but it cannot be described as strong enough, because the overall goal seems to have challenges ahead and the complete realization of it might require longer than 3-5 years. However, the Project is on track towards the overall goal and it will be eventually achieved over longer term, if the consistent commitment of FD continues. The sustainability of the Project can be secured if certain conditions are met. Firstly, the organizational sustainability of FD as an executing organization for promotion of CBRM to all over the country is high. However, financial sustainability of FD will be confirmed only if they continue to make efforts to increase budget for CBRM. Thirdly, technical sustainability would be higher if further efforts are made to employ already trained staff by the Project as permanent staff of FD as well as to promote the community initiative including monitoring by the full implementation of the Management Plan.

### **6 . Recommendations**

- 1) Further efforts for the continuation of collaboration between research and extension sections
- 2) Feasibility study on income generation in the life improvement proposal
- 3) Identification of the Project related techniques to be further strengthened
- 4) Discussion on the indicators for the overall goal

5) Securing budget allocation and recruiting necessary staff

## **7. Lessons Learned**

1) Site selection

Since land dispute is quite common in the South Pacific region, more careful survey is necessary for the project site selection.

2) Consensus on the community-based coastal resource management in JICA

As the nature of the coastal resource management covers quite wide range of activities, and it takes long time to assess the effects of its application, considering and making consensus on the long-term strategy to implement the project for CBRM is necessary and important.

3) Clear and easy indicator

Scientific indicator should be clearly defined and be simple enough to calculate for smooth monitoring and evaluation.

