

# Philippines

## Domestic Shipping Modernization Program

Report Date: June, 2002

Field Survey: July, 2001

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



Location Map of the Project



Project Site

#### 1.1 Background

The Philippines consists of 7,100 islands. The country relies heavily on domestic shipping for its fuel trade and economic development, and domestic shipping consequently plays a key role in the daily economic affairs of the nation. However, most of the vessels are either imported second-hand ships or small, old ships constructed domestically, while most shipyards for repair and maintenance of vessels are obsolete. All of these factors cause inefficiencies in inter-island transport. The government instituted policy reforms that are intended to liberalize and deregulate the industry in order to improve efficiency and to contribute to the safe and environmentally sound operation of the shipping industry. In order to realize these objectives, concerted efforts to modernize the components of the industry, including ship repair/shipbuilding, cargo handling and terminal facilities, were required.

#### 1.2 Objectives

To improve the safety and efficiency of marine transport through modernization of domestic shipping (purchase or repair of ships) and shipping support industries (ship construction or repair facilities, and cargo handling facilities) by providing low-interest, medium- to long-term loans to private ship-owners and ship repair companies.

### 1.3 Project Scope

- (1) Long-term loan through the Development Bank of the Philippines (DBP) to the investment projects
  - (a) Eligible end-users: enterprises engaged in domestic shipping and shipping support industries in the Republic of the Philippines
  - (b) Eligible projects: shipping modernization, shipyard modernization/expansion, and modernization of cargo handling and related terminal facilities
  - (c) Amount of loan limit: from 500 thousand Pesos to Peso equivalent of 1.5 billion Yen
  - (d) Eligible expenditures: not exceeding 80% of project costs
  - (e) Interest rates: between WAIR (Weighted Average Interest Rate) minus 2 percentage points and WAIR plus 3.5 percentage points.
- (2) Consultancy services to help DBP in the implementation of the program.

### 1.4 Borrower/Executing Agency

The Government of the Republic of the Philippines / Development Bank of the Philippines

### 1.5 Outline of Loan Agreement

Loan Amount (estimated)	15,000 million Yen
Loan Disbursed Amount	12,700 million Yen
Exchange of Notes	Nov 1994
Loan Agreement (L/A)	Dec. 1994
Terms and Conditions	
Interest Rate	3.00%
Repayment Period (Grace Period)	30 years (10 years)
Procurement	General Untied
Final Disbursement Date	Mar. 2000

## 2. Results and Evaluation

### 2.1 Relevance

Enhancing safety in the shipping industry has been a priority of the Philippine transportation sector's development policy. However, constructing or rehabilitating vessels requires a long-term investment and difficulty in acquiring long-term loans had hampered development of the shipping industry.

Promoting investment in the shipping industry coincided with the objectives of the transportation sector in the Medium-term Philippine Development Plan 1993-1998, namely: 1) to strengthen interregional and urban-rural linkages to ensure people's mobility and the continuous flow of goods; and 2) to ensure the safety and efficiency of transport services to meet the needs of an increasing population and of dynamic market demand. This policy orientation has been superseded by the Medium-term Philippine Development Plan 1999-2004, which states that the development objective of the transportation sector is "to have the private sector provide improved services to passengers and freight operations that are safe, reliable, ecologically friendly, offer choice and are competitively priced, and support the government's overall economic and social development goals." The Domestic Shipping Modernization Program 1 (DSMP1) plays a major role in realizing these objectives, since it aims to enhance marine safety through the modernization of vessels and shipyards. In this light, it is clear that the current project remains relevant and consistent with the Government's development policy up through the present.

### 2.2 Efficiency

It was envisaged at the time of appraisal that the project would increase vessel capacity by 104,400 gross tons, a goal that was mostly achieved. Actually the capacity increased by 94,600 gross tons.

#### 2.2.1 Disbursement of Sub-loans

Table 1 shows the yearly disbursement of the project, which consists of JBIC financing and the borrowers' own contributions.

**Table 1 Disbursement (million Yen)**

Year		1995	1996	1997	1998	1999	2000	Total
Foreign (JBIC)	Sub-loans	819	5,678	3,467	995	383	1,187	12,525
	Consulting Services	65	61	31	5	-	-	129
	Sub-total	884	5,739	3,496	1,000	383	1,187	12,687
Local (DBP)	Sub-loans	2,356	2,304	1,023	1,181	259	179	8,001
	Consulting Services	14	15	6	-	-	-	35
	Sub-Total	2,370	2,319	1,029	1,881	259	179	8,036
Total		3,254	8,058	4,523	2,881	642	1,366	20,723

Source: DBP

It was envisaged at appraisal that the loan would be disbursed by the end of Year 1997. The delay in disbursement was caused mainly by the Asian financial crisis in 1997, which caused the following specific conditions or reactions:

- (1) Appreciation of Yen vis-à-vis Philippine Peso, which increased the total loan amount denominated in Pesos
- (2) Postponement of projects not yet fully committed, due to the risk associated with the volatile exchange rate
- (3) Increased costs of imported goods, owing to Philippine Peso depreciation, which dampened the enthusiasm of some entrepreneurs.
- (4) More prudent loan approval standards, introduced by DBP management to safeguard portfolio quality from further degradation

### 2.2.2 Implementation of Sub-Projects

By the end of Year 2000, 56 sub-projects (41 borrowers) were contracted, as shown in Table 2.

**Table 2 Number of sub-projects (original loans)**

	1995	1996	1997	1998	1999	2000	Total
Number of sub-loans contracted	14	12	12	10	7	1	56

Source: DBP

It was envisaged at appraisal that the loan would be used 1) to purchase new or second-hand ships, 2) as investment to comply with government classification or security regulations, 3) to repair or convert existing ships, 4) to modernize shipyards, and 5) to modernize cargo handling facilities. Forty-nine (49) sub-projects consisted either of building new vessels or purchasing second-hand vessels; all of the vessels comply with government classification and security regulations, a loan condition requested by DBP. Two sub-projects consist of repairing and upgrading vessels, and five sub-projects involve the construction/rehabilitation of shipyard/terminal/port facilities. Loan size varied from 4.5 million Pesos (construction of a molasses terminal) to 390 million Pesos (acquisition of 2 passenger-cargo vessels), averaging 59 million Pesos. Most sub-loans will mature in 5 to 10 years. Table 3 shows the number and amount of sub-loans by type of sub-project.

**Table 3 Number and Amount of Sub-loans by Type of Sub-project**

Type of sub-project	Number of sub-projects (%)	Total amount of sub-loans (million Pesos) (%)
Cargo	11 (20%)	475 (15%)
Fastcraft/Passenger/ Cargo	19 (34%)	1,357 (41%)
Tanker	17 (30%)	872 (27%)
Tugboat/Barge	4 (7%)	231 (7%)
Shipyard/Terminal/ Facilities	5 (9%)	344 (10%)
Total	56	3,279

Source: DBP

Table 4 shows the number of ships purchased or repaired, and Table 5 shows the total capacity of vessels acquired. Nationwide, there were a total of 548 vessels acquired between 1995 and 1999, 20% of which were financed by the Project. However, since the average size of the vessels financed by the Project is three times larger than the national average, the sub-projects accounted for half of the total tonnage acquired nationwide in the same period.

**Table 4 Utilization of sub-loans**

Number of new ships purchased	56
Number of second-hand ships purchased	52
Number of ships repaired	6

Source: DBP

**Table 5 Total capacity of vessels acquired through DSMP1**

Passenger Capacity	14,869
Gross Ton	94,596

Source: DBP

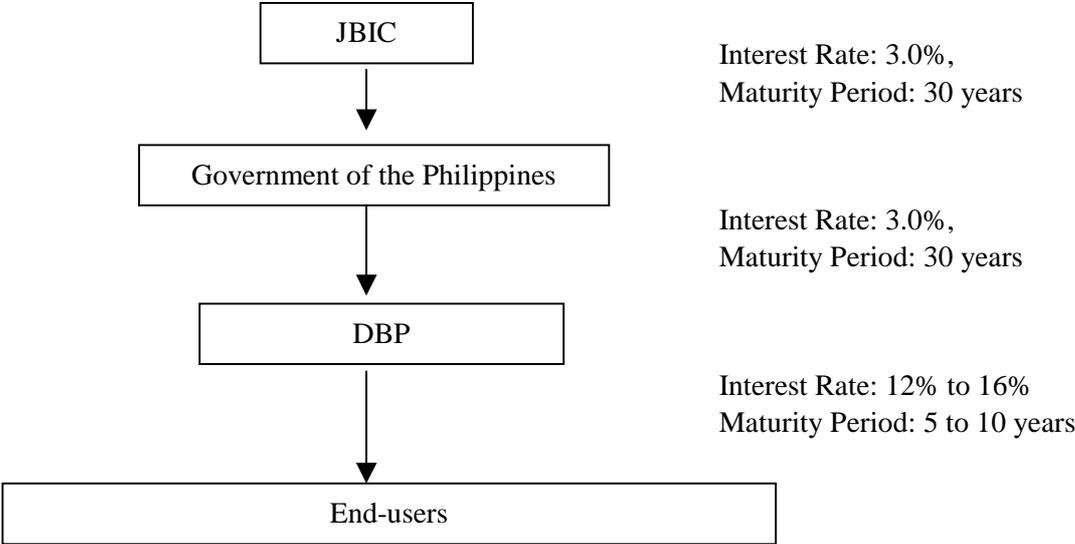
Table 6 shows the interest rates for sub-loans, and Figure 2 shows the lending scheme for the two-step loan used to finance this project. The interest rates applied to sub-projects were linked to the weighted average of interest rates (WAIR), with a minimum interest rate of 12%, based on the agreement between JBIC and DBP. As a result, a 12% interest rate was applied to most of the sub-projects. Higher rates, up to 16%, which were applied to some sub-projects, reflect the market interest rates at the time of contract and the choice of variable or fixed interest rates.

**Table 6 Sub-loan interest rate and market rate**

Year	1995	1996	1997	1998	1999	2000
Weighted Average of Sub-loan Interest rates	12.18%	12.0%	12.16%	13.33%	12.7%	12.0%
Market Rate (WAIR)	11.5%	12.3%	12.9%	15.0%	10.0%	9.7%

Source: DBP

**Figure 2 Lending Scheme for Two-Step Loan**



Source: JBIC

### **2.2.3 Consulting services**

A total of 162 million Yen-worth of consultancy services (40 man-months for the foreign portion and 40 man-months for the local portion) were used to enhance DBP's institutional capability and to efficiently and effectively implement the Project. The consultants designed, together with DBP staff members, a set of procedures for handling client applications and for evaluating projects. The consultants also prepared a manual titled "Industry Guidelines for Shipyard and Shipping," which is meant to be used by the management level of the individual companies to improve the cost efficiency of their operations in compliance with internal and national standards related to safety and environmental protection. The consultants provided a Project Completion/Implementation Report for monitoring activities. It supported, by providing a useful database, the implementation of a management information system. However, owing to the inadequate accounting/reporting system of borrowers, companies did not report regularly, as intended. The consultants also contributed greatly to the preparation of program documents for DSMP2, which eventually were approved by the Philippine Government and by JBIC.

## **2.3 Effectiveness**

The JBIC evaluation mission conducted an interview survey based on sub-projects. All 41 of the borrowers were targeted, and 31 actually responded. Most of the non-respondents were located in remote areas had to be interviewed by mail.

The interviews show that shipowners believe safety has been improved because of the project: 22 out of 24 respondents gave an affirmative answer in this regard. They attributed the increase in safety to the fact that the new vessels and their operations comply with international regulations, which was a condition for the loan. The vessels must also pass an annual inspection.

It should be noted, however, that because of difficulties in implementing inspections, compliance does not necessarily mean that all vessels that passed the inspections are safe. The Philippine Coast Guard (PCG), under the Department of Transport and Communications (DOTC), which is responsible for the implementation of safety regulations, does not have sufficient equipment or technical staff to carry out inspections effectively. Therefore, appropriate inspections cannot be implemented because of the insufficiency in the equipments and staffs. Furthermore, according to the DBP, borrowers that bought new vessels did not necessarily scrap old ones. They either sold their old vessels to other operators or simply reserved them in the dock. Therefore, it is not, in fact, known whether the overall safety level of the shipping industry has been improved.

Since two-thirds of the respondents did not answer the questions concerning operational efficiency, owing to their unwillingness to disclose such business information, it is difficult to judge how much operational efficiency has been improved through the loan. Only two ship owners reported fewer breakdowns, and two ship owners reported less time in dry-dock for repairs. Since all fast crafts were introduced on new routes, a comparison before and after the loan was not possible.

## **2.4 Impact**

### ***2.4.1 Promotion of the Domestic Shipping Industry***

Interviewers requested data on the impact of the Project from all borrowers, but many were not able to submit the actual figures. As a result, the number of eligible answers is quite limited. Moreover, it should be noted that since private business operators do not like to disclose information unfavorable to their business, the results of this interview survey may be biased, and should be treated as such. Of the 13 borrowers who used the loan to obtain passenger ships, 10 provided data on the number of passengers before and after the project; traffic increased by a total of 3.6 million passenger per year, which is equivalent to 8% of the total passenger traffic in the Philippines. With regard to cargo transport, eight borrowers achieved an increase of 0.3 million gross tons in total per year. 25 new routes were created by 13 borrowers, and 21 borrowers increased annual sales revenues by a total of 1,723 million Pesos. Overall, the Project promoted the domestic shipping industry in the Philippines, although the magnitude of the impact is not known.

### ***2.4.2 Impact on Regional Economies***

The Project has improved efficiency in the areas covered by the vessels. This finding is attributed to several factors -- reduced travel time and cost, efficient loading and unloading of cargoes/passengers -- that led to better access to more markets and optimized the utilization of vessels. Several examples follow.

- The ferry project in the Pangil Bay area (bounded by towns of Misamis Occidental and Lanao del Norte provinces) raised the productivity level of farmers, who can now sell more because of better access to markets and post harvest facilities in the neighboring provinces. The travel distance around the Pangil Bay, covering 5 towns, has been reduced drastically, from 108 to 24 kilometers. Travel time was reduced from 3 hours to a mere 15 minutes, made possible by the shuttle ferries crossing the Bay.
- The acquisition of RORO-type vessels (servicing the routes of Cebu – Tagbilaran – Larena – Plaridel - Iligan and back; Cebu – Calbayog - Cebu; Cebu - Santa Fe – Cebu - Larena and back; Tabaco, Albay – Virac Catanduanes; Tabaco, Albay – San Andres, Catanduanes; and other parts of the country) led to increases in cargo capacity and passengers traffic. And with the introduction of semi-mechanized cargo handling using palletized cargoes, the average standing time in ports has been shortened by 50%, thus increasing the frequency and regularity of service.
- The acquisition of fast craft contributed to the mobility of people. The deployment of fast ferries in Cebu-Bohol, for instance, enabled Boholanos to go to Cebu to shop and return to Bohol the same afternoon, traveling for 1 hour and 15 minutes each way. Businessmen, students and daily workers benefited from this mode of transport, saving both time and money.

The increased frequency of operations has had not only economic impacts but also social impacts, for example:

- The ferry project in Panguil Bay in Misamis Oriental and Lanao del Norte provided students the opportunity to commute daily instead of boarding in Ozamis City. This convenience

allowed students to live together with their families, thereby strengthening family cohesion.

### 2.4.3 Generation of Employment

According to DBP, a total of 1,848 crews have been newly employed by the sub-projects. If ground staff and indirect employment are added, more than 3,000 jobs have been generated by the project.

### 2.4.4 Compliance to Environmental Regulations

Submission of Environmental Compliance Certificates (ECC) of the Department of Environment and Natural Resources (DENR) and to MARPOL (International Convention for the Prevention of Pollution from Ships) are a precondition for DBP's approval of sub-loan contracts for shipyards and for vessels, respectively. No significant environmental impact has been observed by DBP.

## 2.5. Sustainability

### 2.5.1 Sustainability of Two Step Loan

The number of past due sub-loans has increased recently; 16 sub-projects, or 30% of the sub-projects, were past due in 2000. The cash collection ratio declined from 95% in 1999 to 63% in 2000, while 14% of the outstanding amount was overdue in 2000. One sub-project was foreclosed in 1998, owing to the company's mismanagement.

**Table 7 Cash Collection Ratio of Sub-loans**

Year	1995	1996	1997	1998	1999	2000
Principal and interest amount due during the period						
Interest	4,425	81,584	149,627	276,251	248,905	249,385
Principal	-	18,817	92,419	157,303	331,949	610,501
Total (a)	4,425	100,401	242,046	433,554	580,854	859,887
of which repaid						
Interest	4,425	72,290	150,620	263,808	231,576	156,542
Principal	-	19,512	89,942	153,619	321,093	387,020
Total (b)	4,425	91,802	240,562	417,428	552,669	543,562
Cash Collection Ratio(b)/(a)	100%	91%	99%	96%	95%	63%

Source: DBP

**Table 8 Arrears Ratio of Sub-loans**

	1995	1996	1997	1998	1999	2000
Number of current sub-loans (a)	14	26	38	48	55	56
Number of past due sub-loans (b)	0	1	3	6	8	16
Arrears ratio by number (b)/(a)	0%	3.8%	7.8%	12.5%	14.5%	28.6%
Total amount Outstanding ('000 pesos) (c)	149,934	1,169,930	2,134,709	2,274,738	2,085,798	2,310,789
Total arrears ('000 Pesos) (d)	-	8,599	1,484	16,126	28,185	316,325
Arrears ratio by amount (d)/(c)	0%	0.7%	0.07%	0.7%	1.3%	13.7%

Source: DBP

The deterioration of the portfolio in 2000 is largely the result of increased operating expenses, especially the high cost of fuel and spare parts due to peso devaluation, and operators' inability to generate revenue from low fare and cargo freight fees to meet the increased costs. Other reasons are company-specific, such as financial distress caused by mismanagement. At the time of this evaluation, it is likely that 9 out of 16 past due sub-projects will be foreclosed or sold to a third party, leaving a total outstanding debt of 357 million Pesos. The rest will undergo restructuring or adjustment to ameliorate the situation.

### 2.5.2 Sustainability of the Executing Agency

DBP has a strong financial position. It registers positive net income every year. The amount of non-performing loans is small, and half of them have already been provisioned. DBP's financial sources are mostly long-term borrowings from foreign financial institutions. The Philippine Government has agreed to assume the currency exposure risks on 90% of its foreign borrowings, ; however, foreign exchange revaluation losses, which amounted to 31 billion Pesos in 2000, have not been paid by the Government, being instead registered in DBP's assets as deferred charges. Foreign borrowings without foreign exchange risk cover are lent in the same currency. Table 9 shows DBP's financial position in 1999 and 2000.

**Table 9 DBP's Financial Position in 1999 and 2000 (million Pesos)**

Financial Statement Items	1999	2000
Total Assets	138,316	173,606
Current Assets	24,696	32,724
Current Liabilities	6,829	8,422
Equity and Retained Earnings	14,478	15,572
Net Banking Product	5,302	5,910
Operating Expense	2,900	3,403
Net Income after Tax	1,029	1,461
<b>Loan Portfolio</b>		
Gross Loans	67,109	80,247
Non-performing Loans	4,429	6,532
Non-performing Loans / Gross Loans	6.6%	8.1%
Allowance for Probable Losses	2,622	3,157
<b>Indicators of Performance</b>		
Operating Expense / Net Banking Product	54.7%	57.6%
Return on Assets	0.7%	0.8%
Current Ratio	3.6	3.9
Stockholder's Equity Ratio	10.4%	9.0%

Source: DBP

As a result of the technical assistance provided by the consultant, DBP's DSMP project team acquired the technical expertise to appraise and monitor sub-projects. The team is self-sufficient for handling regular projects, but still needs technical assistance for more complicated projects such as specialized transport (including refrigerated transport), fiber reinforced plastic (FRP) boats, port development and maritime schools.

### 2.5.3 Status of Special Account and Revolving Fund

A special account for the Project was established in DBP to monitor cash flow. Lending from a revolving fund started in 2000, financing two sub-projects. Unfavorable national economic conditions have made it difficult to identify new, promising sub-projects, which has caused a delay in disbursing the revolving fund. In consequence, the fund in the special account amounted to 1.4 million in 1999. Table 10 shows the status of the special account.

**Table 10 Status of Special Account and Revolving Fund (thousand Pesos)**

	1995	1996	1997	1998	1999	2000
Beginning Balance (a)		194,235	287,627	315,137	996,280	1,376,719
Inflow						
Disbursement from JBIC (b)	419,303	1,396,000	668,256	636,413	45,233	110,122
Principal and interest received of original sub-loans (c)	4,425	91,802	240,562	417,428	552,669	543,562
Total Inflow (d) = (b) + (c)	423,728	1,487,802	908,818	1,053,841	597,902	653,684
Outflow						
Disbursement of original sub-loans (e)	226,334	1,374,288	828,340	323,248	124,916	398,201
Disbursement of revolving fund (f)						114,455
Repayment of JBIC loan (g)	3,159	20,122	52,968	49,450	92,546	96,761
Total Outflow (h) = (e) + (f) + (g)	229,493	1,394,410	881,308	372,698	217,462	609,417
Ending Balance (i) = (a) + (d) - (h)	194,235	287,627	315,137	996,280	1,376,720	1,420,986

Source: DBP

## Comparison of Original and Actual Scope

Item	Plan	Actual
(1) Project Scope	(1) Long-term loan by DBP to eligible investment projects in shipping modernization, shipyard modernization/expansion, and modernization of cargo handling and related terminal facilities. (2) Consultancy services to help DBP in the implementation of the program.	As planned
(2) Implementation Schedule	Nov 1994 to Dec 1997	Nov 1994 to Dec 2000
(3) Project Cost		
Foreign currency	15,000 million Yen	12,700 million Yen
Local currency	-	
Total	15,000 million Yen	12,700 million Yen
ODA Loan Portion	15,000 million Yen	12,700 million Yen

## **Independent Evaluator's Opinion on Domestic Shipping Modernization Program**

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### **Relevance:**

The evaluation report needs to bring out not only safety but also the objective of efficiency of the domestic shipping industry. In addition, DSMP is in fact a major government initiative to encourage greater private sector participation in infrastructure and transportation services under a regime of greater market competition and facilitative policy environment.

### **Impact:**

It is useful to differentiate the macro impacts from the micro- or firm level impacts of DSMP I. The macro impacts are industry-wide or economy-wide. I will focus on macro effects in my comments.

#### ***(a) Age structure and capacity effects.***

The age structure is related to safety and efficiency of domestic shipping. DSMP I may have encouraged the purchase of more new vessels, in contrast to say 1987-1990 when there were virtually no vessel acquisitions that were new. DSMP I may have contributed to the marked reduction in the average age of passenger cargo ships in late 1990s, thereby improving maritime safety esp. for humans. DSMP I did not seem to have contributed to the reduction in the average age of vessels in general cargo, containers, barges and pilotage. On capacity effects, DSMP I may have contributed to the overtonnage problem in domestic shipping that resulted in low capacity utilization rate. This led to the profitability squeeze of shipping companies, which together with the East Asian crisis, may have contributed to the net reduction in the number of shipping companies in 1998 and 1999.

#### ***(b) Investment and employment effects.***

It is likely that the availability of medium-term to long-term financing under DSMP I contributed, together with the general policy of liberalization in the shipping industry, to the greater investor interest in the industry. The preponderance of importation over bareboat chartering in vessel acquisition in the latter 1990s implies a longer-term perspective for the private sector. Paid up capital and number of firms increased during the mid 1990s, before the East Asian crisis and the overcapacity led to the exit of a few firms from the industry in the late 1990s. The increased investments in the industry have led to increased direct employment in the industry, as the evaluation report reported.

#### ***(c) Market competition effects.***

If data allows, it is useful to examine further the details related to the routes served in order to determine if the new routes are really new in that no shipping firm was servicing any of the routes earlier or other players already service the routes. The former opens up new economic linkages; the latter increases market competition against a hitherto monopoly or a number of competitors. Nevertheless, the acquisition of newer and better ships and high-speed ferries has led to a cascading rise in service standards in the domestic shipping industry. The public perceives that sea travel has become easier compared to the 1980s and early 1990s. The Evaluation Survey Results indicate that the respondents reported increases in passengers at rates that are substantially higher than the average annual growth of passenger traffic of 17 percent between 1995 and 2000. This suggests that the DSMP I enabled the recipient firms to increase their market share in the

industry. The increase in market share could have occurred from the increase in passengers in new routes or from successfully capturing passengers away from rival firms in the old routes.

***(d) Linkage and regional development effects.***

The evaluation report gives very good examples of the linkage and regional development effects of DSMP I. Notice that the RoRo examples involve relatively remote islands and provinces being linked with the “mainland” (e.g., Catanduanes viz. Albay) or major economic area (e.g., Calbayog or Santa Fe or Iligan viz Cebu). In short there is greater integration of the more remote islands or provinces with the rest of the country.

***(e) Efficiency and productivity effects.***

The best example is the introduction of semi-mechanized cargo handling using palletized cargoes that has led to the 50 percent reduction in the standing time in the DSMP beneficiary ports, thereby increasing the frequency and regularity of service as the evaluation report noted. If the beneficiary port is Cebu port, the impact is greater given that it is the nerve center of domestic shipping. Also, it is likely that the increased number of barges, general cargo ships and containers because of DSMP I resulted in faster flow of commodities across the archipelago and thereby contributing to improved productivity in the industrial and distribution sectors.