

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Costa Rica office/ El Salvador office: March, 2013

Country Name	Project on Sustainable Fisheries Management for the Gulf of Nicoya
Costa Rica	

I. Project Outline

Project Cost	481 million yen	
Project Period	October, 2002 – September, 2007	
Implementing Agency	<ul style="list-style-type: none"> - National University (UNA: Universidad Nacional) - Costa Rican Fisheries and Aquaculture Institute (INCOPECA: Instituto Costarricense de Pesca y Acuicultura) 	
Cooperation Agency in Japan	<ul style="list-style-type: none"> - Fishery Agency (Ministry of Agriculture, Forestry and Fisheries) - Ministry of Culture, Sports, Science and Technology 	
Related Projects (if any)	<u>Cooperation by Japan</u> <ul style="list-style-type: none"> - None <u>Cooperation by other donors</u> <ul style="list-style-type: none"> - Aquafarming Development Phase I-III (Netherland, 1989-94, 1994-99 and 2001-03) 	
Background	<p>In Costa Rica, a development plan for the fishery sector was elaborated by the Ministry of Agriculture and Livestock under the National Human Development Plan (PNDH: Plan Nacional de Desarrollo Humano , 1998-2002) which aimed at poverty reduction, environment conservation and its appropriated utilization for sustainable development balanced with environment. The main actor of the Costa Rican fisheries sector was inshore and offshore fisheries by small and micro fishermen. The Gulf of Nicoya, located in the central area of the Pacific Coast, had been used to be the main fishing place of the country. However, there was a concern about depletion of fisheries resources in the Gulf of Nicoya since the catches had decreased due to the overexploitation and the deterioration of water quality. Therefore, the government of Costa Rica requested the government of Japan technical cooperation to transfer fishery production technology balanced with environment and effective utilization of water area for sustainable use of marine species in the Gulf of Nicoya.</p>	
Inputs	<u>Japanese Side</u> <ol style="list-style-type: none"> 1. Experts 5 experts of 4 areas for long-term, 13 experts of 12 areas for short-term 2. Trainees Received: 17 trainees 3. Equipment: 49 million yen 4. Local Cost: 25 million yen 	<u>Costa Rican Side</u> <ol style="list-style-type: none"> 1. Counterpart: 32 persons 2. Land and facilities: Office for Japanese experts, laboratory, meeting room and class room 3. Local Cost: 0.636 million dollars by UNA, 0.747 million dollars by INCOPECA
Project Objectives	<u>Overall goal</u> Sustainable management and utilization of fisheries resources are performed in and around the Gulf of Nicoya.	
	<u>Project Purpose</u> National University (UNA) and Costa Rican Fisheries and Aquaculture Institute (INCOPECA) are able to recommend scientific basis for sustainable fisheries management.	
	<u>Outputs</u> <ul style="list-style-type: none"> • Data required of resource management is collected. • Databases are introduced to accumulate data and to increase convenience of access to necessary data. • Utilizing databases, technologies of data processing for stock assessment are introduced. • Institutional framework for recommending fishery-management policies is established. • The condition and problems of quality control of marine products distribution from fishing boats to fish stores are clarified. • C/Ps acquire the techniques of freshness tests and freshness maintenance. • The improvement of monitoring system of toxic shellfish is advanced. • C/Ps acquire the knowledge and technique for dissemination of quality control to stake-holders. 	

II. Result of the Evaluation

Summary of the Evaluation
<p>The catch at the Gulf of Nicoya significantly decreased to around 25% of the total catch in Costa Rica at the beginning of the project despite that it was used to be 60% of the total catch in 1960's. This was because of the increase in the number of fishermen who had switched from farmers due to the sluggish agriculture, the increased overexploitation by the growing pressure on the fisheries as well as the deterioration of water quality. Therefore, there was a concern about depletion of the fisheries resources in the Gulf of Nicoya. In addition, it was worried that the reduced catch of marine</p>

products could lead decline in living standards of small and micro fishermen who were the majority of population in the surrounding area of the Gulf of Nicoya.

The Project has achieved elaboration of the proposal for sustainable fisheries resource management, strategy and plan for improvement of quality control of marine products, and recommendation for improvement of the monitoring system of toxic shellfish for the project purpose. While the recommendation for the monitoring of toxic shellfish for the small and micro fishermen and the Red Tide Committee has been implemented, UNA and INCOPESCA have been continuously implementing activities of monitoring and guidance on quality control of marine products for the fishermen. In terms of the overall goal, policies of resource management for some major fish species was elaborated though these policies have not been implemented yet and policies have not been elaborated for other fish species. On the other hand, it is expected that policies formulation and institutional building will be achieved since the government of Costa Rica initiated some actions such as the establishment of the Fisheries Resources and Marine Division in the Ministry of Environment and Energy which is responsible for resource conservation and management. As for sustainability, the activities initiated by the Project have been continued since the counterpart organizations have been keeping their organizational structure and staff even at the time of ex-post evaluation. On the other hand, necessity to improve the organizational issues of INCOPESCA has been pointed out. Therefore, some problems have been observed in terms of implementing agencies' structural aspect due to the malfunctioning INCOPESCA-UNA Committee of Stock Assessment which had aimed at collaboration between the two organizations for management of statistics, quality and resources.

For relevance, the Project has been highly relevant with Costa Rica's development policy, development needs as well as Japan's ODA policy. For efficiency, both the project cost and the project period were within the plan.

In the light of above, this project is evaluated to be satisfactory.

1 Relevance

This project has been highly relevant with Costa Rica's development policies of "promotion of sustainable fisheries and aquaculture" and "improvement of socio-economic conditions of fishermen" stated in the National Development Plan (1998-2002 and 2006-2010), development needs of "improvement of catch by recovery of fisheries resource", as well as the three priority areas in the Japan's ODA policy for Costa Rica, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project achieved the project purpose of the proposal for sustainable fisheries resource management, the strategy and plan for improvement of quality control of marine products, the recommendation for monitoring system of toxic shellfish as well as development of database form for statistics and biological information by the time of project completion. In addition, the activities related to quality control of marine products and monitoring of toxic shellfish, such as continuation of the surveys and guidance for the fishermen, have been implemented after the project completion. On the other hand, in terms of the overall goal, the strategy and plan for resource management based on the policies for white shrimp and snapper elaborated by the Project were recommended. However, difficulty to balance conflicting interests of stakeholders such as fisheries operators impeded to execute sustainable fisheries resource management in the Gulf of Nicoya. Also, no policy on other fish species was formulated. The changes in catch at the Gulf of Nicoya could not be verified due to the limitation of statistics which are available only up to 2009.

Along with the efforts on the resource management, the Project addressed dissemination of quality and freshness control technologies for marine products landed at the Gulf of Nicoya in order to achieve sustainable use of fisheries resource. In addition to the implementation of monitoring of toxic shellfish, the Center of Marine Species (EBM: Estación de Biología Marina) of UNA has been continuously implementing activities, including projects and workshops for small and micro fishermen and fishery operators after the project completion. Also, UNA and INCOMESCA have been implementing technical support activities to promote aquaculture of clam and oyster in order to create new income source for small and micro fishermen and to stabilize their households.



Materials to explain quality and freshness control of marine products

Therefore, its effectiveness/impact of this project is fair.

Achievement of the Project Purpose and the Overall Goal

Outcomes	Indicators (Target)	Actual Achievements
<u>Overall Goal</u> Implementation of sustainable management and utilization of fisheries resources in and around the Gulf of Nicoya	Fisheries management policies of main species are formulated each year according to the appropriate stock assessment.	(At the time of ex-post evaluation in 2012) - The fisheries management policies on white shrimp and snapper (<i>Lutjanus guttatus</i>) were formulated. - Although no other policy was formulated for other fish species, surveys on fisheries resources were conducted.

Project Purpose Recommendations of scientific basis for sustainable fisheries management by UNA and INCOPECSA	The strategy and plan are recommended for sustainable resource management.	(At the time of project completion in 2007) - The proposal for sustainable resource management based on scientific data (Presentación de Conclusiones y Recomendaciones 2007) was elaborated and recommended to the Chief of INCOPECSA and the Council.
	The strategy and plan are recommended for improvement of quality control of marine products.	- The following plan and recommendation were elaborated by UNA and INCOPECSA and recommended to small and micro fishermen, fishery operators and the Red Tide Committee: <ul style="list-style-type: none"> ➤ The strategy and plan for improvement of quality control of marine products ➤ The recommendation for improvement of monitoring system of toxic shellfish

Source: Terminal Evaluation Report and interviews with the counterpart organizations.

3 Efficiency

The inputs were appropriate for producing the outputs of the project, and both the project cost and the project period were within the plan (ratio against the plan: 85%, 100%). Therefore, efficiency of this project is high.

4 Sustainability

In the National Development Plan (2010–2014), “improvement of socioeconomic conditions of fishermen” and “promotion of sustainable fisheries and aquaculture” are still prioritized. The knowledge and technologies introduced by the Project has been continuously disseminating for the post project period. The database for fisheries resource management established by the Project has been utilized though some data have not been updated. In addition, the equipment provided by the Project have been adequately maintained. In the financial aspect, it can be judged that UNA-EBM and INCOPECSA have been allocating necessary budgets for continuation, implementation and dissemination of the surveys for fisheries resource management and the activities for quality control of marine products due to the increase in the budget of UNA-EBM and no significant reduction in the budget of INCOPECSA.

Although activities such as monitoring has been continued, the remaining issues are the unimplemented proposal for sustainable fisheries resource management which has been recommended to the management board of INCOPECSA and no formulation of fisheries resource management policy for the major fish species. The necessity to review responsibilities and roles of INCOPECSA has been pointed out since one of the board members is from marine product processing firm and there have been difficulties to coordinate interests among stakeholders in order to make recommendations on fisheries resource management including catch limitations. On the other hand, in November 2012, the Water Resource and Marine Division, which is responsible for fresh water and marine resource conservation and management, was established at the Ministry of Environment and Energy and started their activities. It is planned that the Division will strengthen regulations on poaching and overexploitation. Therefore, it is expected to formulate policies and institutional building for regulations on coastal fisheries and marine resource conservation and management in Costa Rica and to promote sustainable fisheries resource management under the cooperation among the key stakeholders including INCOPECSA and universities.

In terms of the structural aspect, UNA enhanced its organizational arrangement because all the staff of EBM who were involved in the Project as counterpart, except the one who has been retired, have been continuing their work at EBM, and UNA increased the number of staff for EBM. There has been no major change in distribution of personnel of INCOPECSA; however, it needs to promote technical transfer from senior staff to junior staff for alternation of generation in future. In addition, the INCOPECSA-UNA Committee of Stock Assessment has not been functioning after the project completion though the Project established the committee and realized conclusion of the cooperation agreement between the two organizations in order to establish collaboration on statistics, quality control and resource management.

Therefore, due to some problems in policy and structural aspects of the implementing agencies, sustainability of the project effect is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

- It is expected to establish collaboration at organizational level between UNA which is responsible for quality and freshness control and INCOPECSA which is responsible for resource management and fisheries statistics. Also, it is necessary to elaborate policies for sustainable fisheries resource management at national level through promotion of collaboration with relevant ministries and organization such as the Ministry of Environment and Energy. In addition, it is desirable to diversify income sources of fishermen, and providing adequate and continuous technical guidance for fishermen on quality and freshness control, resource management and introduction of aquaculture of new types of shellfish by both UNA and INCOPECSA.

Lessons learned for JICA

- Technical cooperation project aiming at policy implementation as overall goal requires to incorporate activities to establish organizational structure which can enable to make involvement of not only counterpart organizations but also other organizations concerning with relevant development issues from the planning of the project and the project implementation period in order to execute recommendations elaborated by the project and in order to ensure project effects and their sustainability.