

Evaluation Summary

1. Outline of the Project

Country: Palau

Project Title: Palau International Coral Reef Center Strengthening Project

Issue/Sector: Natural Environment Conservation

Cooperation Scheme: Technical Cooperation Project

Division in Charge: Forestry and Nature Conservation Team I, Group I (Forestry and Natural Environment), Global Environment Department

Total Cost (at the time of evaluation): approx. 315 million yen in total

Partner Country's Implementing Organization(s): Palau International Coral Reef Center (PICRC)

Supporting Organization(s) in Japan: Ministry of the Environment; Japan Wildlife Research Center; Establishment of Tropical Marine Ecological Research; Aquamarine Fukushima; Yokohama Hakkeijima Sea Paradise

Period of Cooperation

1 October 2002 - 30 September 2006

R/D concluded: 5 July 2002

Related Cooperation: Grant Aid

1-1 Background to the Project

In May 1994, conservation of coral reefs was added as a new field of cooperation to the Japan-US Common Agenda for Cooperation in Global Perspective at a US-Japan vice-ministerial meeting. At a meeting of the International Coral Reef Initiative held in the Philippines in June 1995, the Japanese government announced that it would study the establishment of a research center in the Republic of Palau as a center for coral reef research in the Asia-Pacific region. As a first step, Japan conducted a basic study in October 1995 and a project formulation study in June 1996.

The Palau government planned the establishment of a center to conduct research on coral reefs and related marine life as well as education activities on their preservation. The construction of the center buildings was completed in August 2000 with 830 million yen in grant aid from Japan. In January 2001, the center opened as the Palau International Coral Reef Center (PICRC).

This Project is aimed at supporting organizational strengthening and self-sustainability of PICRC. For a period of four years between October 2002 and September 2006, it will support PICRC in strengthening its research and educational functions in line with the center's

Strategic Plan 2002-2006. It should be noted that PICRC serves not only as a research and educational center for Palau but also as a hub for the Global Coral Reef Monitoring Network (GCRMN) in the Micronesian region.

1-2 Project Overview

(1) Overall Goal

To improve the conservation and sustainable use of the coral reef ecosystem and related biota in Palau

(2) Project Purpose

To build up the capacity of PICRC for organizational administration, research and exhibition/education, and achieve self-sustainability

(3) Outputs

- A. Administration: PICRC will be administered in an organized and planned manner.
- B. Aquarium Operation: The Aquarium will be self-sustained in its exhibition, operation and maintenance.
- C. Research: Coral reef research and monitoring will be firmly established.
- D. Education: The education division will be capable of conducting environmental education on coastal resources for students and communities.

(4) Inputs (until the time of evaluation)

A. Japanese side

Long-term Experts: 5 person-assignments Short-term Experts: 15 person-assignments

Equipment: US\$351,000 (by JFY2006) Trainees received: 11 persons

Local activity expenses: US\$515,672 (by JFY2006) • Others: 2 Japan Overseas Cooperation Volunteers

B. Palauan side

Counterparts: 16 persons

Equipment, facilities and offices

Local cost

Government grants: US\$450,000/year

Other self-generated revenues: US\$656,482 (admission fees for the Aquarium, research grants, etc.)

2. Evaluation Team

Members of Evaluation Team

Team Leader Yoshiharu YAMADA Director, Forestry and Nature Conservation Team I, Group I, Global Environment Department, JICA

• Administration Program Keisuke TAKAHASHI Assistant Director for Coral Reef Conservation, Biodiversity Policy Division, Nature Conservation Bureau, Ministry of the Environment

• Cooperation Planning Hiroshi HIDAKA Forestry and Nature Conservation Team I, Group I, Global Environment Department, JICA

• Evaluation Analysis Yasuyo HIROUCHI Permanent Expert, International Department Associates Ltd.

Period of Evaluation

13 - 22 April 2006

Type of Evaluation: Terminal Evaluation

3. Results of Evaluation

3-1 Achievement Level

(1) Degree of Achievement of the Project Purpose

The Evaluation Team concludes that the Project has largely achieved its purpose of building up the capacity of PICRC to achieve self-sustainability. Although quantitative data was not available, the Palauan side administers PICRC largely on its own and the Project performed well on major indicators as shown below:

A. The quality of PICRC personnel has been improved. They are almost sufficient in number as well.

B. More financially sound. PICRC has increased its self-generated revenues and the budget is well balanced.

C. The research programs of PICRC have been reinforced, judging from the establishment of the National Coral Reef Monitoring Program and the numbers of scientific articles and reports PICRC has published.

D. The capacity of the Aquarium for exhibition, operation and maintenance has been increased, judging from the stable rearing conditions and the number of visitors to the Aquarium.

E. All elementary and secondary schools and almost all the states in Palau have continued environmental education centering on coral reef conservation. The School Support Program continues to be improved.

(2) Degree of Achievement of the Outputs

A. *Output 1: PICRC will be administered in an organized and planned manner.*

The Project will likely achieve the targets for almost all the indicators, although the targets are not clearly defined. 5 of the staff members in General Affairs section have attained training courses related to general affairs operation and self-generated revenues increased almost 70 percent from one year before the project launch (US\$151,646 in PFY2002).

B. Output 2: The Aquarium will be self-sustained in its exhibition, operation, and maintenance.

The Project will likely achieve the targets for almost all the indicators, including (i) stable rearing conditions for the animals and plants in the Aquarium; (ii) periodical updates of the exhibition; and (iii) appropriate O&M of the facilities and equipment by personnel at both the Aquarium and Engineering departments.

C. Output 3: Coral reef research and monitoring will be firmly established.

The Project will likely achieve the targets for almost all the indicators, including (i) the establishment of 21 monitoring sites; (ii) spot checks at over 230 sites; (iii) scientific publications in nine fields; (iv) organizing workshops; and (v) technical assistance to state governments.

D. Output 4: The education division will be capable of conducting environment education on coastal resources for students and communities.

The Project will likely achieve the targets for almost all the indicators. Since the launch of the Project, the School Support Program has covered all the 18 elementary schools and five secondary schools across the country. The Community Outreach Program has been implemented in 12 states and will be implemented in the remaining four by the end of the Project.

3-2 Summary of Evaluation Results

(1) Relevance

The Overall Goal is relevant to the needs of Palau and consistent with the national development plan. Both the Overall Goal and the Project Purpose are relevant to the organizational needs of PICRC. They are also in conformity with Japan's ODA policy, which defines environmental conservation as one of its six focus sectors. Additionally they comply with JICA's Country Program, which ranks environmental conservation, especially coral reef preservation, as priority areas for cooperation.

(2) Effectiveness

PICRC has increased its capacity in administration, research, exhibition and education toward achieving self-sustainability. The Outputs have contributed to the achievement of the Project Purpose.

(3) Efficiency

All the Outputs will be achieved by the end of the Project. The inputs to achieve these outputs were largely appropriate in quantity, quality and timing.

(4) Impact

The Overall Goal will be attained in three to five years after the completion of the Project if PICRC reflects their research outcomes into government policies and continue with its efforts to raise the awareness of the local communities about the need for conserving the marine resources. As an impact of community awareness activities through the Project, change in local people's lifestyle has been seen, such as reduction of littering in public space. Also, meteorological observation data collected and analyzed by the Project came to be in use both at an energy project implemented by the Palauan Government and in research of the Japan Agency for Marine-Earth Science and Technology.

(5) Sustainability

The PICRC is likely to achieve sustainability through continuously increasing self-generated revenues and continuously receiving research grants.

A. *Institutional sustainability.* The Palau International Coral Reef Center Enabling Act (PICRC) was enacted in 1998. Some other laws are in place to support the activities of PICRC. The next Strategic Plan for Palau fiscal years 2007-2011 has already been drafted. The Board of Directors is expected to approve the five-year plan in May 2006.

B. *Organizational sustainability.* The Counterparts (C/Ps) who were trained in the Project will likely assume appropriate posts. In other words, they will be able to make full use of their acquired knowledge and skills to continue their functions and sustain the effects of the Project.

C. *Financial sustainability.* It is likely that PICRC will increase self-generated revenues and continue to receive research grants. Yet these revenues are insufficient for full financial sustainability of PICRC. Government grants for PICRC will be necessary.

D. *Technical sustainability.* The C/Ps have acquired enough technical skills to design and implement research programs on their own and manage the Aquarium and implement educational programs. C/Ps at the research department will likely improve their skills further through such opportunities as joint research with scientists from Japan, the United States, and Australia.

3-3 Contributing and Inhibiting Factors

Major contributing and inhibiting factors can be summarized as shown below:

(1) Contributing factors

A. After the launch of the project, the Palauan government allocated US\$450,000 in funds to PICRC every year, which accounts for about 0.8 percent or some one third of the budget of PICRC.

B. Training in Japan for C/Ps from the Aquarium and Engineering departments has resulted in a friendly relationship between PICRC and Aquamarine Fukushima. In December 2005, PICRC installed the aquarium donated from Aquamarine Fukushima solely for the purpose of renewing the exhibition theme regularly.

C. Palauan Government have high hopes for PICRC's role, as is implied in recognition of PICRC by the Government as a hub center on coral reef conservation in the Micronesian region.

(2) Inhibition factors

A. An unclear link between the PDM and PICRC's strategic plan has been making it difficult for the stakeholders to have a common understanding of the overall process of the project's implementation and progress in the project activities.

B. The Joint Coordination Committee failed to meet regularly as prescribed in the R/D. For this reason, the Japanese and Palauan sides could not work together every year in developing the annual activity plan and reviewing the achievement and progress in the project activities.

C. Self-generated revenues from aquarium admission fees are increasing but not enough to cover all operational expenses of PICRC. Extra expenditure for renewal of equipment is expected, which can lead to suppression of research activities.

3-4 Conclusion

The Evaluation Team has confirmed the relevance, effectiveness and efficiency of the Project. The Project has also had a positive impact (as exemplified by the use of meteorological data, the position of secretariat to the International Coral Reef Initiative). Nevertheless, it is essential that the Palauan side continue to allocate regular budget funds to PICRC if the Center is to continue high-quality research and appropriate O&M of the Aquarium.

To that end, it is necessary to ensure that the Palauan government properly understands the crucial role PICRC plays in conserving coral reefs not only in Palau but also in the Micronesian region as a whole.

3-5 Recommendations and Lessons Learned

(1) Recommendations

A. Measures to be taken by the completion of the Project

(a) The research outcomes in the individual fields that have not been organized should be compiled into research papers or reports.

(b) In order to make the Aquarium more attractive to non-Palauan visitors, the interpretative signs should be translated into Japanese, Chinese, and Korean.

(c) The Joint Coordination Committee should meet at least once before the end of the project period.

B. Measures to be taken after the completion of the Project

(a) It is recommended that the research outcomes at PICRC be reflected in policies on the designation of marine conservation areas and other matters. It is also recommended that close coordination be ensured with local government organizations in the designation process.

(b) PICRC should continue its efforts to secure revenue sources to ensure its financial sustainability. It should also review the accounting system and do all it can to curtail expenditures, including utility expenses.

(c) Necessary equipment should be procured locally as much as possible, so that maintenance services and spare parts are readily available.

(d) PICRC is expected to serve as a hub institution for coral reef conservation in the Micronesian region. It should continue to support capacity building for coral reef monitoring in countries in the region.

(2) Lessons Learned

A. The PDM for the Project was not fully aligned with the Strategic Plan of PICRC. This has had some negative effects, including confusion in project management by the stakeholders. In formulating a PDM, relationships with other relevant documents (strategies, plans, etc.) should be fully taken into consideration.

B. This PDM uses such terms as “financial soundness,” “contents of research program,” and “stable rearing” for Objectively Verifiable Indicators. Some indicators are poorly defined or not quantitatively verifiable. In formulating a PDM, it is advisable to adopt quantitatively verifiable indicators and clearly define terms used for them.

C. In order to maximize the impact of the Project, it is advisable to concentrate on strategically selected activities. This may require revising the PDM in accordance with due process.