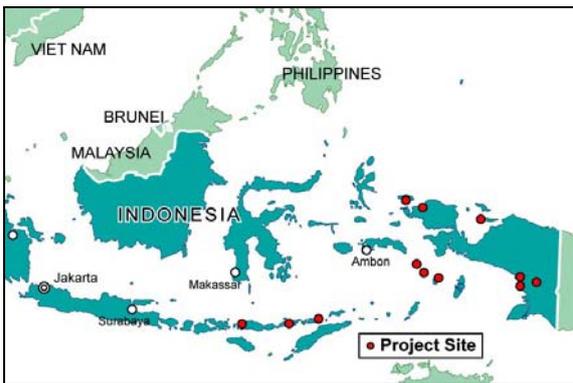


Indonesia

Ex-post Evaluation of Japanese ODA Loan Project  
“Small Ports Development Project in Eastern Indonesia”

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Field Survey: June 2009

1 . Outline of the ODA Loan Assistance



Map of the project area



Wharf at Menanga constructed by this project

1.1 Background

Indonesia is an archipelagic nation stretched over 17,000 islands across 1,800km from north to south and 5,100km from east to west. With such a geographical environment, maritime transport is important in passenger/freight transport and in communication. Furthermore, from the viewpoint of reducing regional disparities, maritime transport plays a vital role in regions where road transportation is not available. Since 1974, the Government of Indonesia has supported the operation of unprofitable sea routes by subsidizing routes calling at non-commercial ports (small-scale ports). The regular sea routes with government support are named “Pioneer Routes” and contribute to the improvement of the living standards of local people and the development of the economy in remote areas. At the time of the appraisal of this project (as of 1997), 36 sea routes were designated as Pioneer Routes, of which 29 routes called at 140 non-commercial ports located in Eastern Indonesia. However, since many of these non-commercial ports did not have basic port facilities such as moorings, these ports were neither efficient nor safe enough to call at, for the embarking/disembarking of passengers, and the loading/unloading of cargo. Therefore, in order to offer a marine transport service in the eastern region, the development of port facilities was urgent. The project target areas, East Nusa Tenggara, Maluku, West Papua, and Papua, are located in the economically underdeveloped eastern region of Indonesia and include vast areas (such as

islands or tropical rainforest areas) hardly accessible by land transport.

## 1.2 Objective

The objective of this project is to enhance the efficiency of maritime transportation and improve safety by improving facilities such as moorings in 12 non-commercial ports in East Nusa Tenggara, Maluku, West Papua and Papua, thereby contributing to the promotion of economic and social development in the above provinces.

## 1.3 Borrower / Executing Agency

Government of Indonesia / Directorate General of Sea Communication, Ministry of Transportation (DGST)

## 1.4 Outline of the Loan Agreement

Approved Amount / Disbursed Amount	3,111 million yen / 2,590 million yen
End Notes Exchange Date / Loan Agreement	January 27, 1998 / January 28, 1998
Terms and Conditions	Interest Rate: 2.7% (Consultant Portion 2.3%) Repayment Period: 30 years (Grace Period: 10 years) Procurement: General Untied
Final Disbursement Date	September 25, 2005
Main Contractor (Over 1 billion yen)	—
Main Consultant (Over 100 million yen)	Pacific Consultant International (Japan) • PT RAYA SURINDO (Indonesia) • PT RAYAKONSULT (Indonesia) (JV)
Feasibility Studies, etc. (F/S)	None
Related Projects	None

## 2. Evaluation Results (Rating : C)

### 2.1 Relevance (Rating: a)

This project has been highly relevant with Indonesia's national policies and development needs at the times of both appraisal and ex-post evaluation.

#### 2.1.1 Consistency with Indonesia's Development Policy

At the time of appraisal, the Sixth Five Year National Development Plan (REPELITA VI, 1994 – 1998) emphasized the importance of the development of the economically

underdeveloped eastern region from the viewpoint of reducing economic disparity among regions. In addition, in order to encourage development and economic growth in remote places, the improvement of facilities in non-commercial ports was a major objective in development policy. The Government of Indonesia had the policy of improving underdeveloped ports within 10 years. Out of 556 non-commercial ports, 286 ports did not have adequate mooring facilities.

At the time of ex-post evaluation, the reduction of regional disparity was one of the most important objectives in the Medium-Term National Development Plan (PRJM 2004–2009). It can be seen that there are still substantial differences between urban and non-urban areas, Java and other areas, and Western and Eastern Indonesia. PRJM also considers the maritime service to offer a highly reliable traffic service and to contribute to national unity. The mid-term strategic plan (RENSTRA 2005-2009) for the executing agency DGST regards port development in Eastern Indonesia and in border areas as a sector issue, and indicates policy direction towards the expansion of public investment into low-developed areas, remote areas, and border areas.

The project was consistent with Indonesia's national and sector policies during the period of both the project implementation and the project completion phases. The project has contributed to the improvement of living standards and regional development by supporting public investment in the small and medium ports located in inaccessible areas of Eastern Indonesia.

### 2.1.2 Consistency with Development Needs

All ports under the project were on Pioneer Routes and were non-commercial ports with inadequate facilities at the time of appraisal. At the time of ex-post evaluation, the ports improved by the project were still on Pioneer Routes. Several routes, one to five routes at each port, are serviced. As Pioneer Routes ensure freight and passenger services to satisfy local people in difficult to access areas, they contribute to the securing of the national minimum in the transport sector.<sup>1</sup> For this reason, the development need for the improvement of ports on Pioneer Routes is extremely high.

## 2.2 Efficiency (Rating : b)

Although the project cost was lower than planned, the project period was much longer than planned; therefore the evaluation for efficiency is moderate. The reason for the delay in the project implementation was prolonged procedures for the procurement of consulting services and civil works.

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<sup>1</sup> National minimum is defined as the service level and living standards which a central government is obliged to provide or secure for citizens.

### 2.2.1 Project Outputs

As part of the project, the development of port facilities was carried out for small and medium ports on Pioneer Routes. There was no change in the target ports. The improvement of the port facilities followed the original plan (see Table 1, Figure 1).

The project monitoring and supervision consultant reexamined the procurement of cargo handling equipment. As a result of the reassessment, the number of forklift trucks<sup>2</sup> was reduced from twelve to three units. At the same time, two truck-cranes were added. As for the consulting service, the review of the detail design of ports, procurement assistance and construction management were conducted as planned.

Table 1: Content of the Civil Work (Planned & Actual)

Name of the Ports (Province)	Content of the Civil Work (Planned)	Content of the Civil Work (Actual)
Labuan Bajo (East Nusa Tenggara)	Wharf (1320 m <sup>2</sup> ), Port office, Parking area, Water supply system, Power generating facility, Harbor lamp	Wharf (1440 m <sup>2</sup> ), Port office, Passenger terminal, Warehouse, Cargo storage, Water supply system, Power generating facility, Harbor lamp
Maritaing (East Nusa Tenggara)	Wharf (560 m <sup>2</sup> ), Port office, Water supply system, Power generating facility, Harbor lamp	Wharf (400 m <sup>2</sup> ), Multipurpose building, Cargo storage, Water supply system, Power generating facility, Harbor lamp
Menanga (East Nusa Tenggara)	Wharf (240 m <sup>2</sup> ), Port office, Warehouse, Cargo storage, Water supply system, Power generating facility, Harbor lamp	Wharf (400 m <sup>2</sup> ), Port office, Multipurpose building, Cargo storage, Water supply system, Power generating facility, Harbor lamp
Kasiui (Maluku)	Wharf (180 m <sup>2</sup> ), Port office, Water supply system, Power generating facility, Harbor lamp	Wharf (368 m <sup>2</sup> ), Port office, Multipurpose building, Cargo storage, Water supply system, Power generating facility, Harbor lamp
Kur Island (Maluku)	Wharf (180 m <sup>2</sup> ), Port office, Water supply system, Power generating facility, Harbor lamp	Wharf (560 m <sup>2</sup> ), Port office, Multipurpose building, Cargo storage, Water supply system, Power generating facility, Harbor lamp
Elat (Maluku)	Wharf (560 m <sup>2</sup> ), Port office, Multipurpose building, Cargo storage, Water supply system, Power generating facility, Harbor lamp	Wharf (560 m <sup>2</sup> ), Port office, Multipurpose building, Warehouse, Cargo storage, Water supply system, Power generating facility, Harbor lamp
Mega (West Papua)	Wharf (120 m <sup>2</sup> ), Port office, Water supply system, Power generating facility, Harbor lamp	Wharf (256 m <sup>2</sup> ), Port office, Multipurpose building, Water supply system, Power generating facility, Harbor lamp, Beacon
Pam Island (West Papua)	Wharf (560 m <sup>2</sup> ), Port office, Cargo storage, Water supply system	Wharf (560 m <sup>2</sup> ), Port office, Multipurpose building, Cargo storage, Water supply system, Power generating facility, Harbor lamp

<sup>2</sup> Powered industrial trucks used to lift and transport materials

Name of the Ports (Province)	Content of the Civil Work (Planned)	Content of the Civil Work (Actual)
Ansus (Papua)	Wharf (120 m <sup>2</sup> ), Port office, Water supply system, Power generating facility, Harbor lamp	Wharf (560 m <sup>2</sup> ), Port office, Multipurpose building, Water supply system, Power generating facility, Harbor lamp
Atsy (Papua)	Wharf (560 m <sup>2</sup> ), Port office, Warehouse, Water supply system, Power generating facility, Harbor lamp	Wharf (560 m <sup>2</sup> ), Port office, Warehouse, Water supply system, Power generating facility, Harbor lamp
Bayun (Papua)	Wharf (432 m <sup>2</sup> ), Port office, Warehouse, Water supply system, Power generating facility, Harbor lamp	Wharf (432 m <sup>2</sup> ), Port office, Warehouse, Water supply system, Power generating facility, Harbor lamp
Eci (Papua)	Wharf (432 m <sup>2</sup> ), Port office, Warehouse, Water supply system, Power generating facility, Harbor lamp	Wharf (432 m <sup>2</sup> ), Port office, Warehouse, Water supply system, Power generating facility, Harbor lamp

Source: DGST

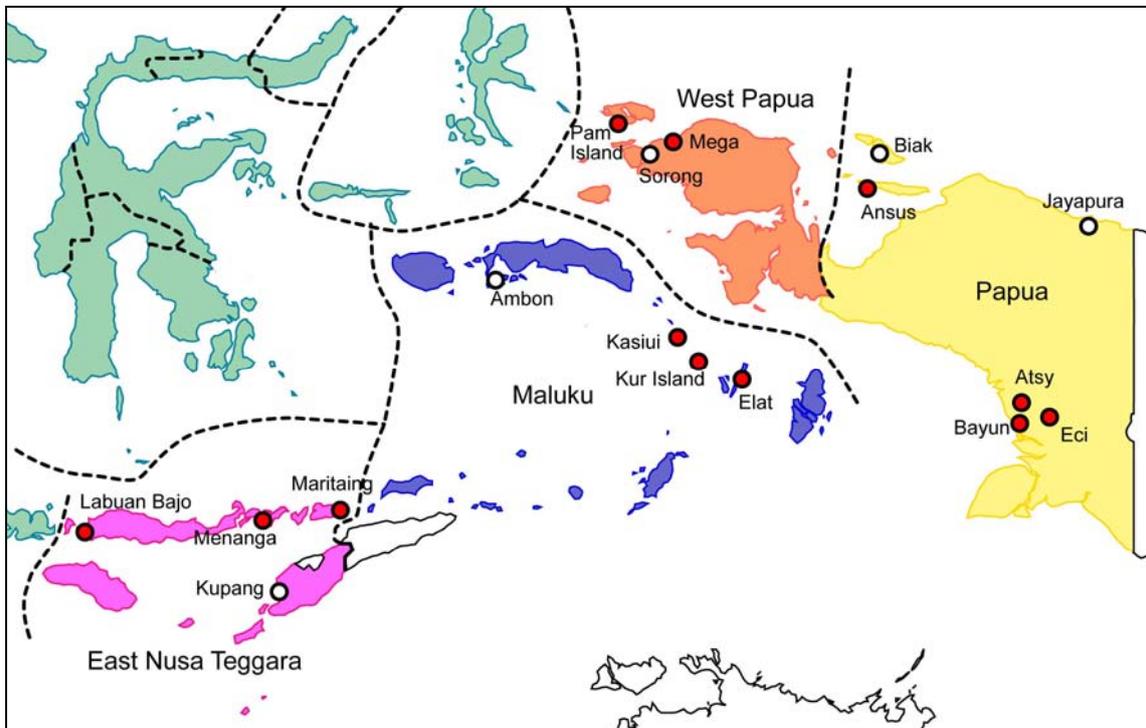


Figure 1: Location of the project target ports

### 2.2.2 Project Period

The project period exceeded the plan substantially. The actual schedule was 8 years and 5 months from January 1998 to May 2006 (210% of planned) while the planned schedule was 4 years from January 1998 to December 2001. The main reason for this delay was the prolonged procurement process for consultants<sup>3</sup>.

<sup>3</sup> The project adopted a shortlist method. The executing agency narrowed down the candidate consulting

### 2.2.3 Project Cost

Although the project cost was estimated at 4,148 million yen (of which the Japanese ODA loan was 3,111 million yen) at the time of appraisal, the actual cost was 3,487 million yen (of which the Japanese ODA loan was 2,509 million yen) (84% of planned). As a result of competitive bidding, the project cost was below the plan.

### 2.3 Effectiveness (Rating: b)

As port management data is available for only two ports, it is difficult to evaluate the degree of attainment for the effectiveness targets. However, positive effects can be seen, such as the increases in ship calls, cargo handling volume and the number of passengers, as well as improvement in the convenience of the Pioneer Routes after the project completion.<sup>4</sup> Therefore, this project has produced certain effects, and its effectiveness is moderate.

#### 2.3.1 Number of Ships Entering the ports, Cargo Volume, and Passengers Embarking /Disembarking

##### (1) Labuan Bajo Port, Menanga Port

According to the operational data of two ports (Labuan Bajo port and Menanga port), cargo volume and the number of passengers increased as a result of the increase in ship calls at after project completion<sup>5</sup> (see Table 2). The cargo volume at Labuan Bajo reached the target set at the time of appraisal while the number of passengers stayed below target. There is a ferry terminal managed by Bina Marga, Ministry of Transportation near Labuan Bajo port and arguably, passengers using short distance sea routes were dispersed over the two ports.

Table 2: Ship Calls, Cargo Volume, and the Number of Passengers  
in Labuan Bajo Port and Menanga Port

Port	Indicators	2005 (Target)	2005 (Actual)	2006 (Actual)	2007 (Actual)	2008 (Actual)
Labuan Bajo Port	Ship Calls	—	886	1,195	1,302	1,602
	Cargo Volume (ton)	24,671	9,456	26,608	22,422	27,556
	Number of Passengers	94,410	17,695	25,489	29,440	36,044
Menanga Port	Ship Calls	—	395	788	806	792
	Cargo Volume (ton)	—	490	838	765	470
	Number of Passengers	—	15,853	32,593	20,035	8,152

Source: DGST

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companies to a few in advance. It took a long time to make up the list of candidate companies.

<sup>4</sup> As this project intends to secure a national minimum, the current operation of Pioneer Routes and local people's views on the benefits from ports were taken into consideration in the ex-post evaluation.

<sup>5</sup> Civil works completed in March 2005 for Labuan Bajo port, and in October 2004 for Menanga Port.

(2) Number of Services, Cargo Volume and Number of Passengers Embarking/Disembarking on Pioneer Routes

The number of regular services on Pioneer Routes increased by approximately 70% during the period between 2003 (before project implementation) and 2007 (after project implementation) (see Table 3). Similarly, cargo volume and the number of passengers on Pioneer Routes increased significantly between 2003 and 2007 (see Table 4).<sup>6</sup> The increase in cargo volume, which was only small before the project, was particularly striking. This signifies that the shipment of goods into other areas through the Pioneer Routes became more active. It can be concluded that the number of services on Pioneer Routes increased due to the development of the ports by the project and that the project resulted in more convenient and frequent services on the Pioneer Routes.

Table 3: Number of Sea Route Services on Pioneer Routes

Port	2003	2007
Labuan Bajo	2	2
Maritaing	1	1
Menanga	—	2
Kasiui	1	3
Kur Island	1	3
Elat	1	3
Mega	1	2
Pam Island	2	2
Ansus	2	5
Atsy	3	3
Bayun	3	3
Eci	2	3
Total	19	32

Source: DGST

Table 4: Cargo Volume and Number of Passengers on Pioneer Routes

Port	Cargo Volume (ton)				Number of Passengers			
	2003		2007		2003		2007	
	Loading	Unloading	Loading	Unloading	Embarkation	Disembarkation	Embarkation	Disembarkation
Labuan Bajo	0	65	171	241	90	108	808	757
Maritaing	0	135	-	-	0	135	-	-
Menanga	-	-	180	202	-	-	1,230	1,956
Kasiui	0	13	415	798	1,122	936	1,951	2,246
Kur Island	0	0	1,009	1,477	296	583	1,731	1,867
Elat	0	0	1,456	1,541	8	84	1,118	1,527
Mega	0	0	0	0	90	152	13	141
Pam Island	89	21	3	122	67	258	233	609
Ansus	0	0	292	282	0	0	1,151	2,698
Atsy	0	494	465	546	870	721	828	765
Bayun	113	833	559	577	1,642	1,164	1,268	859
Eci	0	32	203	115	353	174	159	808
Sub-Total	202	1,593	4,753	5,901	4,538	4,315	10,490	14,233
Total	1,795		10,654		8,853		24,753	

Source: DGST

<sup>6</sup> In 2007, Pioneer Routes account for 2% of total cargo volume and 5% of total number of passengers in Labuan Bajo and 50% of total cargo volume and 16% of total number of passengers in Menanga.

### 2.3.2 Results of the Questionnaire Survey for Business Offices

From the questionnaire survey for business offices located near the project target ports, a more frequent use of ports and the improvement of passenger and freight services can be noted.

The amount of travel on vessels increased following the development of the ports, with the majority of the respondents traveling on vessels from the target ports at least once a month (see Figure 2). Over 90% of the respondents had the opinion that passenger and freight services were “improved” or had “improved a little”. The reasons for improvement were 1) safety, 2) shorter travel time, and 3) shorter waiting time, in order. The majority of respondents (66.4%) mentioned improvement of safety as the reason for improvement, and the contribution to safety by the project is highly valued (see Figure 3).

Picture 1 Questionnaire Survey for Residents



#### Beneficiary Survey conducted in this Ex-Post Evaluation

In the ex-post evaluation of “The Development of Small Ports in Eastern Indonesia”, a questionnaire survey and group interviews were carried out. The purpose of the beneficiary survey is to complement traffic and economic statistics and analyze project effect from the viewpoint of the users. The beneficiary survey conducted in this ex-post evaluation is as follows.

<Questionnaire survey for business offices located near the target ports>

Place : Elat port in Maluku, Labuan Bajo port in East Nusa Tenggara, Menanga port in East Nusa Tenggara

Time : March, April, June, 2009

Target : Business owners and employees from business offices located near the ports.

Number of samples: 118 persons (40 persons in Elat port, 40 persons in Labuan Bajo port, and 38 persons in Menanga port)

<Focus group discussion for residents near the target ports>

Place : Elat port in Maluku, Labuan Bajo port in East Nusa Tenggara

Time : March, April, 2009

Target : Residents living near the ports.

Number of samples: 40 persons  
(26 persons in Elat port and 14 persons in Labuan Bajo port)

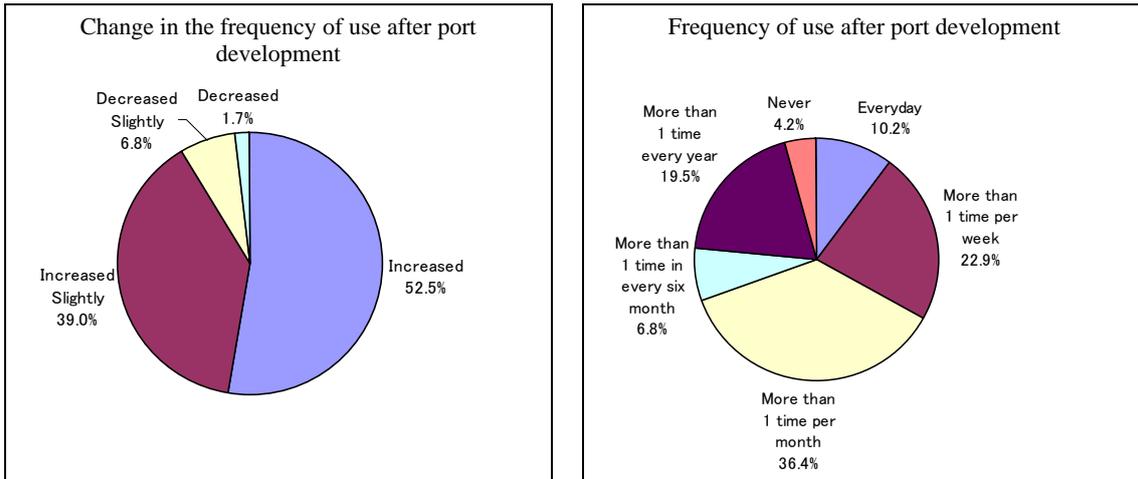


Figure 2: Frequency of Use of the Port After Port Development  
(Questionnaire survey for business offices)<sup>7</sup>

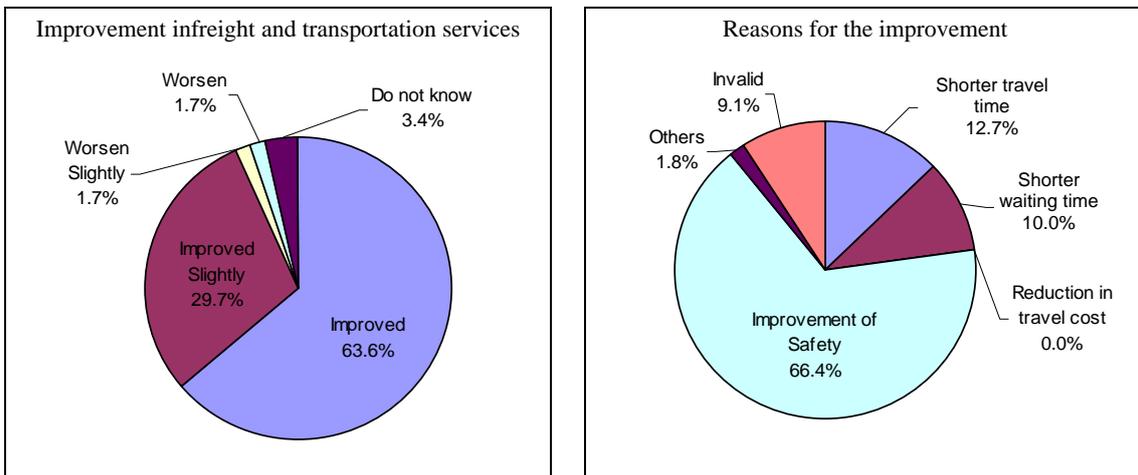


Figure 3: Improvement in the Passenger and Freight Services After Port Development  
(Questionnaire survey for business offices)<sup>8</sup>

### 2.3.3 Improvement in Safety

As seen in “2.3.2 Results of the Questionnaire Survey for Business Offices”, in the questionnaire survey for residents, the improvement in safety was quoted as the major reason for the improvement in freight and passenger services after project completion. DGST staff and crew of vessels serving Pioneer Routes remarked in interviews that wharfs and harbor

<sup>7</sup> Both “Change in the frequency of use after port development” and “Frequency of use after port development” depend on the results of questionnaire surveys for business owners and employees of business offices (118 persons) near the project target area.

<sup>8</sup> “Improvement in freight and transport services” depends on the results of the questionnaire survey for business owners and employees of business offices (118 persons) near the project target area. 110 people who were asked about “Reasons for the improvement” answered “improved” or “improved a little” for the above question.

lamps contributed to safety. Before wharfs were improved through the project, accidents happened easily as large ships were not allowed to anchor, and the embarkation/disembarkation of passengers and the loading/unloading of cargo required transshipment to small boats. The improvement of wharfs has allowed large vessels to berth directly at the ports, enabling the embarkation/disembarkation of passengers and the loading/unloading of cargo. After the improvement works, jetties extended farther offshore. Harbor lamps indicating the location of a port at night, prevent collision with the jetty.

Photo 2 Harbor Lamp (Elat port)



Photo 3 Jetty (Labuan Bajo port)



## 2.4 Impact

### 2.4.1 Impact on Beneficiaries

The questionnaire survey for business offices near the project areas (Elat port in Maluku, Labuan Bajo port in East Nusa Tenggara, Menanga port in East Nusa Tenggara) shows the majority of respondents answering that the number of business opportunities and, furthermore, employment opportunities increased after port development. It can be concluded from this result that the project stimulated the local economy. (see Table 5, 6).

When focus group discussions for residents near the target areas were held in two ports (Elat port in Maluku and Labuan Bajo port in East Nusa Tenggara), a satisfaction survey also took place. More than half of the respondents answered “Completely Satisfied” or “Fairly Satisfied” at both of the ports, and it can be concluded that the satisfaction of local people is generally high (see Table 7). The result of the satisfaction vote was bipolarized in Elat while there was no such bias in Labuan Bajo. Participants in Elat remarked that 1) the deck part of the jetty is too high to moor small vessels and 2) only certain groups such as storekeepers can enjoy the benefits of the port. These complaints are presumably behind the strong feelings of dissatisfaction among the local people who do not benefit from Elat port. On the other hand, a wider group of people enjoys the benefits of Labuan Bajo port as tourism development progressed in tandem with the development of Labuan Bajo port. This widespread benefit has

resulted in a high level of satisfaction among the local people in Labuan Bajo.

Table 5: New Businesses Launched After Port Development  
(Questionnaire survey for business offices)

Port	Increased	Not Changed	Decreased	Invalid
Elat port	26	13	1	0
Labuan Bajo port	31	9	0	0
Menanga port	35	2	0	1
Total	92	24	1	1
Ratio	78.0%	20.3%	0.8%	0.8%

Table 6: Employment Opportunities after Port Development  
(Questionnaire survey for business offices)

Port	Increased	Not Changed	Decreased	Invalid
Elat port	19	19	2	0
Labuan Bajo port	29	11	0	0
Menanga port	34	3	0	1
Total	82	33	2	1
Ratio	69.5%	28.0%	1.7%	0.8%

Table 7: Satisfaction with Ports after Development (Focus Group Discussion)

Port	Completely Satisfied	Fairly Satisfied	Fairly Dissatisfied	Very Dissatisfied	Do not know
Elat port	10	4	3	8	1
	38.5%	15.4%	11.5%	30.8%	3.8%
Labuan Bajo port	8	6	0	0	0
	57.1%	42.9%	0.0%	0.0%	0.0%

#### 2.4.2 Impacts on the Environment and Resident Relocation

Monitoring of the environmental impact was carried out routinely during the project. Water quality examination was held three times; before the commencement of civil work, during civil work, and after the completion of civil work. Water quality was mostly within the environmental standards<sup>9</sup> (see Table 8). Water turbidity exceeded the environmental standards at the river ports where this situation had persisted before the commencement of civil work. Other factors other than the project arguably affected the results<sup>10</sup>. During the site survey of the ex-post evaluation (Elat port, Labuan Bajo port and Menanga port), no negative impact on the environment in and around the ports was observed.

There was no land acquisition nor relocation of local residents for any of the project

<sup>9</sup> According to the environmental standards of the Government of Indonesia, BOD (biological oxygen demand) should be lower than 40mg/l, COD (chemical oxygen demand) should be lower than 80mg/l, ph (hydrogen-ion exponent) should be within 5-9, turbidity should be lower than 40NTU.

<sup>10</sup> Turbidity before the civil work started was 553NTU for Aci port, 64NTU for Bayun port and 96.67NTU for Eci port and the data exceeded environmental standards at the time of the start of civil work.

target ports as the project aimed simply to improve existing port facilities.

Table 8: Water Quality of the Project Target Ports (After project completion)

Labuan Bajo	Maritaing	Menanga
BOD: 6.25 mg/l COD: 46.6 mg/l pH: 7.5 turbidity: 0.2 NTU	BOD: 8.04 mg/l COD: 19.35 mg/l pH: 7.9 turbidity: 3.5 NTU	BOD: 9.7 mg/l COD: 22.3 mg/l pH: 7.7 turbidity: 3.85 NTU

Kasiui	Kur Island	Elat
BOD: 5.4 mg/l COD: 29 mg/l pH: 7.5 turbidity: 7 NTU	BOD: 5.4 mg/l COD: 31 mg/l pH: 7 turbidity: 5.2 NTU	BOD: 4.5 mg/l COD: 24 mg/l pH: 3.1 turbidity: 8.5 NTU

Mega (Central)	Pam Island (Central)	Ansus (Central)
BOD: 7.39 mg/l COD: 19.54 mg/l pH: - turbidity: 0 NTU	BOD: 2.95 mg/l COD: 8.55 mg/l pH: - turbidity: 0 NTU	BOD: 25 mg/l COD: 63.55 mg/l pH: 8 turbidity: 1.50 NTU

Atsy	Bayun	Eci
BOD: 23.77 mg/l COD: 66.49 mg/l pH: 8.5 turbidity: 180.98 NTU	BOD: 33.97 mg/l COD: 82.34mg/l pH: 8.5 turbidity: 157.72 NTU	BOD: 17.72 mg/l COD: 57.94 mg/l pH: 8.5 turbidity: 117.14 NTU

Source: Project Completion Report “The Development of Small Ports in Eastern Indonesia”

## 2.5 Sustainability (Rating: b)

Though some problems have been observed in the O&M system and the financial status of DGST, the sustainability of this project is fair,

### 2.5.1 Executing Agency

#### 2.5.1.1 Structural Aspects of Operation and Maintenance

KANPEL (Regional non-Commercial Port Offices) under DGST conduct the O&M of the ports developed by the project (see Table 9 regarding the KANPEL which are in charge of the project target ports). There are approximately 500 KANPEL across Indonesia, each KANPEL is in charge of more than one non-commercial port. KANPEL play various roles in port administration such as ship inspection, maritime safety, and the O&M of port facilities. In tandem with decentralization by the Government of Indonesia, a new sector policy was decided in 2002. O&M of non-commercial ports must be transferred from DGST to the local government if this is requested by a kabupaten government. After the port is transferred, the local government handles the O&M of the port, and DGST continues to handle ship inspection

and the safety of sea routes. By the time of the ex-post evaluation, the O&M of ports had not been transferred at any of the project target ports. However, the O&M of Pam Island port will be transferred as requested by the kabupaten government.

The collection and management of operation data for the project target ports (ships calls, cargo volume, number of passengers etc.) is not adequate. There is an issue in the monitoring of port administration. In addition, there is confusion in managerial responsibility in Elat where the kabupaten government took over port administration without a request for ownership transfer. In the case that substantial damage occurs, there is a risk that O&M might not be conducted appropriately because of the confusion in managerial responsibility.

Table 9: KANPEL handling O&M

Port	Province	KANPEL
Labuan Bajo	East	Labuan Bajo
Maritaing	Nusa	Baranusa
Menanga	Tenggara	Larantuka
Kasiui	Maluku	Geser
Kur Island		Tual
Elat		Tual
Mega	West	Sorong
Pam Island	Papua	Saunek
Ansus	Papua	Serui
Atsy		Bade
Bayun		Bade
Eci		Agats

#### 2.5.1.2 Technical Aspects of Operation and Maintenance

There are no civil engineers who station at the ports improved by the project. Each port or KANPEL is in charge of routine maintenance (inspection, lubrication, painting, etc.) which does not require advanced technology. If the port is damaged extensively by incidents such as natural disaster or accident, engineers at the DGST Jakarta head office assess the damage. Out of 27 engineers who work for DGST head office, 23 are civil engineers. The engineers in the DGST head office occasionally participate in both outside seminars and training courses.

#### 2.5.1.3 Financial Aspects of Operation and Maintenance

O&M is handled within the budget allocated by DGST to each KANPEL. When repair or dredging is required, KANPEL sends a request to DGST head office for the work. The head office allocates the budget after examination. As user charges for ports are part of the general budget of the Government of Indonesia, they cannot be allocated directly to O&M. For 2008, DGST obtained 53.7 billion rupiah as the budget for port repair. This budget was not allocated to the project target ports because no serious problems preventing the normal operation of the ports occurred. For West Papua and Papua, the official handover from the Directorate of Port and Dredging, the section of DGST in charge of project implementation, to KANPEL was not completed. Although the ports are already in service, budget for repairs is not allocated to them until the official handover. The reason of the delay in the handover is the lack of budget. It is difficult however to secure budget for the dispatch of the five inspectors who are required to complete the handover process.

### 2.5.2 Current Status of Operation and Maintenance

No serious problems hindering the normal operation of ports was observed through the site survey of the ex-post evaluation in Elat port, Labuan Bajo port or Menanga port. However, minor problems (troubles with power generators, cargo handling equipment, wharfs, and harbor lamps) were found. Repairs needing additional budget allocation were not dealt with promptly.

## 3. Conclusion, Lessons Learned and Recommendations

### 3.1 Conclusion

As the project aims to improve various facilities in the ports on Pioneer Routes serving areas which are difficult to access, the consistency with development needs is high. At the project target ports, the service of Pioneer Routes improved due to an increase in the number of services. The satisfaction level of local residents is high. However, the collection of port operation data is not adequate. This is a persistent issue in the monitoring of port administration. Although minor damages were found in the improved infrastructures, no serious problems hindering the function of ports were observed. In light of the above, this project is evaluated to be fairly satisfactory.

### 3.2 Lessons Learned

#### (1) Achievement of the National Minimum

This project developed port facilities in areas inaccessible by land transport, improved the convenience of Pioneer Routes, and aimed to ensure the national minimum in the transport sector. Unlike for large commercial ports, the project object for small ports is not only economic efficiency but also the stable provision of transport to local people. With these points in mind, it is recommended that the target level of the national minimum is set and the means to achieve the target at the formation of projects targeting small ports clarified.

### 3.3 Recommendations

#### (1) To Establish a Port Administration Monitoring System (for the executing agency)

Because the monitoring system for port operation is not established, basic data for port administration has not been collected. Therefore, neither budget allocation nor personnel positioning was based on actual operational conditions. It seems that the “Check” function of the PDCA cycle<sup>11</sup> is insufficient. It is recommended that the executing agency collect and manage basic port operation data, feeding back the data to port operation.

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<sup>11</sup>Initials of four steps of the project; Plan – Do – Check – Act. The project is improved continuously by continuous management of the PDCA cycle.

(2) Responsibility for Maintenance (for the executing agency)

In Elat, the local kabupaten government participates in port administration. In the provinces of Papua and West Papua, transfer from the DGST headquarters to KANPEL has not been completed. In both areas, the responsibility for maintenance is unclear. It is recommended that the responsibility for maintenance is defined by establishing a common understanding among stakeholders and by empowering the government offices in charge of maintenance. For the six ports in the provinces of Papua and West Papua, it is desirable that both the budget for inspectors and their prompt dispatch is secured, that the transfer to KANPEL is completed, and the responsibility for maintenance defined.

Comparison of Original and Actual Scope

Item	Original	Actual
<p>1. Project Outputs</p> <p>a) Civil works</p> <p>b) Handling equipment</p> <p>c) Consulting service</p>	<p>Construction of wharfs, mooring facilities, harbor lamps, incidental equipment (port offices etc.) at 12 ports.</p> <p>1) Laban Bacjo 2) Menanga 3) Maritaing 4) Kur Island 5) Elat 6) Kasiui 7) Mega 8) Pam Island 9) Ansus 10) Atsy 11) Bayun 12) Echi</p> <p>Forklift 12 units</p> <p>Content of consulting service is as follows. 1) Review of detail design 2) Procurement assistance 3) Execution management</p>	<p>Same as planned</p> <p>No change for the target port</p> <p>Forklift 3 units Truck with crane 2 units</p> <p>Same as planned</p>
<p>2) Project Period</p> <p>Consultant selection</p> <p>Consulting service</p> <p>Bid for civil works</p> <p>Civil works</p>	<p>January 1998 – June 1998</p> <p>July 1998 – December 2001</p> <p>July 1997 – June 2000</p> <p>December 1999 – December 2001</p> <p>(Total: 4 years)</p>	<p>January 1998 – February 2001</p> <p>March 2001 – May 2006</p> <p>September 2001 – September 2003</p> <p>October 2003 – May 2006</p> <p>(Total: 8 years and 5 months)</p>
<p>3) Project Cost</p> <p>Total</p> <p>Japanese ODA loan portion</p> <p>Exchange rate</p>	<p>4,148 million yen</p> <p>3,111 million yen</p> <p>1 Rp= 0.052 yen (as of 1998)</p>	<p>3,487 million yen</p> <p>2,509 million yen</p> <p>1 Rp= 0.013 yen (average during the project implementation)</p>