

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Timor-Leste Office: Month, 2014

Country Name	Project for Rehabilitation of Dili Port
The Democratic Republic of Timor-Leste	

I. Project Outline

Background	The Democratic Republic of Timor-Leste (hereinafter referred to as 'Timor-Leste') has seven ports including fishing ports. Dili Port, which was constructed in 1999 by the Indonesian Government and that could accommodate 2000 gross registered tonnage (GRT) class vessels, was the sole international port in this country. In 2002, however, Dili Port was not utilized fully because some parts of concrete slabs and beams of the wharves were damaged accidentally and some defects were found in the wharves. In order to meet the increasing cargo demand, rehabilitation and improvement of the port was necessary.				
Objectives of the Project	To recover safe and smooth operation of Dili Port by rehabilitation of the existing wharf.				
Outputs of the Project	<ol style="list-style-type: none"> 1. Project Site: Dili 2. Japanese side <ul style="list-style-type: none"> • Block 1 and 2: Demolition and re-building of superstructure (1,800m²) • Block 3 and 4: Demolition and re-building of superstructure (1,080m²) • Block 7: Demolition of superstructure, retaining wall, reclamation and concrete pavement (216m²) • Block 9: Demolition of transit shed and enlargement of wharf (720m²) 3. Timor-Leste side: <ul style="list-style-type: none"> • Demolition of existing transit shed • Allotment of site for stockyard of the rehabilitation works • Allotment of site for disposal waste 				
Ex-Ante Evaluation	2005	E/N Date	May 18, 2006	Completion Date	February 1, 2010
Project Cost	E/N Grant Limit: 922 million yen, Actual Grant: 920 million yen				
Implementing Agency	Ministry of Transports and Communications (MTC)				
Contracted Agencies	International Development System Inc. (changed the name to Ideas Inc. in November 2007) Wakachiku Construction Co., Ltd.				

II. Result of the Evaluation

1 Relevance
<p>This project has been highly consistent with Timor-Leste's development policy, such as the development of port infrastructure under "the Five-Year National Development Plan (NDP 2002-2007)" and "NDP 2011-2015", and development needs to improve the capacity of Dili Port for responding to the increasing cargo demand at the time of both ex-ante and ex-post evaluation. It is also consistent with Japan's ODA policy for development and maintenance of infrastructure in Timor-Leste under the Japan's Country Assistance Program for Timor-Leste (2005) at the time of ex-ante evaluation.</p> <p>Therefore, relevance of this project is high.</p>
2 Effectiveness/Impact
<p>The project has largely achieved its objectives of "recovering safe and smooth operation of Dili Port by rehabilitation of the existing wharf." The indicators regarding the improvement of cargo handling capacity of Dili Port such as volume of cargo (indicator 1), volume of containers (indicator 2) and number of arriving vessels (indicator 3) have fully met their target value in 2010 and shown the further progress in 2013. Since the increased number of arriving vessels from 2010 to 2013 are mainly other types of vessels such as tankers, the volume of containers has not substantially increased and volume of cargo remained almost same level from 2010 to 2013. Regarding improvement of efficiency of cargo handling at Dili Port, the target has been achieved mostly at the time of ex-post evaluation. For example, time required to handle 100 tons of cargo (indicator 7) and container handling volume per hour (indicator 8) fully met their target value in 2010, while the achievement of average time of vessels standing by (indicator 5) and cargo handling volume per hour (indicator 6) could not be verified due to lack of information. However, looking at cargo handling volume per hour by item-wise, it improved from less than 20 ton/hour to 30 ton/hour for cement, and from less than 20 ton/hour to 20 ton/hour for rice. For the safety issues, no significant accidents are reported after the project completion except one accident with fatality in 2013. According to the interview with Dili Port officials, they perceived that the safety of loading and unloading works of cargo has been improved by rehabilitation of the port facilities. However, the safety of port workers still remains an issue because compliance with the safety procedures and safety equipment and protective gears such as helmets and safety foot wares are not fully observed among the workers at the time of ex-post evaluation.</p> <p>As for the impacts, the project has positive impacts on reduction of transport cost for export and import goods and promotion of availability of goods in Dili city. According to the interview results with export and import companies in Dili, they recognized the reduction of the transport cost. They suggested that reduction of cargo handling time achieved by the project would be one of the contributing factors for the reduction of the transport cost. Also the local shops who sell construction materials and daily commodities perceived the improvement in availability of goods in the market. No negative impact on natural</p>

environment was observed. The Maritime Department of MTC monitors the disposal of waste in Dili Port such as oil and garbages produced by the cargo ships and controls the natural environmental impact in the port. There was no land acquisition and resettlement of people associated with the project.

Therefore, effectiveness/impact of this project is high.

Quantitative Effects

Indicators	(Before the project) 2006 Actual	(After the project) 2010 Target	2010 Actual	(Ex-post Evaluation) 2013 Actual
Indicator 1 Volume of cargo (ton)	N.A.	90,000	233,607	232,101
Indicator 2 Volume of containers (TEU) ^(Note 1)	N.A.	29,000	36,816	41,846
Indicator 3 Number of arriving vessels (Number)	N.A.	324	378	667
Indicator 4 Operating hours of Dili Port (hours)	24	24	24	24 (2012)
Indicator 5 ^(Note 2) Average time of vessels standing by (hours)	12	12	N.A	N.A.
Indicator 6 ^(Note 3) Cargo handling volume per hour (ton/hour)	21.7	23.2	N.A	N.A.
Indicator 7 Time required to handle 100 tons of cargo (hour/100 tons)	4.5	4.3	2.0	2.0 (2012)
Indicator 8 Container handling volume per hour (TEU/hour)	10	20	20	20
Indicator 9 ^(Note 4) Number of accidents during loading and unloading of container/cargo from vessels (Number)	1	0	0	1
Indicator 10 ^(Note 4) Number of death in associated with the accidents (Number)	1	0	0	1

Source: Dili Port

Note 1: TEU: Twenty-Foot Equipment Unit. This is the unit of measuring the amount of the container handled (1TEU = 5.9mx2.3mx2.3m)

Note 2: Average time of vessels standing by means average mooring time per vessel at wharf of Dili Port for loading and unloading of cargos.

Note 3: Cargo handling efficiency = Volume of cargo (indicator 1) / Number of arriving vessels (indicator 3) / Average time of vessels standing by (Indicator 5)

Note 4: The accident and the death in associated with the accident were not caused by the defects of the design and/or works of the project.

3 Efficiency

Although the project cost was within the plan (ratio against the plan: 99%), the project period exceeded the plan (ratio against the plan: 139%)¹. Therefore, efficiency of this project is fair. The project period exceeded the plan because i) the undertakings by the Timor-Leste side (e.g. removal of the existing building, provision of sites for material stock yard and temporary project office) was not conducted as planned and the commencement of the construction works were delayed, ii) the repair works of the concrete cracks at Block 3 and 4 were needed to satisfy the quality standard required by the project². As a result of these repair works, the outputs of the project were produced as planned.

4 Sustainability

The operation and maintenance of Dili Port including port facilities rehabilitated by the project have been carried out by the Port Authority of Timor-Leste (APORTIL). The structure for the operation and maintenance is sustained as it was considered desirable at the time of ex-ante evaluation. However, there are still more than 30 vacant positions in APORTIL. Regarding this issue, APORTIL has already submitted a proposal to MTC for filling the existing vacant positions in 2014, and recruiting 44 new staff or more in 2015. As for the technical aspect, the technical staff received technical training by the foreign donors including JICA and the maintenance manuals provided by the project is utilized. However, the technical capacity of APORTIL needs to be further improved because the damages in some parts of structures in block 1-4 are left unattended at the time of ex-post evaluation. These damages were created by strong stacking by containers, since monitoring of the cargo handling of port users and strict enforcement of overloaded and oversized cargo/containers were not conducted to prevent these damages as a part of operation and maintenance activities. For the operation and maintenance, APORTIL conducts weekly inspection

¹ The project period is calculated from the date of the E/N to the date of the Certificate of Completion of the works for Final Payment of Term 3. In this project, it is 44.5 months (from May 2006 to February 2010) and it was 12.5 months over against 32 months, which was planned at the ex-ante evaluation.

² The concrete cracks were found at Block 3 in May 2008 and necessary measures had been taken in August 2008. After the several repair works, the Certificate of the First Substantial Taking-Over was issued in September 2008. Based on the certificate, the operations (Block 3, 4, 7 and 9) and the rehabilitation works (Block 1 and 2) had started. However, concrete cracks had been found at Block 3 and 4 even after the repair work. In order to meet the conditions set by the certificate, the additional repair works were conducted at Block 3 and 4 in parallel with the works at Block 1 and 2.

and has conducted the maintenance dredging for safe mooring of ships in 2013-2014. Regarding the financial aspect, sufficient budget for maintenance has been allocated based on the annual action plan of APORTIL submitted to Ministry of Finance by MTC.

Therefore, as there are some problems in the institutional aspect, the technical aspect, and the aspect of current status of operation and maintenance, the sustainability of this project effect is fair.

5 Summary of the Evaluation

The project has largely achieved its objectives of “recovering safe and smooth operation of Dili Port by rehabilitation of the existing wharf.” The volume of cargo, volume of containers and number of arriving vessels have fully met their target value. The efficiency of cargo handling of Dili Port has been improved as time required for handling 100 tons of cargo and handling volume of container per hour fully met their target values. No significant accidents are reported after the project completion except one accident with fatality in 2013, but the safety of port workers still remains an issue. As for the impacts, the project has positive impacts on reduction of transport cost for export and import goods and promotion of availability of goods in Dili city.

As for sustainability, there are some problems in the institutional aspect, technical aspect, and the aspect of current status of operation and maintenance since there are still many vacant positions in APORTIL and the technical capacity of APORTIL needs to be improved.

As for efficiency, the project period exceeded the plan for 12.5 months due to the delay of undertakings by the Timor-Leste side and repair works for concrete cracks at Block 3 and 4.

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

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

- It is recommended that APORTIL makes efforts to recruit the staff especially engineers and technicians necessary for conducting operation and maintenance
- It is recommended that APORTIL in collaboration with MTC should take necessary preventive measures to avoid the damage of the port structures caused by strong stacking by containers. For example, establishment of the monitoring system for cargo handling of port users and enforcement system for overloaded and oversized cargo/containers may help to solve the above issue.



Block no. 3 to the end of block no.4



Back side of wharfs