conducted by Pacific Division (Micronesia Representative Office):March, 2013

Country Name	The Project for the Improvement of the Weno Harbor
Micronesia	The Project for the improvement of the Wello Harbor

I. Project Outline

Project Cost	E/N Grant Limit: 725 million yen Contract Amount: 716 million yen						
E/N Date	August 2006						
Completion Date	January 2008						
Implementing Agency	Department of Transportation and Public Works (DTPW), Chuuk State Government						
Related Studies	Basic Design S	study: February 2006 – July	2006 Detailed Design Study: August 2006 – November 2006				
Contracted	Consultant ECOH CORPORATION						
Agencies	Contractor	Penta-Ocean Construction Co. Ltd.,					
7.1907.000	Supplier	-					
Related Projects (if any)	Federal Emergency Management Agency (USA): Renovation of damaged Pier B by concrete pavement, removal of water facilities and renovation (February 2005 – December 2006)  The Weno Harbor is the only port in the Chuuk State which not only had the commercial Dock for the ocean-going vessels, but also served as a major base for coastal vessels to deal with the freight handling operation. In other words, the Weno Harbor has assumed as a transportation hub and commercial center of state's economy in distribution of daily commodities for about 55,000 people of the Chuuk State. However, because of the damages caused by the destructive typhoon in 2002, the commercial Dock had become unusable. Consequently, it had taken more time for those ocean-going vessels to complete the cargo handling operation because they had to use other piers. They had often been tied up more days in offshore. On the other hand, because the North Port, where passenger ferries connecting small islands had anchored, did not have enough spaces, small local boats had ended up to illegally anchor at the south basin where the anchorage of small local boats were not allowed.  As a result, there had been much congestion in the commercial Dock area where the large ocean-going vessels, coastal vessels and small local boats had been disorderly moving around. It was a						
Background							
Project Objectives	Outcome To improve the port facilities in order to assure its safe and efficient operational condition at the Wend Harbor in Chuuk State by the rehabilitation of commercial Dock and North Port  Outputs  Japanese side:  Rehabilitation of pier A and B in the commercial Dock by the fender replacement, reconstruction of concrete curb, rehabilitation of superstructure concrete and removal of the Submerged Vessels in front of pier B  Construction of the revetment wall and wave dissipating blocks in the North Port Micronesian side:  Securement of the space to carry out the rehabilitation work and removal of the rubbles on the container yard  Disposal of the oil waste bailing out from submerged vessels  Relocation of the disused house at the North Port before the reconstruction work is started  Treatment of the oil leak from the submerged vessels after their disposal  Construction of the fence at the boundary of the commercial Dock after the relocation of small boats from south port						

### II. Result of the Evaluation

### Summary of the Evaluation

The Weno Harbor is the only port in the Chuuk State which has had the commercial Dock for the ocean-going vessels, serving as a commercial center of state's economy in distribution of daily commodities for the people of Chuuk State. Due to the damages caused by the destructive typhoon in 2002, the commercial Dock for the ocean-going vessels had become unusable. As a result, there has been much congestion in the area of commercial Dock where the large ocean-going vessels, coastal vessels as well as small local boats had been disorderly moving around. Thus it was difficult to secure the navigation safety in the harbor, and to smoothly complete the cargo handling operation.

This project has somewhat achieved its objectives to improve the port facilities in order to assure its safe and efficient operational condition at the Weno Harbor by the rehabilitation of commercial Dock and North Port, such that most of the port function has been restored and the cargo handling operation has been streamlined by rehabilitation of the commercial Dock (pier A and B). The revetment at the North Port constructed by the project has now been used for anchorages of midsize vessels, cargo handling operation by small boats and boarding of small boats passengers; however, it has not been used for anchorages of small local boats as it was originally planned. Several impacts in activating the marine transportation have

been observed, such that the volume of cargoes handled at the commercial Dock has been increased, the anchorage cases of ocean-going vessels (in both large size and midsize) for sightseeing tours has been increased.

The roles and structures of both implementing agency and the Transco Co., Ltd., which is in charge of cargo handling operation, are sustained what they were considered desirable at the time of ex-ante evaluation. As for the technical aspect, the implementing agency has no problem in dealing with the daily operation and maintenance. While, the implementing agency has some difficulties to obtain the budget needed to renovate the facilities and to spend for newly allocated budget items. It was also identified in the current status of operation and maintenance that several cases were left unrepaired, such as the caving in the container yard and electricity failure of beacon. Overall, the implementing agency has some problems in the financial aspect and the current status of operation and maintenance.

For relevance, the project has been highly relevant with Micronesia's development policy, development needs and Japan's ODA policy toward Pacific Islanders including Micronesia, at the time of ex-ante evaluation and ex-post evaluation. For efficiency, both the project cost and the project period were within the plan.

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

#### 1 Relevance

This project has been highly consistent with the development policy of Micronesia, such as "to improve the infrastructure for revitalization of private sector and for strengthening the economic activities, distribution of goods and exchange bases" specified under the National Development Strategies (2004-2023), and development needs to rehabilitate the port function, resolution of congestion in the harbor, assurance of security navigation in the harbor and the promotion of streamlining the cargo handling operation, as well as Japan's ODA policy toward Pacific Islanders including Micronesia, such as "to support the infrastructure development on the transportation and facilities of fishery industries" endorsed at the 4<sup>th</sup> Pacific Islander's Meeting at the time of both ex-ante and ex-post evaluation.

Therefore, relevance of this project is high.

## 2 Effectiveness/Impact

This project has achieved its objectives to improve the port facilities in order to assure its safe and efficient operational condition at the Weno Harbor by the rehabilitation of commercial Dock and North Port, such that there has been no congestion in the harbor, the navigation safety has been secured and the cargo handling operation has been streamlined by rehabilitation of the commercial Dock (pier A and B). As a result, the number of ocean-going vessels anchored at the commercial Dock has been increased, and the time of cargo handling operation for those vessels has been minimized. Furthermore, it has helped to secure the serenity level because the wave-dissipating blocks offshore have prevented the corrosion of ocean waves.

The North Port has now been used for anchorages of mid-sized vessels, cargo handling operation by small boats and boarding of small boat passengers. However, it has not been used for anchorages of small local boats as it was originally planned. Those small local boats have still anchored outside of the revetment in the North Port, and some of them have still anchored in the south basins. This means that what was intended, "for the sake of navigation safety for ocean-going vessels, the anchorage of small local boats should be restricted to the North Port and to block the south basin off from small local boats" has not been attained. With the fence set up at the boarder of commercial Dock, it is restricted for anyone except authorized persons to step into the commercial Dock.

Several impacts in activating the marine transportation have been observed, such that the volume of cargo handled at the commercial Dock has been increased, the anchorage cases of ocean-going vessels (in both large size and mid-size) for sightseeing tours has been increased. According to the DTPW, the contamination of sea water, which might have occurred during the construction period, was avoided by setting up the silt fence, as a non-proliferation measure. The process of planned relocation of abandoned house and residents were successfully completed. As for the proposition raised by some households who had claimed the conventional water rights, the documents on agreement was exchanged between the head of DTPW and those representing households after the series of stakeholder meetings. It is also confirmed that there has been no proposition raised since then.

Therefore, the effective ness/impact of this project is fair.

### Quantitative Effects

CONTRACTOR DESCRIPTION	Quantitative Endote						
_		BD Year	Target Year	Target Year Actual	Ex-post Evaluation Actual		
		Actual(200	Planned	(2010)	(2012)		
		6)	(2010)				
Indicator 1 Number of foreign vessels Anchored at the pier B				62 vessels	50 vessels		
		As of 2004 0 vessel	More than 37 vessels (Note 1)	(Including vessels anchored	(Including vessels anchored		
				at the pier A (Note 2))	at the pier A (Note 2))		
				(Annual data) 41 vessels (2008), 33 (2009), 62 (2010),			
per year	per year			50 (2011) in average <u>46.5 vessels</u>			
Indicator 2	Indicator 2		2 days	At the pier B: 1.5 days	At the pier B: 1.5 day		
Number of days spent for cargo handling operation for foreign vessels (Note 3)		3 days		(Kyowa Shipping Co. Ltd.,)	(Kyowa Shipping Co, Ltd.,)		
				At the pier A: 1 day	At the pier A: 1 day		
				(Matson Co. Ltd.,)	(Matson Co. Ltd.)		
Indicator 3	South						
Average	basins for	40 vessels	0 vessels	100 vessels	60-70 vessels		
number of	anchorage						

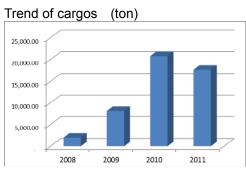
small vessels					
anchored	North Port	80 vessels	120 vessels	100 vessels	60-70 vessels (Note 4)
per day					

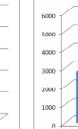
(Data Source) DTPW, Chuuk State Government

(Note 1) Before the project, it was recommended that the ocean-going vessels should not anchor at the pier A. But as the pier B was not usable, those vessels had to anchor at the pier A. The number of vessels anchored at the pier A during the year of 2004 was recorded as thirty-seven (37).

(Note 2) With the renovation of pier fender by the project, both piers (A and B) have become usable for ocean-going vessels. (Note 3) As for the indicator 2, the source of data is from Kyowa Shipping Co. Ltd., for the pier B and Matson Company Led., for the pier A, as they are the main users for each pier.

(Note 4) Small local vessels are to anchor at the North Port, but outside of the revetment.





Trend of tourists (person)



(Source) Chuuk State Government

Current situation of Pier B, renovated by the project

# 3 Efficiency

(Source) Transco Co. Ltd.,

The outputs of the project were produced as planned, and the both the project cost and the project period were within the plan (ratio against the plan: 99% and 95.9%, respectively).

Therefore, efficiency of this project is high.

## 4 Sustainability

The facilities renovated by the project are maintained by DTPW, Chuuk State Government.

The roles and structures of implementing agency and the Transco Co., Ltd., which is in charge of cargo handling operation are sustained what they were considered desirable at the time of ex-ante evaluation, and are considered enough for continuity of project effectiveness.

As for the technical aspect, the implementing agency has no problem in dealing with the daily operation and maintenance. Any problems identified through regular maintenance and inspection are to be dealt by the DTPW in collaboration with Transco Co., Ltd.



Cavings identified at the container yard

While, according to DTPW, the implementing agency has some problems in the financial aspect as it has experienced the difficulties to obtain the budget needed to renovate the facilities and to secure the budget for newly allocated items. Furthermore, there are some problems in the current status of operation and maintenance of implementing agency as it was identified that several cases were left unrepaired, such as the caving in the container yard, electricity failure of beacon. Overall, as for the sustainability, the implementing agency has some problems in the financial aspects and the current status of operation and maintenance.

Therefore, the sustainability of this project effect is fair.

## III. Recommendations & Lessons Learned

Recommendations for Implementing agency

1) The revetment in the North Port, which was constructed by this project, has now been used for anchorages of mid-sized vessels, cargo handling operation by small boats and boarding of small boats passengers. However, it has not been used for anchorages of small local boats as it was originally planned. Therefore, some small local boats have still been anchored at the south basin.

For the sake of the navigation safety in the Weno harbor, it is strongly recommended that the implementing agency should promote the vessels to anchor at the North Port, and at the same time, to prevent small local boats from anchorage at the south basin.

For that purpose, it is suggested that the implementing agency should make it a rule for some part of North Port to be allocated to the cargo handling operation and boarding of passengers and others to the anchorage of small local boats. If the spaces are not sufficient for anchorages of all small local boats at the North Port, it is suggested that the implementing agency should consider the expansion of anchorage spaces such as constructing the floating docks at the public space.

2) Although there has been no problem for the technical level of implementing agency in dealing with the daily operation and maintenance of port facilities, it is recommended that the implementing agency should make some efforts to improve the staff's technical capacity by conducting trainings. So that the port administration, such as management of vessels arriving in and departing from the port, cargo and passengers, communicable disease control, navigation safety

and security, etc. can be systematically carried out.

3) It is strongly recommended that the implementing agency should repair the cavings in the container yard and others unrepaired, at their earliest convenience.