

Country Name	<b>The Project for Construction of Plant for Small Fisheries in Tombali Region</b>
Republic of Guinea-Bissau	

**I. Project Outline**

Background	<p>The fishing industry in Guinea-Bissau had been centered on small-scale artisanal fisheries except for those by foreign fishing boats aiming at exports of fish. The southern region of the country lagged behind other regions in developing basic social infrastructures, and many fishery products, apart from being consumed in the area of unloading, were merchandised after being smoked and/or dried-salted at most. Particularly in Cacine sector, which is a fishery base in the southern region, the number of fishing boats was 216 (except for foreign boats), the number of people engaged in the fishing industry was 3,035, and the volume of landings was 1,162 tons per year (all the figures are as of 2009). However, there was no ice making facility that enables distribution of fresh fish and the foreshore of Cacine was shoaling tideland, which prevented efficient preparation for fishing and landing of fish. Moreover, there was no facility to handle fishery products hygienically. Furthermore, in Cacine village, basic social infrastructures were not available.</p>				
Objectives of the Project	<p>To achieve stable supply of fishery products in terms of both quantity and quality and improve living environment of residents by developing fishing facilities and basic social infrastructures in Cacine sector in Tombali Region, thereby contributing to improvement of living standards of fishing people in Cacine village and health conditions of residents in Cacine sector.</p>				
Contents of the Project	<ol style="list-style-type: none"> <li>Project site: Cacine sector in Tombali Region (Cacine village)</li> <li>Implementations of the Japanese side: (1) Provision of grant for construction of an administration building of small-scale fisheries (including ice making facility, storage for fresh fish, freight handling space and multipurpose room etc.), a supplementary building for day nursery, a fish processing building, a workshop, a public toilet, an equipment storage, a generator house, a water reservoir on tower, a water processing room, access way on tideland, and a facility for unloading boats etc. and procurement of generators and transportation equipment etc., (2) Technical Assistance for operation and maintenance (O&amp;M) of facilities and equipment (soft component of Grant Aid) (Note) Among the above, facilities that are social infrastructures are multipurpose room (adult education facility) in the administration building, supplementary building for day nursery, water distribution pipes from water reservoir on tower to a hospital and schools, and a generator installed in the hospital.</li> <li>Implementations of Guinea-Bissau's side: Dismantlement and removal of block building and debris of construction machinery in the planned construction site, securing of construction site, completion of procedures for environmental and social considerations, procurement of office equipment, telephone, furniture, and desks, chairs, blackboard, television, and video etc. for trainings/seminars, and construction of community road in Cacine village etc. (Note) Among the above, construction of community road was partially completed.</li> </ol>				
Ex-Ante Evaluation	2010	E/N Date	June 9, 2010	Completion Date	February 10, 2012
		G/A Date	June 9, 2010		
Project Cost	E/N Grant Limit / G/A Grant Limit: 856 million yen, Actual Grant Amount: 741 million yen				
Implementing Agency	General Direction of Fisheries, State Secretary of Fisheries (DGPA)				
Contracted Agencies	Overseas Agri-Fisheries Consultants Co., Ltd. (OAFIC), Toa Corporation				

**II. Result of the Evaluation**

<Special perspectives considered in the ex-post evaluation>

[Supplementary Information for Effectiveness and Impact]

- While not defined as an indicator before project implementation, "improvement of hygiene in handling fishery products" was set and checked as supplementary information for effectiveness to check whether construction of fishing facilities has contributed to stable supply of fishery products in terms of quality (through interview with ten households of fishing people in Cacine village).
- While also not defined as indicators before project implementation, the followings were checked as supplementary information for effectiveness: whether construction of supplementary building for day nursery and adult education facility has contributed to "activation of processing and distribution of fishery products by women and women's union activities"; whether installation of a generator in a public hospital in Cacine village has contributed to "realization of night time medical care"; whether construction of water distribution pipes to the hospital has contributed to "realization of medical treatment in a hygiene environment"; and whether construction of water distribution pipes to two primary schools in Cacine village has contributed to "provision of safe drinking water to children" (through interview with ten fishing women, the public hospital and two primary schools in Cacine village).
- As quantitative indicator to evaluate the impact of the project, "contribution to improvement of living standards of fishing people in Cacine village and health conditions of residents in Cacine sector" was not set before project implementation, "increase of income among fishing people in Cacine village" and "improvement of health conditions of residents in the village" were checked as supplementary information for impact (through interview with ten households of fishing people in Cacine village).

**1 Relevance**

<Consistency with the Development Policy of Guinea-Bissau at the time of ex-ante and ex-post evaluation>

This project has been consistent with Guinea-Bissau's development policy, as 'securing food for nationals by increasing supply and diversification of fishery products', 'promotion of fishing activity development' and 'development of fishing base in the southern region that is underdeveloped' are set in policy documents such as "the Recovery Plan of Small-Scale Artisanal Fisheries (2005-2007)" and

“National Fishery Development Plan (2015-2020)”.

<Consistency with the Development Needs of Guinea-Bissau at the time of ex-ante and ex-post evaluation>

At the time of ex-ante evaluation, Cacine village was composed of communities where fishery was the basis of livelihood of residents. However, the village had problems that construction of fishery related infrastructures and basic social infrastructures lagged behind, and the village was selected as an important southern base for an action plan to support fishery workers in accordance with “the Recovery Plan of Small-Scale Artisanal Fisheries”. At the time of ex-post evaluation, the number of fishing boats increased by approximately 60% compared with that of ex-ante evaluation, the number of people engaged in the fishing industry was almost doubled. Thus, the importance of fishery remains unchanged, and the needs for construction of fishing facilities in the village are still confirmed.

<Consistency with Japan’s ODA Policy at the time of ex-ante evaluation>

The project was highly consistent with Japan’s ODA policy as Japan emphasized assistance for the areas related to basic living and livelihood stability in bilateral assistance to Guinea-Bissau<sup>1</sup>, and the project was to construct basic living infrastructures by constructing a fishery base in the southern region of the country where development of social infrastructures lagged behind.

<Evaluation Result>

In light of the above, the relevance of the project is high.

## 2 Effectiveness/Impact

<Effectiveness>

The project has partially achieved its objectives, “to achieve stable supply of fishery products in terms of both quantity and quality and improve living environment of residents”. Regarding “the amount of supply of ice in Cacine village for distribution of fresh fish to outside the region” (Indicator 1), which was set as an indicator of quantitative effect of the project before project implementation, actual figures are approximately 20% of the target. The reasons include the fact that there are problems in budget allocation for purchase of gasoline for ice making, and a competing company called CONAPESCA (a South Korean fishery exporting company equipped with its own ice-making function) has started operation since 2014.<sup>2</sup> On the other hand, regarding “the distribution amount of fresh fish from Cacine village to other regions (outside of Cacine sector)” (Indicator 2), while actual figures from 2013 to 2015 are estimated ones, actual figures have achieved over 80% of the target since project completion. Moreover, actual figures of “waiting time for tidal shift for fishing and unloading in the offshore of Cacine village” (Indicator 3) have also achieved the target due to construction of access road on the tideland under the project.

As qualitative effects, in interviews with ten households of fishing people in Cacine village, all respondents replied that hygiene in handling fishery products has been improved in the village as a result of construction of fishing facilities, and its reasons are that fishery products have become able to be unloaded avoiding mud areas as a result of construction of a pier, fish have become able to be washed as a result of construction of water supply and drainage facility, and fish have become able to be kept fresh using ice, etc. Moreover, according to the director of the Cacine public hospital, night time medical care has become possible as a result of installation of a generator in the hospital under the project, and approximately 15 people on average per day receive night time medical care. Hospital facilities and medical equipment have also become able to be cleaned, bed sheets have become able to be washed, patients’ toilets and hygienic conditions of nurses have become able to be kept clean, and medical treatment has become able to be provided in a hygiene environment, as a result of construction of water distribution pipes to the hospital. Furthermore, water distribution pipes were also constructed at two primary schools in the village under the project, which materialized securing safe drinking water. On the other hand, according to interviews with ten fishing women in the village, while supplementary building for day nursery and adult education facility were constructed under the project, the volume of fish catches has been small and thus the amount of processing and distribution of fishery products by women has not increased, and there are not many activities in fishing facilities, and consequently day nursery and adult education facilities have not been fully utilized and women’s union activities utilizing these facilities have neither been activated.

While soft component for O&M of facilities was also conducted under the project, according to the implementing agency and O&M organization, techniques transferred by the soft component have not been shared within DGPA and the O&M organization smoothly, and budget and expertise are also not sufficient. Consequently, capacity required for O&M of the project facilities have not been acquired. In order to improve the situation, O&M budget needs to be allocated for the project facilities and trainings for utilization of infrastructures and equipment need to be conducted. Nonetheless, project facilities and equipment are used without major problems.

In light of the above, the effect of the project has been observed partially.

<Impact>

As for the expected impact, “contributing to improvement of living standards of fishing people and health conditions of residents in Cacine sector”, certain impacts are considered to have been obtained. In interviews with ten households of fishing people in Cacine village, all respondents replied that their income has increased after project implementation, and its reasons are that conditions of fish have been improved by an use of ice, losses after unloading have decreased, and sales prices of fish have increased (fish have become able to be sold for twice as much as the price before project implementation). Moreover, 60% of these ten households replied that health conditions of their family members have improved after project implementation, and its reasons are that services and hygiene conditions of the public hospital in the village have improved as a result of provision of a generator and water distribution pipes to the hospital.

No negative impact on natural environment has been observed under the project. On the other hand, resettlement of two households residing in the project target areas has occurred (seven people in one household and four in the other household). While one of these households has resettled to a residence constructed by the government in other area in Cacine village, there is a problem in quality of the residence, and while this household had conducted plantation farming before resettlement, it has not received compensation for this yet.<sup>3</sup> The other household has resettled to a different village receiving compensation from the government, while data on the amount of compensation is not available.

<Evaluation Result>

Construction of fishing facilities under the project has led to an increase of distribution of fresh fish, reduction of waiting time for tidal

<sup>1</sup> “ODA Country Data Book” (2009), Ministry of Foreign Affairs

<sup>2</sup> Sufficient information was not available to fully verify the issues such as whether the budget for gasoline as much as anticipated was secured, whether the plan on utilization of the facility was too optimistic, and whether it was possible to foresee an advance of a competitor, at the time of planning.

<sup>3</sup> Information was not available on whether and how this issue was handled.

shift for fishing and unloading in the offshore, and improvement of hygiene in handling fishery products, all of which materialized an income increase of fishing people. Moreover, provision of a generator and water distribution pipes to the public hospital in the village has led to improvement of services and hygiene environment of the hospital, which resulted in improvement of health conditions of fishing people, and provision of water distribution pipes to primary schools has led to securing safe drinking water for children. On the other hand, the actual amount of supply of ice for distribution of fresh fish to outside the region has remained approximately 20% of the target, supplementary building for day nursery and adult education facility constructed under the project have not been fully utilized, effects of the soft component have not been observed sufficiently, and complaints from one of resettled households have been reported.

In light of the above, the effectiveness/impact of the project is fair.

#### Quantitative Effects

Indicators	Baseline 2009 Baseline Year	Target 2015 3 Years after Completion	Actual 2012 Completion Year	Actual 2013 1 Year after Completion	Actual 2014 2 Years after Completion	Actual 2015 3 Years after Completion
Indicator 1: Amount of supply of ice in Cacine village for distribution of fresh fish to outside the region (ton/year)	Approximately 21	Approximately 193	45	49	51	36
Indicator 2: Distribution amount of fresh fish from Cacine village to other regions (outside of Cacine sector) (ton/year)	Approximately 23	Approximately 111	95	Approximately 100	Approximately 100	Approximately 100
Indicator 3: Waiting time for tidal shift for fishing and unloading in the offshore of Cacine village (hour)	Approximately 3	0	0	0	0	0

Source: Ex-Ante Evaluation Sheet, Preparatory Survey Report, interview with the head of the fishing facility

Note: (1) The target of Indicator 1 is calculated as the amount of distribution of fresh fish to other regions (raw fish conversion) (111,015kg/year) x 1.74 = 193,167kg/year = 193ton/year. This formula is based on the assumption that the weight of ice needed is approximately 1.74 times that of fish.

(2) The data for Indicator 2 does not include distribution of fish by the foreign company. Actual figures of 2013 to 2015 are estimated based on results of survey to fishermen's union and women's union by the head of the fishing facility.

#### 3 Efficiency

Both the project cost and project period were within the plan (ratio against the plan: 87% and 95%, respectively). Therefore, the efficiency of the project is high.

#### 4 Sustainability

##### <Institutional Aspect>

An O&M organization for project facilities has been established under DGPA, and while assignment of 14 staff in total was planned at the time of ex-ante evaluation, 16 staff in total are actually assigned at the time of ex-post evaluation. However, positions in charge of accounting/finance and power generation/electricity are vacant, which is partially a problem in sustaining project effects. While financial source is needed for assigning necessary number of staff, the functions of the government have been stagnant since the recall of the prime minister in August 2015, and it is difficult to assign new staff at the time of ex-post evaluation.

##### <Technical Aspect>

As explained above, the implementing agency and O&M organization do not consider that their O&M capacity has been improved through the soft component. Moreover, trainings for improving O&M capacity are not conducted due to lack of budget, and a draft regulation on use and operation of project facilities, a draft manual for collecting facility charge and accounting, an accounting book, and a maintenance plan of water supply, fuel supply, power generation and ice making, all of which were produced under the soft component, are not utilized, as they have not been approved by the Ministry of Fisheries. On the other hand, a maintenance record of water supply, fuel supply, power generation and ice making is utilized and data has been recorded.

##### <Financial Aspect>

Sufficient amount of income/budget required for O&M of facilities and equipment constructed and procured under the project are not secured. A prospect of O&M budget allocation is very limited, as the Center Management Plan (2012-2025) has not been formulated. The amount of expenditure required for O&M of the project facilities from 2013 to 2015 was 19,840 thousand FCFA to 74,710 thousand FCFA, on the other hand, the amount of income such as sales of ice and usage fees of facilities and equipment etc. was 3,790 thousand FCFA to 7,270 thousand FCFA only. Sales of ice, which was expected as a large source of income at the time of planning, is smaller in scale than anticipated, and sales of gasoline to fishing boats has not started yet. In addition, the amount of income from the operation of the project facilities is very limited, as Cacine village is far from arterial roads to create new demand, and there is a competing foreign company, etc. In order to improve the situation, it is required to start selling gasoline to fishing boats soon, to rehabilitate roads connected to the main arterial roads to secure means of transportation in the village, and to prepare rules on the use of the project facilities by fishing people such as through prohibiting landing of fish directly to foreign companies. While these have been promoted by a JICA expert for "Fisheries plant management/marketing promotion" (2012-2017)<sup>4</sup> who were dispatched to the village at the time ex-post evaluation, the Center Management Plan needs to be formulated as early as possible and O&M budget needs to be allocated.

##### <Current Status of Operation and Maintenance>

Facilities and equipment constructed and procured under the project are maintained in mostly good conditions. The project facilities and equipment are inspected on an irregular base, and when a problem such as breakdown occurs, it is dealt with properly. On the other hand, there are issues that some consumables and spare parts cannot be purchased locally, and there is no local professional who can replace consumables and spare parts etc. In this case, support is requested to the Ministry of Fisheries to dispatch an expert, and if a problem is not solved, a supplier is contacted, or support is requested to development partners etc.

<sup>4</sup> The activity was commenced in 2016 due to the coup.

#### <Evaluation Result>

In light of the above, major problems have been observed in terms of institutional, technical and financial aspects of the implementing agency as well as operation and maintenance status. Therefore, the sustainability of the project effect is low.

#### 5 Summary of the Evaluation

Through the project, the project objectives have been partially achieved: the actual amount of supply of ice for distribution of fresh fish to outside the region has been overly lower than the target, and part of the project facilities are not utilized, however, the distribution amount of fresh fish from Cacine village to other regions has increased, waiting time for tidal shift for fishing and unloading in the offshore has been reduced, and hygiene in handling fishery products has been improved. Regarding impact, the project is considered to have contributed to the increase of fishing people's income and improvement of health conditions to a certain extent. While there has been no negative impact on natural environment, a problem was observed in resettlement of residents. As for sustainability, the number of staff, technical skills and budget are not sufficient for conducting O&M of project facilities and equipment.

Considering all of the above points, this project is evaluated to be partially satisfactory.

### III. Recommendations & Lessons Learned

#### Recommendations to implementing agency:

1. DGPA should formulate and approve the Center Management Plan (2012-2025) urgently, and needs to allocate O&M budget for the project facilities.
2. DGPA should make further efforts such as obtaining fishing boats for increasing fish catches, rehabilitating roads to secure means of transportation and preparing rules on the use of the project facilities by fishing people etc., in order to promote the use of the fishing facilities (including the building for day nursery and the adult education facility which are not adequately utilized).
3. DGPA should take necessary measures such as payment of appropriate amount of compensation, as there is a complaint from a household which was resettled.

#### Lessons learned for JICA:

1. As explained above, a long time is required for a repair, as there is no technician who can repair or replace parts, and a long time is required to purchase some consumables and spare parts as they are not available locally. Although procurement of some parts and technicians from abroad was anticipated at the time of planning, it is not clear from existing documents whether details were planned for the procurement. Selection of equipment should be proceeded by a process of checking sufficiently whether there are technicians and agents that have stocks of consumables and spare parts locally before procurement of equipment, and explaining sufficiently to the implementing agency about the necessity of conclusion of an after-purchase servicing contract with such agents, in order to ensure that equipment can be fully operated at any time.
2. Despite the finding that the sales price of fish increased by use of ice and it resulted in higher income of individuals, the amount of supply of ice is limited. Therefore, measures should be taken such as inviting the private sector to production and sales of ice and constructing affiliated facilities such as a nursery and adult education rooms based on adequate demand forecast.
3. At least one of the two households that were resettled from the project site is not satisfied with the contents of the compensation it received. Therefore, the preparatory survey of a project should make sure the implementing agency monitors the status of payment of the compensation and reports the monitoring result to JICA.



Administration Building in Cacine



Water Reservoir on Tower in Cacine