

# Mindanao Container Terminal Project

Evaluator: Mamoru Kobayashi,  
Senshu University

## 1. Project Description



**Location of the project**



**Container berth of the project**

### 1.1 Background

Development of transport infrastructure to promote economic growth in Mindanao Island is one of the most important policies of the Philippine government. To this aim, the Cagayan de Oro port, which is one of the key ports in Northern Mindanao, is given a critical role as a hub, in terms of logistical strategies, to connect local agricultural and industrial areas with major cities in the Philippines including Manila and Cebu, and other major consumption areas in Southeast Asia.

The existing Cagayan de Oro port, however, was facing overcapacity (the berth occupation ratio was over 100%) and inefficiency, and eventually offshore-waiting duration for vessels was getting longer at the time of the appraisal of this project. In addition, since the port was catering for passenger boats as well as cargo carriers, congestion was getting more and more serious. Moreover, since the port was located in the old city area, access roads were narrow and congested, leading to lengthy transport time for delivery of goods and materials to the port from factories and other areas.

Under such conditions, overall improvement in logistical infrastructure including development of port infrastructure in Northern Mindanao was needed, and among others it was highly necessary to develop a new port, in the vicinity of Cagayan de Oro city, that

is equipped with container terminals to deal with the mounting logistical problems.

In sum, it was quite essential to develop a new container terminal port in a neighbouring appropriate location, which would facilitate smoother logistics, thereby contributing to improvement in overall transport infrastructure and regional economic development in Northern Mindanao.

## 1.2 Project Outline

The objective of this project is to harmonize cargo handling and activate logistics in Northern Mindanao by constructing a container terminal in the PHIVIDEC industrial park, which is located in the northwest area of Mindanao Island, thereby contributing to economic development in the region.

Approved Amount / Disbursed Amount	8,266million yen / 8,265million yen
Exchange of Notes Date/ Loan Agreement Signing Date	April, 2000 / April, 2000
Terms and Conditions	<ul style="list-style-type: none"> <li>• Interest Rate: 1.0%</li> <li>• Repayment Period: 40 years (Grace Period: 10 years) (For Consulting Service: Interest Rate: 0.75%, Repayment Period: 40 years (Grace Period: 10 years))</li> <li>• Conditions for Procurement:</li> <li>• General Untied (For Consulting Service: Untied)</li> </ul>
Borrower Executing Agency	Government of Republic of the Philippines PHIVIDEC Industrial Authority
Final Disbursement Date	September, 2007
Main Contractor (Over 1 billion yen)	Kawasaki Steel (Japan), Mitsubishi Corporation (Japan), Toyo Construction (Japan)
Main Consultant (Over 100 million yen)	Basic Technology and Management Corporation (Philippines), CEBU Engineering and Development Corporation Inc.(Philippines) Technosphere Consultants Group, Inc.(Philippines) Overseas Costal Area Development Institute (Japan) Pacific Consultants International (Japan)
Feasibility Studies, etc.	Special Assistance for Project Implementation (SAPI) (JICA, 2008)
Related Projects (if any)	None

## **2. Outline of the Evaluation Study**

### **2.1 External Evaluator**

Mamoru Kobayashi, Senshu University

### **2.2 Duration of Evaluation Study:**

Duration of the Study: May 2010 - February 2011

Duration of the Field Study: August 2-18, 2010, November 16 -26, 2010

### **2.3 Constraints for the Evaluation Study**

The project was implemented for easing congestion in the existing Cagayan de Oro port, and facilitating smoother logistics in the target areas. With this background, it was best to compare operational statuses of the Cagayan de Oro port before and after the implementation of this project; therefore, we needed to obtain the detailed time-series loading data of the existing Cagayan de Oro base. The data, however, was not obtainable although we repeatedly requested, through the executing agency, to Philippine Port Authority (PPA), which administers Cagayan de Oro. Therefore, detailed figures such as the historical utilization ratios of the port and handled cargo volumes could not be fully taken into consideration for our analyses.

## **3. Results of the Evaluation (Overall Rating: A)**

### **3.1 Relevance (Rating: a)**

#### **3.1.1 Relevance with the Development Plan of the Republic of Philippines**

Mid-term Philippine Development Plan (MTPDP) 1999-2004 emphasized sustainable development and growth with social equality as one of the goals, and infrastructure development including port construction was a one of the central issues to achieve that goal.

The basic concept of the plan is held in the current MTPDP 2005-2010 as well, and the newly-born government in the last presidential election in July has also taken the same political intension and continues to hold the same policy to develop infrastructure utilizing further investment. In particular, the government places an emphasis on outsourcing construction, operation and maintenance to private entities for further efficiency. Thus, this project has been consistent with the Philippine's development policies since the time of its appraisal through to the time of this ex-post evaluation.

#### **3.1.2 Relevance with the Development Needs of the Republic of Philippines**

The targeted area, Northern Mindanao, was not fully equipped with ample infrastructure

including port facilities, and this situation was a bottleneck for the efficient logistics in the area. In particular, the existing Cagayan de Oro base port, a major port in the region, was faced with serious congestion in loading cargo with over 100% utilization of capacity, and solving this problem and increasing capacity to handle additional cargos was highly required through expansion of port facilities and new construction of port. Therefore, there was great need for this project, which would construct a new container terminal for efficient transportation and for enhancing economic development in the targeted area.

The project has been contributing to less congestion of cargo traffic in the existing Cagayan de Oro base port as expected at the time of appraisal. In this situation, shippers mainly using container transportation, including Nestle (Netherland) and Del Monte Philippines Inc., have increased the use of the container terminal that was constructed in this project. Thus, their needs have been fairly satisfied; and, their needs for the container terminal in very high even at the moment.

In sum, this project has properly catered for the development needs on the ground, and such needs continued to exist and are expanding further. Therefore, this project is consistent with the development needs.

### 3.1.3 Relevance with Japan's ODA Policy

At the time of appraisal, Japanese ODA policy to the Philippines placed its emphasis on assistance to the country for its economic revival from the damage caused by Asian Economic Crisis in 1997–1998, as mentioned in a Japanese ODA white paper. It was also recognized that the Philippines had a large potential in poverty reduction along with overall economic development. Among others, the Japanese ODA policy toward the Philippines had infrastructure development, including port development, as one of important areas stance to this aim

This project exactly aimed at regional economic development and poverty reduction through infrastructure development. Therefore, this project was consistent with Japan's ODA policy.

Thus, this project has been highly relevant with the country's development plan, development needs, as well as Japan's ODA policy; therefore its relevance is high.

## **3.2 Efficiency (Rating: a)**

### 3.2.1 Project Outputs

The outputs of the project were, as shown in Table 1, civil works for container berth and container yard, and procurement of gantry cranes and yard cranes.

The original scope of the project at the time of appraisal included civil works and procurement for a container berth with 300 meter length, two gantry cranes, four yard cranes with rubber tires and some computer-related equipment. This scope would guarantee annual capacity of 250,000 TEU<sup>9</sup> (berth extension and further procurement of equipment would enable the port to load more container up to 500,000TEU).

The actual outputs showed no changes in the scope and capacity. The capacity is 250,000 TEU, also as planned. In fact, the loading efficiency in the terminal is so high that annual capacity of 270,000 TEU could be expected to achieve even under current facility.

Thus, we confirmed that the outputs were mostly as planned.

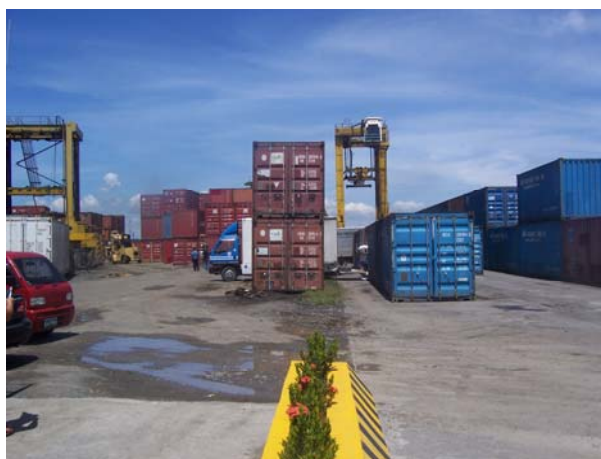
Table 1: Comparison in outputs (Planned and Actual)

Items	Planned	Actual
Civil Works	Container berth (Construction) One berth with 300m length Container yard (construction) 70,000 square meter wide  Annual capacity under the above facility is 250,000 TEU.  (The capacity can be expandable to 500,000 TEU with the berth extension and additional procurement of equipment.)  Related building (construction)	As planned  As planned  Annual capacity under the above facility is 250,000 TEU. 270,000TEU can be loaded at maximum under desirable condition.  (The capacity can be expandable to 500,000 TEU with the berth extension and additional procurement of equipment.)  As planned
Procurement (Major)	Gantry Crane (2 units) Yard Crane (4 units)	As planned As planned

<sup>9</sup> TEU (twenty-foot equivalent unit): it is the unit measuring the volume of loading by the number of twenty-foot equivalent container. One TEU means the volume contained by one 20-foot container.

equipment)	Computer (1 lot)	As planned
------------	------------------	------------

Source: PIA



**Picture Container Yard of the Project**

### 3.2.2 Project Inputs

#### 3.2.2.1 Project Period

The project period was 48 months (from April 2000 to March 2004), which is 88.8% of the planned project period of 54 months (from April 1999 to September 2004). Since PIA has its own industrial estate, it is highly motivated to accelerate the related procedures to facilitate earlier moves of enterprises in the estate. This was a critical factor for smooth and fast progress in the project.

As a result, the actual total period was drastically shortened as a whole although the construction and procurement work spent 2 more months than planned. And the total period from the selection of consultants, to procurement, instalment of facilities and to completion of civil works was about 70% of the planned period.

**Table 2: Comparison in project period (Planned and Actual)**

Items	Planned	Actual
Selection of consultants	December 1999- November 2000 (12 months)	April 2000 - June 2000 (3 months)
Detailed design	December 2000- September 2001 (10months)	October 2000 - May 2001 (8months)
Selection of contractor	July 2001- September 2002 (15months)	January 2002 (One month)

Procurement and construction	October 2002 - September 2004 (24months)	February 2002 - March 2004 (26months)
Maintenance support	Not mentioned	February 2004-March 2004 (2months)

Source: Mail interview with PIA

Thus, very smooth progress was seen in this project for the completion of civil works and procurement of facilities.

### 3.2.2.2 Project Cost

The project cost was 9,148 million yen (including 6,265 million yen for the loan portion), which is 94% of the planned 9,729 million yen (including 6,266million yen for the loan portion). The competitive bidding and no addition of scope led to reduction of the project cost from the original.

Table 3: Comparison in project cost (Planned and Actual)

Items	Planned	Actual
Project cost	9,729 million Yen	9,147 million Yen (94% compared with planned)
Included Yen loan amount	6,266 million Yen	6,265 million Yen
Included foreign portion	4,861 million Yen	6,271 million Yen
Included local portion (Yen basis)	4,869 million Yen	2,876 million Yen
Included local portion(Peso basis)	1,623 million Peso	1,245 million Peso

Note: Peso 1= Yen 3 (at planned, at appraisal work)

Peso 1= Yen 2.31 (averaged exchange rate during project period from April 2000 to March 2004)

Thus, both the project period and the project cost were within the plan, therefore efficiency of the project is high.

## 3.3 Effectiveness (Rating: b)

### 3.3.1 Quantitative Effects

#### 3.3.1.1 Results from Operation and Effect Indicators

The target utilization ratio<sup>10</sup> of the Mindanao container terminal, which was constructed

<sup>10</sup> The utilization ratio is defined as a occupancy ratio of berth area by vessels.

in this project, was not specified in the appraisal report. On the other hand, for the existing Cagayan de Oro base port reduction of the utilization ratio from over 100% to 50-60% in 2006 was mentioned as the target figure of "operation and effect indicator" in the appraisal report. In this connection, it is assumed that the same utilization ratio (50-60%) could be applied to the target of operation and effect indicator for the Mindanao container terminal. The comparison of historical data of utilization ratio of the project and the targeted utilization ratio is depicted in Table 4.

Table 4: Planned and historical actual utilization ratio for the project

Year	2006 (target year)	2007	2008	2009	2010
Years after completion	3 years	4 years	5 years	6 years	7 years
Planned targeted utilization ratio	50-60%	50-60%	50-60%	50-60%	50-60%
Actual utilization ratio for the Mindanao container terminal	15%	32.1%	43.6%	47.4%	65.7% (provisional )

Note: annual capacity of the project = 250,000TEU

Source: PIA

The utilization ratio for the Mindanao container terminal in 2006, the target year, was 15%. It was not until 2010 that the utilization ratio reached 50-60%.

According to the interview with the executing agency, PHIVIDEC industrial Authority (PIA), the realization of the targeted utilization ratio was delayed due to time-consuming process in the selection of private port operator for management and operation of MCT. Lacking the information about competent international operators, PIA sent invitations to embassies and published notice of biddings in newspapers with national circulation, however, only few manifested interest to participate in the two failed biddings excluding the International Container Terminal Services Inc.(ICTSI)<sup>11</sup>. The reason being MCT is a new port and viability of cargo throughput should have to be established. Another obstacle was a case filed against PIA by a local cargo-handling operator questioning the

<sup>11</sup> including Manila international container terminal (Manila, middle of Luzon island), General Santos container terminal (General Santos, South West in Mindanao island), Cubi point container terminal (Subic, Northern middle of Luzon island) and Sasa international port (Davao, South of Mindanao island). The overseas track record of the operator are Palau Maura container terminal (Brunei), La Plata container terminal (Argentina), Batumi port (Georgia), Buenaventura port (Colombia), Guayaquil port (Ecuador), Yantai port (China), Tartous container terminal (Syria) and Makassar container terminal (Indonesia).



legality of PIA to cater to cargoes of non-locator firms inside the industrial estate. The case did not prosper as the Supreme Court decided in PIA's favour. Hence, despite of the lack of expertise, it was determined to take the interim operation of MCT from 2004 to second quarter of 2008 rather than keeping it idle while awaiting for the winning bidder from the third bidding exercise. On April 25, 2008, a winning bidder, ICTSI, an international port operator and the largest private port operator in the country was awarded the concession contract to manage and operate the MCT. ICTSI takes charge of major ports in the world, thus making it a very competent port operator and strategist for making port.

If we suppose that ICTSI had participated in the first bidding, the utilization ratio of the project would have improved earlier. In fact, after ICTSI took in charge of the operation of the port in 2008 the ratio improved drastically while the utilization ration before then, for instance 2006, was lower than planned.

Nowadays, international cargo transactions, which make more profits, are increasing in volume. PIA recognizes that this increase has been made possible thanks to ICTSI. Shares of international cargoes in total cargoes handled by the Mindanao container terminal is shown in table 5. The shares of international cargo are increasing. This indicates that the effectiveness of this project that contributes to regional economic development through activation of revenue-making international cargo transactions.

Table 5: Historical data on shares international cargoes in total cargoes  
In the Mindanao container terminal(%)

Year	2006	2007	2008	2009	2010
Share of international cargoes in total cargoes	20	15	25	34	45

Source: PIA

In addition, regarding international cargoes, the table 6 shows comparison of related figures of the Mindanao container terminal and the Cagayan de Oro base port in 2008 and 2009. The total import volume of the Mindanao container terminal tripled from 14,172TEU to 48,009TEU while the export volume increased by 28% from 17,165TEU to 21,946TEU. The data before 2008 was not available.

For the Cagayan de Oro base port, the volume of import cargo increased by 14% from 10,632TEU to 12,134TEU while that of export decreased by 25% from 11,803TEU to

8,796 TEU; and the total volume in the Cagayan de Oro base port decreased by 6.7%, which means the project contributed to the decrease of congestion in the port.

In fact, the utilization ratio of the Cagayan de Oro base port decreased from over 100% toward 50-60%. The ratio as of 2009 was 68%. This means the project is gradually realizing the targeted figure of operation and effects indicator, that is, decrease of congestion level in the Cagayan de Oro base port.

Besides, the total volume of TEU handled in both ports (the Cagayan de Oro base port and the Mindanao container terminal) increased from 63,772 TEU in 2008 to 68,939 TEU in 2009 by 8.1%. This means total capacity for handling container in the area as a whole is increasing. In other words, the project has fully stimulated the positive effect in expanding the capacity of marine logistics in the targeted area. As this suggests, after outsourcing operation and maintenance work of the project to the external operator, the situation has been improved dramatically, even though the utilization rate in 2006 was far below the target figure.

Table 6: International cargos (import and export)  
in the Cagayan de Oro base port and the Mindanao container terminal

International cargo volume	2008			2009		
	Cagayan de Oro base port	Mindanao Container terminal	total	Cagayan de Oro base port	Mindanao Container terminal	total
Import	10,652	14,172	24,804	12,134	21,946	34,080
Export	11,803	17,165	28,968	8,796	26,063	34,859
Total	22,455	31,337	63,772	20,930	48,009	68,939

Unit:TEU

Source:PHILExport-10A Shipping Costs and Competitiveness in Northern Mindanao and PIA

### 3.3.1.2 Results of Calculations of Internal Rates of Return (IRR)

We recalculated internal rates of returns (IRR) by using, as much as possible, the same assumption applied at the time of appraisal.

#### (1)Financial Internal Rate of Return

As a result of recalculation of FIRR (Financial Internal Rate of Return) (cost: design cost, civil work management cost, land acquisition cost, construction cost, equipment procurement and fix cost, O&M cost and management cost, benefits: port charge, cargo

charge, quay charge and wharf charge), the FIRR was 4.74% instead of 7.05%, the original FIRR.

## (2) Economic Internal Rate of Return

We also recalculated Economic Internal Rate of Return (EIRR) (costs: design cost, civil work management cost, land acquisition cost, construction cost, equipment procurement and fix cost, O&M cost and management cost, benefits: decrease in offshore waiting time for vessels).

With regard to benefits from offshore waiting time for vessels, direct data were not obtainable. Therefore, different data was utilized instead. We assumed that the degree of having achieved the goal is calculated as a result of division of the ideal utilization ratio of 55% (simple average of 50% and 60%) in the Cagayan de Oro base port by the actual utilization ratio of 68% in 2009. In this sense, benefits for EIRR could logically be only 80.8% ( $55\%/68\%=80.8\%$  as of 2009) of original benefit. Recalculated EIRR can be 80.8% of 17.8%, original EIRR ( $17.8\% \times 80.8\% = 14.4\%$ ). The figure of recalculated EIRR 14.4%, is a bit lower than original EIRR 17.8%.

This is presumably caused by delays in the selection of operator of the Mindanao container port as already discussed. Consequently, benefits materialized later. After the selection is completed, however, the operator has been performing quite excellently since then, and lucrative international cargo has been increasing.

In addition, as already mentioned in section 3.3.1.1, the utilization ratio of 68% in the Cagayan de Oro base port in 2009 means the congestion has been steadily being eased toward the target levels of 50-60%. The benefit for FIRR as well as cash-flow will be improved rapidly for the future thanks to increasing shares of income-generating international cargos. PAA is now implementing expansion of the existing Cagayan de Oro base port by its own fund. This factor is expected to accelerate decrease in offshore waiting time of vessels, which will lead to improvement of EIRR.

### 3.3.2 Qualitative Effects

According to the interviews with the executing agency and the forwarders stationed near the project site, the number of shippers using the Mindanao container terminal is increasing, and cargo volume is surging dramatically. Major shippers are large manufacturers such as Del Monte of the USA (food processor), and Saint Miguel of the Philippines (food processor). The number of forwarders' offices increased from 7 (2004)

to 19 (2010) as well, and many of those offices are expanding human resources and developing facilities.

In addition, more and more foreign enterprises are setting up their offices and factories in the premises of PIA's industrial park near the project site. Consequently, 52% of the land estate in the park is already occupied and reserved through lease by large foreign and local companies such as Hanjin of South Korea and Saint Miguel Corporation, Philippine Sinter Corp., STEAG State Power Inc., to name a few. More cargo volume for the container terminal is expected to be handled in the Mindanao container terminal due to the activated import and export involved in the global trading by these companies, which will lead to stimulation of the local logistics.

This project has somewhat achieved its objectives, therefore its effectiveness is fair.

### 3.4 Impact

#### 3.4.1 Intended Impacts

According to the statistics of the 10th administration region including the site of the project, the export drastically decreased in the region due to “global financial crisis” in 2009. Besides this “exceptional year,” however, the export of the region shows sustainable increase. Even in 2009, decrease was mainly seen in industrial goods, light industrial goods and others, which are not the goods this region has its competitiveness for. On the other hand, food and mineral resources, which this region has its competitiveness for, rather increased in export volume. In particular, mineral resources increased in export very much as table 7 shows According to the exporters' association of the Cagayan de Oro region and several forwarders, export to China is the most contributing factor during the “Leman Shock” period. According to the interview with forwarder and its association, export of food and its processed goods through the Mindanao container terminal is steadily increasing.

In addition, under the situation, not only the Mindanao container terminal but also the Cagayan de Oro base port has been improving their service level through some sort of rivalry relationship between them. This is another positive qualitative impact caused by the project.

Table 7: Export volume from the region of the project site

Category/Year	2006	2007	2008	2009	Averaged growth (%)
Foodstuff	135.57	149.5	252	161.3	4.7

Industrial goods	389.62	357.67	463.57	245.45	-9.3
Light industrial goods	1.38	1.76	1.57	1.53	2.7
Mineral goods	10.69	31.62	125.59	70.13	139
Others	0.34	1.93	1.97	0.42	5.9
Total	537.6	542.47	844.71	478.83	-2.7

Unit: million USD

Source: the statistics of the 10<sup>th</sup> administration

### 3.4.2 Other Impacts

#### (1) Impacts on the natural environment

With regard to the impacts on the natural environment, Department of Environment and Natural Resources (DENR) of the Philippine government issued the Environment Compliance Certificate (ECC) for the project (the implementation of Environment Impact Assessment (EIA) is a requirement for the issuance of ECC) in October 1999 before the project started. In fact, no negative impact was observed at the site and neighbouring area during our field survey. Thus, the project has brought about no negative environmental impacts in the region.

#### (2) Land Acquisition and Resettlement

In this project, land acquisition and resettlement was conducted for 96 households involving around 800 persons with due payment of compensation. Among them, 60 households involving around 500 persons were resettled to the neighbouring alternative resettlement areas. The remaining 36 households involving 300 persons were resettled to other areas in accordance with requests from them. Related expenses including moving expenses were covered by PIA. The first resettlement (44 households) was implemented in 1999; the second resettlement for 36 households was conducted in 2001; and the third resettlement for 16 households was conducted in 2002, respectively. It took time because there were households that expressed their requests for moving to non-neighbouring areas. The resettlement was completed, however, before the inauguration of the project's operation; therefore, the negative impact such as harmful incidents to resettled households has not been observed by land acquisition and resettlement since then.

Because of changes in the resettlement plan, PIA had to incur additional expenses; however, the increase of expenses did not cause any significant effects on PIA's financial situation<sup>12</sup>.

In sum, intended impact has been observed in this project. On the other hand, no negative impacts have been observed.

<sup>12</sup> Interview with PIA (August 16, 2009)

### 3.5 Sustainability (Rating: a)

#### 3.5.1 Structural Aspects of Operation and Maintenance

The Philippine government originally has the policy of outsourcing operation and maintenance to private sectors which is shown in MTPDP 1999-2004. Based on this policy, the executing agency, PIA conducted competitive bidding and outsourced operation and maintenance to ICTSI, one of the most experienced operators in the Philippine as well as world market.

Before finalising the contract with ICTSI, PIA's internal experts took charge in operation and maintenance of the terminal. At the time of transition of operation and maintenance work to ICTSI, the internal experts of PIA were transferred to ICTSI; therefore, there were no problems in transition. The transferred staffs are a superintendent in operation and two operational engineers for administration and control of vessels and loading cargos. This transfer enabled ICTSI to utilize existing operational information and data.

The number of staff in charge of the operation and maintenance is 20 persons including the above mentioned 3 engineers, crane operators, logistics managers, clerks and drivers as planned. PIA supervises ICTSI's implementation in operation and maintenance.

Currently, there is no problem with the number of staff and organization for operation and maintenance; however, as the cargo demand for the terminal increases, there may be need for increasing staff in the future.

#### 3.5.2 Technical Aspects of Operation and Maintenance

The operation and maintenance of the Mindanao container terminal is entrusted to ICTSI, which has experiences and records of operation and maintenance in other ports, no problem is observed for operation and maintenance management of the terminal. For further improvement of technical levels for operation and maintenance work, ICTSI provides training courses for its staff. The details of the training courses are shown below in table 8. These training courses are implemented by expert companies and a government agency (coastal guard).

Table8: Training courses for operation and maintenance

Objective of the training courses	Number of trainees (qualified)	Frequencies of the courses
Trouble shooting	3	Once a year
Electrical mechanics	2	Once a year

Ocean contamination preservation	6	Once a year
Construction safety technique	1	Once a year

Source: PIA

No serious malfunction of or damage to the facilities has taken place so far except that some fenders and blocks were broken at the time of loading cargo. The damage was quickly fixed with no effects on technical operation. Thus, it has been observed that operation and maintenance techniques developed in the above has been utilized to take care of malfunctions.

### 3.5.3 Financial Aspects of Operation and Maintenance

According to profit and loss statements of PIA in 2008 and 2009, PIA makes profits and positive cash-flow in both years; therefore, no financial problem is observed for operation and maintenance.

The profit (after tax) and cash-flow in 2008 were 2.7 million pesos and 129 million pesos. Those in 2009 were 21 million pesos and 150 million pesos. Thus, the financial situation is sound enough to sustain operation and maintenance of the container terminal. In the project, however, after the end of the grace period of loan, repayment of principal will start from PIA's financial assets.

### 3.5.4 Current Status of Operation and Maintenance

The container processing efficiency of the Mindanao container terminal is 27 box per hour by a crane. This is a best efficient level in the Philippines<sup>13</sup>. According to ICSTI, the efficiency level of the Cagayan de Oro base port and the Cebu port is 10 box per hour by a crane while that is only 7 box for the heavily congested Manila port<sup>14</sup>.

After inauguration of the Mindanao container terminal, only a fender of container berth and block of container yard got broken during container handling operation. The broken equipment was, however, fixed completely right after that, which left any inefficiency in operation of the terminal. We observed that this was already repaired during the field survey.

<sup>13</sup> Interviews with the superintendent in operation of ICTSI and ,the manager of Confederation of Philippines

<sup>14</sup> Interviews with the superintendent in operation of ICTSI and ,the manager of Confederation of Philippines Exporters Foundation Region 10 Charter, Inc.

Thus, no major problems have been observed in the operation and maintenance system, therefore sustainability of the project is high.

## **4. Conclusion, Lessons Learned and Recommendations**

### **4.1 Conclusion**

This project has been highly relevant with the Philippines' development plan, development needs and aid policy of Japanese government; therefore its relevance is high. In addition, both the project period and project cost were within the plan, therefore efficiency of the project is high.

Regarding effectiveness, positive qualitative effects are widely observed while the timing of achieving the target of the operation and effect indicator for the project was somewhat delayed, which was due to the world financial crisis from 2008. This negative factor was realized as rather moderately lower quantitative effect as indicated in recalculation of FIRR and EIRR. In total, considering the above mentioned qualitative and quantitative effects, effectiveness of the project is fair. However, that was caused by an external factor (world financial crisis) and uncontrollable by the project management.

In terms of operation and maintenance, no problem has been observed in organizational, technical and financial aspects; therefore, sustainability of the project is high.

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

### **4.2 Recommendations**

#### **4.2.1 The Executing Agency**

There are no concerns in the current financial status of the project. The current increase in international cargos in the Mindanao container terminal, however, mainly relies on the capable and experienced operator's global network and marketing activity. On the other hand, as the world economy is forecast to be fluctuating, it is uncertain that international cargo volume in the terminal continue to grow or stay in the same level into the future.

Therefore, PIA is required to make more efforts to grasp shippers' needs and to put emphasis on marketing activities to get international cargo demand. PIA is recommended to focus more on the two targeted marketing activities as follows:

(1) To get cargos of internationally competitive fruits and foodstuff exporters in the local



area; and/or

- (2) To get cargos from export processing-oriented investors whose factories and storages are located in PIA's industrial estate.

#### 4.2.2 JICA

None

### **4.3 Lessons Learned**

#### (1) Outsourcing Operation and Maintenance Work

The Philippine government originally had the policy of outsourcing operation and maintenance on ports to private sectors, which is shown in MTPDP 1999-2004. Based on the policy, PIA, the executing agency, outsourced operation and maintenance work to an outside operator from the beginning since the agency does not have adequate expertise in port operation. However, because the procurement process took a long time, outsourcing was started four years after the completion of the container terminal construction, and the indicators that were established at the planning stage. Therefore the project did not achieve its original target of the indicators set at the planning stage, although the marketing abilities and networks of the commissioned company resulted in increasing demand for the terminal. It is also expected that handling of highly-profitable international cargoes will steadily increase. This may lead to the improvement in financial strengths required for the future sustainable development.

Therefore, for the relatively-profitable business, outsourcing of particular functions such as operation and maintenance to outside entities and actively utilizing their abilities to support the executing agencies is practical and quite valuable for improving the effects of business.

#### (2) Importance of Activities to Find Talented outside Operator

Because no qualifiable contractor participated in the first and second biddings, and bidding had to be conducted three times, the process of selecting resourceful operators for this project took plenty of time. This has resulted in the reduced effects and delay of the project. This is partly due to insufficient ability of the executing agency to set appropriate bidding conditions and actively transmit information to many relevant companies during the course of the bidding process. They did not have enough experiences with international cargo movement (exports/imports) or knowledge about port operation companies that meet world-class standards. Therefore, when outsourcing the operation/maintenance operations in the future for improving effectiveness, an executing agency should conduct study about related industry and companies and set appropriate

bidding conditions, well in advance to conducting the bidding session.

Comparison of the Original and Actual Scope of the Project

Item	Original	Actual
1. Project Outputs	<p>Civil work</p> <p>Container berth (construction) One berth with 300m length</p> <p>Container yard (construction) 70,000 square meter wide</p> <p>Annual capacity under the above facility is 250,000 TEU.</p> <p>(The capacity can be expandable to 500,000 TEU with the berth extension and additional procurement of equipment.)</p> <p>Related building (construction)</p> <p>Procurement</p> <p>Gantry Crane (2 units) Yard Crane (4 units) Computer (1 lot)</p> <p>Consultancy Services</p> <p>Foreign consultant 13 M/M Local consultant 5 M/M</p>	<p>Civil work</p> <p>As planned</p> <p>As planned</p> <p>Annual capacity under the above facility is 250,000 TEU. 270,000 TEU can be dealt at maximum under desirable condition.</p> <p>(The capacity can be expandable to 500,000 TEU with the berth extension and additional procurement of equipment.)</p> <p>As planned</p> <p>Procurement</p> <p>As planned</p> <p>Consultancy Services</p> <p>Foreign consultant 18.8M/M Local consultant 5.5 M/M</p>
2. Project Period	<p>April 1999 - September 2004 (66 months)</p>	<p>April 2000 - March 2004 (48 months)</p>
3. Project Cost	<p>Amount paid in Foreign currency 4,861 million yen</p> <p>Amount paid in Local currency 4,869 million yen (1,623 million peso)</p> <p>Total 9,729 million yen</p> <p>Japanese ODA loan portion 8,266 million yen</p> <p>Exchange rate 1 peso = 3 yen (August 1999)</p>	<p>6,271 million yen</p> <p>2,876 million yen (1,245 million peso)</p> <p>9,147 million yen</p> <p>8,265 million yen</p> <p>1 peso = 2.31 yen (Average between April, 2000 and March, 2004)</p>

**Third Party Opinions on**  
**“Mindanao Container Terminal Project”(MCTP)**

**Dr. Marife M. Ballesteros, Research Fellow**  
**Philippine Institute of Development Studies**

The Project is highly relevant to the Philippines, which urgently needs to improve its presence in the globalized trade regime. In the past two decades, the growth of global trade has consistently outpaced the growth of world GDP and the acceleration of trade growth has been happening primarily in archipelagic Southeast Asia. In particular, the Island of Mindanao is directly covered by the Eastern ASEAN Growth Triangle. The improvement of the Mindanao Port is one of the flagship projects for the development of Mindanao and is consistent with the national government development program to provide logistic services that is at par with the more developed countries for the country to be globally competitive. The focus on improving the Container Terminal is also timely considering the increasing share of containerized cargoes in intra-ASEAN trade.

The Mindanao Container Terminal (MCT) has improved shipping services in Northern Mindanao to other regions particularly with the increased operation of MCT in the last two years. A notable effect is the increase in export volume, since historically containerized cargo export has been limited for the Philippines. The competition provided by the Project also has a positive impact since it has pressed the *Cagayan de Oro* Port to improve its services. The shipping operation of the MCT at this time is perking up and the MCT operator (MTCSI) is bullish of possible expansion in the future. This positive outlook should be supported by demand projections and the ability of MCTSI to maintain sufficient cargo to sustain regular operations.

## List of Errata

page	original	revised
p.7, l.22	The increase of M/M in the component of consulting services was caused by the extension of the termination period from June 2005 to December 2006.	The increase of M/M in the component of consulting services was caused by the change in project scope from STP to 7 STFs (1 <sup>st</sup> Supplemental Agreement in June 2005), and a six-month extension of supervision works for the 7 STFs, ECPC and Civil Works (2 <sup>nd</sup> Supplemental Agreement in December 2006).
p.19 l.17	This new project adopts a similar project framework of the forestry component of the project; therefore it builds upon experiences of the project.	This new project adopts a similar project framework of the forestry component of the project, although the project was designed in 2003 and revised in 2006 and 2009. More recent DENR projects such as the ADB/GEF-funded Integrated Coastal Resource Management (ICRMP) and the WB/GEF-funded Environmental and Natural Resources Management Project (ENRMP) were built upon experiences of the project.
p.23 l.28	Environment Management Board (EMB)	Environment Management Bureau (EMB)
p.25 l.4	EMB (Environment Management Board)	EMB (Environment Management Bureau)
p.26 l.2	Sales revenue generated from agro-forestry, however, will not be sufficient enough to sustain the plantation; therefore, DENR has been subsidizing the POs by providing three million pesos annually from "sustainability fund" since 2008 for compensating the financial shortage. Nevertheless, the amount of subsidy is assumed to make up only one-third of the estimated necessary expenses (about nine million Pesos).	Sales revenue generated from agro-forestry, however, will not be sufficient enough to sustain the plantation. DENR has been providing three million pesos annually from "sustainability fund" since 2008 for monitoring activities and offering technical assistance to the POs. However, the estimated necessary expenses (about nine million Pesos per year) for sustaining the plantation by the POs have not been covered.