conducted by Senegal Office: February, 2014

Country Name	Project for Improvement of Boulbinet Small Fishing Port
Republic of Guinea	(Projet d'amélioration du port de pêche artisanale de Boulbinet)

I. Project Outline

Background	Boulbinet Small Fishery Port, which was one of the seven small fishing ports in Conakry city, a capital of Guinea, was constructed by the Japanese grant aid in 2000. Boulbinet Small Fishery Port was a model port for the country because the Port equipped with the largest landing facility in Conakry, and was designated as a landing port of fresh marine products for exporting to the EU countries. However, the existing capacity of Boulbinet Small Fishery Port could not meet the demand due to increase in number of port users including fishing boats and fish venders and volume of marine products.				
Objectives of the Project	To enhance production, storage, and sales facilities for marine products landed and to reduce congestion of fishing boats by expansion of facilities of the Boulbinet Small Fishing Port, thereby contributing to expand distribution of marine products landed at Boulbinet.				
Outputs of the Project	 Project Site: Conakry city Japanese side Land reclamation (3,880 m²) and slipway Berths (4 berths) Ice making plant (capacity: 10 tons/day) and cold storage (capacity: 2 tons) Smokehouse (2 building) Storehouse for fishery equipment and store building (6 store buildings for 108 shops) Space for fresh fish sales with 70 booths Repair space: space for repair of fish nets and space for repair of fish boats Toilets, 4 septic tanks, water receiving tank, and 2 waste yards Guinean side: Land reclamation Removal of wastes in the site Works for incoming lines of electricity, telephone and water pipes, fences and planting Procurement of furniture and fittings 				
E/N Date	(Stage I) 26 Nov., 2007 (Exchange of Verbal Note for Extension) 24 Oct., 2008 (Exchange of Verbal Note for 2nd Extension) 30 Mar., 2009 (Stage II) 15 Sep., 2008 (Exchange of Verbal Note for Extension) 30 Mar., 2009 (Stage I) E/N Grant Limit: 448 million yen, Contract Amount: 4	Completion Date	8 March, 2010		
Project Cost	(Stage II) E/N Grant Limit: 321 million yen, Contract Amount: 317 million yen				
Implementing Agency	Implementing Agency: Minister of Fishery and Aquaculture (Ministère de la Pêche et de l'Aquaculture) Operating Agency: Directorate General of Boulbinet Small Fishery Port (DGPPAB)				
Contracted Agencies	ICONS Inc., Tokura Corporation				
Related Studies	Basic Design Study: Feb. 2006 – Sep., 2006, Detailed Design: Dec., 2006-Aug., 2007				
Related Projects	Japan's Cooperation: Project for Construction of Boulbinet Small Fishery Port (Grant Aid, 1998)				

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with Guinea's development policy ("promotion of fisheries including small-scale fisheries" in Guinea Vision 2010 and Fisheries Sector Five-Year Development Plan 2011-2015), development needs ("expansion of Boulbinet Fishery Port in order to accommodate the growing fishing activities"), as well as Japan's ODA policy for Guinea with priority area of enhancement of support for the agricultural and fishery sectors from the viewpoint of food security at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has achieved its objectives of "to enhance production, storage, and sales facilities for marine products landed and to reduce congestion of fishing boats." Regarding the volume of marine products including fresh fish and smoked fish, since the operation of Boulbinet Port started in April 2010 due to delay of the project completion period, the actual figures in 2010 were not sufficient as expected. However, they met the targets in 2013. For example, the average volume of landing of fish at Boulbinet Port increased from 16.1 tons/day in 2004 to 18.0 tons/day in 2013. Similarly volume of smoked marine products at Boulbinet Port increased from 2.0 tons/day in 2004 to 2.9 tons/day in 2013. The main reason for increase in volume of marine products is that the number of fishing boats increased by approximately two times from 161 in 2004 to 308 in 2013 and the capacity of ice production, cold storage and smokehouse were expanded by the project. In addition, the waiting time of fishing boats at landing birth at peak time decrease in a quarter or less from average 45-50 minutes in 2004 to average 11 minutes in 2010. However, due to the increasing number of fishing boats more than planned, the waiting time in high season at the time of ex-post evaluation became longer than in 2010.

Also the project improved the sales facilities by constructing indoor space for fresh fish sales. Before the project, the venders used to sell fish in the open air market in an unsanitary environment, but after the project completion they were able to trade in the indoor market equipped with sanitary sales stands and sinks for washing fishes. Also the project newly installed 108 tenant spaces in the store building. In addition, supply capacity of ice to fishing boats and venders increased. For example, volume of ice production increased from 10 tons/day in 2004 to 16 tons/day in 2013 and percentage of fishery boats supplied ice improved from 44% in 2004 to 80% in 2013. The interview with the users of the Port indicated the improvement of freshness of marine products attributed to the above increase. Meanwhile there was a concern on capacity of ice production and utilization of store building. In the first case, ice making machine cannot be fully operated due to a shortage of water and electricity supply as well as deterioration of facility. For this reason, the ice production volume both in 2010 and 2013 did not met its target value. In this regard, the mitigation measures such as hiring water trucks to provide water and financing the fuel of the generators have been implemented by the Directorate General of Boulbinet Small Fishery Port (DGPPAB), but it was not sufficient to solve this issue completely. In the latter case, at the time of ex-post evaluation, the facilities were fully utilized except a part of store building that has been temporary converted into a prayers room because the other prayers room cannot accommodate the rapidly increase of the users. The Guinean authorities gave their engagement concerning the building of a mosque in a plot out of project site and to make the venders take back their place at the store building. Since 19 vendor's stalls are not in the store building, there are needs for further expansion of store building.

Regarding the effect on reduction in congestion in the Port, the situation has been improved by relocation of illegal and unauthorized shops and venders. Furthermore, there was an improvement of safety at landing as number of accident during landing decreased from 10 in 2004 to 2 in 2013. According to the interview results with fishermen, they also recognized this improvement.

As for the impacts, Boulbinet Port increased the volume of fresh fish distribution to domestic market from 3,451 tons in 2004 to 8,669 tons in 2012. Also Boulbinet Port has become a center of various activities like the business of food and other articles. The land acquisition and temporary relocation of 3,389 users including small traders, venders, and fishermen were properly implemented according to the related guidelines and regulations in Guinea. Majority of temporary relocated users retuned to the

Port and continued their commercial activities. No negative impact on natural environmental was observed.

Quantitative Effects

Therefore, effectiveness/impact of this project is high.

Quantitative Effects				
Indicator	Baseline value (2004)	Target value (2010)	Actual value (2010)	Actual value (2013)
Indicator 1 No. of fishing boats (Note 1) at Boulbinet Port	161 fishing boats	-	235 fishing boats	308 fishing boats
Indicator 2 Reduction of waiting time of fishing boats at landing birth at peak time	45-50 minutes (average)	10 minutes (average)	11 minutes (average) 11.9 minutes (high season) 10.1 minutes (low season)	21 minutes (high season and during the day when it is low tide)
Indicator 3 Average volume of landing of fish at Boulbinet Port	16.1 tons/day	17.6 tons/day	9.0 tons/day	18.0 tons/day ^(Note3)
Indicator 4 Production volume of smoked marine products at Boulbinet Port	2.0 tons/day	2.4 tons/day	1.5 tons/day	2.9 tons/day
Indicator 5 Production volume of ice	10 tons/day	20 tons/day	18 tons/day	16 tons/day
Indicator 6 % of fishery boats supplied ice	44%	90%	85%	80% ^(Note3)
Indicator 7 No. of shops opening at the store buildings (Note2)	-	108 shops	108 shops	89 shops
Indicator 8 No. of accidents during landing	10	8	5	2

Source: Minister of Fishery and Aquaculture

Note 1: The size of fishing boats: 12.0 – 19.5 meters.

Note 2: The six store buildings constructed by the project can accommodate maximum 108 shops in total.

Note 3: These data was estimated by the DGPPAB.

3 Efficiency

Although the project cost was mostly as planned (ration against the plan: 99%), the project period slightly exceeded the plan (ration against plan: 118%). This is due to the external factor that was linked to the socio-political turmoil occurred after the death of the former president of Guinea, especially between September and December 2009. In fact, there was an incident of discharging firearms in the vicinity and inside Boulbinet fishing port. Due to this incident, the contractors were forced to suspend the construction works for 4 months. Considering the above exceptional circumstances, the project period was deemed to be within the plan. The outputs of the project were produced as planned. Therefore, efficiency of the project is high.

4 Sustainability

The operation and maintenance (O&M) of the project facilities have been carried out by the Directorate General of Boulbinet Small Fishery Port (DGPPAB), and the National Directorate of Maritime Fish (DNPM) of the Ministry of Fishery and Aquaculture supervises DGPPAB. The Development Committee of Landing Port (CDD) under the National Union of Small Fishermen of Guinea (UNPAG) is responsible for cleaning and waste management of the Port and collection of service fees from users.

Regarding the institutional aspect, DGPPAB has sufficient number of staff including experienced technical staff. The annual maintenance program as well as daily and periodic maintenance plan was established. Regarding the technical aspect, the technicians of DGPPAB have good experience on O&M of refrigeration facilities with Freon cooler but do not master the new technology concerning the refrigeration facilities using ammoniac cooler. Also, there is no system of training to sustain technical level of the technical staff of DGPPAB. In this respect, JICA has announced the dispatch of a short term expert for the training of technical staff concerning the ammoniac refrigeration system in order to strengthen the technical capacity of DGPPAB staff. Regarding the financial aspect, it was planned that the operation cost for ice production including electricity and water charges was to be covered by the government budget and maintenance cost of the facilities was financed by the revenue of ice sales and facility use charges of the port business. However, no government budget has been allocated to the DGPPAB since absence of parliament due to delay of legislative elections after the coup d'état in 2008. Instead, DGPPAB has financed the O&M cost from the revenue of the port, but it is still not sufficient to cover the necessary O&M cost of the project facilities. Meanwhile, with the revenue of shop location fees, the CDD has been continuously allocating the sufficient budget to conduct cleaning works of the port. Regarding the current status of the project facilities, most of the project facilities have been normally operated. However, at the moment of ex-post evaluation there was a problem to find valve spare parts that should be replaced reason why the cold storage was not operating. Also a part of store building has not been utilized for initial purpose due to temporary occupation as a prayers room. Therefore, the project has some problems in the technical, financial aspects as well as the current status of project facilities. Hence its sustainability is fair.

5 Summary of the Evaluation

The project has achieved the project objectives of "to enhance production, storage, and sales facilities for marine products landed and to reduce congestion of fishing boats by expansion of facilities of the Boulbinet Small Fishing Port," as increase in volume of marine products, increase in number of fishing boats, increase in volume of ice production, and reduction in waiting time of fishing boats at landing birth at peak time after project implementation. The expansion of capacity of ice supply and cold storage together with improvement of sales facilities from outdoor to indoor led to the improvement of freshness of marine products. Also the project realized reduction in congestion in the Port by relocation of illegal and unauthorized shops and venders, and an improvement of safety at landing. Meanwhile there was a concern on capacity ice production and utilization of store building, that is, the issues on a shortage of water and electricity supply for ice making machine and a temporary occupation of a part of store building by prayers room. A positive impact was also identified, such as the increase in volume of fresh fish distributed form Boulbinet Port to domestic market.

As for sustainability, the project has some problems in the technical, financial aspects as well as the current status of project facilities since DGPPAB done not master the new technology concerning the refrigeration facilities using ammoniac cooler, the O&M budget was not sufficiently covered by the revenue of port business, and there are problems in spare parts. For efficiency, it is deemed that both project cost and the project period were within the plan.

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

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

• In order to insure the good use of the facilities of the fishing port and as planned in the basic design concept, it is highly recommended to the DGPPAB and the CDD to the strict application of the internal regulations of the fishing port of Boulbinet especially concerning the appropriate use of the facilities and make sure that after the construction of the mosque the vendors will take back their places in the store building.

Lessons learned for JICA:

• In order to avoid further congestions due to the increase of the number of port users, it is necessary to realize long term forecasts and make larger scope extensions to better absorb the demand regarding the growing number of the population in African capitals.



landing birth of Boulbinet Port



Ice plant with the ammoniac refrigeration system