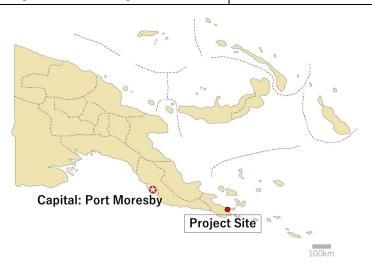
External Evaluator: Keisuke Nishikawa, Octavia Japan Co., Ltd. Duration of the Study: November 2022 – January 2024 Duration of the Field Study: 18 April 2023 – 29 April 2023

Country Name	< Project Name> The Project for Rehabilitation of Alotau Town Market
Independent State of Papua New Guinea	and Fisheries Facilities



Project Site (Source: External Evaluator)



View Inside Alotau Market (Source: External Evaluator)

# I. Project Outline

1. Project Outline					
Background	The Alotau Town Market, located in the centre of Alotau Town, the capital of Milne Bay Province, was a retail market for Alotau Town residents where a variety of agricultural and marine products from all over the province were gathered and was an important source of cash income for farmers and fishermen in the inland and outer islands of the province. However, a long time had passed since the market was first opened in 1969, and it had become dilapidated. In addition, there was not enough space in the covered facility, where there was an average of 728 vendors for the 316 sales tables. Due to the cramped space and unregulated occupancy, fresh fish, processed foods, and produce were sold in close proximity, often on the ground, and the restrooms attached to the market had plumbing problems and were frequently out of service, creating sanitation problems. In addition, when vendors from the farming and fishing villages around the Milne Bay Province accessed the market, they got on and off, unloaded, and loaded their boats on the beach near the market, and used the wooden pier adjacent to the market as a mooring facility. However, some of the piles on the pier had corroded in the middle and were likely to become unusable within a few years. Therefore, in addition to maintaining the mooring facilities, the installation of the facilities for boarding, unloading, and loading was being desired.				
Objectives of the Project	The objective of the project was to improve and revitalise the distribution of agricultural and marine products in the province by constructing a public market facility and mooring facilities in Alotau Town in Milne Bay Province that are suitable for the province's agricultural and marine product distribution needs, thereby contributing to the province's sustainable economic development.				
Contents of the Project	<ol> <li>Project Site: Alotau Town, Milne Bay Province (Population: approximately 100,000)</li> <li>Project Overview         <ol> <li>Description of facilities and procured equipment: [Facilities] Single-storey facility with a total floor area of 3,157.47 m<sup>2</sup></li> <li>Market space (foundation and earth floor only) 795.24 m<sup>2</sup>, Market building 1,531.15 m<sup>2</sup>, Other market facilities (Fisheries Centre, Market toilet, Administration building, Guard houses, Corridors, etc. 831.08 m<sup>2</sup>)</li> <li>Small wharf (mooring facilities) 70.5 m, Revetment 59.2 m, Riverbank protection 240 m [Equipment] 1 Garbage truck</li> <li>Contents of consulting services / soft component: Detailed design, Construction and procurement supervision, Technical guidance/instructions to the market administration staff, etc.</li> </ol> </li> </ol>				
	E/N Date	27 March, 2017	Disbursement Date		
Implementation Schedule	G/A or L/A Date	27 March, 2017	Completion Date	<ul> <li>30 October, 2019 (Completion of construction)</li> <li>21 August, 2020 (Commencement of operation)</li> <li>*Definition of project completion: Commencement of facility operation</li> </ul>	
Project Cost E/N Grant Limit / G/A Grant Limit: 1,169 million yen Actual Grant Amount: 1,063 million yen					

Executing Agency	National Fisheries Authority
Conditions (Loan only)	
Borrower (Loan only)	
	Main Contractor: Dai Nippon Construction
Contracted Agencies	Main Consultant: OAFIC Co., Ltd.
	Agent: None

## **II. Result of the Evaluation**

Summary

This project aimed to improve and revitalise the distribution of agricultural and fisheries products in the region by constructing a public market facility and mooring facilities in Alotau Town, Milne Bay Province, thereby contributing to sustainable economic development of the entire region. This project was in line with the goal of promoting agriculture and fisheries in Papua New Guinea's National Development Plan at the time of planning, and was also in line with the development needs of the project area. Although no concrete outcomes were achieved through collaboration with other JICA projects, the project was in line with Japan's development cooperation policy, and synergies were observed through collaboration with the projects of other donor agencies, so the overall relevance and coherence of this project is high. In terms of project effects, the quantitative effects as a whole exceeded the level envisaged at the time of planning, and the qualitative effects were also generated at high levels, indicating that the market facilities developed are being fully utilised. In addition, the impact of the project on economic activities through improved distribution of agricultural and fisheries products, through increased income for vendors and diversification of sales of catches, was also observed. No negative environmental impacts, resettlement or land acquisition were found in relation to the implementation of this project, and no negative impacts were found in terms of gender, marginalised people, social systems and norms, human well-being and human rights. Therefore, as a whole, the effectiveness and impact of the project are very high. With regard to project implementation, as the project cost was slightly higher than the plan and the project period was also much longer than the plan, the efficiency of the project is judged to be moderately low. With regard to sustainability, there is a need for early repair of the embankment of the adjacent small creek, which was damaged by a heavy rainfall, but no other concerns were found, and the sustainability of the effects achieved through this project is high as a whole.

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

1 Relevance/Coherence

<Relevance>

· Consistency with the Development Policy of Papua New Guinea at the Time of Ex-Ante Evaluation

At the time of planning of this project, Papua New Guinea (hereinafter referred to as 'PNG') had a long-term development plan with target years of 2050 and 2030, and a medium-term development plan based on these plans. Each of them had set the policies listed in Table 1.

Table 1: Long-term and Medium-term Development Plans of PNG			
Name of the Plan	Main Contents		
Vision 2050 (formulated in 2008)	Long-term development plan with the ultimate goal of ranking PNG in the top 50 in		
	the world by 2050 on the Human Development Index		
Development Strategic Plan 2030 (formulated	A plan that aimed at making PNG a middle-income country in order to achieve the		
in 2010)	ultimate goal of Vision 2050. The emphasis was on ensuring access to markets by		
	rural villagers for monetary and economic activities.		
MediumTerm Development Plan	A medium-term development plan that sets out a five-year framework for the		
(Target period: 2011-2015)	realisation of the goals of the Development Strategic Plan 2030. It was reviewed		
Medium-Term Development Plan II	once with the change of government. The Medium-Term Development Plan II		
(Target period: 2016-2017)	focused on food security and poverty reduction for the people.		
Source: Prepared from the Preparatory Survey Report			

Table 1: Long-term and Medium-term Development Plans of PNG

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

<sup>&</sup>lt;sup>2</sup> (4): Very High, (3): High, (2): Moderately low, (1): Low

In addition, the National Fisheries Authority (hereinafter referred to as 'NFA'), the executing agency of this project, in response to the *Medium-Term Development Plan* and the *Medium-Term Development Plan II*, had identified the promotion of coastal fisheries activities in Milne Bay Province, where 81% of the working population is engaged in subsistence agriculture and fishing, as a priority in the National Fisheries Authority Corporate Plan.

Therefore, it can be said that this project was fully in line with the long-term and medium-term national development plans and the NFA Corporate Plan at the time of planning, as the project provided opportunities for cash income through promoting access to Alotau Town Market for farmers and fishermen in Milne Bay Province, improving their quality of life by reducing poverty and ensuring food security.

· Consistency with the Development Needs of Papua New Guinea at the Time of Ex-Ante Evaluation

As mentioned in the 'Background' section above, at the time of planning of this project, Milne Bay Province had the following development needs. The Alotau Town Market, which had been a retail market for the residents of Alotau and an important place for the source of cash income for farmers and fishermen in inland and outer islands of the Province, was ageing and there was a significant shortage of sales space in covered facility. As a result, fresh fish, processed food and fruit and vegetables were often sold in close proximity to each other or on the ground. In addition, the toilets attached to the market had plumbing problems and frequently became unusable, causing sanitation problems.

When retailers and others from farming and fishing villages in Milne Bay Province accessed Alotau Town Market, they got on and off, unloaded and loaded at the beach near the market and used the wooden jetty adjacent to the market as a mooring facility. However, some of the piles on the jetty had corroded in the middle and were likely to become unusable within a few years.

This project was planned to improve the distribution of agricultural and fisheries products and stimulated monetary and economic activities in Milne Bay Province, which was in line with the needs of the Province at the time of planning.

## · Appropriateness of Project Design/Approach

In the ex-post evaluation of similar projects in the past, it was pointed out that the target values for jetty utilisation, ice production and water storage volume were set too high in relation to the demand, as a lesson learned. Therefore, in this project, target values for the indicators were set after verifying and analysing the lifestyle habits of local fishermen, trends in vendors' sales activities and eating habits of the local residents, then the scale and specifications of the facilities were to be set accordingly. In another similar project, there were delays in the transfer of the market management organisation to the local government and the transfer of vendors, so this project planned to promote voluntary coordination on the part of the local government through the soft component to ensure a smooth operational transfer from the Huhu Rural Local-Level Government to the Market Board, and to provide technical guidance to the market operation staff.

In response to these lessons learned, indicators and target values were set for this project, as indicated in the 'Effectiveness' section below, all of which were generally set appropriately based on the situation at the time of planning. In addition, it was confirmed that the capacity of the market management team has improved through this project and another donor support project. With regard to the market management team, repeated discussions were held among the stakeholders of Milne Bay Province and as a result, it was decided that the management of the market would not be transferred to the Market Board and that the market would be managed by the Huhu Rural Local-Level Government. Although it took some time to reach this decision and there were delays in the completion of this project, the lessons learned from the past were addressed and no particular problems were observed as a whole.

### <Coherence>

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

Japan's development cooperation policy for PNG at the time of planning was the 'Country Assistance Policy for the Independent State of Papua New Guinea' (December 2012), which identified 'Strengthening of the Foundation of Economic Growth' as a priority area and stated that industrial and commercial promotion would be supported, including agriculture, forestry and fisheries. In addition, the JICA Country Analytical Paper for the Independent State of Papua New Guinea at that time emphasised the importance of improving the lives of rural people and developing infrastructure to rectify the disparities with urban areas.

This project provided support in the form of the construction of a market for agriculture and fisheries, which is in line with Japan's development cooperation policy at the time of planning, which was to support the development of economic infrastructure and the promotion of industry and commerce.

### Internal Coherence

Similar projects such as 'The Project for Construction of Wewak Market and Jetty' (2008) and 'The Project for Rehabilitation of Madang Town Market' (2013) had been implemented in PNG before this project, but these projects were implemented at very different times and locations. Therefore, no linkages between JICA projects were envisaged and no specific synergetic effects were identified.

# External Coherence

It was planned in this project that a fisheries centre would be constructed in the market to activate the distribution of fisheries products, and the ice maker and freezers to be installed in the centre were to be provided with the support of the Overseas Fisheries Cooperation Foundation (OFCF). During the implementation phase of this project, it was confirmed that the equipment was in fact installed as planned and were being used effectively at the time of ex-post evaluation. In addition, a soft component was planned and implemented under this project, which aimed to smoothly launch the operation and maintenance mechanism of the Alotau Town Market. In implementing the soft component, a market management system was planned to be introduced by the United Nations Women's Organisation (UN Women) to take over the effects of this project in order to establish the operation of the market after the completion of this project. Through the support of UN Women, a PC-based fee collection and management online system was introduced and training for the staff of the market management team was provided accordingly.

In this way, the collaboration with OFCF was envisaged in this project and the generation of the actual effects was also observed. The

collaboration with UN Women during the implementation of the project was also planned, and it was observed during the ex-post evaluation that the effects of the soft component implemented under this project was steadily increasing. Therefore, it can be said that this project was linked to other projects and the synergetic effects of these projects were also confirmed.

<Evaluation Result>

Therefore, its relevance and coherence are high<sup>3</sup>.

## 2 Effectiveness/Impacts<sup>4</sup>

<Effectiveness>

# (Quantitative effects)

This project set the following indicators to measure the quantitative effects: the number of vendors per day who can sell at the sales table and floor sales space in the market facilities, the area of one sales unit, the annual operating revenue from the market, the number of uses of toilets per week in the market and the number of dinghies that can moor at the beach in front of the market. As described below, the project was completed in August 2020, the actual values for 2021 and 2022 were captured and the degree of achievement against the targets set at the time of planning was verified in the ex-post evaluation.

As shown in Table 2, the number of vendors' booths available for selling at the sales tables and floor sales areas in the market was physically secured for 737 people through the implementation of this project. In contrast, the number of people actually selling reached 1,131 in 2022. The target was not reached in 2021 due to a period when some vendors were prohibited from selling in the market due to movement restrictions following the spread of COVID-19, but in 2022, when the restrictions were removed, more vendors than the number of sales tables and floor sales areas were selling in the market. Similarly, in April 2023, when the site survey was conducted in the ex-post evaluation, more vendors than the number of sales tables and floor sales areas were engaged in sales activities. The excess vendors were forced to sell in the spaces other than the sales units<sup>5</sup>.

Table 2. Achievement of Qualitative indicators of the Hoject				
Indicator	Baseline 2015 Baseline Year	Target 2022 3 Years after Completion	Actual 2021 1 Year after Completion	Actual 2022 2 Years after Completion
Number of vendors <u>being able to conduct sales activities</u> per day on the sales table or the floor sales space in the market (persons)	316	737	737	737
Number of vendors <u>conducting sales activities</u> per day on the sales table or the floor sales space in the market (persons)	-	_	609	1,131
Area of one sales unit (m <sup>2</sup> )	0.45	0.64	0.64	0.64
Annual operating revenue from the market (kina)	314,866	404,500	516,892	621,955
Number of uses of the toilets per week in the market (times)	0	1,300	6,112	6,789
Number of <u>dinghies that can moor</u> at the beach in front of the market (number of dinghies)	10	15	15	15
Number of <u>dinghies mooring</u> at the beach in front of the market (number of dinghies)	_	_	0	7

Table 2: Achievement of Quantitative Indicators of the Project

Source: Ex-ante Evaluation Paper, information provided by Alotau Town Market

The annual operating revenue of the market was well above the target due to the sales by more vendors than expected, with the amount of revenue already exceeding the target by 54% in 2022. Market revenues are also driven by the increased use of toilets. The number of toilet users has significantly exceeded the target, mainly due to the fact that the market is located in the centre of Alotau and adjacent to the bus terminal, which has resulted in a very high level of toilet use by non-market users. The lack of public toilets in the city centre meant that the market toilets were used more than expected. Other physical figures for the sales floor area per unit and small boats (dinghies) that can be moored were achieved through the implementation of this project. However, the number of small boats actually moored was still only seven in 2022. According to the market staff, this was because fishermen thought that only the commercial operators with large boats could moor at the wharf and that they should moor on the adjacent beach. As they finally started to use in mid-2022 after the market management team informed them that small-scale fishermen could also use the wharf, the average number of boats per year was remained only seven.

Based on the above, the number of small boats moored at the beach in front of the market fell below the target value, but other indicators significantly exceeded the target values. The number of vendors, annual operating revenue and the number of toilet users (toilet fee revenue) are the indicators that should be emphasised, and it can be judged that the overall quantitative effects have been achieved above the planned level.

<sup>&</sup>lt;sup>3</sup> Relevance: ③, Coherence: ③

<sup>&</sup>lt;sup>4</sup> When providing the sub-rating, Effectiveness and Impacts are to be considered together.

<sup>&</sup>lt;sup>5</sup> Although there is a shortage of sales units, the market buildings are allocated according to the goods sold, and there is no situation where, for example, vegetables and seafood are sold in the same building, and they are clearly separated.

## (Qualitative effects)

It was envisaged as qualitative effects in this project that, through the development of the market, an improved hygienic environment, increased user satisfaction and convenience, and improved food safety in Alotau Town Market would be achieved. These effects were checked in the ex-post evaluation, and the generation of the following effects were mainly confirmed.

### (i) Improved sanitation in Alotau Town Market

The market premises were paved, which eliminated the problems such as mud stains and lack of drainage, as well as enabling the consolidation of vegetable waste and other waste, and the constant use of the toilets. Cleaning of the entire market is also carried out daily through outsourcing to external youth groups and sports teams (toilets are cleaned by the dedicated staff).

It should be noted that Alotau Town Market reached a level where it was identified as the most hygienic of the country's 14 markets in 2022 in a market hygiene survey reviewed by UN Women, and received an award in April 2023.

### (ii) Increased satisfaction and convenience of users

The users who had been using the market since the pre-implementation period of this project (10 users in total, 5 vendors and customers each) were interviewed, and all the respondents were of the opinion that the implementation of this project had improved their satisfaction with the bigger and cleaner facilities, with the permanent sales tables and space secured, with the installation of the roofs of sufficient sizes, and with the cleaner market as a result of the well secured rubbish bay and toilet.

### (iii) Improved food safety

In this project, the Market Building IV was developed as a building for the sale of cooked food, and was designed to prevent insects, etc. from entering the building. In addition, market management rules were developed in the soft component of this project, and it was confirmed that the technical assistance led to the situation where the market management team established and is operating hygiene standards, such as the one requiring that the sale of cooked food must be finished by 1pm.

In this way, it has been confirmed that the sanitation environment has improved significantly in all aspects, and the market even received an award as the most hygienic market in PNG. User satisfaction and convenience also improved significantly, as well as food safety, both in terms of facilities and operations, and it can be said that the overall qualitative effect is high.

### <Impacts>

### (1) Intended Impacts

In this project, sustainable economic development through the improvement and revitalisation of the distribution of agricultural and fisheries products in Milne Bay Province was envisaged as an impact.

As seen in 'Effectiveness', the number of market vendors significantly exceeded the target, as the vendors from different parts of Milne Bay Province, including outer islands, who previously did not come to the markets, now come to sell. Some were also seen to transport goods from other provinces, such as the Highlands Region, to Alotau to sell in the market. Although quantitative figures were not available, vendors interviewed commented that their income from the new market had increased compared to the past. According to the market management team, through the increase in vendors' incomes, it was suggested that they were able to pay for their children's education and stimulate economic activities in general.

With regard to the impacts on fishing activities, although individual fishermen use the market sales units, there are also landings by a fisherman's organisation, which are purchased in bulk by the market and sold to customers. Procedures for the constant sale of a certain amount of those fish under a contract with an educational institution in a different province were also identified during the ex-post evaluation. The market is also expected to increase its income from the sales outside the province.

Based on the above, Alotau Town Market, as the largest market in Milne Bay Province, plays a major role as a base for sales activities at the individual level. The market has been able to make more efforts than envisaged at the time of planning, such as by promoting the procedures to start selling fish products to another province, and as a whole, economic activities have become much more active than before the project was implemented.

#### (2) Other Positive and Negative Impacts

### (i) Impacts on the Environment

The environmental and social considerations guideline applied to the project was the JICA Guidelines for Environmental and Social Considerations (issued in April 2010), with an environmental category of B (The project did not fall into any sensitive sectors/characteristics or sensitive areas, and the undesirable environmental impacts were judged to be not significant).

The environmental permit was issued in August 2017, prior to the commencement of the main construction works (December 2017). In accordance with the permit, pollution control measures (e.g. dust control by water spraying, installation of anti-pollution fences in the marine area, prevention of noise and vibration by low-noise construction equipment) were taken in the project, and monthly reporting was made to the executing agency. According to the executing agency, on-site inspections by the Conservation and Environmental Protection Agency (CEPA) were also carried out three times during the project period and no problems were identified. In addition, after the project was completed, waste collection has been carried out almost every day and toilet waste has been discharged into the sewage system via a septic tank, and no problems have been reported. The market management team also stated that no complaints about the natural environment have been received from the users or residents of the surrounding area since the commencement of the market use, and it is judged that no negative environmental impacts have occurred as a whole.

## (ii) Resettlement and Land Acquisition

This project was implemented on the existing market site and neither resettlement nor land acquisition occurred. In addition, the market

site is owned by the Huhu Rural Local-Level Government and the Milne Bay Provincial Government, and there were no problems with the continued use of the land.

(iii) Gender Equality, Marginalised People, Social Systems and Norms, Human Well-being and Human Rights

In this project, the installation of a toilet for disabled people, a women's toilet, a first aid room and a storage room in the market was planned and in fact developed as planned.

The toilet for the disabled was reportedly used as required and the women's toilet was always in use. One shower was located in each of the men's and women's toilets and was used as required. The first aid room was said to be used when necessary and has also been used as a blood donation centre and as a vaccination centre for COVID-19. It was also observed that market facilities were connected by ramps as appropriate, allowing wheelchair users to move around the entire market.

The storage rooms were not necessarily large enough, but were made available (3 kina/night) for vendors coming to the market from distant locations to leave their goods until the next day. Transporting vegetables and other goods to the market every day is a burden in terms of labour and cost, especially for the vendors from distant locations, but the availability of the market storage rooms has helped to reduce the disparity caused by the distance from the market.

In this way, it was confirmed that the facilities are developed and operated in such a way that all people, including women and the disabled, have equitable access to the market.

## (iv) Other Positive and Negative Impacts

Although the establishment of a bank counter within the market was not envisaged when the project was implemented, it was confirmed during the ex-post evaluation that Mama Bank (Women's Micro Bank) counter was established in 2022, allowing the vendors to deposit their daily revenues in the bank. As a result, the vendors reported an increase in convenience, as well as an increased sense of safety and security as they no longer needed to carry cash. In addition, the market management team is considering the installation of a bank ATM on the market premises and a playground for the vendors' children.

In this way, in response to the growing importance of the market for the economic activities of the region, it was confirmed that initiatives to improve convenience for users have been implemented and planned beyond the scope of the project's assumptions.

## <Evaluation Result>

Therefore, effectiveness and impacts of the project are very high.

### 3 Efficiency

# (1) Project Outputs

The outputs of this project were generally implemented as planned as described in "Contents of the Project, I. Project Outline", but the slope protection (240 m) of the banks of the small creek (Waduwadu Creek) west of the market was separated from the Japanese component at the project implementation stage because of the time required for discussions between the PNG stakeholders involved in the design. It was carried out together with the drainage enhancement works at the expense of the PNG side.

## (2) Project Cost

The planned amount for this project was 1,442 million yen, consisting of 1,169 million yen for the Japanese side and 273 million yen for the PNG side. The actual amount for the Japanese side was 1,063 million yen, less than the plan, but that of the PNG side increased significantly to 624 million yen (converted at an average exchange rate of 1 kina = 33.53 yen during the project period), resulting in an overall total of 1,687 million yen (117% of the planned amount). The reasons for the significant increase in the actual project cost on the PNG side were that the temporary market building, which was planned to be paid for by the PNG side as part of the implementation of the project, was eventually developed as a permanent structure, and the revetment of the small creek was changed from the Japanese side to the PNG side.

Therefore, the total project cost is judged to have slightly exceeded the plan.

## (3) Project Period

The actual period of this project was 42 months in total, from March 2017 (signing of the grant agreement) to August 2020 (commencement of the use of facilities), which significantly exceeded the planned period of 22 months (191% of the plan). This was due to the delay of 11 months in the development of the temporarily relocated market and the informal market, which were the components to be borne by the PNG side, due to the general election and the delay in the internal procedures of the provincial government. Another reason was that the operation of the market did not commence for another 10 months after the completion of the market facilities due to the time required to determine the organisation responsible for the operation of the market and also to respond to the effects of COVID-19<sup>6</sup>.

Therefore, the project period is considered to have significantly exceeded the plan.

## <Evaluation Result>

Based on the above, the project cost slightly exceeded the plan and the project period also significantly exceeded the plan. Therefore, efficiency of the project is moderately low.

<sup>&</sup>lt;sup>6</sup> Vendors did not face the situation of losing their sales facilities, as they remained in the old market facility while the construction of the adjacent temporary relocation site was delayed, and they remained in the temporary relocation site during the period between the completion of the market facilities in this project and the commencement of its operation.

### 4 Sustainability

## · Policy and System

In July 2023, the PNG Government announced the Medium-Term Development Plan IV (2023-2027). The plan sets out three objectives: to grow the PNG economy to a GDP level of 200 billion kina by 2030 (108 billion kina in 2022), create one million new jobs and improve the quality of life of the people, and identifies 12 specific strategic priority areas. The first strategic priority area is strategic economic investment, and the promotion of commercial agriculture and livestock industry, fisheries and marine resources is mentioned in the deliberate intervention programmes in this area.

There is no change in the position of the National Fisheries Authority (NFA), and one of the priorities in the sector plan, the Fisheries Strategic Plan (2021-2030), is to expand and improve market access for fish and seafood. As before the implementation of the project, the Alotau Town Market is operated and maintained by a Market Board under the Huhu Rural Local-Level Government, which supervises the operation and maintenance of the market by the dedicated staff members.

In this way, the promotion of agriculture and fisheries continues to be an important policy, and there is no change in the positioning of NFA or the Alotau Town Market management team. Therefore, the sustainability of the policy and system is judged to be high.

### · Institutional/Organizational Aspect

The daily operation and maintenance of the Alotau Town Market is carried out by the market management team comprising 23 members under the supervision of the Market Board, which is chaired by the Milne Bay Provincial Administrator and comprises 14 representatives from NFA, Huhu Rural Local-Level Government, Alotau Urban Local-Level Government, Chamber of Commerce, vendors (including women) and others. The market management team is composed of a market manager, supervisor, fee officer, clerks, cleaners and others, and the number of staff was reportedly sufficient.

As a whole, it can be said that the market operation is based on a well-established organisational structure with the necessary composition and staff members to carry out the supervision and day-to-day operations.

## Technical Aspect

In addition to the development of market facilities, the Operation and Maintenance Plan, the Accounting Procedures Manual and the Market Facilities and Equipment Maintenance Procedures Manual were developed in the soft component of this project, and the activities necessary to achieve the outcomes were implemented. It was also confirmed that the plans and manuals developed under the soft component were still being used at the time of ex-post evaluation, and that inspections and maintenance work were also being carried out on a weekly and monthly basis. In addition, training on market operations, disaster management and food safety was provided by UN Women and the Milne Bay Provincial Department of Health, among others, and, as noted above under 'External Coherence', the fee collection and management system provided by UN Women was being properly managed and operated at the time of ex-post evaluation. Therefore, the technical sustainability of the project effects generated is high.

### · Financial Aspect

The income and expenditure of the Alotau Town Market in 2021 and 2022 were as shown in Table 3.

		(Unit: kina)
	2021	2022
REVENUE		
Sales Unit Fees	358,934	403,499
Toilet Fees	134,029	182,559
Storage Fees	22,055	27,643
Water Sales	1,167	559
Shower Fees	707	7,695
TOTAL	<u>516,892</u>	<u>621,955</u>
EXPENDITURE		
Wages	246,267	350,416
Cash Advances	34,136	38,450
Transport	26,916	15,876
Fuel	7,522	13,354
Consumables	2,769	26,098
Electricity and Water	9,669	26,246
Maintenance	1,520	4,738
Others	500	54,036
TOTAL	<u>329,299</u>	<u>529,214</u>
BALANCE	<u>187,593</u>	<u>92,741</u>

#### Table 3: Income and Expenditure of Alotau Town Market

Reference: 3.5 kina/day for using the sales area, 1.5 kina/time for using the toilet, 2 kina/time for using the shower and 3 kina/night for using the storage room (water sales have not been conducted since April 2022 due to the rising water rates).

Source: Data provided by the Alotau Town Market management team

In 2021 and 2022, when the market was operated throughout the year, the revenues significantly exceeded the expenditures, despite the negative impact of the spread of COVID-19, and the surpluses were achieved. Wages for the staff of the market management team are paid by the Huhu Rural Local-Level Government, while other expenditures are made at the discretion of the market management team. According to the Huhu Rural Local-Level Government, the market will fully implement its own budget management from 2024. Therefore, the financial sustainability of the market's operation and maintenance is judged to be high.

# • Environmental and Social Aspect

As analysed in 'Impacts', no problems were found in terms of environmental and social considerations both during and after the project implementation, and no concerns were identified at the time of ex-post evaluation. The toilets are used more frequently than expected, but it is considered that this will be addressed by steadily continuing to maintain the treatment tanks.

### Preventative Measures to Risks

A part of the embankment of the small creek flowing next to the market was eroded during a heavy rainfall in 2022 and remained as it was at the time of ex-post evaluation. The eroded point could gradually erode towards the market site if it is left unattended for a long period of time. The market management team stated that they were preparing to take action, but immediate action is important to prevent or mitigate the spread of damage.

### · Current Status of Operation and Maintenance

The operation and maintenance status at the Alotau Town Market was reviewed during the site visit of the ex-post evaluation, and the following situations were mainly identified.

- In the market building, the management team was properly managing the operating hours and sanitary environment, while the sales restrictions due to the spread of COVID-19 had been removed and vendors were selling beyond the market capacity.
- The ice-making facilities and freezers at the Fisheries Centre were being fully utilised, although some days they were not in operation due to power outages.
- As for other facilities, some parts of the toilets were out of order and could not be used until the spare parts arrived, but other facilities were in good working order. Waste from the market was also frequently (but not daily) collected.
- Weekly and monthly inspections of the various market facilities were planned and carried out by the market management team in accordance with the plan. Cleaning was also carried out steadily, changing the local group to whom the cleaning was outsourced on a monthly basis.
- Fees for the use of the sales space from vendors were collected daily and entered into the fee collection and management system every time.

In this way, the facilities developed under the project were fully operated and maintained, and the overall situation was good. It should be noted that at the National Markets Congress held for the first time in PNG in April 2023, the Alotau Town Market, apart from the award for being the most hygienic market, also received the 2022 Best Market of Year Award.

<Evaluation Result>

Therefore, sustainability of the project effects is high.

## III. Recommendations & Lessons Learned

## · Recommendations to Executing Agency

The ex-post evaluation confirmed that a part of the embankment of the small creek that runs beside the market had collapsed. If it is left as it is for a long time, this could lead to the loss of part of the market site, and it is important for the stable generation of project effects and impacts that the market facilities continue to be utilised without any problems.

Therefore, it is recommended that the Huhu Rural Local-Level Government and the market management team secure a budget as early as possible to carry out the repair work on the bank of the small creek.

• Recommendations to JICA None.

## • Lessons Learned

Need for detailed planning of the project components to be borne by the recipient government and early decision on the mode of operation after project completion

This project involved the construction of public market facilities and mooring facilities to meet the demand to improve and revitalise the distribution of agricultural and fisheries products in Milne Bay Province. For this reason, in order to realise the project effects as planned, it was necessary to start the use of the market on schedule. However, the actual commencement of the use of the market was significantly delayed due to the extended construction period and the time required to determine the operating body.

Therefore, it was necessary to consider more detailed design details and budgetary measures at the time of planning for the procedures related to the construction of temporary market facilities and one of the buildings for the new market, which were the components to be borne by the PNG side, and to try to construct the facilities on schedule as far as possible. In addition, as there is a period of several years between the time of planning and the time of completion of the project, it was important to complete the coordination among the parties concerned regarding the operation of the market during this period.

When implementing similar projects in the future, it is desirable to establish an environment in which the effects of the project can be felt immediately after the project is completed, leaving as little uncertainty as possible, for example by more precisely determining the detailed

design of the components to be borne by the recipient government and making the determination of the market operating body a condition for the implementation of the project.

# IV. Non-Score Criteria

### Performance

### · Objective Perspective

The Alotau market was operated and maintained under good conditions, and this was made possible not only by the established organisational structure and the high awareness of the members of the management team, but also by the inclusion of a soft component in the project and the subsequent implementation of continuous operational strengthening support by UN Women and others, in order to realise this in a stable manner. The support by UN Women was realised by the JICA staff who reached out for collaboration during the implementation of this project, which can be said to have further enhanced the effectiveness of this project.

Additionality

None.



Market Buildings in Alotau Town Market (Source: External Evaluator)



Small Creek Eroded by Heavy Rainfall (Source: External Evaluator)

(end)