Summary of Evaluation Study

1. Outline of the Project

Name of Country: Republic of Palau

Name of Project: Capacity Enhancement Project for Coral Reef Monitoring

Sector: Environment Scheme: Technical Cooperation

Department in Charge at JICA: Forestry and Nature Conservation Division 1, Global Environment Department

Duration of Project: From July 2009 to July 2012

Implementing Organization: Palau International Coral Reef Center

Other Related Cooperation Activities: Grant Aid Project, Technical Cooperation Project (Palau International Coral Reef Center Strengthening Project: 2002-2006), Japan Overseas Cooperation Volunteers

1-1 Background

The Palau International Coral Reef Center (PICRC) was constructed by grant-aid from the Government of Japan in the context that a new cooperation field (coral reefs) was added to the Common Agenda at a US-Japan vice-ministerial meeting, and it began its activities in January 2001 to provide a forum for coral reef research and education. The Japan International Cooperation Agency (JICA) implemented a 4-year Technical Cooperation Project between 2002 and 2006 to strengthen the main functions of PICRC. At the completion of the project, the evaluation team recommended, among others, that: (1) PICRC should utilize their research results to strengthen the Palau Government's policy for the establishment and evaluation of Marine Protected Areas (MPAs), and (2) PICRC should improve its institutional capacity as a hub in the Micronesia region for the monitoring of coral reefs.

The Palau government enacted the Protected Areas Network Act (RPPL 6-39) to provide a framework for collaboration between the national and the state governments for protecting the nation's biodiversity by managing MPAs. Moreover, five Micronesian jurisdictions, including Palau, launched the Micronesia Challenge (MC)¹ in 2006. There was a necessity to develop basic systems for monitoring, including a monitoring protocol. Based on this background, there have been increasing expectations that PICRC's technical support for monitoring will play an important role for measuring the effectiveness of the management of MPAs. In view of this situation, JICA, in collaboration with PICRC, commenced the 3-year "Capacity Enhancement Project for Coral Reef Monitoring Project" (CEPCRM) in July 2009.

¹ It is a commitment to effectively conserve 30 percent of near-shore marine resources and 20 percent of terrestrial resources across Micronesia by 2020 by the Federated States of Micronesia, the Republic of Palau, the Republic of the Marshall Islands, the United States Territory of Guam and the Commonwealth of the Northern Mariana Islands.

1-2 Outline of the Project

CEPCRM is the project for enhancement of PICRC's monitoring capacity, so that MPA is set and managed adequately in Palau and collaboration with surrounding nations and regions is strengthened

(1) Overall Goal

• The technical capacity of Palau International Coral Reef Center (PICRC) is utilized in five Micronesia Challenge (MC) Jurisdictions.

(2) **Project Purpose**

• The technical capacity of PICRC is enhanced in monitoring required for management of Marine Protected Area (MPA).

(3) Outputs

- 1. The system to support the monitoring on MPA is developed.
- 2. The partnership is enhanced between PICRC and international initiatives, five MC Jurisdictions, related organizations and research institutions.

(4) Inputs(as of Dec.2011)

(Japanese side)

- long-term experts:3
- short-term experts:2
- training in Japan;4 trainees (training in Japan)
- Equipment: 124,950.54 US dollars (USD) for Vehicle, Monitoring equipment, Aquarium spare parts, GIS and database system devices, etc.
- Operational Costs: 430,773.99 US dollars (USD) (in July 2009-December 2011)
- participation to conferences/workshops

(Palauan side)

- Counterparts: Total number of assigned counterparts is 25(current counterparts : 16)
- > Facilities and Equipment: Land, buildings, facilities, and room space necessary for the Project
- Administration and operational costs for the Project: 43,685 USD. The following portions are the costs for utilities, fuel (vehicles), and supplies for project implementation
 - > 30% of the costs used by research and education departments
 - > 10% of the costs used by administration, engineering, and aquarium departments

2. Members of Evaluation Study Team

	Leader:	Kazunobu SUZUKI (Mr.)		
		Advisor, Forestry and Nature Conservation Division 1,		
	Coral Reef Conservation:	Global Environment Department, JICA		
		Tadashi KIMURA (Mr.)		
Members		Technical Advisory Committee,		
		Global Environment Department, JICA		
	Nature Conservation	Naoki AMAKO (Mr.)		
	Policy:	Assistant Director, Biodiversity Policy Division,		
		Nature Conservation Bureau, Ministry of the Environment		

	Cooperation Planning:	Hiroyuki MIYAZAKI (Mr.)				
		Forestry and Nature Conservation Division 1,				
		Global Environment Department, JICA				
	Evaluation Analysis:	Kenichi MACHIDA (Mr.)				
		Consultant, Kaihatsu Management Consulting, Inc.				
Duration	From 23 January to 2 Febr	ary 2012 Type Terminal evaluation		Terminal evaluation		
3. Outline of Results of Evaluation Study						
3-1 Achievements of Outputs						
3-1-1 Project Purpose: The technical capacity of PICRC is enhanced in monitoring required for						
management of Marine Protected Area (MPA).						
Objective Verifiable Indicators: The monitoring is implemented based on protocols developed						
by PICRC at 2 MPAs of Palau.						
The institutional role of the PICRC in MPA monitoring is						
clarified						
Project Purpose will be accomplished. The MPA monitoring has been implemented at the four						
selected sites in line with the draft monitoring protocol. As the institutional role of PICRC in MPA						

selected sites in line with the draft monitoring protocol. As the institutional role of PICRC in MPA monitoring is clearly stated in the draft monitoring protocol, the role is to be officially confirmed upon the approval by the Minister of Natural Resources, Environment & Tourism (NRET) in the near future.

3-1-2 Output 1: The system to support the monitoring on MPA is developed.

Objective Verifiable Indicators: Information related to management and conservation of MPA is updated.

The monitoring protocols are approved as official monitoring protocols by the Ministry of Natural Resources, Environment and Tourism. Output 1 will be accomplished. The monitoring data of the selected four MPAs and their control sites have been collected in PICRC, and the database has been updated. Moreover, the monitoring protocols have been drafted and are to be submitted to the Minister of NRET for official approval.

3-1-3 Output 2:The partnership is enhanced between PICRC and international initiatives, five MC Jurisdictions, related organizations and research institutions.

Objective Verifiable Indicators: PICRC makes 5 presentations at the conferences and workshops of relevant international frameworks and related organization or research institutions by the end of the Project.

PICRC produces 20 different publications or announcements through media by the end of the Project.

The seminars and/or workshops on MPA monitoring for five MC Jurisdictions are conducted by PICRC 3 times by the end of the Project.

Output 2 is accomplished. The project has sent participants to ten relevant international conferences

or workshops, where they have given a presentation at each occasion. Newspapers published in Palau have reported on the project 21 times. The project has conducted a workshop on MPA monitoring and database building in FSM and RMI a total of four times, and a workshop for MC focusing on MPA monitoring in February 2010. As an example of a partnership between PICRC and other organizations, PICRC has been working with the South Pacific Committee (SPC) to modify and improve the MPA database. The relationship between the two organizations was initiated at one of the conferences participated in, the Pacific Regional Conference on Marine Managed Areas (November 2009).

3-2 Evaluation by Five Criteria

3-2-1 Relevance

Relevance of the project is regarded as very high. The project purpose and overall goal are aligned with relevant policies, laws, and plans in Japan and Palau. The four target MPAs were appropriately selected based on several criteria such as the characteristics of MPAs, capacity of state governments, etc. The livelihood of communities near the MPAs is closely related to marine resources, so their needs are consistent with the project. Moreover, the uniqueness of Japan's ODA was effective for emphasizing self-reliant effort, leadership and ownership by recipients, as called for by Japan's ODA, in this project.

3-2-2 Effectiveness

Effectiveness of the project is judged as high. The project purpose is likely to be attained as described in 3-1-1 Project Purpose. The two outputs have contributed to the achievement of the project purpose. Through the achievement of output 1, Palauan counterparts have monitored the four MPAs and drafted the monitoring protocol. These directly enhanced PICRC's technical capacity for MPA monitoring. As a result of output 2, Palauan counterparts have participated in international conferences and workshops to present the project and discuss the MPA monitoring. These experiences have facilitated PICRC's efforts to enrich the knowledge of MPA monitoring in various countries and network with related organizations domestically and internationally (Evaluation team think there are shortcoming in these indicators, so collaboration with relevant bodies is used as supplemental indicator).

However, the important assumption for the project purpose that "PICRC personnel assigned for monitoring is not decreased drastically" was not fulfilled throughout the project period. At the beginning of the Project, There is a vacant post on the Palauan side. Several key Palauan counterparts, including the head of the research department, CEO, and two researchers, left PICRC and replacements were often not found promptly, impeding the progress of the project.

3-2-3 Efficiency

Efficiency of the project is estimated as moderately successful. Almost all inputs were appropriately provided for conducting the activities. The activities have been implemented nearly on schedule, and two outputs have been achieved in line with the plan, as described in 3-1-2 and 3-1-3. The monitoring

protocol, one of the major outputs, has been drafted reflecting the results of practices in the field in Palau, FSM, and RMI, so that the protocol is feasible and applicable to the MC jurisdictions. The cost-effectiveness of the project was enhanced by replacing Japanese short-term experts and training in Japan with local and third-party experts, and by utilizing human and physical resources in external organizations such as TNC and PCS.

However, the pre-condition that "The governing structure of PICRC is stably maintained" and as mentioned in 3-2-2 an important assumption for the project purpose were not met, and this affected the smooth project implementation, resulting in a lowering of the efficiency. The salary of all PICRC staff was decreased by 15% for about seven months in 2011 due to a reduction² of government funding to PICRC. This measure affected the motivation and lowered the productivity of the staff during the period. In addition, delays in the arrangements for training in Japan also lowered the project efficiency because it was quite useful training that could have made the project more efficient earlier.

3-2-4 Impact

Impacts from the project are regarded as high based on the following evaluations.

(1) Overall Goal

The overall goal is likely to be achieved in the future, centering on FSM and RMI. Relating to Objective Verification Indicators, Monitoring protocols developed by the project are expected to be utilized for the management of MPAs in FSM and RMI, which are independent countries in the MC jurisdictions. A database on MPA monitoring has been established in PICRC, and MPA monitoring data from the MC jurisdictions will likely be collected in the database. During the course of these processes, PICRC will be requested to provide technical assistance to the MC jurisdictions. All of these expected activities for the MC jurisdictions are to be implemented by the Micronesian Conservation Trust Fund (MCTF), and the fund will become available once each MC jurisdiction provides the designated amount of contribution to the MCTF. The contributions have started to come in and are expected to be completed soon.

(2) Other Impacts

Apart from the overall goal, several other positive impacts are seen, and no negative impacts are projected. First, "Reef Talk," a project newsletter, has been up-scaled to become the newsletter for PICRC. Second, a guideline for the PAN technical committee will be prepared referring to the monitoring protocol, including the role of PICRC, once it is officially approved by MNRET. Third, an interest of non-targeted state governments in the projects MPA monitoring has been enhanced. Fourth, the project strengthened the conservation consortium (CO)³ and the network among the members by providing CO with issues for discussion, including the draft monitoring protocol. Fifth, an MC Workshop organized by the project has provided impetus to the MC and brought MC's attention to monitoring.

² From \$450,000 (Oct.2009-Nov.2010) to \$372,000 (Oct.2010-Nov.2011)

³ The consortium is an informal but exclusive platform in which all parties concerned with environment issues in Palau meet and discuss the issues.

3-2-5 Sustainability

Sustainability of the project is regarded as moderate based on the following evaluations

(1) Political, Institutional and Legal Aspects

As mentioned earlier in 3-2-1, it is certain that the conservation of marine resources and environment will remain as a prioritized national agenda in Palau. The institutional groundwork for PICRC to continue to support MPA monitoring will be confirmed once the monitoring protocol is officially approved. However, one concern in the PICRC Act is that it states that PICRC should be self-sufficient, even though it is not feasible in reality.

(2) Organizational Aspects

PICRC has been organizationally strengthened through the implementation of the project. However, frequent turnover of the staff and difficulty in recruiting qualified replacements are structural risk factors for PICRC that could hamper its sustainability. Moreover, coral reef monitoring and MPA monitoring are not specifically described in PICRC's current 5-year strategic plan. This will not help facilitating PICRC's paying attention to continuous support to MPA monitoring.

(3) Financial Aspects

The sources of PICRC's funding consist of government budget, grants for research projects, donations, and income from the aquarium and shop. The total amount of the funding is generally stable. Financial resources allowing PICRC to assist MPA management and monitoring are the PAN fund (PANF) and the MCTF fund for domestic and international activities respectively. Both funds will be available for government organizations in Palau and the MC jurisdictions responsible for their MPAs, as well as related parties such as PICRC. But process of the protocol's approval and fund development are not ended, so the availability lacks detail or specifics yet. It is important for PICRC to continue discussion with relative organizations.

(4) Technical aspects

Palauan counterparts in PICRC now have enough skills and knowledge to continue the project activities. Moreover, as described in 3-2-3 Efficiency, the monitoring protocol has been drafted quite appropriately from a technical standpoint. However, high-turnover seems to be a risk of sustainability, as the organizational capacity and institutions of PICRC have not sufficiently developed in order to accumulate expertise and knowledge. The state governments that have jurisdiction over the four MPAs, as well as many states of FSM and RMI, need PICRC's technical support to conduct MPA monitoring and analyze the data.

3-3 Promoting Factors

3-3-1 Factors concerning to Planning Nothing special

3-3-2 Factors concerning to Implementation

(1) Communication

The project has improved the communication among project members from both the Japanese and the Palauan sides as well as the staff of PICRC. Specifically, the project introduced biweekly project meetings, weekly directors' meetings and PICRC-wide staff meetings that aim at monitoring the progress of the project, sharing information, discussing issues, and building consensus. One of the Palauan counterparts initiated internal meetings in his department after being stimulated by what he had learned on management and communication during the training in Japan.

(2) Ownership

In order to nurture the Palauan ownership and strengthen the sustainability of the project, the Japanese experts have paid careful attention to motivating and facilitating the Palauan counterparts to implement the project proactively. For example, often acting in a supporting role, the Japanese experts have requested the Palauan counterparts to give presentations at conferences or workshops. This has enhanced, as expected, Palauan counterparts' ownership of the project, although it has entailed the risk of creating an impression that the contribution of the Japanese side is less visible.

(3) Collaboration with Organizations concerned

The project has actively worked with many related organizations in various ways. As MNRET has limited capacity, related organizations such as TNC, PCS, etc. fulfill an indispensable function in marine environmental conservation in Palau and the MC jurisdictions. Collaboration with those organizations is necessary and important for the project. The collaboration has enriched the project activities, improved efficiency, and will contribute to sustainability.

3-4 Impeding Factors

3-4-1 Factors concerning to Planning

Nothing special

3-4-2 Factors concerning to Implementation

As described in 3-2-3 Efficiency, the turnover of key counterparts and the financial crisis in PICRC have affected the project implementation. These problems have meant that the pre-condition and important assumption for the project purpose were not fulfilled.

3-5 Conclusion

The project will continue to be appropriate from the viewpoints of priority, needs and means for addressing the issue, so relevance is regarded as very high. The project purpose is likely to be achieved through creating the two outputs, so effectiveness is judged as high. While efficiency is moderate because the project has been creating quality outputs by appropriate inputs and remarkable efforts for activities focusing on such aspects as facilitating communication, nurturing a sense of ownership, and collaborating with other organizations in project implementation, yet the project was affected by the unfulfilled precondition and important assumption for the project purpose. Impact appears to be high, as several kinds of impacts are expected to be seen including the achievement of the overall goal. Based on good prospects for accessibility to the PANF and the MCTF, achievement

of the overall goal and financial sustainability of the project activities seem to be feasible, although the high turnover of PICRC staff is a concern for technical sustainability. As a result, sustainability is estimated as moderate.

3-6 Recommendations

3-6-1 Recommendations for the remaining period of the Project (mainly for the project or PICRC)

- (1) It is strongly recommended that the Project publicize its outputs/results and future direction of the MPA management by the PAN mechanism to the public to encourage government bodies such as MNRET to facilitate the process of authorization and recognize the responsibilities of PICRC for implementing the PAN mechanism.
- (2) It is recommended that the Project organize national/local workshops to promote a better understanding of the protocol by the local communities and state governments in non-targeted states, so that the utilization of the protocol will be facilitated.
- (3) It is recommended that the Project/PICRC request the MC to find appropriate mechanisms for supporting FSM and RMI in conducting national monitoring with the assistance of PICRC.
- (4) It is recommended that the Project prepare the summary of the Project products in English to be proactively used not only for public relations purposes but also as a case study for international communities of scientists and practitioners.
- (5) It is recommended that the project make a collaboration plan toward achievement of the overall goal in close consultation and cooperation with its partners (governments, foreign aid agencies and NGOs).

3-6-2 Recommendations for the post-project period (mainly for PICRC)

- (1) It is recommended that PICRC regard MPA monitoring as an official activity in its next 5-year strategy plan in order to implement the activity based on the monitoring protocol under the official/governmental program supporting PAN mechanisms continuously.
- (2) It is recommended that PICRC lead the Conservation Consortium so that PICRC can improve its capacity for MPA management as a scientific advisory institution for the government. It is also recommended that the consortium consider a national policy on environmental conservation with PICRC playing a key role in the consortium.
- (3) It is recommended that PICRC further explore possible applications of the protocol for regular MPA monitoring in states outside the scope of the Project and the MC jurisdictions.
- (4) It is recommended that PICRC continue to maintain and strengthen its network with central and state government agencies and NGOs such as TNC and PCS toward the achievement of the overall goal.
- (5) From a long-term point of view, the Project outputs/results should be verified and applied for future integrated environmental monitoring in combination with other data sources (e.g., terrestrial and socioeconomic data). Therefore, it is recommended that the Project outputs/results be shared with the government and semi-government organizations concerned, including the board of the PANF,
- (6) The Project has developed publicity materials such as a newsletter, leaflets, and publications, and intensively implemented public relations activities through the mass media and seminars. This contributes to improving the visibility of PICRC both in Palau and international arenas. Thus, it is

recommended that PICRC continue these public relations activities even after the termination of the Project.

- (7) It is recommended that PICRC develop a clear management strategy and request National Congress to amend the current PICRC Act (RPPL 5-17), taking financial, institutional and human resource aspects into consideration, particularly the operation of the Aquarium to ensure financial sustainability.
- (8) It is recommended that PICRC encourage the PANF, National Congress, MNRET and state governments to fully recognize PICRC's function and role and to take necessary measures to support its activities.
- (9) It is recommended that PICRC organize regular meetings with the participation of various stakeholders such as the central government, state governments, JICA Palau, relevant partners, including foreign aid agencies and NGOs, in order to utilize the Project outputs/results effectively as well as to maintain the partnership with them. At the same time, future possible occasions to enhance partnerships with the MC jurisdictions to contribute to the MC should be promoted.

3-7 Lessons Learned

(1) Although the institutional management of PICRC is not a part of the Project, technical achievement of the project is dependent on the sound institutional management. For long-term institutional sustainability, financial and administrative aspects, *inter alia* financial strategy planning and accounting staff allocation, should have been taken into consideration from the planning stage of the project.

(2) There are many unforeseeable and uncontrollable conditions for achievement of the overall goal and sustainability. For example, MCTF is a necessary scheme for PICRC to provide technical assistance to the MC jurisdictions, yet the fund has not been disbursed, mainly due to financial constraints on the MC jurisdictions. The Project design should be discussed and modified at appropriate times during the course of the Project to set a feasible and appropriate overall goal.

3-8 Follow-up situation

Nothing.

Holding workshops targeting the States officer is be discussing to utilize PICRC's the enhanced capacity for non-targeted states.