

Ex-Post Evaluation of Japanese ODA Loan
Batangas Port Development Project (Phase II)

External Evaluator: Ryujiro Sasao, IC Net Limited

0. Summary

This project aimed to raise the logistical efficiency of the Philippines. It worked to achieve this goal by equipping the Batangas Port in the Calabarzon region of Luzon to be an international trade port capable of handling container cargo for foreign trade. This project has been consistent with the Philippines' policy, development needs as well as Japan's ODA policy; therefore its relevance is high. However, the operating ratio of the container terminal constructed by this project remains low, falling far short of the target volume of container cargo to be handled. For this reason, the project has shown only an extremely limited effect on local employment and the economic growth of local businesses; therefore its effectiveness and impact is low. Although the project cost was within the plan, the project period significantly exceeded the plan; therefore efficiency of the project is fair. There are no problems with the facility operation and maintenance. Nor are any particular problems observed on an organizational or technical level. Overall, however, with its financial uncertainties, the External Evaluator deems that sustainability of the project is fair.

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

1. Project Description



Project Location



Rubber Tired Gantry Crane

1.1 Background

Located 110 km south of Metro Manila, Batangas Port is situated in the northeastern part of Batangas Bay in southwestern Luzon. A highway opened between Manila and Batangas makes up part of what is called the SCMB¹ Corridor. The three regions (Central Luzon, Metro Manila, and Calabarzon²) connected by the SCMB Corridor are said to contribute two-thirds of the total

¹ SCMB refers to Subic-Clark-Manila-Batangas.

² This is composed of Batangas province, where Batangas Port is located, and four additional provinces.

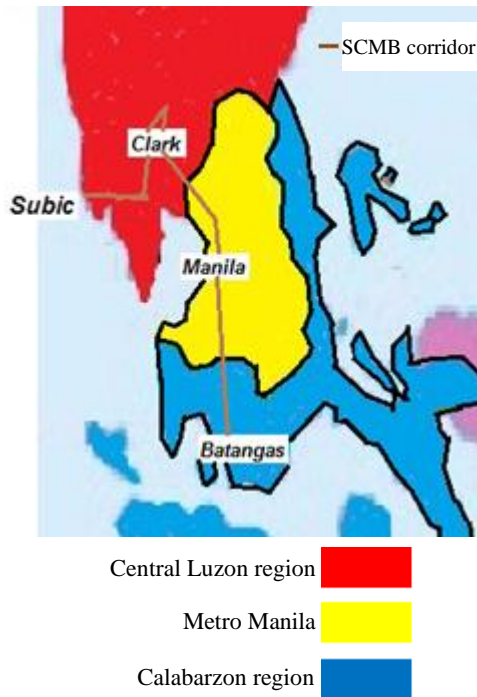


Figure 1: Part of Luzon

GDP of the Philippines³.

With a certain level of water depth, Batangas Port is located inside a bay (Batangas Bay) which provides the geographical features that shield ships from bad weather. Thus it is equipped with the properties of a natural good harbor, which lend themselves to large-scale port development.

Large-scale port development plans were already in place in the 1980s to ensure that Batangas Port would possess the following functions for promoting regional development.

1. Further function as a gateway port to Mindoro Island: Contribute to enhancing logistics with and development of Mindoro, which serves as an agricultural supply base for both Metro Manila and the Southern Tagalog region.

2. Function as a central port of the region that contributes to the economic development of the

hinterland: Stimulate regional economic development of the Southern Tagalog region, which is a key industrial area for the Philippines.

3. Function related to Metro Manila: Serves as secondary port to complement the Port of Manila in increasingly overcongested Metro Manila.

Against the backdrop of the development policies above, JICA, having received a request from the Philippine government, conducted a feasibility study (F/S) on Batangas Port development in 1984. The development plans within this F/S were divided into short-term and long-term ones. The objective of the short-term plan was first to improve and expand the now extremely deteriorated and confined port facilities in an attempt to improve logistical efficiency. The long-term plan called for the port to be expanded to include substantial facilities for foreign trade in the hope that such facilities would increase the port's ability to complement the Port of Manila. Within the entirety of this development plan, the short-term plan corresponds to Batangas Port Development Project Phase I, which saw port construction completed in March 1999. This project (Phase II) corresponds to a portion⁴ of the long-term plan.

1.2 Project Outline

The objective of this project is to raise the logistical efficiency of the Philippines by improving the Batangas Port in the Calabarzon region as an international trade port capable of handling container cargo for foreign trade, thereby contributing to the alleviation of traffic congestion that

³ Source: p. 129, "Philippine Development Plan 2011-2016"

⁴ Components that make up the long-term plan include RO-RO ship and ferry piers, foreign cargo terminals, domestic cargo terminals, steel piers, fertilizer piers, etc. Among these, foreign cargo terminals seem to be the component related to this project.

stems from overconcentration in Metro Manila⁵ and balanced development of the Calabarzon region.

Loan Approved Amount / Disbursed Amount	14,555 million yen / 14,527 million yen
Exchange of Notes Date / Loan Agreement Signing Date	September, 1998 / September, 1998
Terms and Conditions	(Construction/Procurement) Interest Rate: 2.2 % Repayment Period: 30 years (Grace Period: 10 years) General untied (Consulting service) Interest Rate: 0.75 % Repayment Period: 40 years (Grace Period: 10 years) General untied
Borrower / Executing Agency	Philippine Ports Authority (PPA)
Final Disbursement Date	January, 2008
Main Contractors	Joint Venture: Shimizu Corporation (Japan) / F.F. Cruz and Company, Incorporated (Philippines)
Main Consultants	Joint Venture: Pacific Consultants International (Japan) / Basic Technology and Management Corporation (Philippines)
Feasibility Studies, etc.	PPA drafted Phase II F/S in 1996
Related Projects (if any)	Batangas Port Development Project (Phase I)

2. Outline of the Evaluation Study

2.1 External Evaluator

Ryujiro Sasao (IC Net Limited)

This project was jointly evaluated with the Philippines' National Economic and Development Authority (NEDA).

2.2 Duration of Evaluation Study

The External Evaluator performed an evaluation study as follows in the course of this ex-post evaluation:

Duration of the Study: November 2011 - September 2012 (from the beginning of the contract through the month in which finished products were delivered)

Duration of the Field Study: February 4 - March 3, April 22 - May 7 and July 8 - 22, 2012

2.3 Constraints during the Evaluation Study

Resettlement during this project peaked around 1998, more than ten years before the ex-post evaluation was conducted. For this reason, main office personnel who participated in the

⁵ "Alleviation of traffic congestion that stems from overconcentration in Metro Manila" references descriptions of project objectives found in documents at the time of the appraisal. However, this section was not clarified in the Minutes of Discussion (M/D), and it was confirmed at the time of the ex-post evaluation that the section was not distinctly recognized as a project objective by the implementing agency.

resettlement that took place when the project was underway have retired or are no longer at the PPA for other reasons. In tandem with a lack of relevant data written to describe the particulars of the move, this made it exceedingly difficult to confirm the facts. Also, failure to acquire detailed financial information on the company responsible for facility maintenance prevented the External Evaluator from analyzing sustainability in detail.

3. Results of the Evaluation (Overall Rating: D)

3.1 Relevance (Rating: 3)

3.1.1 Relevance with the Development Plan of the Philippines

At the time of the appraisal, the Medium-term Philippine Development Plan (MTPDP) 1993 - 1998 was promoting investment in the maritime sector to encourage the movement of people and the distribution of goods. It was also moving the Philippines toward maritime sector development to improve the efficiency and safety of transport services.

At the time of the ex-post evaluation, two policy objectives related to the development of Batangas Port had been raised in “Chapter 5: Accelerating Infrastructure Development” in the latest MTPDP 2011 - 2016. The first objective is the maintenance and enhancement of the SCMB Corridor. Batangas Port is located at the end of this corridor. As previously mentioned, the corridor is a path that connects the three regions of Central Luzon, Metro Manila, and Calabarzon that are said to contribute two-thirds of the total GDP of the Philippines. The government has expressed the importance of further improving distribution and exchange among these regions by the maintenance and enhancement of the corridor. The second objective is to enhance maritime traffic safety. The Philippine government has set forth policies that adhere to the international safety standards for maritime traffic. The total port security system⁶ introduced to the port during this project is in line with these policies. Also, according to the Calabarzon Regional Development Plan 2011 - 2016, Batangas Port is expected to serve as a substitute for the Port of Manila by connecting travelers and transshipping international cargo.

3.1.2 Relevance with the Development Needs of the Philippines

At the time of the appraisal, the Port of Manila’s insufficient processing capacity was a concern as indicated in Tables 1 and 2. This insufficiency arose from a sharp increase in the handling of container cargo for foreign trade that accompanied the economic development of the Philippines. There was strong demand for the establishment of a port that could serve to substitute or complement the Port of Manila in the hope that it would both optimize logistics for the entire nation and correct the overconcentration in Metro Manila.

As touched on in the project background, Batangas Port is a natural good harbor and the most appropriate to substitute for or complement the Port of Manila; it would be both the cornerstone of the Calabarzon region that is seeing continued development as an industrial belt for outer Manila and also a gateway into the Visayas and Mindanao regions in the south. It was necessary to establish a safe and efficient transportation system by developing Batangas Port into an international trade port capable of handling container cargo for foreign trade and by consolidating land and sea transport.

⁶ Detailed descriptions are available in “3.4.1 Project Outputs.”

Here are the ex-post evaluation results of the Port of Manila’s aforementioned cargo processing capacities. Although the Port has improved its processing capacity for container cargo by improving the facilities and equipment to handle it, the situation has not improved and the Port is still becoming increasingly congested.

Table 1: Port of Manila’s (three ports) handling capacity of container cargo for foreign trade

Unit: one million tons

Year	1994	1998	2005	2010
Estimate ^{*1}	7.7	11.1	23.4	-
Actual	-	13.4	18.4	22.8

*Note 1: Assumes that this project had not been implemented

Source: PPA

Table 2: Demurrage time

Unit: amount of time per ship

Year	1998	2005	2010
Estimate ^{*1}	3.36	16.80	-
Actual ^{*2}	4.06 (2001)	3.15	7.69

*Note 1: Assumes that this project had not been implemented

*Note 2: Figures from Manila International Container Terminal (MICT)⁷

Source: PPA

As discussed later, the necessity of the project remains, as the Port of Manila is still congested. This is partly due to the failure to fully realize the project objective of transferring a portion of cargo handling concentrated on the Port of Manila.

3.1.3 Relevance with Japan’s ODA Policy

The following is an excerpt from the Foreign Economic Cooperation Project Policy (developed in 1999):

“3. Assistance by Region/Country: V. Philippines

The focus is on assistance toward strengthening the economic structure of the Philippines for sustained growth; mitigating restrictive factors of poverty and regional disparities; providing support that benefits environmental preservation measures that include disaster management; developing human resources and establishing systems.”

The objective of this project is to develop a port in a way that will improve the logistical efficiency of the Philippines while also promoting the economic development of the Calabarzon region. This objective correlates to the aforementioned policy of strengthening the economic structure for the sustainable growth of the Philippines.

In light of the above, this project has been relevant to the Philippines’ development plan, development needs as well as Japan’s ODA policy. Therefore its relevance is high.

⁷ Composing the Port of Manila with North Harbor and South Harbor. MICT handles the largest volume of container cargo of the three ports.

3.2 Effectiveness (Rating: 1)

3.2.1 Quantitative Effects (Operation and Effect Indicators)

During the appraisal process, estimates of volume of cargo to be handled are calculated using the GDP of the Philippines and other economic indicators⁸. The targets⁹ of volume of cargo handled eight years after completion in 2010 and the results are given in Tables 3 and 4. This project's level of achievement in terms of targets for volume of cargo handled¹⁰ is exceedingly low.

In truth, due to the factors described in Figure 2, start of full-scale operations at Batangas Port was significantly delayed beyond the original plan and did not occur until March 2010. With that in mind, a comparison of the plan values of handled container cargoes for 2005 (three years after completion) with the actual values of 2011 (one year and nine months after start of full scale operation) shows that the plan value was 6,372,000 tons, compared to actual results of 123,000 tons. Even taking the three years versus one year and nine months difference in elapsed time between the two, the project's level of achievement in terms of its targets is exceedingly low. Currently, the number of container ships scheduled for service at Batangas Port sits at only one ship per week.

Table 3: Project Goal Indicators

Unit: 1,000 tons

Type of cargo	Port Cargo of Batangas Port in 2010					
	Domestic			Foreign		
	Inbound	Outbound	Total	Imports	Exports	Total
Container	1,530	2,004	3,534	3,230	2,990	6,220
Other	1,390	710	2,100	890	10	900
Total	2,920	2,714	5,634	4,120	3,000	7,120

Source: Data at time of appraisal

Table 4: Actual Values Compared to Project Goal Indicators

Unit: 1,000 tons

Type of cargo	Port Cargo of Batangas Port in 2010					
	Domestic			Foreign		
	Inbound	Outbound	Total	Imports	Exports	Total
Container	21.2	37.8	59.0	8.2	0.5	8.7
Other	191.6	148.9	340.5	456.7	0.8	457.5
Total	212.8	186.7	399.5	464.9	1.3	466.2

Source: PPA

The background behind the aforementioned low level of achievement involves a variety of

⁸ Luzon's yearly volume of cargo was first calculated with a multivariate regression analysis that included GDP growth rate. Then, dividing that estimated volume of cargo among Luzon's Northern, Central, and Southern regions based on each region's GDP share (estimate), a fixed percentage of 56.7% from within Southern Luzon was calculated as the demand for use (or share) of Batangas Port. This fixed percentage is based on a trial calculation that from within the 120 km stretch between Manila and Batangas, there is a point 68 km away, or 56.7% of the total distance from Batangas Port, where transportation costs are exactly the same whether from Manila or Batangas. Analysis of industry trend such as enterprises and factories, which were expected to be invited or to move into Calabarzon, was not reflected in the forecast of cargo volume very much.

⁹ As explicit target indicators were not implemented in the project, demand forecast figures calculated at the time of appraisal are used as target indicators to conduct the analysis of effectiveness.

¹⁰ Because the main output of this project was the construction of container terminals, the volume of container cargo handled constitutes the project's goal indicator.

factors described in Figure 2¹¹. However, the following two points are the most direct of the causes.

- The total amount of container cargo handled on Luzon has plateaued.
- A shift in the handling of container cargo from the Port of Manila to Batangas Port has not occurred.

¹¹ Sources of the information shown in “Description” of Figure 2 include PPA, PEZA (Philippine Economic Zone Authority), the Japanese Chamber of Commerce and Industry of the Philippines (JCCIP), industrial park development companies, and shipping companies.

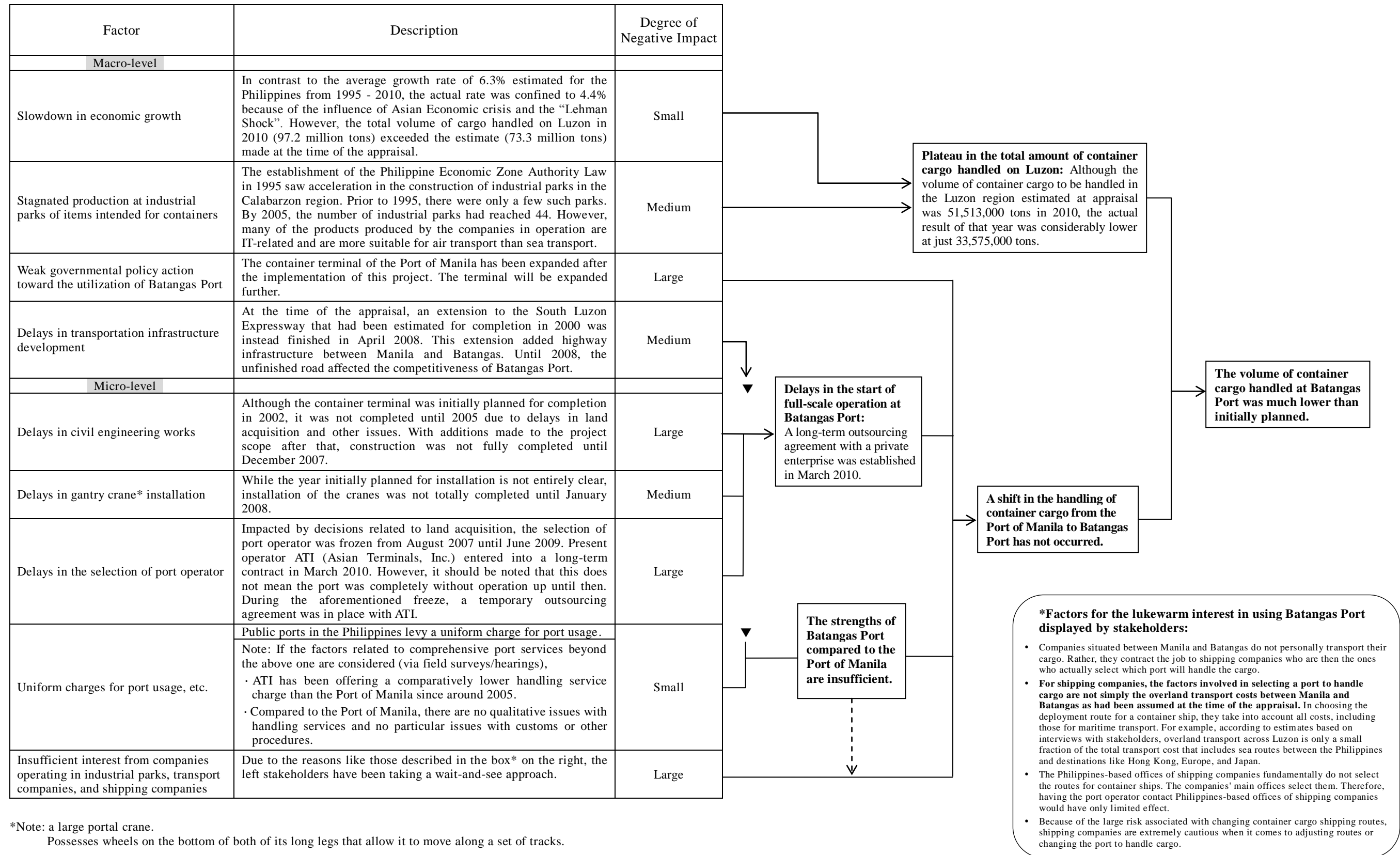


Figure 2: Adverse Factors that Affected the Operational Status of Batangas Port's Container Terminal

The first point is striking when confirmed using the actual statistics¹². In terms of numbers from 2010, the results for volume of container cargo handled on Luzon were limited to just 65.2% of the initial plan. The External Evaluator surmises that the primary cause of this is that, as opposed to a general economic trend, the increase in IT companies in the Calabarzon region has increased products such as semiconductor products, electronic components, etc. in the makeup of products produced in the region. Those products are better suited for air transport than container transport¹³. When including all non-container cargo, the total cargo volume actually exceeds the values estimated at the time of the appraisal. In conducting demand forecast at the appraisal time, they could have conducted not only macro simulation based on GDP estimates but also 10 years span of analysis of industry trend, that is to say, enterprises and factories expected to be invited or to move into the Calabarzon region and the resulting kind of cargo movement.

The second point appears to primarily be the result of three factors. The first was the delayed start of full-scale operations at Batangas Port resulting from delays in civil engineering works and port operator selection and other factors. The second was the insufficient overall strength of Batangas Port in terms of port facilities and quality of service as compared to the Port of Manila. The third was that companies operating in industrial parks, transport companies, and shipping companies showed lukewarm interest in using Batangas Port¹⁴.

Further impact on the port operations of Batangas Port resulted from facility expansion at the Port of Manila that increased that port's cargo handling capacity. As described previously, the Port of Manila used its increased capacity to absorb most of the increases in volume of container cargo handled on Luzon at the sacrifice of increased congestion¹⁵. If the PPA would have provided political support for Batangas Port, it is possible that circumstances may have unfolded differently. Since October 2012, however, the promotional measure such as reducing the port charges against vessels to half has been implemented.

This time, for the sake of reference, the External Evaluator compared this project to port projects in other countries that are also based on yen loans. Specifically, the External Evaluator compared this project with two projects that were implemented under similar circumstances involving existing large-scale ports. These projects were the Laem Chabang Commercial Port Project in Thailand and the Cai Lan Port Expansion Project in Vietnam.

Although both of those projects were implemented successfully, the biggest difference between the Batangas project and these two projects can be summed up in the following two points.

- In the cases of both Thailand and Vietnam, the water depths of the existing large-scale ports

¹² Source: PPA website: <http://www.ppa.com.ph/ppa%20web/portstat.htm>

¹³ This information was taken from interviews with sources that include the JCCPI and industrial park development companies (two Japanese companies).

¹⁴ However, personnel from the Japanese Embassy, JICA, JCCPI, PEZA, and other organizations have constantly showed great concern in the operational status of the container terminal at Batangas Port and occasionally hold conferences, seminars, and other activities in hopes of promoting use of the port. In March 2012, JCCPI and the JICA Philippines office jointly held the Seminar on the Improvement of Logistics through the Utilization of Batangas Port, and with presentations from the port operator, shipping companies, trucking companies, and others, this seminar was by far the most thorough and practical of its kind to date.

¹⁵ Although the Port of Subic is also located on Luzon, its effect is limited, as the volume of container cargo it handled as of 2011 was only 289,600 tons, or approximately 1% of the Port of Manila's total (Source: Subic Bay Metropolitan Authority: SBMA).

were too shallow to accommodate large container ships. The newly established ports were deep-sea ports that possessed strengths that the existing ports did not, that is, the ability to accommodate large container ships. Because the Port of Manila also maintains a certain level of water depth, this was not a strength possessed only by Batangas Port.

- In the cases of both Thailand and Vietnam, industrial parks were adjacent to the ports, allowing those ports to monopolize the handling of industrial park-related cargo. Because the nearest industrial park (Lipa) was 35 km away from the port for this project, the Batangas location could hardly be called an absolute strength.

In terms of future expectations, some of the aforementioned major adverse factors such as delays in civil engineering works and delays in the selection of port operator are already things of the past, and the current situations for which are improved. However, if the persistent issues, “Batangas Port’s insufficient strengths compared to those of the Port of Manila” and “the lukewarm interest toward using Batangas Port of companies operating in industrial parks, transport companies, and shipping companies”, are not resolved or improved, there will not likely be any dramatic improvement in the port’s operating ratio in the future.

3.2.2 Qualitative Effects

In this study, the External Evaluator conducted questionnaire survey and got 137 respondents, comprised of area residents, stores, and others. However, only a few of the respondents in either group mentioned the benefits or drawbacks of this project. 25 respondents, or 18.2% of the total, said they had benefitted from the project. Normally, the benefits for area residents that accompany port development include increased employment, increases in the number of port workers, and a resulting increase in the benefits of local stores. However, the operating ratio of the container terminal was exceedingly low in this project, so the appearance of effects such as these was limited. Also, of the 18 respondents who sold land to the government for this project, the majority felt dissatisfied with the sale price.

Vocational training programs, which are another major part of project implementation, are established to offer employment opportunities to people in regions affected by resettlement and other factors of the project and to increase the income of the unemployed¹⁶. Vocational training was offered to 1,009 individuals, based on a target of 1,000 individuals (February 2002 - July 2005). The program included 39 training courses and 53 classes. The trainees included residents of seven different barangays, with approximately 60% of them residing in the barangays¹⁷ of Balete¹⁸. The ex-post evaluation (degree of satisfaction) conducted one year after the training saw the majority of students give the training favorable reviews (Details on the vocational training in terms of efficiency are described in “Project Outputs”, while impacts are described in “Impact”).

¹⁶ This program was not simply about vocational training as it was also implemented to include organizational enhancements for the local community. In this case, organizational enhancement to the local community specifically refers to the establishment of the Relocation Development Committee (RDC), which has reportedly helped increase the training program’s participation rate and sustainability.

¹⁷ A “barangay” is the smallest administrative unit, managed and operated by the barangay captain, who is appointed in elections within the realms of cities and towns, and functions as a liaison for various government services.

¹⁸ Seven barangays were targeted for this vocational training program. Individuals targeted were not confined to those affected by this project but rather, included individuals affected in the first phase.

3.3 Impact

3.3.1 Intended Impacts

The intended impacts of this project are reduction of traffic congestion caused by an overconcentration in Metro Manila and balanced development in the Calabarzon area. However, as stated above, the operating status of the container terminal for this project is extremely low, and there has yet to be an apparent impact socially or economically in the Calabarzon area according to interviews with the City Planning and Development Department in Batangas City Hall. Thus, there has been little improvement in unemployment in the local community and few economic benefits for corporations with this project. According to interviews with the PPA, although there was an improvement in employment as a whole at Batangas Port—for example, there was increased employment of workers at the port and attached facilities—most of this was related to Phase I, the precursor to this project. Furthermore, traffic congestion around the Port of Manila appears to have not decreased¹⁹.

The monitoring result of the vocational training program shows that 742 trainees, or 73.5% of 1,009 have obtained some sort of job, whereas the initial employment rate target was 90%. Although the reality did not meet the initial target, the result was relatively good compared to other training projects considering the fact that the years 2003 and 2004 when this project was taking place showed the highest unemployment rate in the past 10 years in the Philippines^{20,21}. Besides, the following socio-economic benefits were reported in a final report by a consultant:

- Economic benefit: The abilities and income of trainees increased
- Social benefit: Establishment of two local organizations by residents (community-based organizations: CBO) and lifestyle improvements of trainees (less anti-social behavior)

3.3.2 Other Impacts

(1) Impacts on the Natural Environment

According to the PPA, the following countermeasures were implemented along with Environmental Compliance Certification (ECC). As a result, environmental impact was limited.

- Appropriate treatment of suspended solids caused by construction
- Land leveling in the bay area necessary for port facility construction
- Considerations for noise, vibrations, and gas emissions during construction

With regard to the flyover above the port access road, the Department of Environment and Natural Resources (DENR) had confirmed that there was no need to issue a new ECC.

The following are the responses to the questionnaire (137 respondents) from the same area residents and store owners mentioned above. No environmental degradation caused by this project was observed.

¹⁹ While an attempt was made, the External Evaluator was unable to obtain the related statistics. The JICA Philippines office is interested in the traffic congestion in Manila. At the time of ex-post evaluation, they are currently hiring a consultant to conduct a research on the logistical situation for general and container cargo on Luzon as well as how to reduce traffic congestion in Manila including the promotion of the use of Batangas port.

²⁰ The unemployment rate in the Philippines was 10.0% in 2001 while it was 11.7% in 2004 (Source: CIA World Factbook).

²¹ The Technical Education and Skills Development Project conducted by the ADB and several other donors in 2007 resulted in having only 36% of its trainees (students) employed within six months after the project.

Table 5: Environmental Change after Construction (Respondent Ratio)

Unit: %

Items	Air	Noise	Water Quality
Greatly improved	1.5	1.5	1.5
Slightly improved	15.3	12.4	11.7
Unchanged	73.0	72.3	82.5
Slightly worsened	10.2	13.9	4.4
Greatly worsened	0	0	0

Together with the site visit, the External Evaluator conducted interviews in relation to any environmental effects with the implementing agency (air, water quality, noise, and ecological systems, etc.), and no specific problems were identified.

(2) Land Acquisition and Resettlement

Both resettlement and land acquisition were necessary for this project. The results from both events can be summed up as follows: while residents were not satisfied with compensation, the negotiation processes between the PPA and resettled residents received a certain degree of praise, and the vocational training courses were highly appreciated by the resettled residents. (Questionnaire responses from the resettled residents are summarized in Attachment 1.) The PPA response was also in line with the law. Thus it was inevitable that the land acquisition and resettlement became protracted due to the following reasons:

1) Resettlement²²

(a) Number of Resettlements

Initially at the time of the appraisal, the plan included 114 families. However, according to the record during the project, 222 families²³ eventually had to be resettled. The reasons and causes for the increase of targets remains unknown as there are no records left.

(b) Compensation Details

According to JICA internal documents, resettlement compensation per family was 35,000 PHP (Philippine peso)²⁴ and a resettled living area of 50 square meters. Responses to the recent questionnaires to the resettled residents showed the actual compensation was the same as the promised compensation.

(c) Resettlement Schedule

The initial plan set forth at the time of the appraisal was to make the appraisal by September 1997 and negotiate, close contracts, finish payments, and remove and transfer unnecessary buildings by December of the same year.

In reality, 77 families resettled in the barangays of Balete in February 1998.

Subsequently, it became difficult to acquire land and resettle residents due to complaints

²² As stated in "Constraints during the Evaluation Study" at the beginning of this report, main office personnel who participated in the resettlement that took place when the project was underway have retired or are no longer at PPA for other reasons. In tandem with a lack of relevant data written to describe the particulars of the move, this made it exceedingly difficult to confirm the facts. Statements below concerning resettlement without notice are based on JICA internal documents.

²³ Land owners and illegal residents confirmed at the end of May 2002.

²⁴ As planned at the time of appraisal.

about the compensation package from the residents who had remained at the project site. However, in May 2002, the PPA sent a Notice to Vacate²⁵ to the residents and they in turn resettled. By June 2002, 206 families out of 222 completed resettlement.

(d) Legal grounds for conducting resident resettlement (starting construction) and for compensation due to resettlement

- Legal grounds concerning resettlement: Construction started based on the access permit issued by the district court in September 2001. This permission was issued based on the Republic ACT 7279²⁶.
- Legal ground concerning the compensation: According to the PPA, the site acquisition committee was organized by the PPA, the city of Batangas, the Department of Social Welfare and Development, and the affected barangay captains in March 1998. The above stated compensation details were determined by the site acquisition committee and comply with internal PPA guidelines²⁷, and the contents of these guidelines also comply with the Republic ACT 7279.

2) Land Acquisition²⁸

(a) Land Acquired

At the time of the appraisal, 128 ha of fishpond and others was the target for land acquisition. Through an accurate subsequent measurement, a total of 117 ha net area affected by the project and owned by 166 landowners was eventually necessary for land acquisition.

(b) Compensation Details

At the time of the appraisal, compensation was expected to be 336.83 PHP per square meter. However, land owners were actually presented an offer of 500 PHP per square meter by the PPA. Later, some of the land owners filed a lawsuit with complaints about the compensation amount, and finally the Supreme Court ordered for a compensation of 425 PHP per square meter to be paid.

(c) Land Acquisition Schedule

The initial plan at the time of the appraisal for this project was to specify and appraise the land to be acquired by September 1997 and negotiate, close contracts, and finish payments by March 1998. In reality, in 1999, as the PPA decided to proceed with the construction of the Batangas Port Development Project, Phase II, a land acquisition committee was created to determine the reasonable price in the area and negotiate with the landowners affected by the project. The price of 500 PHP per square meter was authorized then. Except for a few, a majority of the landowners refused to voluntarily sell their properties forcing the PPA to eventually file the expropriation case. Negotiation for the voluntary sale continued even when the PPA, through the Office of the Solicitor General, already filed the expropriation

²⁵ The content was 1. to provide residents who agree with resettlement with proper benefits including 10,000 PHP for any inconvenience, and 2. that the PPA is to start demolishing houses of those who do not agree with resettlement by June 11.

²⁶ An Act to provide for a comprehensive and continuing urban development and housing program, establish the mechanism for its implementation and for other purposes.

²⁷ The PPA Memorandum Circular No. 55 - 97, "Guidelines on the relocation and Payment of Financial Assistance to families affected by the Implementation of Batangas project, Phase II".

²⁸ The following statements are mainly based on the PPA questionnaire responses.

case. A total of 18 landowners accepted the price offered and entered into a voluntary sale with the PPA. The total land area sold voluntarily was 120,050 square meters and the PPA paid a total price of 60,025,000 PHP. In 2009, the expropriation case was finally decided by the Supreme Court at the final compensation price of 425 PHP per square meter with interest reckoned from September 2001. The PPA is trying to finish payment on the balance of advanced payment made by the PPA based on the zonal value which is 290 PHP per square meter at Brgy. Sta. Clara and Bolbok and 400 PHP per square meter at Brgy. Calicanto before the end of CY 2012.

(d) Legal Grounds for Compensation along with Land Acquisition

The 500 PHP per square meter stated above as initially suggested by the PPA complies with the Presidential Administration Order No.50, indicating a price that is at least 10% higher than the official land price fixed by the Bureau of Internal Revenue (zonal value)²⁹.

3) Other Impacts

None.

In light of the above, this project has achieved its objectives at a limited level. Therefore its effectiveness and impact are low.

3.4 Efficiency (Rating: 2)

3.4.1 Project Outputs

(1) Civil engineering work

Table 6 shows planned project details and actual results.

Table 6: Comparison of the Initial Plan and Actual Output of the Civil Engineering Work

Item	Initial Plan (at time of appraisal)	Actual Result	Causes for Difference
1. Container berth	2 Berths: Total 450 m, Designed water depth -15 m	2 Berths: Total 450 m, Water depth -15 m	
2. Dredging	Water depth -13 m, 4.5 million m ³ , other land excavated 200,000 m ³	Water depth -13 m, 4.1 million m ³ , land excavated 330,000 m ³	Some were changed reflecting the difference in actual land shape and geology.
3. Reclamation	For Project Phase II 800,000 m ³ , Phase IV 2.4 million m ³	Container terminal 2.1 million m ³ , general cargo berth 700,000 m ³	Amount of reclamation for container terminal is close to the figure that was fixed by the detailed design (2.3 million m ³). Due to amount of dredging shortage, landfill for Phase IV was shelved.
4. Pavement works	Pavement construction 17 ha, including container yard of 15 ha	Pavement construction 16.7 ha, including container yard of 15 ha	Due to land acquisition limitations, the land area was less than planned.
5. Berth of domestic berth for Phase I	3 Berths	3 Berths	
6. Attaching a boarding bridge with the ferry dock for Phase I	1 Set	1 Set (as planned)	
7. Terminal buildings, electricity, water line, sewerage, and facilities for waste disposal	1 Set	1 Set (as planned)	

²⁹ Presidential Administration Order No.50, "Guideline for the Acquisition of Certain Parcels of Private Land Intended for Public Use including the Right of Way Easement of Several Infrastructure Projects".

8. Flyover construction work	Extension 650 m Note: Manila and Batangas port were supposed to be connected by the South Luzon highway, roads constructed by the BOT, and access roads constructed by the Department of Public Works and Highways.	Extension 824 m Note: Manila and Batangas port were connected by the South Luzon highway, Lipa- Batangas highway, and access roads constructed by the Department of Public Works and Highways.	It became longer than the initial plan taking into account the actual land shape.
9. Additional Items	/	<p>Installing cargo handling machinery^{*1} and total port security system^{*2}</p> <p>*1 Two Quay Side Gantry Cranes and four Rubber Tired Gantry Cranes</p> <p>*2 This system consists of the following five functions: - Gate Management System, Vessel Traffic Management System, Closed Circuit Television System, RO-RO Inspection System, Patrol Boat</p>	<p>Reasons for additions:</p> <p>1. Cargo handling machinery: Initially, cargo handling machinery was supposed to be procured by the port operator. However, as there was enough room in the project budget, it was purchased by the project to encourage the operator activity.</p> <p>2. Total port security system: In 2002, the International Maritime Organization (IMO) adopted a new regulation in the 1974 International Convention for the Safety of Life at Sea (SOLAS). As this new regulation called International Ship and Port Facility Security (ISPS) code called for the system. (There was no such movement at the time of appraisal.)</p>

(2) Consulting services

The following is the content for consulting services, with no changes³⁰.

- 1) Bidding support, supervision of construction
- 2) Monitoring for environmental surroundings, such as water quality, ground pollution, and noise and vibrations around residential areas during construction

(3) Improvement for Lifestyle and Livelihood

Conducted basically as planned.

- 1) Consulting service

The PPA delegated the following tasks to Madecor Group and had the group implement them. The group worked for 168 man-months (MM), as planned initially (NGOs were hired for 21MM, also as initially planned)³¹.

- (a) Investigation of the needs for vocational training and coordination with related organizations

The vocational training needs were assessed targeting 3,241 residents in 2002. Additionally, the needs from hiring companies were also investigated, with results reflected in the content of the training program (classes). While conducting the program, the Inter-Agency Committee (IAC) was organized to coordinate the related organizations. As many as 30 meetings were held between the PPA project management office, PPA General Manager, Batangas Port Manager, IAC committee, and JICA to check progress.

- (b) Staff education and formulation, implementation and evaluation of vocational training

³⁰ Terms of Reference (TOR) of the services includes support for resettlement and compensation for land.

³¹ Various governmental organizations, universities, and an NGO (LASAC) joined as conductors of training.

programs

A vocational training program was offered to 1,009 individuals, based on a target of 1,000 individuals (through May 2005). The program included 39 training courses and 53 classes. The courses included handicraft, restaurant business, construction, and computer. Only a few courses were related to port work skills.

(c) Support for job hunting activities for trainees

The PPA project management office built a network with various governmental organizations (the Department of Labor and Employment, the Department of Trade and Industry, Batangas province and city governments), private companies, and microfinance organizations in order to help trainees find employment. These organizations provided the trainees with a variety of information as well as employment and microfinance.

As seen already in section “3.2 Effectiveness”, vocational training was offered to 1,009 individuals, based on a target of 1,000 individuals. The ex-post evaluation (level of satisfaction) conducted one year after the training was highly praised by trainees. Also, as seen in section “3.3 Impact”, 742 out of 1,009 trainees, or 73.5%, reported that they obtained some sort of job, thereby confirming economic and social benefits. The following are believed to be the main factors for a successful lifestyle and livelihood improvement.

- i. Vocational training conducted together with community organizational strengthening, such as the establishment of the Relocation Development Committee: Activity of the Relocation Development Committee was reported to be useful in increasing the participation rate and sustainability for training programs.
- ii. In addition to the vocational training needs assessment for the trainees, the needs from hiring companies were also investigated and the results were reflected in the contents of training program classes: These actions developed the sorts of human resources that companies require.
- iii. The vocational training program office built a network with various governmental organizations (the Department of Labor and Employment, the Department of Trade and Industry, Batangas province and city governments), private companies, and microfinance organizations in order to seek support for the employment of trainees: This helped the trainees find employment.
- iv. The program operators always monitored progress and the level of trainees' satisfaction sensitively and continuously: They were able to check in on the effectiveness of training anytime and reflect the results in the training program.

2) Procurement of vocational training devices

Devices were procured based on the training module when necessary.

As stated above, there were no major changes in scope from the initial plan from an aspect of civil engineering work. The two additional scopes (installation of cargo handling machinery and the total port security systems) were both rational and necessary; they are considered appropriate for the purposes of the project.

Although MM of consulting services (related to civil engineering work) have increased due to the extended construction period, including the two additional scopes, the content of consulting service was the same as planned. Consulting service for lifestyle and livelihood improvement was also conducted as initially planned.

3.4.2 Project Inputs

3.4.2.1 Project Cost

The project cost in the initial plan was 12.465 billion yen as foreign currency plus 1.993 billion PHP as domestic currency (6.976 billion yen³²) for a total of 19.441 billion yen. The project called for yen loans to make up 14.555 billion yen, so the remaining 4.886 billion yen was supposed to be paid out of the Philippines government budget.

The actual project cost was 12.093 billion yen as foreign currency plus 2.356 billion PHP as domestic currency (5.502 billion yen³³) for a total of 17.595 billion yen, and yen loans made up 14.527 billion yen, so the remaining 3.068 billion yen was paid out of the Philippines government budget.

If viewed entirely in Japanese yen, the actual project cost was 90.5% of the budget.

Table 7: Project Cost: Planned vs. Actual

Items	Initial Plan (time of appraisal)			Actual Cost		
	Foreign currency (1 million yen)	Domestic currency (1 million PHP)	Total (1 million yen)	Foreign currency (1 million yen)	Domestic currency (1 million PHP)	Total (1 million yen)
Civil engineering work and construction	10,417	797	13,207	11,309	853	13,466
Improvement for Lifestyle and Livelihood	-	38	133	40		40
Consulting services	728	30	833	744	121	1,021
Price escalation	761	60	971	-	-	-
Contingency	559	43	710	-	-	-
Administration costs	-	66	231		68	150
Land acquisition	-	959	3,356		692	1,539
Tax					621	1,379
Total	12,465	1,993	19,441	12,093	2,356	17,595

Note: The exchange rate was 3.5 yen per one PHP in the initial plan and 2.24 yen per one PHP (weighted average rate).

Comparing the planned costs and the actual costs for this project, it is clear that the actual cost was lower than the planned cost. However, this is due to the strengthening of the yen; actual spending in PHP was almost the same as the planned costs, excluding the additional scopes. The total expenditure in yen was 13.961 billion yen excluding the unplanned scopes, and the ratio against the planned cost was 71.8%.

³² The exchange rate (as of September 1997) was 3.5 yen to one PHP.

³³ The exchange rate (weighted average) was 2.24 yen to one PHP.

3.4.2.2 Project Period

This project was supposed to last for three years and seven months from the time loan agreements (L/A) signed in September 1998 until the time civil engineering work completed in March 2002. L/A were actually signed in September 1998, but the civil engineering work was completed in December 2007. As the last two months of the civil engineering work was part of the work period for the unplanned additional scopes, excluding this period, the actual project period was 110 months, while the schedule was 43 months. This largely exceeded the planned period at 255.8%. The main cause for the extended project period was the prolonged land acquisition and resettlement. Among the three construction packages, the construction period for the flyover on the port access road was extended as the final layout was changed due to the problems with land acquisition after bidding. Other civil engineering works finished in close to the scheduled period after starting construction.

3.4.2.3 Consulting Services

The plan and actual results in MM of consulting services (related to civil engineering work) are shown below. Although there was no change in the content of the consulting services, MM increased due to the extension of the project period, which includes the additional scopes.

Table 8: Planned and Actual MM for Consulting Services

Categories	Initial Plan	Actual
Engineers from overseas	196MM	301.5MM
Engineers from the Philippines	294MM	454.5MM
Assistants from the Philippines	225MM	877.5MM

3.4.3 Results of Calculations of Internal Rates of Return (IRR) (Reference Value)

Based on documents and information collected at the time of ex-post evaluation, the result for the Economic Internal Rate of Return (EIRR) recalculated with the exactly same method at the time of the appraisal is shown below. (Analysis for the Financial Internal Rate of Return was not possible because critical data needed for re-calculation was not available.)

Table 9: Comparison on EIRR Before and After Project

	Estimation at appraisal	Recalculation result at ex-post evaluation
EIRR	22.9%	-8.1%
Project life	14 years ^{*1}	14 years
Cost	Cost required for this project (construction fee) Increasing maintenance costs by conducting this project	Cost required for this project (construction fee) Increasing maintenance costs by conducting this project ^{*2}
Benefits	Reducing demurrage cost at the Port of Manila, conserving cargo logistic time on land	Reducing demurrage cost at the Port of Manila, conserving cargo logistic time on land

*Note 1: According to the main appraisal document, this was 30 years, but the detailed calculation documents attached in the appraisal documentation, which were the base of recalculation, stated 14 years.

*Note 2: As the port operator did not provide actual data on maintenance costs, the calculation method of maintenance costs used at the time of appraisal is applied.

The total cost in PHP exceeded the initial estimated scale, and the volume of container cargo handled was also much less than the initial plan. Therefore, the EIRR was clearly lower than the initial estimate.

In light of the above, although the project cost was within the plan, the project period was significantly exceeded. Therefore efficiency of the project is fair.

3.5 Sustainability (Rating: 2)

3.5.1 Structural Aspects of Operation and Maintenance

There are no specific problems with structural aspects of operation and maintenance.

The operation and maintenance at the container terminal (part of this project) at the Batangas port was delegated to a private company, as initially planned and ATI was selected³⁴.

The contract is effective for 25 years and was signed in March 2010. The details of the delegated operation are defined in the Terms of Reference (TOR), which is attached to the contract, stating how to operate (cargo handling work, related operations, and other services at port), maintain, promote, and take any other action regarding the facilities. ATI is supposed to pay the PPA a fixed fee and a variable fee linked to the sales amount every year.

At the time of ex-post evaluation, the operation and maintenance organization (ATI) that handles Phase I of the project (berth for ship and boats and general cargo berths, etc.) also handles the container terminal operation and management, as the volume of container cargo is small.

With regard to personnel who actually handle cargo (e.g., crane operators), training is offered to those who meet a few prerequisites³⁵ and then only those who pass the exam are employed. The division of duties for specialized operation and management personnel is clear. The annual turnover of staff is less than 5%, and the organization is stable.

3.5.2 Technical Aspects of Operation and Maintenance

The core members of the maintenance division for ATI consist of the maintenance supervisor, crane technician, and plant electrician, and each of them holds necessary academic degrees and qualifications.

Operation and maintenance of main devices are conducted as follows based on the operating manual, and the inventory control for necessary parts is also computerized³⁶.

- Quay Side Gantry Crane: Gantry system, gantry brake, and hydraulic oil are visually inspected as monthly maintenance. In each quarter, they inspect greasing on fitting, wire cable joints and fastening for bolts and nuts.
- Rubber Tired Gantry Crane: Engine oil and various filters are replaced in each after 300 or 600 hours. Every 1,200 hours, air filters are inspected and lubrication is given to wire ropes and the pulley. Engine oil is replaced and the generator system is inspected every 3,600 hours.

³⁴ ATI is a port operating company based in Manila in the Philippines. Established in 1986, ATI mainly has been operating the Manila south port.

³⁵ Driver's license and operating experience of heavy machinery.

³⁶ If parts are out of stock, it is possible to receive support from ATI at the Port of Manila.

When necessary, training for device operators is conducted at the South Harbor of the Port of Manila, which is controlled by ATI.

The port operation quality at Batangas Port is rated highly by an important client (shipping company).

3.5.3 Financial Aspects of Operation and Maintenance

The main organization to pay for the operation and maintenance of this project is the port operator, i.e., ATI. Detailed financial figures regarding the whole ATI port operation, other than financial statements, could not be obtained from ATI. However, operation and maintenance expenses are limited as the facility is quite new, and the budget for operation and maintenance is sufficiently reserved.

According to the received financial statements, the net profit in the past three years until 2010 for the consolidated base of ATI group companies has been increasing every year: 851 million PHP, 1,162 million PHP, and 2,145 million PHP. The return on assets in 2010 was 23.3%.

It is worth noting that the financial situation of the PPA in the past three years until 2011 has been losses of 35.2 million PHP in 2009 and 34.6 million PHP in 2010, and then improving to a profit of 129.4 million PHP in 2011. The return on assets in 2011 was 1.3%.

As explained above, the port operator has been creating profits at a certain level and has reserved necessary financial resources for operation and maintenance at this point. However, the volume of container cargo handled is much lower than expected; a significant deficit is emerging with this project³⁷. The volume of container cargo handled is not predicted to rapidly grow, at least at this point. Additionally, according to the contract signed between the implementing agency and the port operator, the fixed fee of the port operator will increase³⁸. Considering the entire situation, the financial situation for the project itself will continue to be tight. Therefore, there is a possibility that the port operator might discontinue this project based on the management's judgment in the future. In the long run, it may not be possible to secure the financial resources for operation and maintenance.

3.5.4 Current Status of Operation and Maintenance

As explained already in section "3.2 Effectiveness", all the scheduled machinery is installed, and everything is running smoothly.

There are no specific problems with facility management and maintenance; nor with the organization and technical aspects. As explained above, however, while no detailed information has been provided, there is uncertainty regarding the finance aspect in the long run.

Some problems have been observed in the financial aspect of the maintenance of this project. Therefore sustainability of the project effect is fair.

³⁷ According to the interview with ATI

³⁸ The fixed fee that ATI pays to PPA is 2.26 million US dollars in the first two years, 4.68 million US dollars in the third year, 5.08 million US dollars in and after the fourth year, and 5.33 million US dollars in and after the eighth year according to the contract.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

This project has been consistent with the Philippines' policy, development needs as well as Japan's ODA policy; therefore its relevance is high. However, the operating ratio of the container terminal constructed by this project remains low, falling far short of the target volume of container cargo to be handled. For this reason, the project has shown only an extremely limited effect on local employment and the economic growth of local businesses; thus its effectiveness and impact is low. Although the project cost was within the plan, the project period significantly exceeded the plan; therefore efficiency of the project is fair. There are no problems with the facility operation and maintenance. Nor are any particular problems observed on an organizational or technical level. Overall, however, with its financial uncertainties, the External Evaluator deems that sustainability of the project is fair.

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

4.2 Recommendations

4.2.1 Recommendations to the Executing Agency

Although no outstanding effect from this project has been observed at this point, companies in the industrial park at Calabarzon have started using the container terminal in Batangas Port thanks to the sales efforts of the port operator. It is now at an important turning point to judge whether Batangas Port can grow in the future. Under such circumstance it is an effective measure to reduce the port charges against vessels which has been implemented by PPA since October 2012. PPA is recommended to continue implementing this kind of promotional measure in future.

Furthermore, an ongoing JICA research on solutions to alleviate traffic congestion in Manila including the promotion of use of Batangas Port suggests that a key factor in increasing the handled cargoes at the port is the change of the expansion policy of the Port of Manila aiming to increase its cargo handling capacity. Therefore, it is strongly recommended to consider this policy change.

4.2.2 Recommendations to JICA

JICA is recommended to continue watching container terminal operations and to take actions to increase the operating rate such as a promotional seminar for utilizing this terminal that it held together this year with the JCCIFI.

4.3 Lessons Learned

1. During the implementation of this project, the role allotment among ports (differentiating services in Batangas Port from those of the existing large ports in the neighborhood such as the Port of Manila) was rarely considered and the cargo handling capacity at the Port of Manila was increased. These have also led to a low operating rate of the container terminal at Batangas Port. For similar projects in the future, if new ports do not possess areas of strength, the related government offices must give preferential treatment to the new ports through policy, such as restricting the cargo volumes that competitor ports handle or

applying lower usage rate to the new ports, to encourage use of the new ports.

2. The target value for this project is founded on the consideration mainly of the distance between the Port of Manila and Batangas Port and the resulting costs of land transport to distribute cargo volume between these two ports. This is all based on the estimated total volume of cargo handled in Luzon based on GDP estimates. As seen in the analysis on effectiveness, the actual cargo movements are determined by various factors. Therefore, when setting targets for similar port development projects in the future, factors other than macro aspect such as GDP estimates should also be considered as much as possible. Those factors are mid- and long-term outlook of industrial structure (particularly in the hinterland of the port), requirements from potential client companies, and action by the shipping companies who actually deal with cargo.
3. Lifestyle and livelihood improvement policy on this project was successfully conducted. In particular, the following factors can be referred to as good practices that can be applied in other projects.
 - 1) Investigating the needs of hiring companies together with vocational training needs assessment of the trainees, and reflecting the results in the contents of the training program
 - 2) Building a network with various governmental organizations (the Department of Labor and Employment, the Department of Trade and Industry, province and city governments), private companies, and microfinance organizations in order to seek support for the employment of trainees
 - 3) Having program coordinators always pay attention to progress of the program and the level of satisfaction of the trainees, and monitor these factors regularly
4. Resettlement records were not well kept at the PPA, i.e., the implementing agency. Resettlement is always an issue that greatly influences costs and time periods for a project involving large-scale construction. Accordingly, detailed records for each project should be kept to accumulate know-how and lessons for smooth resettlement in future projects.

Comparison of the Planned and Actual Scope of the Project

Item	Planned	Actual
1. Project Outputs		
1) Container berth	2 Berths: Total 450 m, Designed water depth -15 m	As planned
2) Dredging	Water depth -13 m, 4.5 million m ³ , other land excavated 200,000 m ³	Water depth -13 m, 4.1 million m ³ , land excavated 330,000 m ³
3) Reclamation	For Project Phase II 800,000 m ³ , Phase IV 2.4 million m ³	Container terminal 2.1 million m ³ , general cargo berth 700,000 m ³
4) Pavement works	Pavement construction 17 ha, including container yard of 15 ha	Pavement construction 16.7 ha, including container yard of 15 ha
5) Berth of domestic berth for Phase I	3 Berths	As planned
6) Attaching a boarding bridge with the ferry dock for Phase I	1 Set	As planned
7) Terminal buildings, electricity, water line, sewerage, and facilities for waste disposal	1 Set	As planned
8) Flyover construction work	Extension 650 m Note: Manila and Batangas port were supposed to be connected by the South Luzon highway, roads constructed by the BOT, and access roads constructed by the Department of Public Works and Highways.	Extension 824 m Note: Manila and Batangas port were connected by the South Luzon highway, Lipa- Batangas highway, and access roads constructed by the Department of Public Works and Highways.
9) Additional items	n.a.	Installing cargo handling machinery and total port security system
2. Project Period	September 1989 – March 2002 (43 months)	September 1989 – December 2007 (112 months)
3. Project Cost		
Amount paid in foreign currency	12,465 million yen	12,093 million yen
Amount paid in local currency	6,976 million yen (1,993 million peso)	5,502 million yen (2,356 million peso)
Total	19,441 million yen	17,595 million yen
Japanese ODA loan portion	14,555 million yen	14,527 million yen
Exchange rate	1 peso = 3.5 yen (As of September 1997)	1 peso = 2.24 yen (Weighted average)

Attachment 1: Summary of Questionnaire Responses from Resettled Residents

A total number of 115 people resettled during this project period from 1998 to 2007³⁹ responded to the questionnaire. Respondents were randomly selected among those 222 families that lived in Balete.

The results of the satisfaction level of compensation on this project (four levels): “Very satisfied”, one person; “Satisfied”, one person; “Less satisfied”, 27 people (23%); “Not satisfied at all”, 84 people (73%). As for the compensation process (explanation and negotiation methods)⁴⁰: “Very satisfied”, 18 people (16%); “Satisfied”, 29 people (25%); “Less satisfied”, 37 people (32%); “Not satisfied at all”, 25 people (22%). Costs of housing construction following resettlement were approximately 127,000 PHP per person⁴¹, and the difference between this amount and the compensation fee of 35,000 PHP is considered to be the cause of the unsatisfactory results mentioned above.

37 trainees who joined the vocational training also responded: 29 people answered “Very satisfied” or “Satisfied”⁴², which shows a relatively high degree of satisfaction. On this project, the vocational training started later than the resident resettlement, and there were two different groups of opinions on whether before or after resettlement the training should have been conducted.

For the employment situation before and after resettlement, 90.4% of relocated residents had jobs before resettlement while it dropped to 71.3% after that. This is also considered as one of the reasons for dissatisfaction with the compensation.

³⁹ Accounts for more than half of the resettled residents.

⁴⁰ By the time of the appraisal on this project, the Philippines’ academic groups and local NGOs had already had conversations with residents and started a lifestyle and livelihood improvement policy based on experience of the Phase I project. This seemed to obtain a certain level of effects for smooth resettlement.

⁴¹ From questionnaire responses. It is the amount based on self-reported figures.

⁴² In detail: “Very satisfied”, 11 people; “Satisfied”, 18 people; “Less satisfied”, 7 people; and “Not satisfied at all”, 1 person.