

Gabonese Republic

FY2015 Ex-Post Evaluation of Japanese Grant Aid Project

“Project for the construction of the support centre for small fisheries in Libreville”

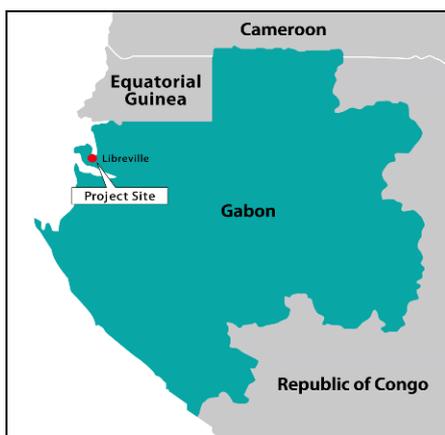
External Evaluator: Koichiro Ishimori, Value Frontier Co., Ltd

0. Summary

The objective of the project was to integrate the existing landing places into the Support Centre for Small Fisheries in Libreville (CAPAL)¹ by developing the Centre, thereby contributing to the improvement of a hygienic environment and the supply chain of marine products. The project was in line with the development policies and needs of Gabon as well as Japan’s ODA policies. However, it turned out that the project planning was not appropriate enough, and thus its relevance is fair. Although the project cost was as planned, the project period was longer than planned. Moreover, the construction of the access road that was supposed to be completed during the project period by the Government of Gabon was completed after the project period, and thus its efficiency is fair. The quantitative effects (i.e., number of artisanal ships for landings, volume of landings, and volume of ice supply) are significantly lower than planned and the qualitative effects are limited. As a result, the expected impacts are also limited, and thus the effectiveness and impact of the project are low. The sustainability of the project effects is insufficient and so are the institutional aspects of operation and maintenance of the facilities and equipment. The technical aspects of the project have minor problems and its financial aspects have major concerns about its outlook, thus the sustainability of the project effects is low.

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

1. Project Description



Project location



Main entrance of CAPAL

1.1 Background

¹ Centre d'Appui à la Pêche Artisanale de Libreville.

Gabon is situated on the central coast of West Africa and surrounded by Equatorial Guinea in the northwest, Cameroon to the north, and the Republic of Congo to the east and the south. It has approximately 0.27 million square kilometres of land that is almost the equivalent to 71% of Japan's land area, and it had approximately 1.4 million people (2006) that is almost equivalent to 1% of Japan's population. Almost half of the population in Gabon have been living in and around the capital city of Libreville. The economy of the country heavily has depended upon the oil industry whose share in GDP was approximately 55% (2006). However, oil production has decreased since its peak of 0.217 million barrel per day in 1997 and is expected to be depleted sometime in the future, like other oil countries. Therefore, the Government of Gabon has been trying to grow out of its dependency on the oil economy and diversify its industries. Among many other options, the fishing industry especially has been considered to have a high potential for development; however, while the annual potential volume of landings was estimated to be approximately 0.3 million tons, the actual volume was approximately 38,000 tons or the equivalent of just under 13%.

1.2 Project Outline

The objective of the project was to integrate landing places into CAPAL by developing it, thereby contributing to the improvement of a hygienic environment and the supply chain of marine products.

| | |
|---|--|
| G/A Grant Amount / Actual Grant Amount | 1,162 million yen/1,162 million yen |
| Exchange of Notes Date / Grant Agreement Date | June, 2009/June, 2009 |
| Implementing Agency | Directorate General of Fisheries and Aquaculture (DGPA ²), Ministry of Fishery and Animal Husbandry ³ |
| Project Completion Date | August, 2011 |
| Main Contractor(s) | Iwata Chizaki Inc. |
| Main Consultant(s) | ECOH Corporation |
| Basic Design | April, 2009 |
| Detailed Design | — |
| Related Projects | “The Study on the Master Plan of Integrated Development of Small-Scale Fishery and Inland Aquaculture in the Republic of Gabon (2009)” |

² Direction Générale de la Pêche et Aquaculture.

³ At the time of the project planning, the name of the implementing agency was Ministry of Forest Economy, Waters, Fishery and Aquaculture. However, it changed several times because of organizational restructuring and was the Ministry of Fishery and Animal Husbandry at the time of the ex-post evaluation in 2015.

2. Outline of the Evaluation Study

2.1 External Evaluator

Koichiro Ishimori, Value Frontier Co., Ltd

2.2 Duration of Evaluation Study

The ex-post evaluation was conducted according to the following schedule.

Duration of the Study: July, 2015 – April, 2017

Duration of the Field Study: November 8, 2015 – November 20, 2015, and February 6, 2016 – February 12, 2016

3. Results of the Evaluation (Overall Rating: D⁴)

3.1 Relevance (Rating: ②⁵)

3.1.1 Relevance to the Development Plan of Gabon

The “Document de Stratégie de Croissance et de Réduction de la Pauvreté (DSCR P)” in 2005, the mid-long term national development plan of the Government of Gabon at the time of project planning in 2009, was attempting to grow out of its dependency on the oil economy and diversify its industries and considering the fishing industry that had abundant marine resources as an industry with a high potential for development. The “Plan de Développement de la Pêche et de l’Aquaculture” in 1998, the mid-long term sector plan of the Government of Gabon, was planning to develop fishery infrastructures for promoting the fishery industry. The “Plan Stratégique Gabon Emergent -Vision 2025 et Orientations Stratégiques 2011-2016” in 2012, the mid-long term national development plan of the Government of Gabon at the time of the ex-post evaluation in 2015, was trying to develop modern fishing ports for landings, storages, and processing of marine products at Mandji Island in the West, Mayumba in the South, and Libreville in the North and considering the development of CAPAL as important. There has been no subsequent sector plan⁶ after the “Plan de Développement de la Pêche et de l’Aquaculture” in 1998, and thus the original Plan is still valid.

In light of the above, the project is judged to have been in line with the development policies of Gabon both at the time of the project planning and the ex-post evaluation.

⁴ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

⁵ ③: High, ② Fair, ① Low

⁶ At the time of the ex-post evaluation, there was a concept of “the Gabon Blue” that may be pertinent to the fishery sector. According to the Government of Gabon, however, it was just trying to promote sustainable use of the marine resources (e.g., marine minerals, dissolved substances in seawater, and marine life) and, for this reason, to establish marine protected areas as well as strengthen law enforcement, such as the crackdown on illegal fishing. Thus, it did not mean, for example, that it was trying to forbid artisanal fishing in the sea and shift fishery policies from artisanal fishing in the sea to the inland water aquaculture. Considering this, the ex-post evaluator has judged that the concept has no particular effect on the sector planning. According to the Government of Gabon, an official paper on the concept has not been undertaken.

3.1.2 Relevance to the Development Needs of Gabon

At the time of the project planning in 2009, the volume of consumption of marine products on the national annual average per person was approximately 30kg, which was significantly higher than the African annual average per person of 9.1kg.⁷ Marine products were also important sources of nutrition because they accounted for approximately 40% of animal protein intake.⁸ As Gabon has a tropical climate with high temperatures and high humidity, fungi that adhere to marine products are inclined to breed. For this reason, there was a demand for maintaining good hygiene to preserve the freshness of marine products. However, there were no hygienic facilities for landings and ice making at the existing landing places in and around Libreville where almost half of the population live, and thus the environment for landings and the distribution of marine products was not hygienic.

At the time of the ex-post evaluation in 2015, the volume of consumption of marine products on the national annual average per person was approximately 39kg, which was significantly higher than African annual average of per person 9.7kg.⁹ Marine products were also important sources of nutrition because they still accounted for approximately 40% of animal protein intake.¹⁰ There were still no fishery facilities with a hygienic environment for landings and distribution of marine products in and around Libreville except for CAPAL.

In light of the above, the project is judged to have been in line with the development needs of Gabon both at the time of the project planning and the ex-post evaluation.

3.1.3 Relevance to Japan's ODA Policy

The "ODA Charter" in 2003, the aid policy of the Government of Japan at the time of project planning in 2009, was trying to develop economic and social infrastructures that were important for economic activities; it was doing so in order to support sustainable growth of developing countries in one of its four pillars, sustainable growth. The "Mid-term Policy of ODA" in 2005 was also prioritizing the development of economic and social infrastructures including port developments in one of its four pillars, sustainable growth. Moreover, the "data book for Gabon" in 2009 was prioritizing the fishery sector that had an underdeveloped but significant potential for development to diversify industries in Gabon.

In light of the above, the project is judged to have been in line with Japan's ODA Policy at the time of the project planning.

3.1.4 Relevance to Appropriateness of Project Planning

⁷ FAO, "The State of World Fisheries and Aquaculture 2012"

⁸ JICA document

⁹ FAO, "The State of World Fisheries and Aquaculture 2014"

¹⁰ DGPA document

At the time of the project planning, the Japan International Cooperation Agency (JICA) insisted, based on the understanding that it was necessary to close the existing landing places in and around Libreville and integrate them into CAPAL in order to promote its usage, that DGPA should take necessary policy measures. DGPA agreed in return that it would close them because their hygienic environments were in bad condition. However, they are not closed even



Bird's eye view of CAPAL

today. Moreover, it was considered desirable to construct a seawall so as to improve the tranquillity of the seawater in front of the CAPAL pier at the time of the project planning because Gabon had a season of high waves. After having considered the limitation on the budget of the project, however, it was agreed that the Government of Gabon would construct the seawall outside of the project's scope. Nevertheless, this has not yet been realized. Moreover, artisanal fishermen in Gabon have been avoiding using the CAPAL pier because they are not used to using piers, even under the normal wave conditions. For these reasons and others, CAPAL has not been utilized as much as planned, as explained later.

DGPA did not take necessary policy measures to close the existing landing places during 27 months of the project period, and it was not until February 2012, six months after the project completion, that it drafted an ordinance. However, a decision on the ordinance has not yet been made. As a result, the existing landing places are not closed. At the time of the project planning, JICA should have grasped precisely the probability of enforcing closure of the existing landing places by DGPA and then taken positive measures accordingly. Moreover, at the time of the project planning, JICA requested, based on the understanding that it was desirable to construct a seawall in order to promote usage of CAPAL, that DGPA should construct it as a desirable condition rather than as a prior condition for implementing the project because it was outside of the project's scope. DGPA answered in return that it would construct it with the funds from the African Development Bank (AfDB). Nevertheless, it has not yet been realized. In fact, DGPA obtained 300 million CFA francs from AfDB as the cost for constructing it (both for design and civil work) and implemented the design study. However, it ended incompletely owing to insufficient capability of the DGPA and the consulting company to implement it. Meanwhile the Japanese consultant for this project estimated that it would cost 2 billion CFA francs for the civil work alone. Therefore, even if the design study had been properly completed, 300 million CFA francs would have been far from enough to construct the seawall. It is acknowledged that JICA has been continuously following this issue from the time of the project planning to the time of the ex-post evaluation. However, it is considered that JICA and DGPA should have understood precisely this issue related to the construction costs by examining the AfDB-funded construction

project in more detail, and then taken positive measures accordingly at the time of the project planning. Moreover, based on the fact that artisanal fishermen in Gabon were used to landings on sand beaches but not used to piers, it is also considered that JICA and DGPA should have included a soft component for transferring landing techniques at piers in the project at the time of the project planning.

In light of the above, it is hard to say that the project planning was appropriate enough.

In conclusion, this project was highly relevant to Gabon's development plan and development needs, as well as to Japan's ODA policy. However, the way that it was planned was not appropriate enough. Therefore, its relevance is fair.

3.2 Efficiency (Rating: ②)

3.2.1 Project Outputs

Table 1: Outputs

| | Planned outputs | Actual outputs |
|----------------------------------|--|--------------------------|
| Japanese side | | |
| (1) Civil engineering facilities | Pier and shore protection. | As planned |
| (2) Architectural facilities | Support centre building (including ice makers and storage), toilets, engine repair building, and processing plant. | As planned |
| (3) Equipment | Equipment for handling fish (including carts, weighing machines, cool boxes, tables), equipment for processes, equipment for hygiene and quality control, equipment and tools for engines, and equipment for engine repair building. | As planned |
| Gabonese side | | |
| (1) Civil engineering facilities | Access road. | As planned ¹¹ |
| (2) Architectural facilities | Fence, gates, and gatehouse. | As planned |
| (3) Construction | Electricity, water, and telephone. | As planned |

Source: DGPA documents

3.2.2 Project Inputs

3.2.2.1 Project Cost

While the planned project cost on the Japanese side was 1,162 million yen, the actual cost was the same as planned. The planned project cost on the Gabonese side was 66 million yen, but the actual costs have not been revealed.

3.2.2.2 Project Period

¹¹ However, it was not completed during 27 months of the project period (June 2009 to August 2011) because of delays in payment for the road construction on the Gabonese side. It was completed around January 2013 after completion of the project.

The planned project period was 20 months from June 2009 (signing of Grant Agreement (G/A)) to January 2011 (completion of construction), during which 7 months were intended for the design study and 13 months for the construction of civil engineering facilities and architectural facilities as well as procurement of equipment. In reality, however, it was 27 months from June 2009 (signing of G/A) to August 2011 (completion of construction), because the construction of civil engineering facilities and architectural facilities as well as procurement of equipment took 20 months due to 7 months of delays in Gabonese construction and procurement, although the design study took the same 7 months. Thus, the project period was longer than planned (135% of the planned project period).

In conclusion, although the project costs were the same as those planned, the project period exceeded the plan. The access road which the Gabonese side was supposed to have completed during the project period was also completed after the project period. Therefore, efficiency of the project is fair.

3.3 Effectiveness¹² (Rating: ①)

3.3.1 Quantitative Effects (Operation and Effect Indicators)¹³

Table 2: Operation and effect indicators

| | Baseline | Target | Actual achievement | | | | |
|--|---------------|--------------------------|--------------------|-------------------------|--------------------------|--------------------------|--------------------------|
| | 2009 | 2013 | 2011 | 2012 | 2013 | 2014 | 2015 |
| | Baseline year | 2 years after completion | Completion year | 1 year after completion | 2 years after completion | 3 years after completion | 4 years after completion |
| Operation indicators | | | | | | | |
| Indicator 1: Integrating four existing landing places into CAPAL | 4 places | 1 place ¹⁴ | 4 places | 4 places | 4 places | 4 places | 4 places |
| Effect indicators | | | | | | | |
| Indicator 2: Daily average number of artisanal ships for landings at CAPAL | 0 ship | 60 ships ¹⁵ | NA | NA | NA | NA | 1.3 ships ¹⁶ |

¹² Sub-rating for Effectiveness is to be put with consideration of Impact.

¹³ At the time of the project planning, the indicators for quantitative effects were 1) the integration of four existing landing places into CAPAL, and 2) the daily maximum volume of ice supply at CAPAL (from 0 t/day to 9t/day) alone. However, the external evaluator added two more indicators, daily average number of artisanal ships at CAPAL and daily average volume of landings at CAPAL, because it was difficult to properly measure quantitative effects by using the original indicators alone. Moreover, the daily average volume of ice supply at CAPAL was used because the daily maximum volume of ice supply at CAPAL (from 0 t/day to 9t/day) was nothing but the total capacity of the procured three sets of ice makers.

¹⁴ It is considered appropriate because the project attempts to integrate four existing landing places into CAPAL.

¹⁵ It is considered appropriate because it is the total of the daily average number of artisanal ships on busy days at four existing landing places (12 ships for Jeanne Ebori, 11 ships for Oloumi, 21 ships for Pont Nomba, and 16 ships for Owendo).

¹⁶ As DGPA has not made and kept the appropriate records, the external evaluator used data on average for three months from January to March 2015 that the JICA expert obtained as well as data on average for one month in November 2015 that the external evaluator obtained.

| | | | | | | | |
|--|----|--------------------|----|----|----|-------|--------------------|
| Indicator 3: Daily average volume of landings at CAPAL | 0t | 8.9t ¹⁷ | NA | NA | NA | 0.17t | 0.09t |
| Indicator 4: Daily average volume of ice supply at CAPAL | 0t | 5.5t ¹⁸ | NA | NA | NA | NA | 1.3t ¹⁹ |

Source: Information and data obtained from JICA and DGPA documents, JICA experts, and the external evaluator

Indicator 1: Integrating the four existing landing places into CAPAL

Although the hygienic environments of the four existing landing places in and around Libreville (Jeanne Ebori, Oloumi, Pont Nomba, and Owendo) have been still in bad condition, these four landing places are becoming more utilized along with installation of new ice makers and other factors. Consequently, there has been no progress in their integration into CAPAL.



Present situation of Oloumi

At the time of the project planning in 2009, JICA demanded, based on the understanding that it was desirable to integrate the four existing landing places into CAPAL in order to promote its use, that DGPA should take necessary policy measures. DGPA answered in return that it had a plan to close them because their hygienic environments were in bad condition. In fact, DGPA drafted such an ordinance in February 2012 after completion of the project. However, the Government of Gabon has not yet made a decision on issuing the ordinance and, consequently, the four existing landing places are not yet closed.

Indicator 2: Daily average number of artisanal ships for landings at CAPAL

The actual achievement rate of the planned target at the time of the ex-post evaluation in 2015 was approximately 2% and significantly low. Concerned parties²⁰ point out numerous hard (objective) and soft (process-oriented) factors as the reasons, including 1) - 4) below. 1) As mentioned in the section on Indicator 1, integrating the four existing landing places into CAPAL, at 3.3 Effectiveness, the four existing landing places are not closed. 2) As mentioned in the section on Relevance, the Appropriateness of Project Planning at 3.1 Relevance, the seawall has not yet been realized at CAPAL. Moreover, artisanal fishermen, who are used to landings on sand beaches but not used to piers, consider that it is rather difficult, if not impossible, to safely dock their small wooden ships (pirogues) to the CAPAL pier and land fish not only under high wave conditions but also under normal wave conditions. 3) Artisanal fishermen perceive that fish retailers do not come to CAPAL. 4) Although the majority of artisanal fishermen are legal

¹⁷ It is considered appropriate because it is the figure obtained by multiplying the daily average number of artisanal ships at CAPAL by the daily volume of landings per ship (i.e., 60 by 147.1kg).

¹⁸ It is considered appropriate that the project expected two ice makers to be operated at a 90% operation rate on a regular basis, although three ice makers with the capacity of 3t per day each were installed to meet the highest demand of 8.6t per day on busy days.

¹⁹ It is the same as footnote 16.

²⁰ Concerned parties are CAPAL staff, JICA experts, and any artisanal fishermen who have used CAPAL before.

immigrants with a permitted right of residence in Gabon, they are inclined to avoid CAPAL in order to avoid the sometimes unnecessarily strict crackdowns that often take place in the sea nearby; these are undertaken to maintain maritime order by the maritime police (Gendarmerie Nautique) and the Directorate General of Documentation and Immigration, and to ensure the preservation of maritime resources and safe navigation by the national agency for national parks and DGPA.

Indicator 3: Daily average volume of landings at CAPAL

The actual achievement rate of the planned target right before and at the time of the ex-post evaluation in 2014 and 2015 were significantly low at approximately 2% and 1%, respectively. This was because of numerous factors, both hard and soft, including 1) - 4) above. The reason why the actual achievement in 2015 is lower than that of 2014 is that a marine product processing company (Gabon Seafood Inc.), which was doing business at CAPAL, terminated its contracts with artisanal fishermen and those fishermen then stopped using CAPAL for landings.

Indicator 4: Daily average volume of ice supply at CAPAL

The actual achievement rate of the planned target at the time of the ex-post evaluation in 2015 was significantly low at approximately 18%. This is because of the significantly low volume of landings at CAPAL caused by numerous factors, both hard and soft, including 1) - 4) above. Although the project installed ice makers for the purpose of improving the distribution of marine products that were landed at CAPAL, most of the usage of ice was not to provide ice for the supply chain of marine products as planned but to provide ice for artisanal ships²¹ that were about to go fishing, and thus the actual achievement rate of indicator 4 is slightly higher than indicators 2 and 3.

3.3.2 Qualitative Effects

(1) Hygienic improvement in handling marine products

Before the project, marine products that were landed at the four existing landing places were displayed and sold outside on unhygienic sheets. With the integration of the existing landing places into CAPAL, the project expected that marine products landed at CAPAL would be displayed and sold on hygienic tables inside CAPAL. At the time of the ex-post evaluation, however, the existing landing places were not integrated into CAPAL and marine products that were landed there were still displayed and sold outside on unhygienic sheets. Moreover, the small volume of marine products that were landed at CAPAL were put into cool boxes without ice and then sold to fish retailers with no use of the hygienic tables inside CAPAL; the fish retailers put the products into their own tubs and took them to markets in town without using

²¹ Such artisanal ships do not necessarily return to CAPAL for landing.

ice. For this reason, the effects on hygienic improvement in handling marine products are considered to be limited in comparison with the planned effects.



Present situation of the market at Pont Nomba



Fish wholesaler and a tub

(2) Improvement in distributing marine products

Before the project, marine products were landed at the existing landing places in and around Libreville and distributed to six markets in town. With the integration of the existing landing places into CAPAL, the project expected that fish retailers would be able to purchase fish at CAPAL in an efficient manner and take them to markets using cool boxes and ice so as to maintain their freshness. At the time of the ex-post evaluation, however, the existing landing places were not integrated into CAPAL and the volume of landings at CAPAL was very small. Consequently, the volume of marine products that were distributed from CAPAL to markets was also very small. For this reason, the effects on improving the distribution of marine products are considered to be limited in comparison with the planned effects.

3.4 Impacts

3.4.1 Intended Impacts

(1) Vitalization of artisanal fishery in and around Libreville

In order to measure if there has been any impact of the project on vitalizing the artisanal fishery²² in and around Libreville, a beneficiary survey was conducted involving 18 artisanal fishermen, 2 marine product processing companies, and 3 fish retailers²³ during the ex-post evaluation. As a result of the survey, it turned out that nine artisanal fishermen, one marine product processing company, and two fish retailers confirmed its positive impact. Now that the volume of landings at CAPAL is so low, however, it is difficult to argue with the affirmative

²² Vitalization of the artisanal fishery means volumes of landings and supplies of artisanal fishery, and others.

²³ At the time of the ex-post evaluation, there were very few artisanal fishermen, marine product processing companies, and fish retailers that used CAPAL. Consequently, there were only 18 male artisanal fishermen, 2 marine product processing companies, and 3 female fish retailers who were available to take the survey. Because of this small sample size, the survey targeted all samples, not randomly selected samples, and took interview forms and collected answers from all.

answers from 11 people and 1 company indicating only that the project has had any impact on vitalizing the artisanal fishery in and around Libreville. Therefore, it is considered that there has been hardly any impact on it.

(2) Sustainable use of marine resources

With the integration of the existing landing places into CAPAL and the allocation of a statistical officer to CAPAL, the project expected that CAPAL would be able to record and keep statistical data on the volume of landings for the sustainable use of marine resources. Furthermore, the project also expected that CAPAL would implement public awareness programs and trainings on sustainable use of marine resources aimed at artisanal fishermen in the conference/seminar room in CAPAL's support centre building. In order to measure if there has been any impact of the project on sustainable use of marine resources, the beneficiary survey was conducted involving the same people and companies indicated above. As it turned out, only one artisanal fisherman confirmed its positive answer. However, his affirmative observation came from only his personal impression, not from any public awareness programs and trainings implemented at CAPAL. As nothing like public awareness programs or trainings ever took place at CAPAL, it is considered that there has been hardly any impact on it.

(3) Hygienic distribution of marine products to consumers

The project expected that marine products landed at CAPAL would be put on ice and distributed to markets in a hygienic manner that would maintain their freshness. In order to measure if there has been any impact of the project on the hygienic distribution of marine products, the beneficiary survey was conducted involving three fish retailers who came to CAPAL. As it turned out, the survey found that there was no fish wholesaler who used ice to take marine products to markets where consumers could buy them. There was also no consumer who took products home using ice. Therefore, it is considered that there has been hardly any impact on it.

3.4.2 Other Impacts

(1) Impacts on the Natural Environment

As there was no construction work that could negatively affect the natural environment, no mitigation measures were taken when implementing the construction for the project. The construction of the project was implemented in line with the following three guidelines: 1) low noise construction machinery should be used to respond to noise concerns, 2) portable toilets should be installed and used water should be properly treated at the construction site, 3) soils and wastes generated from the construction work should be properly treated. According to the Directorate General of the Environment of the Ministry of Fishery and

Animal Husbandry, all construction work was done in line with the guidelines.

(2) Land Acquisition and Resettlement

There was land acquisition at the construction site of CAPAL's support centre building, but there was no resettlement. Although there was an issue between the Government of Gabon and the land owner over the land's acquisition, the Government of Gabon compensated for it based on the legal procedures during the project period. The issue is now completely resolved.

(3) Unintended Positive/Negative Impact

Because most of the fish retailers are female, the beneficiary survey was conducted involving three female fish retailers to measure if the project had had any impact according to gender, such as improvements in the convenience of using CAPAL. However, no sales and processing activities using CAPAL facilities have been taking place, and thus it is considered that impacts on gender are limited. Moreover, the project also expected to bring about impacts on improvement in convenience to consumers (and especially women), who would come to buy marine products. However, the access road to CAPAL that was paved by the project is approximately 1 km distant from town and has few people using it. Besides, another access road to CAPAL that is stretching from the side of the Oloumi market and is several hundred meters away from the main road becomes difficult to use in the rainy season, although it is usable both on foot and by car in the dry season. Consequently, there are hardly any consumers, especially women, at CAPAL. Therefore, it is considered that impacts on gender are limited. The project also assumed that it might negatively affect the operators of ice makers at the existing four landing places, but now it is considered that there has been no negative impact on them because use of the existing landing places remains stable.

As explained above, CAPAL has not been used as much as expected because of numerous factors, both hard and soft. Consequently, the achievement rates of quantitative effects such as the number of artisanal ships, the volume of landings, and the volume of the ice supply are significantly low, and the qualitative effects are also limited. In addition, the expected impacts are also limited because of the limited effects. There is no other noteworthy impact. In light of the above, realizations of effects by the implementation of the project are limited. Therefore, effectiveness and impact of the project are low.

3.5 Sustainability (Rating: ①)

3.5.1 Institutional Aspects of Operation and Maintenance

DGPA managed CAPAL from the project planning until September 2015. However, the

National Agency for Fishery and Aquaculture (ANPA)²⁴ that was newly created under the Ministry of Fishery and Animal Husbandry in October 2015 started managing all landing places in Gabon including CAPAL on behalf of DGPA. At the time of the ex-post evaluation in February 2016, there were eight staff members at ANPA, i.e., one director general, one general and financial director, one planning officer, one cooperation officer, one aquaculture officer, one surveillance officer, one statistical officer, and one general duties officer. However, ANPA was not able to set up its organizational and planning capabilities without an allocation of any budget from the government since its establishment. Consequently, nothing was decided about the CAPAL Managing Committee²⁵ that was supposed to have been created under the project.

Meanwhile, the planned and actual deployment of staff members at CAPAL was as follows. Considering the fact that the volume and distributions of landings at CAPAL were significantly lower than planned, the number of staff members that were deployed to CAPAL was not as planned. At the time of the ex-post evaluation, the 14 staff members that were deployed to CAPAL were barely capable of running it. For appropriate operation of CAPAL, it would be desirable for CAPAL to deploy required, albeit minimum, number of staff members in the future, including one statistical officer for recording and keeping the statistical data on the landings for the sustainable use of marine resources.

Table 3: Planned and actual deployment of staff members at CAPAL

| Title | Planned | Actual |
|--------------------------------------|---------|--------|
| Centre chief | 1 | 1 |
| Secretary for centre chief | 1 | 1 |
| Centre deputy chief | 2 | 1 |
| Hygienic and quality control officer | 1 | 0 |
| Accountant | 1 | 1 |
| General affairs officer | 1 | 0 |
| Officer for halls and storages | 2 | 1 |
| Maintenance staff for ice makers | 2 | 1 |
| Ice sellers | 3 | 2 |
| Statistician | 1 | 0 |
| Cleaning staff | 4 | 3 |
| Security staff | 4 | 3 |
| Total | 23 | 14 |

Source: CAPAL

According to the internal regulation of CAPAL, the centre chief was supposed to submit a profit and loss sheet to DGPA every month and DGPA was supposed to send external auditors

²⁴ Agence Nationale de la Pêche et Aquaculture.

²⁵ The committee members at the time of the project planning consisted of the director general of DGPA, the director of artisanal fishery of DGPA, the director of legal affairs and surveillance of DGPA, the director of hygiene and quality control of DGPA, the centre chief of CAPAL, and the centre deputy chief of CAPAL.

to CAPAL every quarter. However, there was no record left that indicated that these activities ever took place. Moreover, now that the management of CAPAL is shifted from DGPA to ANPA, the centre chief did not submit one and ANPA did not send an auditor. Therefore, it is hard to say that the management of CAPAL by ANPA and the operation and maintenance of CAPAL are adequate.

3.5.2 Technical Aspects of Operation and Maintenance

Among numerous pieces of equipment that were procured by the project, it was only the ice makers that required some technical guidance. When the ice makers were installed at CAPAL in 2011, engineers from the maker (SOGAFRIC) in Gabon provided eight staff members, who were candidates for maintaining the ice makers, with two days of training on how to operate them. The maker also provided them with one year of on-the-job-training on how to maintain them. There was only one staff member who was still working in maintenance for ice makers at CAPAL, at the time of the ex-post evaluation. To make matters worse, according to the centre chief, the staff did not have sufficient maintenance skills. CAPAL still had the operation and maintenance manual, but did not provide the staff with any training on maintenance. As the staff was able to only operate ice makers, CAPAL entrusted the maker to maintain them even though their required maintenance was minor. Therefore, although there is little problem with operation of ice makers, it is hard to say that the maintenance skills available are sufficient.

3.5.3 Financial Aspects of Operation and Maintenance

CAPAL did not record and keep the financial data properly, and thus there were no data available before 2015. This is partly because reporting and auditing in line with the internal regulation of CAPAL did not occur, as noted above. The data in 2015 which the ex-post evaluation study was able to obtain are summarized in Table 4 below.

Table 4: Net balance of CAPAL

(unit: thousand CFA franc)

| Items | Plan ²⁶ | 2013 | 2014 | 2015 |
|-------------------|--------------------|------|------|--------|
| Total revenue | 91,000 | NA | NA | 21,137 |
| Ice sold | 77,660 | NA | NA | 17,679 |
| Facilities Rented | 13,340 | NA | NA | 3,458 |
| Total expenses | 83,280 | NA | NA | 21,011 |
| Human resources | 42,480 | NA | NA | 17,900 |
| Others | 31,700 | NA | NA | 3,111 |
| Reserves | 9,100 | NA | NA | 0 |
| Net Balance | 7,720 | NA | NA | 126 |

Source: CAPAL

²⁶ The project did not set a particular year for the plan.

Regarding the data in 2015 that the ex-post evaluation was able to obtain, the unit cost of selling ice per sac of 50kg at 2,000 CFA francs was the same as planned. However, the sales of ice were approximately 23% of the planned sales (77,660 thousand CFA francs) because the volume of sales was less than expected. Similarly, the facilities rental fees were approximately 26% of the planned fees (13,340 thousand CFA francs). The project originally expected that it would make revenue from renting storages and tables to fish retailers, fish-handling spaces, fish-processing facilities, and the engine-repair building. However, as they were hardly used, there was little revenue. The net balance in 2015 was 126 thousand CFA francs but the reserves for repairing facilities and equipment such as ice makers, equivalent to 10% of the total revenue, were not established at all. If they had been established as anticipated, they would have been negative in the final accounting. When the project was planned, if a case arose where CAPAL fell into debt, the DGPA was supposed to compensate for it. Now that the management of CAPAL is shifted from DGPA to ANPA, it is still unclear whether ANPA is going to fulfil this responsibility under the circumstances without an allocation of any budget from the government. In sum, considering that ANPA has not allocated any budget to CAPAL, that the budget management including compensation for deficits at CAPAL has not been institutionalized between ANPA and CAPAL, and that reserves for repairing facilities and equipment have not been established, it is hard to say that the financial aspects of operation and maintenance are adequate.

3.5.4 Current Status of Operation and Maintenance

【Civil engineering facilities】

As there is no major damage on the pier and the access road, artisanal fishermen and CAPAL staff use them more or less. Therefore, there is no particular problem with their current status of operation and maintenance.

【Architectural facilities】

Three janitors at CAPAL clean up the support centre building and halls, and there is no problem with their use. Ice makers, storages, and toilets are also in use. Meanwhile, the engine-repair building and the fish-processing facilities are not in use at all because there is no repairmen or processor. However, they could be used if needed.

【Equipment】

Apart from carts and cool boxes that are used to transport ice from ice makers to small wooden ships (pirogues), no other equipment is in use. However, it could be used if needed.

As mentioned above, sustainability of the project effects as well as institutionalization of the operation and maintenance of the architectural facilities and equipment are insufficient. There is also a partial problem with the technical aspects of the operation and maintenance. Moreover, the financial aspects of the operation and maintenance are far from sufficient, and future prospects are quite unclear. In light of the above, major problems have been observed in terms of the institutional and financial aspects of operation and maintenance. Therefore, sustainability of the project effects is low.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

The objective of the project was to integrate the existing landing places into CAPAL by developing the Centre, thereby contributing to the improvement of a hygienic environment and the supply chain of marine products. The project was in line with the development policies and needs of Gabon as well as Japan's ODA policies. However, it turned out that the project planning was not appropriate enough, and thus its relevance is fair. Although the project cost was as planned, the project period was longer than planned. Moreover, the construction of the access road that was supposed to be completed during the project period by the Government of Gabon was completed after the project period, and thus its efficiency is fair. The quantitative effects (i.e., number of artisanal ships for landings, volume of landings, and volume of ice supply) are significantly lower than planned and the qualitative effects are limited. As a result, the expected impacts are also limited, and thus the effectiveness and impact of the project are low. The sustainability of the project effects is insufficient and so are the institutional aspects of operation and maintenance of the facilities and equipment. The technical aspects of the project have minor problems and its financial aspects have major concerns about its outlook, thus the sustainability of the project effects is low.

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

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

In order to achieve the planned targets and ensure that CAPAL plays its planned roles, it is necessary to take numerous actions with both hard (the objective) and soft (process-oriented) aspects of the project including 1) - 5). Such actions as 1) - 5) below are examples only and necessary actions to be taken are not necessarily limited to them.

- 1) It has been pointed out that one of the reasons why CAPAL is not used as much as expected is because the existing landing places in and around Libreville are not integrated into CAPAL as was agreed at the time of the project planning. Therefore,

it is important for ANPA to take the necessary policy measures to integrate them into CAPAL at the earliest possible time.

- 2) It has been pointed out that one of the reasons why CAPAL is not used as much as expected is because a seawall to improve the tranquillity of the seawater in front of the CAPAL pier during high waves was and still is not constructed, and hence artisanal fishermen in Gabon who are not used to using piers avoid using the CAPAL pier, not only under high wave conditions but also under normal wave conditions. Therefore, it is important for ANPA to construct a seawall at the earliest possible time. In a case where it is quite difficult to allocate the budget for constructing the large-scale seawall that was initially planned, it is suggested as a second option that ANPA should construct a small-scale seawall that can ensure some degree of tranquillity, in addition to a small-scale sand beach that makes it easier for artisanal fishermen to land fish. Because it will take some time to complete the construction of a seawall, ANPA should, in the meantime, continuously provide technical guidance on how to land fish at the CAPAL pier as the JICA experts have been doing since the completion of the project. In this way, ANPA should eliminate the anxieties that artisanal fishermen hold about landing fish at the CAPAL pier.
- 3) It has been pointed out that one of the reasons why CAPAL is not used as much as expected is because artisanal fishermen perceive that fish retailers do not come to CAPAL. Therefore, it is important for ANPA to take measures at the earliest possible time to make CAPAL a lively and attractive environment with a lot of fish retailers. In this way, ANPA should change the fishermen's perceptions. For this reason, it is suggested, for example, that ANPA should provide free services of supplying ice, storages, cool boxes, and tables for fish retailers for a year.
- 4) It has been pointed out that one of the reasons why CAPAL is not used as much as expected is because the access road to CAPAL is about 1 km distant from town and has few people using it; another access road to CAPAL that is stretching from the side of the Oloumi market and is several hundred meters away from the main road is difficult for consumers, and especially women, to use in the rainy season, although it is usable both on foot and by car in the dry season. Therefore, ANPA should construct 50 - 100m of a second access road to connect the main entrance of CAPAL and town which can bring more consumers, and especially women, to CAPAL as well as rehabilitate the access road stretching from the side of the Oloumi market. In this way, ANPA should be able to improve access to CAPAL for consumers.

- 5) The project had a plan to deploy 23 staff members to CAPAL for its operation. Currently, however, there are only 14 staff members deployed. For appropriate operation of CAPAL, it is important for CAPAL to deploy required, albeit minimum, number of staff. For example, the project expected that CAPAL would contribute to the sustainable use of marine resources, but CAPAL does not currently play such a role because there is no statistical officer deployed. Meanwhile, ANPA has deployed one statistical officer and started working on the sustainable use of marine resources. The statistical officer at ANPA is in charge of statistics on the volume of landings all over the country and is not available solely to CAPAL. It is thus important for CAPAL to deploy a statistical officer to accurately monitor the volume of landings at CAPAL and then promote sustainable use of marine resources by collaborating with the statistical officer at ANPA at some point when the use of CAPAL and the volume of landings have increased. At the same time, CAPAL should promote an appropriate volume of landings by raising public awareness of the sustainable use of marine products and appropriate distribution using ice, and then promote sustainable use of marine products. In this way, CAPAL should be able to decrease the volume of marine products that are wasted without being consumed.

4.2.2 Recommendations to JICA

In order to improve the current status of CAPAL, JICA has been dispatching the JICA experts to Gabon and working with DGPA, ANPA, and artisanal fishermen. It is important for JICA, notably the JICA experts, to continuously monitor and follow up activities by ANPA and CAPAL so that it can ensure that ANPA and CAPAL will implement the aforementioned recommendations.

4.3 Lessons Learned

【Assured implementation of policies and matters by the counter government】

Based on the understanding that it was necessary to integrate the existing landing places in and around Libreville into CAPAL at the time of the project planning, JICA insisted that DGPA should take the necessary policy measures, and JICA confirmed that DGPA had a plan to shut them down. However, DGPA has not done so to date. Moreover, the Government of Gabon was supposed to construct a seawall outside of the project scope, but that has not been constructed either. Therefore, when it comes to policies and matters that can significantly affect the project activities, it is important for JICA to continuously work with the counterpart government and ensure that they are implemented.

【Implementation of project planning of artisanal ports and activities of public awareness that pay due attention to the natural and cultural environment】

One of the reasons why the number of artisanal ships and the volume of landings at CAPAL have not increased is because a seawall to improve the tranquility of the seawater in front of the CAPAL pier during high waves was and still is not constructed and that artisanal fishermen in Gabon who are not used to using piers avoid using the CAPAL pier not only under high wave conditions but also under normal wave conditions. Therefore, when constructing an artisanal port, a project should pay due attention to its project scope by considering the natural environment and also to carrying out such appropriate activities as public awareness by grasping the local practices through stakeholder analyses involving artisanal fishermen, if necessary.