# Seychelles

Ex-Post Evaluation of Japanese ODA Grant Aid Project "The Project for Construction of Artisanal Fisheries Facilities in Mahé Island" External Evaluator: Koichiro Ishimori, Value Frontier Co., Ltd

#### 0. Summary

This project intended to ease congestion at Victoria Port by constructing artisanal fisheries facilities at Providence Port and Bel Ombre Port. The objective of the project was in line with the development policies and needs of Seychelles as well as the development policies of Japan. The project successfully achieved the objective of easing congestion at Victoria Port by diverting artisanal fishing ships concentrated at Victoria Port to Providence Port and Bel Ombre Port, and developing the Victoria and Bel Ombre ports. In addition, the project has created jobs and developed the regions around the ports. Therefore, the effectiveness and impacts of the project are high. Since the project cost and project period slightly exceeded the plan and some outputs were even incomplete, the efficiency of the project is low. However, there are no problems with the organizational, technical, and financial aspects of the Seychelles Fishing Authority (SFA); therefore, the sustainability of the project's effects is high.

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



#### 1.1 Background

Seychelles, located in the southwestern Indian Ocean, is an island country consisting of 115 islands; Mahé is the largest of the islands. In 1997, the Japanese government constructed a quay and a fish handling shed and contributed to the development of Victoria Port by implementing an ODA Grant Aid Project—a project for improving the Victoria artisanal fishing port in Seychelles. Ten years after the project, however, increases in artisanal fishing ships worsened congestion at Victoria Port. The Seychelles government initially tried to expand Victoria Port but was unable to do it since the quays of the port were situated between fish processing companies. Consequently, it made an alternative plan to construct artisanal fishing ports at Providence and Bel Ombre, and actually constructed reclaimed land and breakwaters. However, it had difficulty developing facilities such as quays and icemakers at the ports due to a lack of budget. Therefore, it asked the Japanese government to implement the project.

# 1.2 Project Outline

The objective of this project was to ease congestion at Victoria Port by diverting artisanal fisheries ships concentrated at Victoria Port to Providence Port and Bel Ombre Port, and to develop the Victoria and Bel Ombre ports.

Grant Limit / Actual Grant Amount	1,089 million yen / 1,088 million yen
Exchange of Notes Date	June, 2008
Implementing Agency	Seychelles Fishing Authority (SFA)
Project Completion Date	February, 2010
Main Contractor(s)	Penta-Ocean Construction Co., Ltd
Main Consultant(s)	ECOH Co., Ltd
Basic Design	"Project for Construction of Artisanal Fisheries Facilities in Mahé Island", ECOH Co., Ltd, October 2006
Related Projects (if any)	"Project for improvement of Victoria artisanal fishing port in the Republic of Seychelles"

# 2. Outline of the Evaluation Study

2.1 External Evaluator

Mr. Koichiro Ishimori, Value Frontier Co., Ltd

2.2 Duration of Evaluation Study

The Ex-Post Evaluation Study was implemented according to the following schedule: Duration of the Study: November, 2012 - October, 2013 Duration of the Field Study: February 18<sup>th</sup> - March 10<sup>th</sup>, 2013

# 3. Results of the Evaluation (Overall Rating: B<sup>1</sup>)

- 3.1 Relevance (Rating:  $3^2$ )
  - 3.1.1 Relevance with the Development Plan of Seychelles

The national development plan, Strategy 2017 (2007–2017), aimed to double Seychelles's GDP, prioritizing tourism and fisheries as the two major pillars of the economy. It also aimed to make Seychelles the major fish processing center of the Indian Ocean. In addition, the sector policy, Fisheries Policy (2005), aimed to promote sustainable fisheries and maximize benefits for present and future generations; it prioritized the development of new ports and the improvement of existing ports as one of its 10 priorities, which included infrastructure development.

Strategy 2017 (2007-2017) and the Fisheries Policy (2005) were still valid at the time of the project's completion, and their priorities remained unchanged. Therefore, the project was in line with the development plan and the sector plan in Seychelles—at both the time of the project's

<sup>&</sup>lt;sup>1</sup> A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

<sup>&</sup>lt;sup>2</sup> ③: High, ② Fair, ① Low

planning and its completion-and is judged to be relevant.

# 3.1.2 Relevance with the Development Needs of Seychelles

At the time of the project's planning, congestion at Victoria Port, resulting from a higher number of artisanal fishing ships, had increased the risk of collisions between ships. In addition, ships were not able to go fishing in a timely manner since the capacity to supply ice flakes at Victoria Port was not high enough to meet the increasing demands<sup>3</sup>. Congestion was further worsened by ships from other ports coming to Victoria Port to unload fish and obtain ice flakes due to a lack of quays and ice makers at their original ports. By seeking to ease congestion at Victoria Port and develop artisanal fisheries at Providence Port and Bel Ombre Port, the project, therefore, met the development needs at the time of planning and is judged to have been necessary.

At the time of the project's completion, congestion at Victoria Port had been eased by successfully diverting ships from Victoria Port to Providence Port and Bel Ombre Port. The number of ships using Providence Port and Bel Ombre Port was also increasing. However, Victoria Port still faced congestion—albeit less than before—since the number of ships newly using that port was also increasing. Therefore, the project was still meeting development needs at the time of completion and is judged to still be necessary.

#### 3.1.3 Relevance with Japan's ODA Policy

Before the implementation of the project, the Charter on Official Development Assistance (ODA) (2003) highlighted, as one of its four priorities, the importance of "infrastructure development and structure development" to promote sustainable growth. The Midterm Policy on ODA (2005), before the implementation of the project, highlighted the importance of "social and economic infrastructure development, including ports" as one of its four priorities. In addition, the basic policy on ODA for Seychelles (2008) emphasized that the Japanese government should assist the fishery industry so that Seychelles would not have to heavily depend on tourism, which is affected by changes in the external environment. The Japanese government has assisted the Seychelles government in developing the fishery industry for many years, as with the Project for Improvement of Victoria Artisanal Fishing Port (1997). Therefore, the project met Japan's ODA policy at the time of its planning and is judged to be relevant.

In conclusion, the project falls in line with the Seychelles development plan, with the country's development needs, and with Japan's ODA policy. Therefore, its relevance is high.

<sup>&</sup>lt;sup>3</sup> Ships need to put loads of ice flakes into storage before going fishing so they can keep the fish they catch fresh during their travels, which may span two to three days or longer.

# 3.2 Effectiveness<sup>4</sup> (Rating: ③)

3.2.1 Quantitative Effects (Operation and Effect Indicators)

[Easing congestion at Victoria Port and promoting Providence and Bel Ombre Ports]

Indicators (ships)	2008	2009	2010 (Plan)	2011	2012
Daily average number of ships mooring at Victoria Port	58	70	51 (40)	51	45
Daily average number of ships mooring at Providence Port	0	0	14 (12)	26	24
Daily average number of ships mooring at Bel Ombre Port	5	6	11 (11)	12	11

Table 1: Average number of ships mooring daily at Victoria Port, Providence Port, and Bel Ombre Port

Source: SFA

With the development of Providence and Bel Ombre Ports, the average number of ships mooring daily at Victoria Port after 2010 was lower than in 2008. This indicates that congestion at Victoria Port was eased. The figures after 2010 did not, however, reach the planned target of 40; this was because the number of newly registered ships using Victoria Port was greater than the number of ships that had been diverted from Victoria Port to Providence and Bel Omber Ports. But while the project intended to divert 18 ships (58– 40) from Victoria Port, it actually diverted 19 ships (70– 51).

With the development of Providence Port, it became possible for ships to obtain ice flakes there in addition to Victoria Port. Also, it became easier for ships to unload fish. As a result, the average number of ships mooring daily at Providence Port in 2010 was higher than planned. The figures after 2011 were even higher, which indicates that Providence Port was more promoted than before.

With the development of Bel Ombre Port, it became possible for ships to obtain ice flakes there as well. The average number of ships mooring daily at Bel Ombre Port in 2010 was the same as planned. The figures after 2011 were similar, indicating that Bel Ombre Port was more promoted than before.

Table 2. Comstons between ships at victoria 1 off						
Indicators (ships)	2008	2009	2010 (Plan)	2011	2012	
Collisions between ships at Victoria Port	0	0	0 (NA)	0	0	

Table 2: Collisions between ships at Victoria Port

Source: SFA

There is no difference in the number of collisions between ships before and after the project. There were no collisions at all between 2008 and 2012.

<sup>&</sup>lt;sup>4</sup> Subrating for effectiveness is to be put with consideration of impact.

Indicators (tons)	2008	2009	2010 (Plan)	2011	2012
Annual volume of catch at Providence Port	0	0	319 (273)	592	546
Annual volume of catch at Bel Ombre Port	254	306	447 (447)	470	447

Table 3: Annual volume of catch at Providence Port and Bel Ombre Port<sup>5</sup>

Source: SFA

The volume of catch at Providence Port in 2010 was higher than the planned figure of 273. The figures after 2011 were even higher, which indicates that Providence Port was more promoted than before. The volume of catch at Bel Ombre Port in 2010 was same as the planned figure of 447. The figures after 2011 were similar, indicating that Bel Ombre Port was more promoted than before.

# [Operation status of the installed ice makers]

Table 4: Daily average production of ice flakes at Providence Port and Bel Ombre Port

Indicators (tons)	2008	2009	2010 (Plan)	2011	2012
Daily average production of ice flakes at Providence Port	0	0	2.5 (10)	6.4	7.6
Daily average production of ice flakes at Bel Ombre Port	0	0	1.5 (6)	1.5	2.3

Source: SFA

The figure in 2010 at Providence Port was 25% of the planned figure. This was because fishermen obtained ice flakes at Victoria Port based on a contract with fish processing companies at Victoria Port. However, the figures after 2011 increased because fishermen did not need to have a contract with the companies to obtain ice flakes at Providence Port, and the usability of Providence Port improved in the sense that the number of fish processing companies there increased from two to four. In particular, the figure in 2012—76% of the planned target—is considered relatively high since the ice makers had to be stopped during holidays and regular maintenance and inspection periods.

The figures for 2010, 2011, and 2012 at Bel Ombre Port were 25%, 25%, and 38% of the planned figure, respectively. Since Seychelles became a multiple external debtor in 2008, the International Monetary Fund (IMF) initiated an economic reform of the county that resulted in a freeze on all government projects until 2011. During the implementation period of the project, the Ministry of Land Use and Habitat (MLUH), which owned almost half of the land of Bel Ombre Port, was making a land-use plan for Bel Ombre Port, but it was forced to stop. Consequently, the SFA—which was making an overall land-use plan for Bel Ombre Port, including a land-use plan by MLUH—was not able to run a high-voltage cable to Bel Ombre Port and had to use a

<sup>&</sup>lt;sup>5</sup> The SFA does not monitor the actual volume of catch. Therefore, the *ex post* evaluation study made a calculation using the same formula as B/D of multiplying the average volume of catch per ship (12.1 t for small-sized ships and 9.2 t for medium-sized ships) by the number of ships.

low-voltage cable to operate the ice makers<sup>6</sup>. Consequently, the SFA could not operate two ice makers simultaneously and had to take turns operating them<sup>7</sup>. According to a hotel owner who employs fishermen at Bel Ombre Port, the limited production of ice flakes at Bel Ombre Port prevents fishermen from going fishing and him from increasing the number of ships. Therefore, it would appear that Bel Ombre Port has more demand for ice flakes now, and the installation of a high-voltage cable—which will enable two ice makers to operate simultaneously—is expected to further promote Bel Ombre Port.

In summary, though the daily average production of ice flakes did not achieve the planned target, the project objective of easing congestion at Victoria Port and promoting Providence Port and Bel Ombre Port by diverting ships concentrated at Victoria Port to those two ports was achieved. Therefore, it is judged that the project has mostly realized its planned effects.

### 3.3 Impact

#### 3.3.1 Intended Impacts

[Job creation by increases in fish processing companies near Providence Port and economic impacts]

At the time of the ex post evaluation study, four sea cucumber processing companies were in operation around Providence Port. Two companies had already begun operations before the project, and another two began operations either during or after the project. Currently, another 16 fish processing companies have applied to register their establishments. In the beneficiary survey administered to the four sea cucumber processing companies, all answered that the project was contributing to smooth operations in the way that they were now easily able to obtain ice flakes and unload the fish they caught. In addition, the survey confirmed that the four companies had created 78 new jobs (68 fishermen and 10 company staff members) and that sales income was increasing (though detailed financial data were not disclosed). Furthermore, the ex post evaluation study confirmed that over 30 shops—such as restaurants, groceries, and banks—had been established near Providence Port for the convenience of people around the area. This indicates that the project has had an economic impact on the development of the area.

<sup>&</sup>lt;sup>6</sup> In June 2013, MLUH's land-use plan for Bel Ombre Port was approved by the cabinet and then a high-voltage cable was run to Bel Ombre Port.

<sup>&</sup>lt;sup>7</sup> Since the production capacity of one ice maker is three tons per day, the operation rate for the ice makers in 2010, 2011, and 2012 was 50%, 50%, and 77%, respectively. Since a high-voltage cable was run to Bel Ombre Port in June 2013, it is now possible to operate two ice makers simultaneously.



Sea cucumber processing company

Providence area

[Indirect impacts on related industries near Bel Ombre Port and job creation]

Although there is a plan to establish fish processing companies near Bel Ombre Port, none exists at the time of the ex post evaluation study. However, one fishing company has been operating since before the project, contracting fishermen to catch fish. The owner of the company serves the fish to guests staying at a hotel he operates; he also sells the fish at a local market. In the beneficiary survey administered to the fishing company, the owner of the company answered that the project was contributing to smooth operations in the way that it was now easily able to obtain ice flakes. It also answered, however, that the number of employees and sales income were unchanged. Furthermore, the ex post evaluation study confirmed that one grocery store was established near Bel Ombre Port in 2010 for the convenience of the people—fishermen in particular—around the area.



Fish sold at a local market

Grocery store

### 3.3.2 Other Impacts

The SFA has used soil excavated by the project at Providence Port for expanding the port, and there has been no report on marine pollution. The port is reclaimed land, and there has been neither land acquisition nor resettlement.

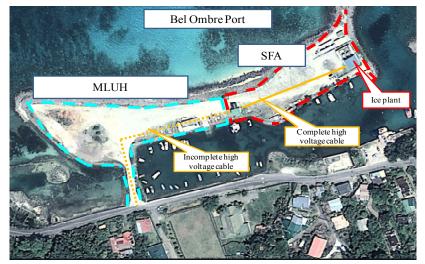
In light of the above, it is judged that while the impact on the Providence area is significant, the impact on Bel Ombre is not.

In conclusion, this project has largely achieved its objectives; therefore, its effectiveness is high.

# 3.4 Efficiency (Rating:①)

3.4.1 Project Outputs

	Table 5: Outputs
Planed Outputs	Actual Outputs
Providence Port	
Construction of a quay	Same as planned
Construction of artisanal fisheries	Same as planned
facilities (ice plant $\times$ 1; ice maker	
with a production capacity of 5	
tons/day $\times$ 2), administration building	
$\times$ 1, fish handling shed $\times$ 1, storage $\times$	
1, and bunkering lay-by $\times$ 1)	
Procurement of equipment (forklift ×	Same as planned
1, container for fish $\times$ 20, and	
container for ice $\times$ 1)	
Bel Ombre Port	
Construction of artisanal fisheries	An ice plant has been constructed. However, the Ministry of
facilities (ice plant $\times$ 1; ice maker	Land Use and Habitat (MLUH), which owned almost half of
with a production capacity of 3	the land in Bel Ombre Port, was forced to stop making a
$tons/day \times 2)$	land-use plan for Bel Ombre Port due to interventions by the
	IMF. Consequently, the SFA—which was making an overall
	land-use plan for Bel Ombre Port, including a land-use plan by
	MLUH—was not able to finish running a high-voltage cable to
	the ice plant at Bel Ombre Port. Therefore, the project is
	incomplete (see Picture 1 below).
Procurement of equipment (forklift $\times$	A forklift and a container for ice have been procured.
1 and container for ice $\times$ 1)	However, the SFA was not able to finish paving the roads in
	Bel Ombre Port due to the reason mentioned above. Therefore,
	the project is incomplete.



Picture 1: Bel Ombre Port

# 3.4.2 Project Inputs

# 3.4.2.1 Project Cost

# [Japanese side]

While the planned project cost was 1,089 million yen, the actual cost was 1,088 million yen. Therefore, the project fell within the planned costs.

#### Seychelles side

While the planned project cost was SR 2,859,000 (approximately 51 million yen), the actual cost was SR 11,849,000 (approximately 211 million yen). The construction costs for utilities and fuel tanks quadrupled due to the devaluation of the SR<sup>8</sup> resulting from new introduction of the floating exchange rate system imposed by the IMF. In addition, a fuel tank required reconstruction due to cyclone damage, though the degree of cost overrun was not as high as the devaluation.

In summary, the actual cost on the Japanese side was within the plan. However, while the planned total cost of the combined Japanese and Seychelles sides was 1,140 million yen, the actual total cost became 1,299 million yen; this was slightly higher than planned (114% of the planned total cost) and was due to the 414% cost overrun on the Seychelles side.

#### 3.4.2.2 Project Period

While the planned project period was 18 months (July 2008 to December 2009), the actual period was 20 months (July 2008 to February 2010). Detailed design and construction took six months and twelve months, respectively, as planned. However, land development that involved cutting trees and paving roads, which was necessary before starting construction, took an additional two months, resulting in a two-month delay.

In summary, the actual project period was slightly longer than planned (111% of the planned period). In addition, the outputs of running a high-voltage cable and paving the roads at Bel Ombre Port, for which the Seychelles side was responsible, are incomplete and will be realized after approval by the cabinet.

In conclusion, the actual project cost was slightly higher than planned. The actual project period, for which the Japanese side was responsible, was slightly longer than planned. The outputs for which the Seychelles side was responsible are still incomplete and experiencing significant delays. Therefore, efficiency is low.

<sup>&</sup>lt;sup>8</sup> USD 1 was equivalent to SR 5 at the time of the project planning, while USD 1 was equivalent to SR 15-17 at the time of construction.

#### 3.5 Sustainability (Rating: ③)

# 3.5.1 Institutional Aspects of Operation and Maintenance

In Providence Port, there are one port manager, one assistant port manager, one pier master, two ice plant operators, one maintenance manager, one cleaner, and two security guards. The planned activities of selling ice, transporting fish, driving a forklift, and operating gas/water facilities are done by the pier master and ice plant operators due to higher cost efficiency. Similarly, the SFA monitors the activities of illegal operations by dispatching enforcement officers from its headquarters due to higher cost efficiency. Meanwhile, the SFA does not deploy research officers who measure the size of fish and take fishery statistics to Providence Port. Therefore, the institutional aspects of operation and maintenance are not perfect. However, this is not a significant issue since it does not prevent the project from sustaining its effects.

In Bel Ombre Port, there is one port manager (who holds the same post in Providence Port), one ice plant operator, and one security guard. Since there is no forklift, there is no forklift driver. However, once the roads are paved and a forklift is deployed in Bel Ombre Port, the ice plant operator will drive the forklift as he does in Providence Port.

In summary, there are no problems with the institutional aspects of operation and maintenance.

### 3.5.2 Technical Aspects of Operation and Maintenance

The SFA operates and maintains quays, facilities, and equipment for over 20 ports in Seychelles using its technical staff and external maintenance companies. It effectively operates and maintains the quays, facilities, and equipment that the project developed. It also provides its staff with national and international training on fisheries in short terms and scholarship training in long terms. In 2011, it sent its staff for leadership training on fishery management held by the University of Kagoshima; it also sent staff for training on coastal fishery management held by JICA. It continuously provides its staff with training every year; therefore, there is no problem with the technical aspect. The Basic Design Study and Implementation Review Study for the project selected appropriate construction methods adjusted to the regional environment and tried to procure as many materials as possible in Seychelles. Since the project was implemented with a perspective of sustainability, no particular skills and techniques are needed to operate and maintain the quays, facilities, and equipment that the project developed.

In summary, the SFA has sufficient technical capability to operate and maintain the quays, facilities, and equipment that the project developed, and it continuously provides its staff with training. Therefore, there is no problem with the technical aspects of operation and maintenance.

#### 3.5.3 Financial Aspects of Operation and Maintenance

The Seychelles government provided the SFA with funds to partially cover its budget until 2009 and from 2010 provided funds to cover all of its budget. Therefore, the net balance for the past three years, including other revenues from renting ships and selling ice, is positive (Table 6). Therefore, there is no problem with the financial aspects of operation and maintenance.

Year	2009	2010	2011	2012		
Government fund	2,550	35,578	23,654	32,706		
Other revenues	11,021	20,766	9,384	12,913		
Total revenues (1)	13,571	56,344	33,038	45,619		
Personnel expenses	3,394	8,734	11,194	16,191		
Office expenses	4,400	3,773	5,945	8,187		
Maintenance expenses	1,436	1,128	1,700	1,649		
Travel expenses	1,120	3,557	1,104	1,132		
Research expenses	2,703	17,513	83	69		
Other expenses	1,063	737	3,628	5,478		
Total expenses (2)	14,116	35,442	23,654	32,706		
Net balance (1)-(2)	-545	20,902	9,384	12,913		

Table 6: Profit and Loss Sheet for the SFA

Source: SFA

#### 3.5.4 Current Status of Operation and Maintenance

At the time of the ex post evaluation study, Providence Port was well operated and maintained. Although the floor of the cold store is damaged, the SFA plans to repair it by the end of June 2013 and resume operating it. Other facilities are well operated and maintained. One forklift procured for Bel Ombre Port is now in use in Providence Port, but other equipment are well operated and maintained.

Since a high-voltage cable was run to Bel Ombre Port in June 2013, the SFA is now able to operate two ice makers simultaneously and they are fully operational. Since the roads are not yet paved in Bel Ombre Port, a forklift procured for Bel Ombre Port is still in use in Providence Port. However, the SFA plans to deploy it to Bel Ombre Port once the roads are paved. The SFA also checks the operation status of facilities and equipment and takes appropriate measures, if necessary, by carrying out maintenance activities on a monthly and biannual basis

In summary, the facilities constructed and equipment procured by the project are well operated and maintained.

In conclusion, no major problems have been observed in the operation and maintenance system; therefore, sustainability of the project's effects is high.

### 4. Conclusion, Lessons Learned, and Recommendations

#### 4.1 Conclusion

This project intended to ease congestion at Victoria Port by constructing artisanal fisheries facilities at Providence Port and Bel Ombre Port. The objective of the project was in line with the development policies and needs of Seychelles as well as the development policies of Japan. The project successfully achieved the objective of easing congestion at Victoria Port by diverting artisanal fishing ships concentrated at Victoria Port to Providence Port and Bel Ombre Port, and developing the Victoria and Bel Ombre ports. In addition, the project has created jobs and developed the regions around the ports. Therefore, the effectiveness and impacts of the project are high. Since the project cost and project is low. However, there are no problems with the organizational, technical, and financial aspects of the SFA; therefore, the sustainability of the project's effects is high.

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

#### 4.2 Recommendations

4.2.1 Recommendations to the Executing Agency

# [Providence Port]

The SFA should repair the floor of the cold store as soon as possible.

#### [Bel Ombre Port]

Since a high-voltage cable was run to Bel Ombre Port, the SFA is now able to operate two ice makers simultaneously. However, since the roads are not yet paved, the SFA still cannot deploy a forklift. And as soon as the roads are paved, the SFA should deploy the forklift that is now in use in Providence Port to Bel Ombre Port.

#### 4.2.2 Recommendations to JICA

The JICA should monitor the situation related to pavement of the roads in Bel Ombre Port; it should then follow the activities of the SFA after approval.

#### 4.3 Lessons Learned

The SFA was not able to develop outputs as planned since the land owned by the MLUH was not available to the SFA, which resulted in significant delays to the project. Therefore, when a project presumes the use of lands owned by another entity for its implementation, it is essential to have sufficient coordination and arrangements with the entity well in advance.