

## Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Junko Miura Global Link Management Inc.	Duration of Evaluation Study
Project Name	The Project for the Improvement of Small-scale Fishery Center (“Le Projet de Construction d’un Centre de Pêches à Lompoul”)	March 2010—December 2010

### I Project Outline

Country Name	Republic of Senegal	
Project Period	December 2004 (Detailed Design) to March 2006 (Completion of facility construction, installation of equipment and soft component)	
Executing Agency	La Direction des Pêches Maritimes (DPM), Ministère de L’Économie Maritime et des Transports Maritimes Internationaux	
Project Cost	Grant Limit: 652 million yen	Actual Grant Amount: 651 million yen
Main Contractors	Construction: TOA Corporation, Procurement (Facility): Kankyo Corporation, (Ice-maker and refrigerator): Maekawa MFG. Co., Ltd., (Radio equipment): Furuno Electric Co., Ltd.	
Main Consultants	Fisheries Engineering Co. Ltd.	
Basic Design	“Basic Study Report on the Project for the Improvement of Small-scale Fishery Center”, August 2004, Fisheries Engineering Co. Ltd.	
Related Projects (if any)	<ol style="list-style-type: none"> <li>1. Development Study on the Plan to Revitalize Northern Fishing District” (1997) (based on the results of this study, a master plan was established including recommendations for a plan to develop infrastructure in Saint-Louis and Kayar and a plan to build facilities supporting fishermen in northern coastal fishing villages, including Lompoul)</li> <li>2. Similar grant aid cooperation projects such as “Project for Small-scale Fishery Revitalization (Missirah Fish Processing Center) (1987)”, “Project for Building the Dakar Central Wholesale Fish Market (1989)” the “Project for Construction of the Kayar Fish Processing Center (2000)” and the “Project for Building a Central Market in Kaolack (2002)” have been implemented. When the ice machine provided in this project broke down, the ice machine technician from the Kaolack Central Market has provided assistance.</li> <li>3. Long-term experts, such as advisers on the administration of marine products, has been dispatched since 1987, and two of these experts worked on development studies, technical cooperation projects and follow-up on grant-aid projects, including this project, that were being implemented or had already been implemented, as well as providing support for the formation of new projects (one expert was dispatched for the period from January 2008 to March 2010 and the other will be dispatched from May 2010 to May 2012).</li> <li>4. In the technical cooperation project “Project on Capacity Building for Artisanal Fisheries Organizations and Leaders in Fishery Villages (2009-2013),” the practice of round haul net fishing in Lompoul and other places was considered as one activity, and training of marine product processing workers and fishermen was also planned.</li> </ol>	
Project Background	Since Lompoul does not have docks, marine products were unloaded directly on the sand and traded without regulation. Moreover, vehicles were unable to access the landing area, so that a lengthy period elapsed until the fish catch could be put into cold storage, thus hurting the freshness of the catch. Sanitary conditions were poor since clean water to wash the sand-covered fish catch could not be obtained, so the fish catch was occasionally contaminated. Moreover, the lack of an ice making and cold storage facility meant that the price of fish plummeted when the fish catch was large and the quality of the processed products was damaged because the hygienic environment at the processor was poor and there was no storage warehouse. This impeded the development of the fishing industry.	
Project Objective	To construct fish landing facilities, ice-making and cold storage equipment, facility and equipment for processing, a facility to supply well water, management office, and equipment to monitor safety of fishing boats in order to improve the quality of the fish catch and the processed marine products in Lompoul, Commnauté Rurale de Kab Gaye, Région de Louga.	
Output[s] (Japanese Side)	<p>&lt;Construction of facilities&gt; Support facility for marine product processing, support facility for marine product distribution (including fish landing facilities), support facility for fishermen, basic infrastructure (water supply facility, toilets, other)</p> <p>&lt;Procurement of equipment&gt; Processing equipment, equipment for hall for disposal of goods, equipment for multi-purpose assembly room and administration, equipment for safety monitoring of fishing boats</p>	<p>&lt;Soft components&gt; Assistance in establishing the Management Committee for the Lompoul Marine Production Center (“Comité de pilotage du Centre de Pêches à Lompoul”) and management committees for the fish landing facility (“Comité de gestion de l’aire de débarquement”), the processing area “Comité de gestion de l’aire de transformation”), and facility for the supply of well water (“Comité de gestion de l’installation d’approvisionnement en eau”) (establishment of administrative regulations, setting of usage fees, preparation of record books for facilities and equipment, etc.), training for staff working in operation and management and financial management for the above committees and associations, educational activities for users</p>

## II Result of the Evaluation

### Summary of the evaluation

• This project has been highly relevant with the country's development plan and development needs both at the time of planning and ex-post evaluation, as well as Japan's ODA policy at the time of planning, therefore its relevance is high. Both project period and project cost were within the plan, therefore efficiency of the project is high. This project has somewhat achieved its objectives, therefore its effectiveness is fair. Some problems have been observed in the O&M system and financial situation of the executing agency, therefore, sustainability of the project effects is fair. In light of the above, this project is evaluated to be satisfactory.

<Recommendations to the Lompoul Marine Production Center (hereinafter referred to as, "Center") in order to enhance sustainability >

1. The Center should continuously collect unpaid fees for ice and unpaid rental fees for lockers for fishing equipment and fish drying stands and to repay unpaid electricity bills.
2. The Center should fully consider diversifying revenue sources at the administration improvement meeting and the regular monthly meetings of GIEI (mutual association) and carry out feasible ones.

<Recommendations to DPM and JICA>

In order to increase the fish processing amount at the Center, which has been used as an indicator for the direct effect, DPM and JICA should consider the possibility of transferring round haul net fishing techniques to Lompoul fishermen and implement if feasible. This would be one of the activities of the "Project on Capacity Building for Artisanal Fisheries Organizations and Leaders in Fishery Villages," which is currently being carried out.

<Lessons Learned>

1. One of this project's goals was to improve the quality of processed goods, but the fishing boats based at the Center did not have the technology for the round haul net fishing that would ensure a sufficient stable catch of the sardines needed as the raw material in processed goods. Thus, in similar projects in the future, the feasibility of incorporating the technology transfer needed to achieve the project objectives into a Technical Cooperation project that could be affiliated should be considered at the planning stage for grant-aid cooperation.
2. This evaluation study was able to quantitatively measure the utilization of equipment by confirming the utilization rate of the ice-making machine (actual ice production divided by ice maker's production capacity), but the gaps between the plan and the actual could not be analyzed since no target was set. In similar projects in the future, a target utilization rate for ice making machines should be set for both the peak fishing season and the off season as operation indicator when the project is planned.

<Constraints of this evaluation study>

• This evaluation study is a simplified version, and the evaluation was based solely on the data obtained in a review of documents, questionnaires given to the implementing organization and interviews with Japanese consultants. Accordingly, the data that could be confirmed through direct observation (such as the use of the donated facilities and equipment) was assessed based on responses to questionnaires. Moreover, the primary data forming the basis for the indicators in the questionnaire responses was not confirmed. A beneficiary study was not conducted in this simplified evaluation.

At the same time, the implementing organization provided appropriate information when they were asked to answer the questionnaire and additional questions. Particularly when evaluating the project's sustainability, the information from the previous and present advisors were used as data sources. Accordingly, we were able to conduct a more rigorous evaluation compared other projects in the same package, whose evaluations were based solely on information from JICA and questionnaires given to the implementing organization.

• Due to the lack of a field survey, there was no opportunity to hold discussions with the executing agency regarding the recommendations.

### 1 Relevance

#### (1) Relevance with the Development Plan of Senegal

When the project was planned, the Priority Action Plan (2003-2005) designated the enhancement of the added value of fishery products through the construction of fish landing facilities and the promotion of processing and production. At the time of the ex-post evaluation, the Marine Product Sector Policy Paper (2007) specified five development policies: 1) sustainable management of marine product resources, 2) fulfillment of national marine product demand, 3) adding value to marine product resources, 4) reinforcing capacity of specialists and 5) improving access to funding. This project is consistent with 2) and 3). Thus, this project was consistent with Senegal's development policy both at the time of planning and the ex-post evaluation.

#### (2) Relevance with the Development Needs of Senegal

Lompoul was located in between Saint-Louis and Kayar. When the project was planned, fishing had been introduced relatively recently and development of the fishing industry lagged behind in Lompoul. Based on the results of the Development Study "Study on Plan to Revitalize Northern Fishing District," in cooperation with JICA, a master plan was established in 1997 including recommendations for a plan to develop infrastructure in Saint-Louis and Kayar and a plan to build support facilities for fishermen in northern coastal fishing villages, including Lompoul. At the time of the ex-post evaluation, according to the executing agency, the recommendations for the northern coastal fishing villages in the aforementioned master plan were effective. For this reason, the project was consistent with Senegal's development needs both when the project was planned and when the ex-post evaluation was conducted.

#### (3) Relevance with Japan's ODA Policy

In February 1998, the Policy Consultation Mission confirmed that the basic human needs sector (water supply, education, healthcare and medicine), the environment (preventing desertification) and agriculture and fisheries that had been designated as the priority areas for aid to Senegal when the Economic Cooperation Study Mission visited in November 1993 were still the priority areas. Accordingly, this project is consistent with the Japan's aid policies at the time the project was planned.

This project has been highly relevant with the country's development plan, development needs, as well as Japan's ODA policy, therefore its relevance is high.

## 2 Efficiency

### (1) Project Outputs

The outputs of the Japanese side were mostly as planned.

### (2) Project Period (Project Inputs)

The planned project period was 16.5 months where as the actual period was 16 months. Thus, the project period was almost as planned (97% of the planned).

### (3) Project Cost (Project Inputs)

The planned project cost was 652 million yen whereas the actual project cost was 651 million yen. Thus, the project cost was within the plan (99.8% of the planned).

Both project period and project cost were within the plan, therefore efficiency of the project is high.

## 3 Effectiveness / Impact

### (1) Quantitative Effects

Indicator (1) the amount of fresh fish distributed by the Center amounted to 1,486 tons/year in 2008, exceeding the 2008 target of 1,435 tons/year, and distribution continued to increase in 2009. In addition, indicator (2) the ice storage rate for the fish (sardines) distributed by the Center was 50% in both 2008 and 2009, exceeding the 2008 target of more than 10%. Indicator (3) the ice storage rate for types of fish other than sardines also stood at 50% in 2008, meeting the 2008 target of more than 50%.

On the other hand, (4) the Center's fish processing amount fell far short of the 2008 target of 900 tons/year, producing only 137 tons/year; this also significantly undercut the baseline in 2004, which was 716 tons/year. The reasons for this shortfall are as follows: 1) since the goal was to improve the quality of fresh fish by increasing the ice storage rate, sales were boosted with the sale of fresh fish rather than with processed fish products and 2) the catch of fish used in processing (such as sardines) did not increase as much as anticipated. At the time of planning, it was assumed that some sardine round haul netters from Saint-Louis, Kayar and Fass Boye would dock at Lompoul, but this could not be confirmed at the time of the ex-post evaluation. At Lompoul, bottom gill net fishing and driftnet fishing are practiced, with a peak fishing season limited to April-June. If the round haul net fishing are practiced in Lompoul in the peak season for round haul net fishing on Senegal's northern coast, December –March, through the cooperation with Italy's Shalom Foundation or/and through "Project on Capacity Building for Artisanal Fisheries Organizations and Leaders in Fishery Villages" in cooperation with JICA, the processing amount could be increased.

Distribution support facilities (landing and disposal facility, ice-making and storage facility) are utilized. Use of the processing support facility is limited because catches of fish used for processing have not increased as much as expected. Moreover, since not all of the fishermen use lockers for their fishing equipment, only some lockers are used. There are no facilities or equipment that are not utilized or are being used for other purposes. Data on the ice-making machines' utilization rate for the peak season, interim season and off season are not known, but the average utilization rate from March 2006 to April 2010 was about 54%.

### (2) Impacts (Impacts on the natural environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

The fish market and warehouse located on the planned construction site were demolished and the site was acquired as planned. All of the fishery workers targeted for transfer were given a new stall, and there were no particular problems with the site acquisition process.

The anticipated positive indirect effects were 1) an increase in fishery production, 2) an increase in revenue for fishermen due to the improved freshness of fish products, 3) an increase in the revenue of women employed in processing work due to the improved value of the processed goods and increased distribution resulting from improved storage conditions for process goods, 4) an improvement in the working environment in the processing area and 5) the improved living environment for fishery workers as a result of a supply of clean water and the installation of toilets. According to the executing agency, although there is no quantitative data, all of these effects have materialized, with the exception of 3). As regards 3), the processing amount has fallen significantly, as described above, so the earnings of processing workers have not increased. The number of beneficiaries such as fishermen, women employed in processing, and middlemen have increased compared to the plan. Other indirect effects include 1) the start of fishing activities in surrounding villages (Diogo, Dare Dao, Mbetete, Rony, etc.), with many of these fishermen docking at the Center, and 2) the fact that, although middlemen used to bring ice from Dakar and Saint-Louis prior to the project's completion, after the project was completed these middlemen came from surrounding villages such as Loga, Kebemer and Potou to buy ice from the Center.

This project has somewhat achieved its objectives, therefore its effectiveness is fair.

## 4 Sustainability

#### (1) Structural Aspects of Operation Maintenance

The government entrusted the administration of the Lompoul Marine Production Center to the Kab Gaye Village Committee, and this committee then entrusted the Center's administration to GIEI (mutual association), which had been formed for the purpose of running the Center. In order to run the Center, four members from each of the 18 GIEs (economic interest group, or "Groupement d'intérêt économique") for marine product-related activities in Lompoul participate (72) and make up the administrative committee. Fifteen members of this administrative committee were selected to form the GIEI. When the project was planned, the intention was to set up management associations for each of the facilities (landing place, processing area, well water supply facility) targeted in this project, as well as a management committee (CRG) to serve as the organization managing all of the management associations. As planned, management associations and management committees were set up as planned by the time the project was completed in March 2006 with support from soft components. Subsequently, the GIEI was established in May 2006, and it was decided that CRG should be established underneath the GIEI, which was a change of plan. However, CRG had not been organized up to the present, and the monthly meetings that CRG were to have held have been hosted by GIEI. As described below, in order to improve operation and management problems such as failure to pay electricity costs, an administrative improvement council has been held every month since June 2010 in addition to GIEI's monthly meetings. This shows that the administrative and maintenance system is improving.

#### (2) Technical Aspects of Operation Maintenance

Two employees to operate and maintain the ice-making and storage equipment were assigned by DPM, one of whom handles minor repairs, including parts replacement. If these employees cannot handle an issue, the ice machine technician at the Kaolack Central Market, which was established in the previous grant-aid project for Kaolack Central Market Construction, is contacted and this technician either diagnoses the problem over the telephone or comes from Kaolack. In addition, an agent of a refrigerating equipment manufacturer and an assembly factory are located in Dakar, and major malfunctions can be fixed by these technicians. Accordingly, it is considered that there are no particular problems.

#### (3) Financial Aspects of Operation Maintenance

Since the Ministry of Maritime Economy covered electricity costs from the time the Center was established in 2006 until April 2008, the Center posted a profit. However, the Center had a deficit in 2009–2010 because of the high expenditures for electricity and failure by some users to pay rental fees for lockers for fishing equipment and fish drying stands and for ice. According to the report by the marine product administration adviser who is currently dispatched (original data: executing agency), the Center's revenue in July 2010 was about 4.8 million FCFA and its expenditures were 2.7 million FCFA, resulting in a profit of 2.14 million FCFA. The Center also had savings totaling 4.75 million FCFA. However, the balance of unpaid electricity bills at that point was about 26 million FCFA, so the Center would have a deficit if it paid its electricity bills. The Center had revenue from the collection of payments in arrears in July 2010, so total revenues were high, but the balance when excluding this revenue was about 750,000 FCFA.

To eliminate these unpaid electricity bills, the Center attempted to reduce its electricity bills by stopping one of its ice-making machine compressors and raised the price of ice (from 20 FCFA/kg to 30 FCFA/kg) in 2009. In addition, since the administrative improvement meeting met in June 2010, the Center has made progress in collecting arrears on payments for fees for lockers for fishing equipment and fish drying stands and for fees for ice, and this money has been used to pay unpaid electricity bills. According to the report by the marine product administrative adviser, if the Center has the same amount of revenue (excluding revenue from the collection of payments in arrears) as in July 2010 (off season) every month from now on and 30% of this is saved to be used to upgrade the facility in the future, the unpaid electricity bills can be paid in approximately three years.

Meanwhile, at the time the project was planned, the ratio of revenue from the landing place, processing area and well water supply was expected to be 2:3:5. However, as described above, sales from the sale of fresh fish have been higher than for processed fish products, and as of January 2010, approximately 80% of the revenue came from ice sales. According to the report by the previous advisor, the fish catch in periods other than the peak season have dropped precipitously (the monthly catch during the peak season was 400 tons and only 25 tons in the off season in 2007), and ice sales have dropped sharply in tandem. This means that revenue sources must be diversified. As of the ex-post evaluation, water is distributed to 39 taps in homes and 4 public taps from wells supplying water for ice-making machines, and the fee collection rate is 97%, but revenue from water bill payments account for only about 3% of the Center's entire revenue. At the August 2010 monthly GIEI meeting, the establishment of a cafeteria, use of round haul net fishing practices and the re-opening of a gasoline stand were proposed as ways to diversify revenue sources, and these ideas will be considered for actual implementation in the future.

#### (4) Current Status of Operation Maintenance

The trolleys in the processing facility and distribution facility are rusted, and the chairs in the multi-purpose conference room are dilapidated, but other facilities and equipment are in generally good conditions. There is no plan for maintenance and management, but records of daily checks, regular service records, malfunction and repair records and operating records can be accessed. The frequency of regular service for facilities and equipment depends on the facility and equipment, but is about once a week or once a month.

Some problems have been observed in the O&M system and financial aspects of the Center, therefore, sustainability of the project effects is fair.