#### Republic of the Philippines

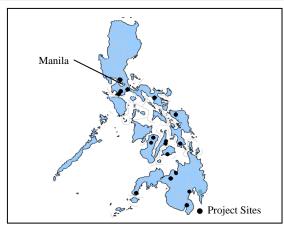
### Domestic Shipping Modernization Program II

External Evaluators: Akihiro Nakagome, Hideyuki Takagi

(Ernst & Young SN Global Solution Co., Ltd.)

Field Survey: November 2008

### 1. Program Profile and Japan's ODA Loan





Program Area Map

Replaced Tanker

1.

#### 1.1 Background

The Philippines is an archipelago of more than 7,000 islands. Due to this geographical characteristic, its economic and social activities rely to a large extent on marine transportation. Thus, the role played by domestic shipping is, in relative terms, important <sup>1</sup>. In addition, for the public at large, inter-island shipping is an increasingly important means of transportation compared to long-distance night buses, which are not necessarily a safe means of travel. Due to the public nature of maritime transportation, fares were set low under the approval system, with routes, anchoring sites and number of trips being strictly regulated. As a result, the profitability of the shipping industry remained low. Under this situation, ships and other vessels were not rehabilitated and improvement of maritime safety and operational efficiency had long been hampered. Simultaneously, the effect of existing maritime safety and environmental protection regulations has not been sufficient, and the number of accidents at sea had reached approximately 200 per year.

In order to mitigate these problems and to increase the economic efficiency of the shipping

<sup>&</sup>lt;sup>1</sup> At the time of the appraisal, participation of domestic shipping in the total domestic passenger transportation and freight transportation were 9% (in 1987) and 47% (in 1990), respectively. In Japan, corresponding numbers were 0.2% (in 1996) and 42% (in 1996), respectively.

industry, it became necessary to replace the aging ships and vessels, to observe regulations strictly regarding safety and environmental standards, to streamline the overall transportation system including port facilities, cargo handling and access to roads, to promote shipbuilding industry which would supply safe ships and vessels; and to foster human resource development in all these areas. In the first phase of the Program, the Domestic Shipping Modernization Program I (DSMP I), assistance focused on the acquisition of new ships and vessels and the repair of existing ones. Though positive results were achieved, the demand for funds to upgrade the domestic shipping infrastructure remained high. In addition, private financial institutions lacked mid to long-term funds, and the know-how necessary for credit assessment and assistance to end users. Thus, in the second phase, the Domestic Shipping Modernization Program II (DSMP II), the need for technical assistance for private financial institutions and end users was noted as an important component. At the same time, private financial institutions were expected to prepare for the mid to long-term fund requirements.

Within this framework, the Program (i.e. DSMP II) aimed to comprehensively address the issues facing the domestic shipping industry in the Philippines. DSMP II conducted maintenance and upgrading of ships and vessels in addition to that already conducted under DSMP I. The following items were identified, and then conducted by supplying funds to the policy-based lending program: upgrading of regional ports; construction and improvement of small and medium-sized shipyards; enhancing education and training systems for shipping industry workers; and the technical transfer of shipping finance know-how, such as evaluation, management and business support, to private financial institutions.

#### 1.2 Objective

This policy-based lending program aims at supporting investments of enterprises engaged in domestic shipping and shipping-related industries, such as ship repair, shipbuilding, maritime schools, cargo handling and terminal operations and port development, particularly in rural areas. It is intended to support the modernization of the domestic shipping fleet to make the transport of passengers and cargo more efficient, reliable, safe and affordable.

#### 1.3 Borrower/Executing Agency

The Development Bank of the Philippines: DBP (Guarantor: Government of the Philippines)

### 1.4 Outline of Loan Agreement

Loan Amount/Loan Disbursement Amount	19,900 million yen/19,383 million yen
Exchange of Notes/Loan Agreement	September 1998/September 1998

Terms and Conditions	Interest Rate: 2.2%, Repayment Period: 30
	years (Grace period: 10 years)
	General Untied
Final Disbursement Date	January 2007
Main Contractor	Not Applicable
Consulting Services	Overseas Shipping Cooperation Center
(Only contracts over 100 million yen are	(Japan), Norwegian Shipping Development
listed)	Company – SHIPDECO AS (Norway)
Program Preparation Studies (Feasibility	None
Study: F/S, etc.)	

### 2. Evaluation Result (Overall Rating: A)

#### 2.1 Relevance (Rating: a)

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

#### 2.1.1 Relevance at the time of the appraisal

The Philippines, being an archipelago, has put modernization of the domestic shipping industry as a part of its National Policy. The government of the Philippines, based on the "Presidential Task Force (PTF) on Inter-island Shipping Industry," promoted competition through deregulation and liberalization of the domestic shipping industry, and supplied funds through the DSMP I carried out by the DBP. The objectives for the transportation sector at the time of the appraisal were set in the Medium-Term Philippine Development Plan 1993-1998 as follows: to strengthen interregional and urban-rural links to ensure people's mobility and the continuous flow of goods; and to ensure the safety and efficiency of transport services to meet the needs of a growing population and dynamic market demand. Moreover, even after DSMP I was finalized, the shortage of funds for the upgrading of ships and vessels persisted, and private financial institutions lacked sufficient mid to long-term funds to respond to this shortage. At the same time, due to a lack of experience in lending to domestic shipping sector, know how for credit assessment and customer service was insufficient in the private financial institutions. Thus, the second phase for DSMP was much needed to solve these issues. Continuing efforts throughout DSMP I and DSMP II were considered necessary to secure private financial institutions' mid to long-term funds, as well as to transfer sufficient know-how and expertise to the end users. Thus, relevance of the Program at the time of the appraisal was very high.

#### 2.1.2 Relevance at the time of the evaluation

National policy at the time of the evaluation put even stronger emphasis on the development needs of the domestic shipping industry than at the time of the appraisal. The government of the Philippines issued "Executive Order EO170" in January 2003 in order to stimulate private sector participation and investment in the improvement and operation of the Roll-on Roll-off (RORO) Terminal System (RRTS)<sup>2</sup>. EO170 specified that long-term financing from DBP to RRTS would be made as a part of the Sustainable Logistics Development Program (SLDP)<sup>3</sup>, thus emphasizing the need for long-term financing in the domestic shipping industry. In the following year, the Strong Republic Nautical Highway (SRNH) was announced as a part of President Arroyo's 10 Point Development Agenda, which aimed to alleviate bottlenecks in the country's distribution system through the development of intermodal transportation networks using vessels such as roll-on roll-off (RORO) vessels.

At the time of the evaluation, the demand for funding to the domestic shipping sector and the volume of maritime transportation of both goods and people was consistently high. Therefore, the relevance of this Program is high, as it was consistent with the development policy and development needs both at the time of appraisal and ex-post evaluation.

### 2.2 Efficiency (Rating: b)

Although the actual Program cost was mostly as planned, the program period was slightly longer than planned, taking 32% longer; therefore the evaluation for efficiency is moderate.

#### 2.2.1 Output

#### 1) Two-Step Loan Scheme

Information on original and actual output of the two-step loan<sup>4</sup> is summarized in Table 1. This loan scheme was modified in accordance with the economic and financial market conditions of the Philippines.

Table 1. Two-step loan scheme at the time of the appraisal and actual output

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<sup>&</sup>lt;sup>2</sup> The Roll-on Roll-off (RORO) Terminal System is an intermodal transportation system wherein maritime transportation and land transportation by trucks is combined. The RORO vessel itself has a gate at the end or at the rear that enables horizontal cargo handling.

<sup>&</sup>lt;sup>3</sup> The SLDP originated from a study that was carried out within the scope of the consulting services of this project. It is a loan program with an aim toward developing domestic transportation services that would support the government's SRNH. It consists of an intermodal transportation system that combines RORO vessels with roads for the bulk transportation of grains and cold chain transportation.

<sup>&</sup>lt;sup>4</sup> Two-step loans (financial intermediary loans) are implemented through the financial institutions of the recipient country based on the policy-oriented financial system of that country. These loans provide funds necessary for the implementation of designated policies, such as the promotion of small and medium-sized enterprises (SMEs) in manufacturing, agriculture and other specified industries, and the construction of facilities to improve the living standards of the poor. These loans are known as two-step loans because there are two or more steps before the end beneficiaries receive the funds (Source: JBIC *ODA Loan Report*, 2001).

Item	At the time of the appraisal (1997)	Actual (2008)
Lending	Direct finance (retail banking	Direct finance (retail banking
scheme	scheme): Loan, investment.	scheme): Loan.
	<ul> <li>Indirect finance through</li> </ul>	<ul> <li>Indirect finance through PFIs</li> </ul>
	Participating Financial Institutions	(wholesale banking scheme): Loan.
	(PFIs) (wholesale banking scheme):	
	Loan, and loan to lease through	
	PFIs.	
	Bond issue by end users was also	
	considered (bonds would be bought	
	by DBP).	
Terms	1) Sub-loan interest rates.	1) Sub-loan interest rates.
and	• Regular projects: 16% fixed.	• Pass-on rate to PFIs: 7.7%.
conditions	• Developmental projects: 14% fixed.	Pass-on rate to end users (for
		investment in developmental
		projects through RRTS, the rate was
		changed to 7.7% plus a spread of
		1.8%. For commercial investments, the rate was reduced to fit a range
		0.8% to 2.8%).
	2) Lending ceiling: Lending amount is	2) As planned.
	limited to 80% of the project cost. It	2) As planned.
	must be over PHP500,000 but no	
	more than 10 billion yen.	
	3) Repayment period: 3 to 15 years	
	(Grace period: 5 years).	3) As planned.
Eligible	1) Regular projects	1) Regular projects: As planned.
investment	<ul> <li>Shipping modernization/expansion.</li> </ul>	
sub-projects	<ul> <li>Shipyard modernization/expansion.</li> </ul>	
	<ul> <li>Port development project, including</li> </ul>	
	cargo handling/ storage	
	facility/terminal, etc.	
	Replacement of wooden banca	
	boats with a modern and safe type	
	of vessels.	
	• Maritime education.	0.5
	I = -	
	upgrade banca boats.	been conducted.
		occii conducted.
	<ul> <li>2) Developmental project.</li> <li>Maritime education.</li> <li>Upgrade from wooden to plastic banca boats.</li> <li>Regional small scale shipyards to</li> </ul>	2) Developmental project.  As planned, with the following exception: wooden banca boats have not been upgraded, and financing for the small-scale shipyard has not
	Feeder port development.	

Source: Project Completion Report and documents provided by DBP.

## ① On the modification of the two-step loan scheme

• Although one of the Program's aims was to consolidate the shipping finance system and to provide support to private financial institutions in this regard, the financing scheme was somewhat revised due to the deterioration of the economy caused by the Asian financial crisis. Thus, investments to the end-users and bond issues by the end-users were deferred and

leasing of vessels through PFIs were not carried out because it required a large initial investment from the PFIs, and the risk involved was decided to be too high.

- Sub-loan interest rates were reduced gradually in accordance with the interest rates of the Philippines' domestic market. For the RORO vessels and cold chain facilities, which are covered by SLDP, further preferred interest rates are currently applied<sup>5</sup>.
- The upgrading of wooden banca boats<sup>6</sup> to plastic banca boats, which was one of the components under the developmental projects (expected to be given priority), was not carried out for several reasons. For example, applying for loans to invest in facilities is not a common practice for small-sized maritime corporations. Also, the traditional, banca boat with an outrigger is still popular among its users. As a result, loans to the regional small-scale shipyards where upgrading of banca boats was to be done were not provided.
- Following the promotion of SRNH based on the national policy, as well as the implementation of SLDP during DSMPII, the priority of investment shifted to RORO vessels. Therefore the actually invested sub-projects were somewhat to those expected at the time of the original two step loan scheme.

### ② Modification of consulting services

Originally, consulting services were planned to be provided in the form of technical assistance on shipping loans and shipping technology, as well as financial consultancy services to assess the possibility of issuance of bonds by end users. However, the introduction of the bond issue scheme was not realized considering the economic and market situation at the time; thus, the consulting services involved were naturally not conducted. No negative effects on the Program were identified in this regard.

### 2) Actual sub-loans by sector

Sub-loans by sector are classified into two types: the 1st sub-loans and the 2nd sub-loans. The 2nd sub-loans utilize the revolving fund as shown in Table 2.

<sup>&</sup>lt;sup>5</sup> The preferred interest rate is fixed at 7% for the first two years. For succeeding years, annual re-pricing is performed based on the prevailing Philippines Dealing System Treasury Reference (PDSTR) rates, or a government bond benchmark plus 0 to 1% depending upon an annual credit review.

<sup>&</sup>lt;sup>6</sup> Due to its structure, the wooden banca boat is vulnerable to sea conditions, which makes its durability a concern.

Table 2. Actual sub-loans by sector (as of November 2008)

(1st sub-loan)

Sector	Number of projects	Loan amount (million pesos)	Percentage of total loan amount	
Regular Projects				
Passenger/cargo	5	2,793	33%	
Tanker	8	1,388	17%	
Port/terminal facility	5	341	4%	
General cargo/passenger ferries	4	303	4%	
Regular Projects Subtotal	22	4,825	58%	
<b>Developmental Projects</b>			•	
Regional port (base port, etc)	2 *	1,989	24%	
Cold/Bulk chain facility	5	695	8%	
RORO vessels	5	308	4%	
Maritime school	8	194	2%	
Feeder port (small-scale regional port)	4	218	3%	
Shipyard	1	70	1%	
Developmental Projects Subtotal	25	3,474	42%	
TOTAL	47	8,299	100%	

Source: DBP

### (2nd sub-loan)

Sector	Number of projects	Loan amount (in millions of pesos)	Percentage of total loan amount	
Regular Projects				
Tanker	1	59	5%	
General cargo/passenger ferry	3	189	15%	
Regular Projects Subtotal	4	4 248		
<b>Developmental Projects</b>				
Regional port (base port, etc.)	_ *	41	3%	
Cold/Bulk chain facility	3	390	32%	
RORO vessels	4	543	45%	
Developmental Projects Subtotal	7	974	80%	
TOTAL	11	1,222	100%	

Source: DBP

In the 1st sub-loan, 32% of lending was provided through the retail banking scheme, and 68% was provided through the wholesale banking scheme.

<sup>\*</sup> Although there were two loans for regional ports, one of the loans was provided to the Philippine Ports Authority (PPA) for the development of 12 ports.

<sup>\*</sup> Part of the approved 1st sub-loan

### 2.2.2 Program Period

The actual Program period was from September 1998 to January 2007 (eight years and four months, a total of 100 months). Originally, the Program period was to last until March 2005, but the Program was extended for two additional years, which resulted in a 32% extension compared to the original plan.

The reasons for the extended period were external factors, mainly the economic recession in the Philippines and the depreciation of the Philippine peso, both of which were caused by the Asian Financial Crisis. The depreciation of the Philippine peso against the yen triggered a rise in the price of used ships in the international market. This, together with the worsening economic situation, inhibited shipping companies from upgrading their ships. In addition, there was a shortage of supply of used ships that would meet the funding criteria. In response, the DBP gradually reduced interest rates and relaxed the terms and conditions of the loans.

#### 2.2.3 Program Cost

The planned Program cost was 19,990 million yen (sub-loan:19,532 million yen, consulting services: 458 million yen), whereas the actual Program cost for the sub-loan component was 18,973 million yen and 410 million yen for the consulting services. Therefore, the actual Program cost was within the planned value, being 97% of the original plan.

#### 2.3 Effectiveness (Rating: a)

This program has largely produced the planned effects and its effectiveness is high.

#### 2.3.1 Operational and Effectiveness Indicators

In general terms, efficiency of domestic shipping and maritime safety improved due to the development of the regional port infrastructure and the increase in the number of RORO vessels, among other factors. Evaluation of the Program's effectiveness was conducted based on the indicators that were set at the time of this ex-post evaluation (increase in cargo handling, reduction in distribution/traveling time, increase in maritime human resources and decrease in maritime accidents). Improvement in maritime safety that was expected through the upgrading of wooden banca boats was limited because this component was not implemented as originally planned. However, regional maritime safety *did* improve as a result of the loans provided for the acquisition of RORO vessels.

### ① Increase in cargo handling /passenger volume

In regard to the development of ports which fall under the jurisdiction of PPA, it is still too early to see any effects, as it started in 2007 and is still an on-going project. On the other hand,

in Cebu port, where partial development and expansion of the port was conducted as a part of the Program, cargo volume increased by 9% from 2004 to 2007, while the number of passengers decreased by 2.4% in the same period. This decrease is assumed to be due to tougher competition from the Cebu-Manila air transportation route.

### ② Increase in cargo/passenger vessels

As part of the Program, new acquisitions, replacement and improvement of vessels were conducted as described below. These investments helped to increase the number of cargo and passenger vessels.

- Increase in the number of cargo vessels: 1 new tanker acquired, 4 tankers upgraded, 6 improved, and 3 new general cargo vessels acquired.
- Passenger vessels: 4 passenger vessels upgraded, 3 cargo-passenger vessels upgraded, 4 RORO vessels upgraded and 10 RORO vessels acquired.

### ③ Reduction in traveling time

The following are some examples of the reduction in the travelling time:

- In Cebu port, improved facilities reduced the time for cargo handling by one third. In
  addition, the number of ferry services (i.e. round trips) increased from one service per
  day to three or four per day, due to the reduction in the time needed per trip.
- In Mabini port which is a small regional port, the number of services (i.e. round trips) between Mabini port and Tangaloy Island increased from one service per day to two, due to the reduction in the time needed per trip.
- A company which used to operate 40 services per year before the upgrading of its tankers increased its services to 80 per year after the upgrade. Two upgraded tankers are now able to complete the same work which previously required three tankers.

#### 4) Increase in maritime human resources

Construction and/or expansion of buildings were carried out in five of the eight maritime universities covered by the Program. Navigation simulators and other training equipment were also acquired for five universities. Construction and/or expansion of buildings enabled an increase in the capacity of these educational institutions in terms of the numbers of students. For example, in one university, 64 classrooms were built, increasing the student capacity by 3,500.

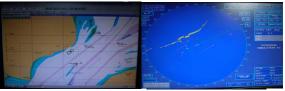
### 5 Decrease in maritime accidents

Upgrading of wooden banca boats to plastic banca boats was one of the developmental projects that were included with the aim of strengthening the security of maritime passenger

transportation. This upgrading, however, was in the end not implemented. On the other hand, modernization of the domestic shipping industry through the use of RORO vessels was promoted under the current national plan. As a result, RORO vessels are gaining wide spread usage as a much safer substitute for long-distance banca boats, whose high level of risk has been a cause for concern. Since the beginning of SLDP, the Program has also focused more on financing RORO vessels as the main component of marine transportation infrastructure. Therefore, it could be said that through the increase in RORO vessels, the safety and security in the regional marine transportation has improved.







Intermodal transportation using a RORO vessel

Above: a class room at a maritime university Below: newly introduced navigation simulator

An outline of the sub-projects by sector is shown in Table 3.

Table 3. Sub-projects outline by sector

Type of Project	Sub-Project Outline
Regular Projects	
Liners/Passenger-cargo vessels	Replacing of 4 passenger vessels and 3 cargo vessels
Tankers	Oil/Chemical Tankers: 1 acquired; 4 upgraded and 6 improved
Port/Terminal facility	Construction/expansion of 2 warehouses, expansion of 1 terminal, and acquisition of 2 cranes
General cargo/Passenger ferry	New acquisition of 3 general cargos and 1 passenger ferry
<b>Developmental Projects</b>	
Regional port (base port, etc)	Improvement and expansion of 10 regional ports, construction of 4 ports
Cold/Bulk chain facility	Construction of 48 storage facilities
RORO vessels	Upgrade of 4 large RORO vessels for Manila-Cebu route, 10 acquisitions of new mid and small-sized RORO vessels for regional shipping routes (including investments using the 2nd sub-loan funds)
Maritime school	Construction and expansion of 5 school buildings, acquisition of 4 training equipment

Feeder port	Construction and expansion of 4 feeder ports (Southern Luzon
(small scale regional port)	and Visayas Regions)
Shipyard	1 shipyard facility

Source: DBP

#### 2.3.2 Economic Analysis and Financial Internal Rate of Return (FIRR)

In this evaluation study, the Financial Internal Rate of Return (FIRR) of major components was assessed. For most of the large shipping companies, the FIRR values were high and the overall degrees of attainment of the planned values were also high. For most of the large shipping companies that were interviewed, FIRR was higher than the planned value. The same result was obtained in the recalculations conducted by the evaluation team in which compared to the planned FIRR of 16%, the actual FIRR achieved was 17%.

On the other hand, for the regional port projects, in most of the cases FIRR was not used as an investment criterion, thus it was difficult to obtain the necessary basic information to calculate the FIRR. It is also worth noting that while most of the major regional ports continued to be highly profitable, the same does not necessarily hold true for the small-sized regional ports<sup>7</sup>.

#### 2.3.3 Qualitative Effects

The following qualitative effects were identified at the time of the appraisal: (1) modernization and expansion of domestic shipping, (2) modernization and expansion of shipbuilding industry, (3) expansion of logistics through the development of ports, and (4) enhancement of maritime education. Through interviews with the executing agency as well as with end-users, the resulting qualitative effects were identified as follows:

#### ① Modernization and expansion of domestic shipping

Although loans to large companies located in the urban areas accounted for a significant proportion of the loans, it can be said that the upgrading and improvement of ships and vessels contributed to meeting the needs of the market, that it promoted an increase in safety and security, and modernized the domestic shipping industry.

### ② Modernization and expansion of shipbuilding industry

Contribution to the modernization and expansion of shipbuilding industry was limited. The main reason being that the loans to regional small-sized shipbuilders did not progress as originally planned, which in turn affected the construction of regional small-sized shippards that

<sup>&</sup>lt;sup>7</sup> According to "The Study on the Master Plan for the Strategic Development of the National Port System" (JICA, 2004), the FIRR of the International Container Terminal Plan was expected to be over 7%, while the FIRR for regional ports were expected to be quite low or even negative.

were expected to contribute to the upgrading of banca boats.

### ③ Expansion of logistics through the development of ports

The investment for the enlargement, development and rehabilitation of regional ports increased their utilization rate. The decreased cargo handling time, increased cargo volume; and improved port safety resulted in the expansion of logistics and distribution of goods.

#### 4 Enhancement of maritime education

The quality of education improved in the maritime universities where navigation simulators and training equipment were introduced. For example, at a maritime university located in the Bicol region, training that previously could only be undertaken in Manila is now available at the university, thanks to the construction of a new school building and the acquisition of a navigation simulator.

### ⑤ Consulting services

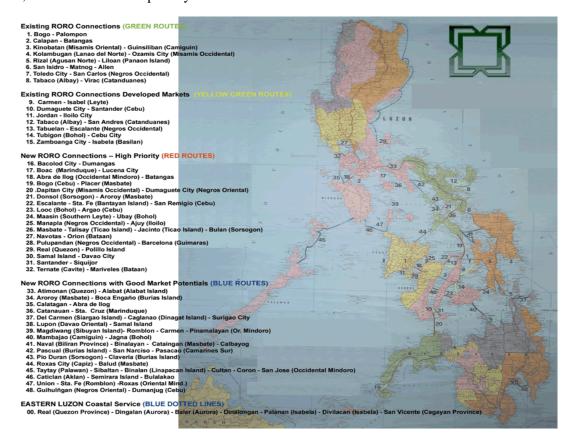
According to DBP, the Development Survey for Regional Shipping, which was conducted as a part of the consulting services, was the basis of SLDP's framework for the development of regional economies through the establishment of efficient transportation networks.

#### 2.4 Impact

2.4.1 Improvement of inter-island transportation, promotion of regional economies by improving efficiency of maritime transportation and development of maritime transportation related industries

Positive impacts were observed from the improvement of inter-island transportation and the development of maritime financing. In particular, the SLDP which is being implemented based on the SRNH policy, introduces 49 routes which are Eastern, Central and Western Nautical Highways, promotes investments in the shipping and related industries, and aims to increase the cargo volume as well as the number of passengers nationwide. The SLDP is currently being implemented. More than half of the 49 routes are already in operation, and the rest will gradually begin operation. The Program has contributed to the realization of the SRNH through loans mainly for RORO vessels and cold/bulk chain facilities. For example, distribution costs have been reduced by 45% in the Western Nautical Highway within five years since its opening in 2003, and it has become the main distribution means for agricultural products. Meanwhile, the increase in the number of operations has enabled the efficient transportation of passengers. Traveling time from Mindanao to Luzon has been reduced from 36 hours to 24 hours. In addition, cargo transportation, which was previously only possible once a week with a liner boat

is now, conducted 12 times per day with the introduction of the RORO vessels<sup>8</sup>.



The 49 routes currently being developed by the SLDP

### 2.4.2 Development of a maritime financing system and related PFIs

According to a report by the DBP, the end-users have positive response toward the DSMPII, as they appreciate that the long-term financial assistance that provides not only an opportunity to purchase vessels, but also to invest in shipping-related businesses. Also, according to an interview with a finance officer of a shipping company, after the implementation of the Program, the company is now able to borrow medium and long-term loans with a fixed rate from private banks. Although this change has been seen only at large shipping companies in sound financial condition, taking into consideration the fact that the loans of these banks have traditionally been only short-term with variable interest rates, it may be said that the Program triggered new lending schemes by private banks, whose impact has been quite significant.

On the other hand, in response to the problem that the strict collateral requirements of the Program loans hindered lending to small and medium shipping companies, the DBP considered it necessary to introduce an alternative finance scheme. This resulted in the establishment of a ship-leasing company, the Maritime Equity Corporation (MEC), which is a National

13

<sup>&</sup>lt;sup>8</sup> Based on a report by Mr. Ignacio Rivera Bunye, currently President Arroyo's Press Secretary

Development Company (NDC) established in 2005. MEC started ship leasing operations in 2006 and became a subsidiary of the DBP in 2008 and was renamed the Maritime Leasing Corporation. It is now being recapitalized and undergoing institutional reform.

### 2.4.3 Impact on the Environment

At the time of appraisal, reduction of environmental pollution by preventing maritime accidents and enforcing actions that comply with the environmental regulations of the Philippines was required. For the appraisal of sub-projects, compliance with the laws and ordinances indicated in Table 4 for each of the sub-projects was examined and certificates had to be submitted to the appraisers on a regular basis. Thus, proper attention was given to prevention of any negative impact on the environment. Moreover, periodical monitoring conducted by the DBP corroborates compliance with these environmental provisions.

Table 4. Laws that should be observed and mandatory certifications

Type of project	Laws, ordinances and certifications
Shipping project	<ul> <li>The International Convention for the Safety of Life at Sea (SOLAS)</li> <li>International Convention for the Prevention of Pollution from Ships (MARPOL)</li> </ul>
Port/Logistics facility	Environmental Compliance Certificate (ECC)
Maritime education	<ul> <li>Standards of training, certification and watch keeping for seafarers (STCW)</li> <li>Approval of Commission on Higher Education (CHED)</li> </ul>
Shipyard	Environmental Compliance Certificate (ECC)

Source: DBP

#### 2.5 Sustainability (Rating: a)

No major problem has been observed in the capacity nor the operation and maintenance system of the executing agency; therefore, sustainability of this program is high.

### 2.5.1 Operation and Maintenance System

#### 2.5.1.1 Management of the Revolving Fund

The DBP has been modifying its structure according to the changing environment surrounding the Program. Although an "implementing group" was originally planned to be in charge of the revolving fund, the current organizational structure is as indicated in Table 5, where different divisions are in charge of different aspects of the revolving fund. The 2nd sub-loan is managed basically the same way as that of the 1st sub-loan; however, monitoring has been enhanced for the 2nd sub-loan, for example cash flow is examined more closely when carrying out loan appraisals.

Table 5. Main functions of the divisions in charge of the revolving fund at DBP

Function of the Division	Name of the Division
Marketing calls, selection of projects, eligibility	Marketing/Program development
clearance, investment planning, etc	
Appraisal tasks: documentation review and visual	Program development/Lending units
inspection	
Project implementation support: conducting project	Program development
evaluations; preparing Project Preparation	
Endorsement Reports (PPER), etc.	
Administration of loans: provision of loans to users,	Fund sourcing
and monitoring of repayments	
Project monitoring: site visits and project inspections	Program development/Lending units

### 2.5.1.2 Operation and Maintenance of the Sub-Projects

The DBP and PFIs conduct periodical monitoring of the sub-projects. No particular problems were identified in their organization. In addition to the periodical inspections conducted by the Maritime Industry Authority and the Register of Shipping, technical experts at DBP conduct annual inspections of the financed vessels.

As for the sub-loans, an annual loan review by the DBP or PFIs' accounting officer is required, and each loan scheme (retail banking or wholesale banking) is reviewed as well.

### 2.5.2 Technical Aspects of Operation and Maintenance

In DSMPII, consulting services necessary for the loan appraisal and management of the revolving fund were carried out as planned and technology was transferred to the DBP, PFIs and the end-users. Loan appraisers at the DBP who took training courses under DSMP I, which meant that skilled DBP appraisers could participated in DSMP II.

Two new appraisal officers were being trained at the time of the evaluation, because the officer skilled in appraisal and project monitoring was due to retire in the near future. That skilled officer has made recommendations that a young officer with expertise in the technical aspects of shipping is needed to conduct loan appraisals for the shipping sector.

### 2.5.3 Financial Status of Operation and Maintenance

#### ① Financial status of the Executing Agency

As the figures in Table 6 indicate, the DBP's financial status is stable.

Table 6. Net income and financial status

(Unit: million pesos/%)

	Revenue	Operating Income	Current Net Income	Equity Ratio	Ratio of nonperforming loans
2005	13,387	5,203	3,802	12.20	6.94
2006	14,631	4,496	2,805	13.45	2.09
2007	13,589	5,189	2,674	13.59	2.70

Source: DBP Annual Report

### 2 Repayment status of the revolving fund

As can be seen in Table 7 below, the repayment status of the revolving fund is good. There is only one loan in arrears, and no problems were identified with sustainability of the revolving fund.

Table 7. Repayment status of sub-loans past due

(As of November 30, 2008, Unit: million pesos)

Duration of arrears	No. of arrears Loan amount		Outstanding principal	Amount in arrears	
3 to 6 months	-	-	-	-	
6 months to 1 year	-	-	-	-	
1 to 2 years	-	-	-	-	
Over 2 years	1	8.7	8.6	4.6	
TOTAL	1	8.7	8.6	4.6	

Source: DBP Annual Report

Note: The above loan in arrears is a loan to a maritime university. Many families faced difficulties in paying tuition fees after a typhoon hit the region. As of January 2009, the situation has improved.

#### ③ Profitability of end-users

Ships and vessels that were purchased through DSMP II were modern and satisfied the standards of age and safety set out in the loan regulations. Most of the ships and vessels were acquired in order to replace old ones. According to the interviews conducted with large end-users, the increased efficiency due to the replacement of vessels is contributing to the attainment of the planned profitability. In addition, the utilization of RORO vessels improved the efficiency of logistics by cutting through cargo handling operations in the port, whereas the exemption from the wharf fee has also contributed to cost reduction.

### 2.5.4 Status of the Revolving Fund

As shown in Table 8, sub-loan disbursement (2nd sub-loan) to the end-users from the revolving fund already reached 1,222 million pesos in November 2008, indicating that the operation of the Fund is adequate. No problems have been identified in the repayment of the 1<sup>st</sup> sub-loan. Furthermore, since 59% of the 1st sub-loan had already been collected at the time of

the evaluation, it can be concluded that the maintenance of the revolving fund is appropriate.

Table 8. Statement of the revolving fund account

(Accumulative as of the end of December, Unit: million pesos)

Item	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008 *
Disbursement by JBIC	127	970	1,176	1,790	3,040	4,223	4,872	6,545	8,474	8,474
Principal repayment by end-users of 1st sub-loan	29	66	90	174	320	760	1,244	2,289	4,352	5,001
Principal repayment by end-users of sub-loan from revolving fund	1	1	1	1	1	1	-	1	2	13
Total Revenues	156	1,036	1,266	1,964	3,360	4,983	6,116	8,834	12,828	13,488
1st sub-loan disbursement to end-users and technical assistance, and service fee on disbursement	111	387	1,009	1,277	2,490	3,919	4,767	6,069	8,474	8,474
Sub-loan disbursement to end-users from revolving fund									153	1,222
Repayment to JBIC										205
Total Expenditure	111	387	1,009	1,277	2,490	3,919	4,767	6,069	8,627	9,901
Closing Balance	45	649	257	687	870	1,064	1,349	2,765	4,201	3,587

Source: DBP

#### Operation and Maintenance Status of the Sub-Projects 2.5.5

According to the periodical monitoring conducted by the DBP, the operation and maintenance status of the major end-users in the sub-projects is satisfactory, as below.

### ① Passenger/cargo vessels

In regard to the passenger vessels, most of the loan was used to finance the purchase of ferries. Due to the price competition with air transportation and the small-sized RORO vessels that link RRTS, most of these vessels have been sold off. Cargo vessels are used for inter-island transportation of goods and their operation and maintenance status is good.

#### (2) Tankers

Tankers continue to be an important means of domestic transportation of petroleum products. Operation continues to be done in an efficient and safe manner, and maintenance status is good.

### ③ Regional ports

Regional ports are used as an important part of the inter-island transportation and distribution of goods, and their operation and maintenance status is good.

<sup>\*</sup> Values are as of the end of November 2008 when the field work was conducted.

#### 4 Cold/bulk chain facilities

Due to an increase in the demand for cold storage and warehouses, in general terms, their operation is profitable. Maintenance status is good.

## Shipyard

Only one loan was made to a shipyard and it has already been fully repaid by the end-user. Thus the DBP no longer monitors the sub-project. Because of this, operation and maintenance status could not be verified. However, according to DBP data, the shipyard is currently in use and continues to function.

#### 3. Conclusion, Lessons Learned and Recommendations

### 3.1 Conclusion

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

#### 3.2 Lessons Learned

Although the qualitative effects of the areas and sub-projects that were covered by the two-step loan were set at the time of the appraisal, some of the developmental projects, and the operation and effect indicators for sub-projects were not set in advance. This was because at that time, the use of operation and effect indicators was still not institutionalized.

In the future, efforts to identify and set operation and effect indicators in advance of sub-projects will be very important in order for the loans to end-users to achieve their objectives. The difficulty to set these indicators beforehand for two-step loans became clear in this Program, especially because sub-projects were identified only after the loan had started. However, from the point of view of project evaluation, setting indicators and their targets at the time of the appraisal is very important.

#### 3.3 Recommendations

The 2nd sub-loan focused on loans for RORO vessels with the aim to improve regional development. Since loans to regional small and medium-sized maritime companies are expected to continue to increase in the future, the following points require particular attention.

 In order to promote loans to regional small and medium-sized maritime companies, and to carry out projects smoothly, it will become even more important to give technical support to the end-users. In this respect, it would be advisable to increase the number of technical experts on shipping at the DBP, and to take proper measures to enhance consulting services for maritime business management. • At the Port of Mabini which was inspected by the evaluators, it was found that detailed assistance by the regional office of the DBP assisted the realization of the loan. For new borrowers who are not familiar with the loan procedures, it is extremely beneficial to receive support in the preparation and submission of necessary documentation, and so the role of DBP regional offices is crucial. Therefore, action by DBP headquarters to further enhance DBP regional office operations systems, such as organization and implementation of training courses is recommended.

# Comparison of the Original and Actual Scope

Item	Plan	Actual
(1) Output [Two-step loan]	① Direct finance (retail banking scheme): Loan,	① Direct finance(Retail banking scheme): Loan
Lending scheme	investment ② Indirect finance through PFIs (wholesale banking scheme): Loan, and loan to lease through PFIs ③ Bond issue by end-users was also considered (bonds bought by DBP)	② Indirect finance through PFIs (wholesale banking scheme): Loan
Terms and conditions 1) Sub-loan interest rates	1) Decaylor projects, 160/ fixed	1) Dogg on moto to DEIG 7 70/
1) Sub-toan interest rates	1) Regular projects: 16% fixed  Developmental projects: 14% fixed	1) Pass-on rate to PFIs: 7.7% Pass-on rate to end-users (for investment in development projects through RRTS, rate was changed to 7.7% plus a spread of 1.8%. For commercial investments, rate was reduced to within the range of 0.8% to 2.8%.
2) Lending ceiling	2) Limited within 80% of the project cost. The loan has to be more than PHP500,000 but not exceeding 10 billion yen.	2) As planned
3) Repayment period	3) 3 to 15 years (Grace Period: 5 years)	3) As planned
Eligible investment sub-projects		
	① Shipping modernization/expansion	① Passenger/cargo vessels, tankers, RORO vessels, total 29
	② Construction and improvement of shipyard	② Construction and improvement of one shipyard
	③ Construction and improvement of port and port facilities	3 Construction and improvement of 21 port and
	Construction/improvement     and repair of educational     and training facilities	port facilities  (4) (5) total 8
	<ul><li> Maritime education</li><li> Upgrade wooden banca</li></ul>	Not executed
	boats to plastic banca boats.  (7) Regional small-scale shipyards to upgrade banca boats	Not executed
	Feeder port development	8 8 feeder ports
[Consulting services]		

	Shipping: technical     assistance on shipping loans     and shipping technology     Finance: assessment and     advice on of the bond     issuance scheme by     end-users	<ul><li>① As planned</li><li>② Not executed</li></ul>
(2) Program Period	September 1998 to March 2005	September 1998 to January 2007
	(76 months)	(100 months)
(3) Program Cost Foreign Currency Sub-loan	19,532 million yen	18,973 million yen
Consulting Services	453 million yen	410 million yen
Domestic Currency	-	-
Total	19,990 million yen	19,383 million yen