FY2021 Simplified Ex-Post Evaluation Report of Japanese Grant Aid Project

External Evaluator: Keisuke Nishikawa, QUNIE CORPORATION Duration of the Study: November 2021 - January 2023 Duration of the Field Study: None (remotely conducted)

Country NameThe Project for Enhancement of Safety of Apia PortIndependent State of SamoaThe Project for Enhancement of Safety of Apia Port





Location of the project site (Source: External Evaluator)

New wharf developed in this project and a cargo vessel in berthing (Source: External Evaluator)

I. Project Outline

Background	Samoa is an island nation located almost in the center of the South Pacific, and its geographical conditions make it heavily dependent on maritime transportation for both its people's livelihood and economic activities. Apia Port, located in the capital, serves as the country's most important international port. In 1966, a 185-meter-long wharf (the old wharf) was constructed with support from New Zealand. However, problems such as load restriction due to aging and increased offshore waiting time due to an increase in the number of vessels have arisen. In response to these problems, a new 165-meter-long wharf was constructed (in 2001) under Japan's grant aid project, "The Project for the Second Development of Apia Port." However, in addition to the aging of the old wharf and two tugboats, the recent increase in the size of vessels led to the arrival of large 290-meter cruise ships, which far exceeded the length of the new wharf and the old wharf, threatening the safety of vessels when entering, leaving, and mooring. In addition, when cruise ships called at the port, cargoes and passengers were mixed in the narrow space behind the wharf, and ensuring passenger safety was also an issue.						
Objectives of the Project	The objective of the project is to improve the safety of incoming and outgoing vessels, port operations and passengers by rehabilitating port facilities and upgrading tugboats at Apia Port, thereby contributing to the strengthening of the maritime transport sector, which is essential for Samoa's economic growth.						
Contents of the Project	 Project Site: Apia Port, Mat Japanese side [Civil engineering plan) Facility Wharf Container yard Fender Mooring facility Separation of cargo and passenger traffic Navigation aids Equipment Tug boat Samoan side: 	tautu-tai, Apia works and procurement of equipment] (Actual results in the table. Some changes from th Details Extension of new wharf (137 m), Depth 11 m New pavement: 1,970 m², Total area repaired: 23,000 m² Existing wharf area: 15 units, New wharf area: 13 units Installation of seven 70-tonne mooring pillars and one 100-tonne mooring dolphin on the extended pier Walkway: 1.5 m-wide, approximately 50 m-long Mobile fence: 1.85 m-high, 70 m-long Repair and renewal of navigation signs (five buoys and existing leading lights) Details Restoration (two vessels (MV Tafola and MV Atafa). Hull repair, engine maintenance and repair work of navigation equipment)					
	Obtaining environmental and construction permits, securing of temporary yard, change of use of oil tank (from oil to water) and rehabilitation of access road						

Implementation	E/N Date	June 22, 2015	Disbursement Date				
Schedule	G/A Date	June 22, 2015	Completion Date	June 27, 2018			
Project Cost	E/N Grant Limit / G/A Grant Limit: 3,477 million yen Actual Grant Amount: 3,315 million yen						
Executing Agency	Samoa Ports Authority (hereinafter referred to as "SPA")						
	Main Contractor: Wakachiku Construction Co., Ltd.						
Contracted Agencies	Main Consultant: Oriental Consultants Global Co., Ltd.						
	Agent: None						

II. Result of the Evaluation

Summary

This project aimed to improve the safety of vessels entering and leaving the port and the safety of port operations and passengers by developing port facilities and rehabilitating tugboats at Apia Port, thereby contributing to strengthening the infrastructure of the maritime transport sector, which is important for Samoa's economic growth. It was confirmed that this project was consistent with Samoa's development policy and development needs at the time of planning. Although there were no JICA-related projects during the planning and implementation period of this project and the effects of collaboration between JICA and projects supported by other organizations were not generated at the time of ex-post evaluation, this project was consistent with Japan's ODA policy at the time of planning. Therefore, the overall relevance and coherence of this project is high. The implementation of the project was generally as planned, with minor changes. In addition, both the project cost and project duration for the implementation of the project were within the plan, and the efficiency of the project can be said to be very high.

With regard to project effects, it was confirmed that all quantitative effects envisaged at the time of planning were achieved, and that port users' evaluations of safety were also high. It was also observed that although cruise ships no longer visited the port due to border blockade measures following the global spread of the new coronavirus infection, Apia Port played a sufficient role in supporting the increased cargo handling operations. There were no negative impacts on the natural environment, no resettlement or land acquisition associated with the implementation of the project, and no negative impacts on gender aspects, on the marginalized people, and on social systems, norms and people's well-being. As a whole, the effectiveness and impacts of the project are high.

Regarding sustainability, in terms of policy and systems, the importance of infrastructure development and management was mentioned in various plans, and it was confirmed that the executing agency has been positioned as the agency responsible for port management. Sufficient staff members have been allocated to operate and maintain the facilities and equipment developed, the technical capacity required to implement maintenance has been ensured, and necessary repairs have generally been carried out. There are no financial challenges, with record profits, and the maintenance costs have been adequately allocated. Therefore, the overall sustainability of the generated project effects is high.

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

Overall Rating ¹	Α	Relevance &	(3 ²	Effectiveness & Impacts	3	Efficiency	4	Sustainability	3
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<Special Perspectives Considered in the Ex-Post Evaluation/Constraints of the Ex-post Evaluation>

In the ex-post evaluation of this project, it was envisaged that the evaluator would travel to Samoa to conduct a field survey, but due to the difficulties in entering Samoa following the global spread of the new coronavirus infection, information was collected remotely from the executing agency and the site survey was conducted by the local assistant. The evaluator himself was unable to check the facilities and equipment directly, and consultations with various stakeholders and beneficiaries were inadequate in some respects, so the evaluation judgement was made based on the information that could be obtained.

1 Relevance/Coherence

<Relevance>

· Consistency with the Development Policy of Samoa at the Time of Ex-Ante Evaluation

The national development plan at the time of ex-ante evaluation of the project was the *Strategy for the Development of Samoa (SDS)* (2012-2016). One of the priority areas of the plan was infrastructure development, with the goal of establishing "efficient, safe and sustainable transport system and networks." With regard to infrastructure development, the *Samoa National Infrastructure Strategic Plan* was developed

¹ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

² ④: Very High ③: High, ②: Moderately low, ①: Low

in 2011. Regarding the port sector, the strategic direction was to meet the needs of international maritime cargo. Specifically, international port facilities were to be improved in a phased manner. Also effective at the sector level was the *Transport Sector Plan* (2013-2018), which listed "Improve effectiveness, safety, security and competitiveness of maritime services" as one of the Plan's five goals. It stated there that the plan would improve safety and security systems and compliance in all ports and maritime-related services, and included improving the operational efficiency of SPA, the executing agency.

Based on the above, it can be said that the project was in line with the Samoan Government's policy as it provided efficient and safe infrastructure development at Apia Port, a nexus point for maritime and land transport.

· Consistency with the Development Needs of Samoa at the Time of Ex-Ante Evaluation

Apia Port had a wharf that was built in 1966, but to cope with its aging and the increased offshore waiting time for vessels, a new wharf (165 m-long, 11 m-deep) was built on an adjacent plot under the Japanese grant aid "The Project for the Second Development of Apia Port" (2001). However, further deterioration of the old wharf, aging of the tugboats and the arrival of large cruise ships (290 m class), which far exceeded the length of the new and old wharves, threatened the safety of ships when entering, leaving and mooring at the port. In addition, when cruise ships called at the port, cargo and passengers were mixed in the narrow space behind the wharf, and ensuring passenger safety was also an issue. This project is judged to have met these needs, as it aimed to improve the safety of vessels entering and leaving Apia Port, as well as the safety of operations in the port and passengers, through the rehabilitation of port facilities and tugboats.

· Appropriateness of Project Design/Approach

Prior to the implementation of this project, JICA had implemented "The Project for the Development of Apia Port" (1988), "The Project for Construction of a Tugboat for Apia Port" (2000) and "The Project for the Second Development of Apia Port" (2001) (all grant aid) in the maritime infrastructure sector in Samoa. The steady progress in the development of Apia Port through these projects provided the basis for the planning and implementation of this project. In particular, the project extended the wharf by a further 137 m, building on the achievements of the 165 m wharf under "The Project for the Second Development of Apia Port". This produced the outcome that the wharf became able to safely accommodate the visits of cruise ships, which had become larger in recent years. The repair of tug boats built under "The Project for Construction of a Tugboat for Apia Port" was also included in the component of this project. In these respects, it can be said that this project was appropriately implemented based on the previous aid projects.

<Coherence>

Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation

In the Okinawa Kizuna Declaration adopted at the sixth meeting of the Pacific Islands Leaders Meeting (2012), a summit meeting held every three years since 1997 between Japan and the Pacific island countries, the importance of good infrastructure in ensuring a reliable transport network was stressed. The "JICA Country Analysis Paper for the Pacific Region" also positions "strengthening the infrastructure for economic activities/maintaining lifelines" as a priority area, as the maritime infrastructure is an essential lifeline for the economic activities and daily lives of the islanders. Furthermore, Japan's Country Assistance Policy for Samoa sets "overcoming vulnerability" as a medium-term objective, and support for maritime transport, which forms the basis of economic activities and social life, was mentioned.

Based on the above, it can be said that this project was in line with these development cooperation policies for the Pacific region and Samoa.

Internal Coherence

No other JICA projects were being planned or implemented at the time this project was planned and implemented. Therefore, no linkage between JICA projects was envisaged, and no particular internal consistency was identified.

External Coherence

At the time of project planning, there were no other projects expected to be linked to this project, but around the time the decision was made to implement this project, the Asian Development Bank (ADB) planned the Enhancing Safety, Security and Sustainability of the Apia Port Project (hereinafter referred to as "ESSSAP") (Project cost: US\$ 62 million; Project period: 2019-2024), and the construction work started in 2019 after the completion of this project. That project includes the rehabilitation of the breakwater, the installation of a reefer container power supply system, the installation of additional lighting throughout the port, the construction of a maintenance workshop, and the construction of a new tugboat at Apia Port, which is expected to further improve the safety of the port. In addition, New Zealand has been supporting the development of the coast in the Apia urban area under the Apia Waterfront Development Plan since the mid-2010s. Although there are no direct synergistic effects with this project, it is expected to benefit cruise ship passengers in the tourism sector, such as walking along the coast.

<Evaluation Result>

In light of the above, the relevance and coherence of the project are high³.

2 Effectiveness/Impacts⁴

<Effectiveness>

(Quantitative Effects)

The following four indicators were assumed to be used to measure the quantitative effects of this project, and the degree of achievement

³ Relevance: ③, Coherence: ②

⁴ When providing the sub-rating, Effectiveness and Impacts are to be considered together.

of each indicator was as follows.

(Indicator 1) The existing wharf (165 m) and the new wharf (137 m) were made available in an integrated manner through the implementation of this project, resulting in a wharf extended to 302 m. No cruise ships exceeding the length of the newly extended wharf have visited, and it can be said that the improved wharf is sufficiently meeting the demand⁵.

(Indicator 2) It was confirmed that due to the proper installation of fenders, there have been no collisions between the wharf concrete and vessels and no damage to the vessels' hulls.

(Indicator 3) When cruise ships arrive, a passenger walkway is provided to the entrance of the port site, and it was confirmed that the lines of flow between passengers and cargoes are sufficiently separated.

(Indicator 4) The navigation aids (beacons and lights) were installed in such a way that they perform as planned, and as a result, the distance to identify the harbor entrance from vessels is sufficiently secured, leading to the achievement of the targeted values.

Quantitative Effects

Indicators	Baseline 2014 Planned Year	Target 2021 3 Years after Completion	Actual 2019 1 Year after Completion	Actual 2020 2 Years after Completion	Actual 2021 3 Years after Completion
Indicator 1 Wharf length against cruise ship: Rate of the ships where more than 30 % of the lengths overall overhanging beyond the wharf length while berthing	58.3%	0%	0%	0%	0%
Indicator 2 Accidents due to insufficient fenders: Damage to ship's hull by hitting the wharf concrete	1-2 times	0 times	0 times	0 times	0 times
Indicator 3 Separation of passenger and cargo flows: Separation rate of passengers and cargoes by mobile fences on the trestle	0%	100%	100%	100%	100%
Indicator 4 Navigation aids: Visible distance of harbor entrance from the ship at sea (from the height 10 m above sea surface on a sunny day)	Daytime: 12.2 km Night time: less thar 1.9 km	Daytime: 20.7 km Night time: 10.9 km	Daytime: 20.7 km Night time: 10.9 km	Daytime: 20.7 km Night time: 10.9 km	Daytime: 20.7 km Night time: 10.9 km

Source: Project Ex-ante Evaluation Report, Response to the questionnaire

(Qualitative Effects)

As the qualitative effects of this project, it was assumed that (1) port users' satisfaction would increase and (2) the environment for port calls by cruise ships would improve. In particular, the following were listed as the indicators for measuring the improvement of satisfaction in (1).

a. Complaints from shipping companies (several complaints per year at the time of planning) due to inadequate wharf fenders would be eliminated.

b. The evaluation of safety by port users, such as seafarers and the staff of ship agencies would improve.

Regarding (1), according to the executing agency, there have been no complaints at all regarding the fenders since the wharf was put into service in June 2018. SPA also noted that port users' satisfaction with the extended wharf and expanded container yard has increased, and that quarterly meetings between port users and SPA executives have elicited positive responses regarding the improved facilities. According to interviews with port users during the ex-post evaluation survey, port safety has improved significantly, and port users expressed that they had no safety concerns since the completion of the project. In addition, while only one vessel could berth before the project was implemented, after completion, two cargo vessels can berth at the same time, making the schedule more efficient. As a whole, the improvement of the facility has been highly evaluated, as there have been no more ship collisions with the wharf and no more complaints.

As for (2) the improvement of the environment for cruise ship calls, the wharf was extended to 302 m after the completion of the project, which facilitated the berthing of cruise ships over 200 m in length, which would have exceeded the existing wharf before the project was implemented. As a result, the wharf is now able to accommodate larger vessels than before.

Based on the above, both quantitative and qualitative effects have been generated as expected at the time of planning.

<Impacts>

(1) Intended Impacts

The expected impact of this project was that "the current status of Apia Port would be improved, cargo handling operations and users would increase, and economic activities associated with port activities and cruise ship tourism would become more vibrant."

The number of vessel calls, gross tonnage, and number of containers handled at the Port of Apia are shown in the table below (the number of users was unknown).

⁵ Judged from the data up to FY 2019/20, as no cruise ships visited the port after March 2020 due to the global spread of new coronavirus infection.

Key Data of Apia Port								
	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	
Total number of vessels calling at port (number of vessels)	365	472	528	525	621	637	403	
of which, container ships	131	123	145	154	169	148	125	
of which, cruise ships	15	16	14	5	17	2	0	
of which, fishing vessels	54	222	240	220	240	292	200	
Gross registered tonnage (thousand tons)	2,692	2,898	2,997	2,439	3,673	2,499	1,899	
Number of containers (TEU)	32,387	34,588	34,950	37,091	42,102	41,200	43,933	

Note 1: "Fiscal year" is from July to June of the following year

Note 2: In FY 2017/18, the number of cruise ships calling at the port temporarily decreased significantly, but this is due to scheduling adjustments associated with the construction in this project.

Note 3: In addition to the container, cruise, and fishing vessels listed in the table above, other vessels calling at the port include general cargo ships, fuel tankers, gas carriers, and research vessels.

Source: SPA Annual Report, various years

As a result of the ban on the entry of cruise ships due to the global spread of the new coronavirus, the number of cruise ships calling at the port has drastically decreased since FY 2019/20. In addition, container ships and fishing vessels were not allowed to disembark their crews, and the Ministry of Health checked each vessel for new coronavirus when they arrived at the port. As a result, the total number of vessels calling at the port in FY 2020/21 was significantly reduced by 37% compared to the previous year. However, in terms of cargo transport, the number of containers handled per vessel increased and the overall number of containers (TEUs) reached a record high, as shipping companies changed their transport routes throughout the region and began to use Apia Port more as a transshipment port for cargo.

Although the port has not contributed to the tourism industry as cruise ships no longer visit the port due to the new coronavirus, cargo handling operations increased compared to before the project was implemented, and as the only international port in Samoa, the port is supporting import activities in particular. As a result of the improvement of Apia Port, through the increase in handling capacity and actual volume handled, it is considered that the project has greatly contributed to the activation of economic activities through the revitalization of logistics.

The number of cruise ship users (passengers) has dropped to zero due to the new coronavirus, but this should be viewed as a force majeure that could not be anticipated at the time of project planning.

(2) Other Positive and Negative Impacts

1) Impact on the Natural Environment

The guideline for environmental and social considerations applied to this project is the "JICA Guidelines for Environmental and Social Considerations" (2010), with the environmental category of "B." In order to implement the project, it was necessary to conduct an Environmental Impact Assessment (EIA) and obtain a permit from the Planning and Urban Management Agency of the Ministry of Natural Resources and Environment. The permit was obtained prior to the commencement of the project and no special compliance requirements were set. During the project implementation, measures were taken as planned for air quality, wastewater, water quality, noise and vibration, and no specific negative environmental impacts were observed during the construction. During the construction, an engineer hired by the project, in coordination with SPA, monitored and recorded water quality, seabed pollution, noise and vibration. According to SPA, no negative impacts on the natural environment occurred even after the project was completed, and no problems were found as a whole. 2) Resettlement and Land Acquisition

As this project was implemented entirely within the existing port site, no resettlement or land acquisition occurred.

3) Response to Gender Equality, Marginalized People and Human Rights

All exports and imports in Samoa are conducted through Apia Port, the only gateway for international trade, which handles all commodities. In this regard, this project plays a role that benefits all Samoan residents, and it is considered that no people have been disadvantaged as a result of the implementation of this project.

4) Social Systems, Norms and Human Well-being

For shipping companies, the extension of the wharf made it possible for them to berth two vessels, while only one vessel was able to berth before the project. This has made it easier to adjust the port call schedule and has eliminated the increase in transportation costs caused by vessels waiting offshore. This project is considered to have improved convenience by widely meeting the needs of Samoan citizens for a range of goods through the realization of smooth importation of goods.

<Evaluation Result>

Therefore, the planned effects were generated through the implementation of this project, and the effectiveness and impacts of the project are high.

3 Efficiency

(1) Project Outputs

The output of this project is described in "I. Project Outline, Contents of the Project" above, and although several minor changes were made to the plan, the facilities and equipment were generally implemented as planned as a whole. The major changes were as follows.

Changes to the placement and extension of pile driving for the new pier, and changes in the number of fenders removed and installed (due to softer-than-expected ground conditions)

- Change in the quantity of fenders removed and installed at the existing wharf

- Installation of mooring dolphins (due to softer-than-expected ground conditions)

- Repair of navigation aids (replacement of three pile-foundation type with floating light beacons)

- Tugboats: 28 changes made on both vessels, including changes to hull fenders and additional replacement of engine operating levers

As described above, although several changes were made to the output of this project, the executing agency and the project consultant confirmed that these changes were necessary to ensure and improve safety and did not impair the effectiveness of the project. Therefore, it is judged that there were no problems with these changes.

The items to be borne by the Samoan side were implemented as planned, and the site survey by the field survey assistant confirmed that they were actually implemented.

(2) Project Cost

The Japanese side's project cost was 3,315 million yen (2,858 million yen for construction, 280 million yen for equipment, and 177 million yen for design and supervision), which was within the plan (95% of the plan). The exact amount of the Samoan side's project cost was unknown, but according to the executing agency, it was less than the planned amount of 230,000 tala (less than 10 million yen when converted to yen at the average rate for the project period). Therefore, although the total project cost of the project could not be accurately ascertained, it is judged to have been within the plan.

(3) Project Period

The project period was from June 2015 (signing of G/A) to June 2018 (completion of construction), implemented in 37 months as planned (100% of the plan). In addition, it was confirmed that the items borne by the Samoan side were also implemented within the project period.

<Evaluation Result>

Based on the above, both the project cost and period are within the plan. Therefore, the efficiency of the project is very high.

4 Sustainability

Policy/Systems

In Samoa, a long-term development plan, *Samoa 2040*, was announced in 2021 and emphasizes investment in resilient infrastructure to support economic and social development. In addition, Apia Port is heavily used and needs to be expanded in the long term. The shorter-term national development plan *Pathway for the Development of Samoa* (FY 2021/22 - FY 2025/26) identifies "Structured public works and infrastructure" as one of the key strategic outcomes, with "Integrated Infrastructure Management" as a key priority area. In addition, the *Samoa National Infrastructure Strategic Plan* (2011) and the Executing Agency's Corporate Plan (FY 2020/21 - FY 2023/24) remain in effect. Also, SPA is responsible for port management under the Port Authority Act (1998). Therefore, the sustainability in the aspect of policy and systems is high.

Institutional/Organizational Aspect

The SPA continues to be the executing agency for the project. SPA owns land, port facilities, buildings, and equipment related to the port, including Apia Port, and is responsible for the management and operation of the ports in Samoa. At the time of ex-post evaluation, SPA consists of seven divisions (Maritime, Port Operations, Audit, Legal, Finance, Corporate Services divisions and General Manager's Office) with a total of 137 staff members. Of these, the port facilities are operated and maintained by the maintenance section of the Port Operations Division (6 staff members), and the tugboats are operated and maintained by the Maritime Division (24 staff). The number of staff is sufficient and civil engineers have been secured. According to SPA, it is desirable to secure a staff member with expertise in marine engineering, but it continues to be difficult to secure appropriate personnel in Samoa in a short time.

Sufficient human resources have been secured for the maintenance of the project facilities and equipment. It was confirmed that civil engineers have also been secured, and as a whole, there are no major issues in terms of the institutional and organizational aspects.

Technical Aspect

The staff members in charge of port operation and maintenance are qualified in the field of engineering and have, on average, more than 10 years of work experience. While it can be said that the technical skills necessary to take on the operation and maintenance have been secured, there is a need to constantly improve their skills and qualifications as new technologies and international standards are introduced one after another. For this reason, SPA has been training and qualifying senior pilots by having them attend training at New Zealand educational institutions as needed. In addition, a training needs analysis survey is conducted annually and a mechanism to determine the skills needed for the staff has been established.

Therefore, it is judged that the technical capacity to sustain the effects of this project has been equipped.

Financial Aspect

SPA's financial situation was confirmed to be very stable. In FY 2020/21, the number of vessels calling at the port decreased, but the volume handled per vessel increased, resulting in the highest profit since SPA's inception in 1999. SPA expects to generate similarly high profits also in FY 2021/22. Although the amount of repair and maintenance expenditures was less than the amount assumed at the time of planning, it is believed that the necessary amount has been spent, since sufficient maintenance activities have been carried out and there are no problems with the maintenance status, as described below.

SPA's Operating Balance								
(Unit: thousand t								
	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21			
Revenue	18,319	16,406	21,015	21,065	24,092			
Operating Income	11,080	10,023	13,084	12,843	14,701			
Deferred Revenue Amortized	1,923	1,923	3,219	3,174	3,196			
Recoveries	2,719	2,877	2,738	2,846	3,713			
Others	2,597	1,583	1,974	2,202	2,482			
Expenditure	11,333	10,734	12,327	13,467	14,999			
Operating Costs	2,448	2,659	2,888	3,071	2,697			
Of which, Repair and Maintenance	163	238	182	129	235			
Personnel Costs	3,826	3,520	3,831	4,112	4,504			
Depreciation	3,584	3,829	4,972	4,931	4,794			
Others	1,475	726	636	1,353	3,004			
Operating Balance	6,985	5,672	8,688	7,599	9,094			

Note 1: Fiscal year is from July to June of the following year.

Note 2: Recoveries: Electricity costs and labor costs for vessel operations in the port are temporarily advanced by SPA, which later collects them from shipping companies and agents. This refers to the collected fees.

Source: SPA Annual Report (various years)

SPA has established a maintenance fund through the ADB-assisted ESSSAP to prepare for future maintenance of port facilities and other assets. The financial sustainability of SPA is considered to be sufficiently secured for the future.

Social and Environmental Aspect

As described above, it was confirmed that there were no specific negative impacts on the natural environment, but the executing agency has not conducted any periodic environmental monitoring since the completion of the project. In the ESSSAP underway at the time of expost evaluation, an initiative to make the port more environmentally friendly (Greenport Initiative) has been initiated, and a safety officer to work on this initiative is to be appointed.

Preventative Measures to Risks

A part of the old pier, which is more than 50 years old, does not have sufficient strength and has been subject to weight restrictions during cargo handling operations. This part of the pier is not accessible to heavy machinery or fully loaded containers and is used only for storing empty containers. This problem is expected to be resolved as it is going to be rehabilitated in the ESSSAP

Current Status of Operation and Maintenance

All the facilities and equipment developed under the project are being utilized, and a system is in place for the maintenance personnel to constantly check the status of the port. Regarding the operation and maintenance of port facilities, the Port Operations Division was in the process of formulating a new manual at the time of the ex-post evaluation. With regard to the tugboats, it was confirmed that monthly, quarterly, and annual maintenance work was being conducted and records were being kept. Procurement of the parts for the tugboats has been generally done without any issues, but the gearbox of the MV Tafola, which is over 30 years old, is not replaceable due to the absence of a matching replacement. Considering the vessel's age, there should be no port safety issues if the vessel can be utilized while undergoing repairs until a new one is built under the ESSSAP (one new tugboat is scheduled to be built under the ESSSAP). Therefore, as a whole, the operation and maintenance of the port is generally adequate while addressing minor issues.

<Evaluation Result>

Therefore, the sustainability of the project effects is high.

III. Recommendations & Lessons Learned

Recommendations to Executing Agency

Through the implementation of this project, urgent issues in terms of safety assurance and efficient operations at Apia Port were resolved. The remaining issue of strengthening the safety of the old pier will be improved through the ESSSAP, and once the project is completed, it will be possible to operate the port efficiently and safely in the future while fully meeting Samoa's import/export demand. Therefore, ensuring the completion of the ESSSAP and implementing appropriate inspections, repairs, etc., by utilizing the maintenance fund are considered important to further enhance the effects of the project and to underpin international trade in Samoa. In addition, when cruise ship operations are resumed and cruise ship passengers begin to arrive, it is important to ensure the safety of passengers by separating the traffic flows as thoroughly as before.

Recommendations to JICA

None.

Lessons Learned

Identification of issues and precise project planning through long-term assistance for the entire sector

This project was implemented to further improve the safety of Apia Port. Through the implementation of this project, it became possible to accommodate larger cruise ships, the safety of berthing and unberthing of vessels improved, and the efficiency and safety of cargo handling operations improved through the construction and repair of container yards, enabling Apia Port to function smoothly as an international port. This project was implemented on the basis of grant aid projects that provided port facilities and tugboats in the past, and it can be said that these cooperation projects as a whole have led to the securing of efficiency and safety at Apia Port, and realized the facilitation of trade activities. This is a particularly good example of how cooperation that was concentrated over many years on the country's most important ports has come to function as a whole. In addition, although no specific medium- to long-term plan was formulated, the short-term measures taken to improve safety through the JICA-assisted project and the subsequent medium- to long-term improvements through the ADB-assisted ESSSAP are also highly commendable efforts.

In this way, this project is characterized by the fact that it was planned and implemented based on the accurate understandings of the issues related to port development through the past cooperation, and it showed a high degree of project effectiveness. Therefore, in formulating similar projects in the port sector in the future, regardless of whether Japanese assistance was provided in the past or not, it is important to fully analyze the content, results, and challenges of past projects in the target port, and to provide intensive assistance tailored to the challenges from a short-term, medium- to long-term perspective in order to fully realize the project effects.

IV. Non-Score Criteria

Performance (Objective Perspective)

JICA provided appropriate project supervision from the time of planning to the time of completion to ensure smooth implementation of the project, which resolved safety issues at Apia Port, the only international port in Samoa, and achieved safety in vessel berthing and unberthing, cargo handling, and passenger movement. The project consultant/contractor also held regular progress report meetings with the executing agency and smoothly responded to the need for various changes, resulting in the completion of the project as planned.



New wharf developed in this project (Source: Taken by the Local Associate)



Two tug boats rehabilitated in this project (Source: Taken by the Local Associate)