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Final Report

Technical Resources Project

# Interisland Liner Shipping Rate Rationalization Study

Volume III

## Economic Analysis of Liner Shipping Rate Rationalization and Deregulation

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## **FOREWORD**

The Interisland Liner Shipping Study Rate Rationalization Study (SRRS) was conducted in the Philippines from November 1990 through August 1991 by a six-person team. This study was completed through the assistance of the Agency for International Development (A.I.D.). Throughout the study the team received full cooperation from management and staff of the Maritime Industry Authority (MARINA) and the Philippine Shippers' Council (SHIPPERCON). A.I.D. and the Conference of Interisland Shipowners and Operators (CISO), together with MARINA and SHIPPERCON, closely reviewed the work of the team and provided valuable information and comments. Several other Philippine public and private organizations also provided useful information and comments. Notwithstanding all of these important inputs from various concerned organizations and individuals, the analyses, conclusions, and recommendations in this report remain solely the products of the SRRS team and do not necessarily reflect the views or policies of MARINA, SHIPPERCON, A.I.D., CISO, or any other individual or organization. Certainly any mistakes that might appear in the report are solely the responsibility of the study team.

The SRRS first phase report submitted in June 1991 and the draft final report submitted in August 1991 are incorporated in this draft final report, with some revisions based on comments and further analysis.

This draft final report is submitted in five volumes. Volume I presents the findings and recommendations of the SRRS team on liner shipping rate rationalization and deregulation; Volume II presents the study shipping cost and rate analysis and incorporates most of the first phase report; Volume III discusses the economic effects of shipping rate regulation and deregulation; Volume IV discusses the design and development of MARINA and SHIPPERCON databases; and Volume V presents a broader review of the Philippine interisland shipping sector and identifies desirable actions to be taken for improvement of the sector.

## ACRONYMS

BAI	Bureau of Animal Industry
CONFED	Confederation of Filipino Rice and Corn Traders Association
CPC	Certificate of Public Convenience
DA	Department of Agriculture
GMC	General Milling Corporation
IATS	Interisland Agro-Transport Study
IPACTS	International Ports and Container Transport Study (recommended)
LSRS	Liner Shipping Route Study (recommended)
MARINA	Maritime Industry Authority
MC	moisture content
MT	metric ton
NFA	National Food Authority
NTPP	National Transport Planning Project
PAL	Philippine Airlines
PCCI	Philippine Chamber of Commerce and Industry
PPA	Philippine Ports Authority
PTF	Presidential Task Force (on interisland shipping)
PTSR	Philippine Transport Sector Review
RCS	Rice and Corn Survey
RFM	Republic Flour Mills Corporation
RORO	roll-on roll-off (vessels)
SAGREX	Southern Agro Export Corporation
SHIPPERCON	Philippine Shippers' Council
SMC	San Miguel Corporation
SMSA	Southwestern Mindanao Shipowners Association
SRRS	Interisland Liner Shipping Rate Rationalization Study (current study)
TEU	twenty-foot equivalent units (containers)
TOR	terms of reference
USAID	United States Agency for International Development
VAFCSO	Visayan Association of Ferryboat and Coastwise Service Operators

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## **Chapter 1**

### **INTRODUCTION**

#### **Economic Concerns Arising From Liner Shipping Regulation**

##### **Rate Regulation**

The basic problem with regulating transport rates is the difficulty of identifying, instituting, and adjusting rates appropriate for all traffic at all times. Regulating cargo rates is particularly difficult because of the differences among commodities, packaging modes, handling and stowage considerations, and the volume of backhaul traffic. Levels of both cargo and passenger traffic may fluctuate according to season, necessitating flexibility in transport service schedules, which in turn would affect the average cost per traffic unit. Regardless of the care taken in regulating transport rates, it is likely that some rates, over some periods of time, will be inappropriate for the traffic offering.

If regulated rates are higher than economically appropriate, some potential traffic may be prevented, thereby constraining the economic and social activities of the country or region. In an archipelagic country such as the Philippines, high interisland shipping rates can hinder the integration of some islands into the national economy, perhaps seriously limiting both labor mobility and market opportunities in many areas.

If regulated rates are too low, the economic result may be similar. However, instead of the shipper's being unable to bear the shipping cost, the rates are too low to induce shipping operators to provide services. In either case, potentially desirable traffic and economic and social interchange fail to occur because inappropriate rates have made it difficult or impossible for the shipping operator and the shipper or traveler to agree on terms for shipping service.

Regulation of interisland liner shipping rates began in 1928, but liner services remained unregulated until 1972, when route franchising was instituted and service schedules and vessels were no longer left to the discretion of the shipping operator. Reportedly, regulated rates were originally based on the costs of providing services, with only a 0.5 percent surcharge permitted on the value of what were then just a few high-valued commodities in interisland trade. From this modest beginning six decades earlier, ad valorem charging rose to 7.3 percent for a wide range of commodities by the late 1980s, representing serious deviations from appropriate charges based on shipping costs. Rate discounts became the rule, with discounts of 15 to 25 percent being common, according to several studies of interisland shipping conducted over the 1980s. Despite the discounts, it is likely that the overall levels of liner cargo rates during the decade were higher than what would have been economic.

Both the Maritime Industry Authority (MARINA), the organization responsible for regulating liner shipping rates and services, and the consensus of several studies conducted during the 1980s identified serious distortions in cargo rates resulting from ad valorem charging and the need to rectify the situation. After a 1989 presidential task force (PTF) on interisland shipping recommended discontinuance of ad valorem charging, ad valorem charging sank to a 0.3 percent surcharge on most commodities by the end of the year. In 1990, even this last vestige of ad valorem charging ended.

Although ending ad valorem charging has eliminated the most serious distortions of regulated liner shipping cargo rates, the methodology used to identify official cargo rates and to determine their periodic upward adjustment maintains a higher general level of rates than is warranted under competitive market conditions. Volume II of the Interisland Liner Shipping Rate Rationalization Study (SRRS) report discusses the inaccuracies of the current methodology used to identify regulated cargo rates. Volume II also discusses the tendency of the overall rate level to remain high as a result of upward adjustment on the basis of revenue deficiency without regard to average load factors and degree of efficiency of operations. Even if load factors are low and vessel operation is very inefficient, rate increases would be approved if revenue were insufficient to obtain the government-approved 12 percent annual return on assets. The government's willingness to have shippers and passengers pay for operator inefficiency and, where it occurs, oversupply of shipping capacity, tends to reduce efficiency of operations. It is impossible to determine how efficient the liner industry might have become by 1991 if government policy had not been to protect inefficiency in the industry, but it is possible that substantial increments to shipping costs each year would have been eliminated, and that total traffic is far less than if the industry had been highly efficient.

In addition to the generally high levels of cargo rates and the potential inaccuracy in identifying appropriate rates for all operators on all routes, some transport and economic problems have been created by the interisland

shipping commodity classification system. Currently, interisland liner shipping commodities are classified for the purpose of rate regulation into four groupings: Class A, Class B, Class C, and Class C (Basic). Livestock are no longer included in the Class C (Basic) group, because rates for shipment of livestock have been deregulated. In addition, any of the commodities are deregulated if they are shipped as transit traffic (that is, the interisland legs of international shipments) or in reefer (refrigerated) boxes. Cargo rates decline from Class A to Class C (Basic), with Class C (Basic) rates being less than 60 percent of Class A rates. The rate differentials do not reflect differences in the cost of providing services for each commodity group, but instead represent an attempt by the government to incorporate consideration of "what the market will bear" into the rate regulation process. The problem with a number of commodities is that applicable rates have been too low to ensure that sufficient services are available everywhere at all times to meet demand. A few other commodities have been placed in classes that are too high to permit them to bear the official shipping charges and require downgrading to lower classes.

These problems have been most serious for the agricultural commodities that, until 1989, constituted a commodity group designated as Basic. Commodities included milled and unmilled grains, horticultural commodities (most fruits and vegetables), and livestock. The rate differential from Class A was much greater than the largest current differential. In 1989 the PTF concluded that Mindanao grain shippers had difficulty obtaining sufficient liner cargo space because rates were unattractive to liner operators and in particular fell below the rates imposed by tramp vessel operators for hauling grains. To correct this situation, the PTF recommended that all agricultural products in the basic group be shifted to Class C. Instead, the Class C (Basic) group was created to replace the Basic grouping. Livestock shipments were subsequently deregulated entirely.

In 1990 the Philippine Transport Sector Review (PTSR) pointed out that the higher rates of Class C (Basic), compared with the former group of Basic commodities, had failed to correct insufficiency of appropriate liner services, and that tramp rates for grain shipments had climbed, at least in the peak volume season, to equal Class B rates. A representative of the Conference of Interisland Shipowners and Operators (CISO), whose members accommodate about 85 percent of interisland liner traffic, has indicated that grain shippers sometimes even offer to pay Class A rates if enough services can be made regularly available.

Liner passenger services are generally divided into First, Second, and Third Class services, and some operators further sub-divide services. Whereas First Class passage has been deregulated for many years, Second Class passage rates were deregulated in May 1989 at the recommendation of the PTF. Third Class passage rates continue to be regulated: all operators providing passenger services are required to reserve at least 50 percent of passenger capacity to accommodate Third Class passengers. In the past, rates



have generally not been permitted to rise as rapidly as the general inflation rate. As a result, achieving profitability from passenger operations is difficult for operators and may account for both the tendency to overload and the very low service standards of much of the industry. These low passenger rates may also have hindered the introduction of liner services on new routes. The desire to establish new liner services usually arises from the potential for passenger traffic (with accompanying baggage). Low official rates for passenger services would raise the minimum levels of traffic required to make services profitable.

### **Objectives of the SRRS Economic Analysis**

In 1990, when the terms of reference were drafted for the SRRS by the PTSR (which worked from an earlier draft written by MARINA), the SRRS team was expected to provide recommendations on an initial phase of cargo rate deregulation. However, while the SRRS was still in its early stages, the Philippine government decided that reefer box shipments, transit traffic, and livestock shipments should be deregulated and fork tariffs ( $\pm 5$  percent from reference points for each of four commodity classes) introduced. This early action of the government enabled the SRRS team to examine the early effects of changes in rate regulation and thereby gain some insight into the effects of cargo rate flexibility and deregulation.

Except for this examination of the early effects of cargo rate flexibility and deregulation, the objectives of the SRRS economic analysis remain as they were when terms of reference for the study were drafted, and include the following.

- Examination of the Mindanao grain shipment situation to confirm that liner rates for these shipments have been held too low in the past, with assessment of the economic effects of the inappropriate rates and identification of a desirable strategy to ensure adequate accommodation of Mindanao grain shipments in the future.
- Examination of the constraints placed on liner shipping accommodation of fruits and vegetables by unrealistically low rates, with assessment of the economic effects of such rates and identification of a strategy to ensure sufficient accommodation of fruits and vegetable shipments in the future.
- Examination of passenger services to determine whether the potential to improve profitability and service standards exists.
- Investigation of the possibility that passenger and cargo rate regulation has impeded introduction of desirable new liner

services and identification of a strategy for ensuring more rapid introduction of desirable services in the future.

- Identification of the possible effects of liner shipping rate deregulation, with and without concomitant service liberalization or deregulation, on the degree of liner shipping industry concentration and rate levels and structure, and recommendations on the optimal manner and extent of rate deregulation.

SRRS survey efforts and assessments in regard to the above-listed objectives of the economic analysis are identified and discussed in Chapters 2 through 7 of this report volume. Appendix A provides background information on grain production and trade in the Philippines. Appendix B describes the SRRS passenger traffic surveys.

## Chapter 2

### DEREGULATING LINER CARGO

#### Reefer Boxes

Reefer boxes are expensive: 20-foot second-hand boxes in good condition cost more than US\$200,000 apiece and cost three times as much new. Reefer box services are costly not only because the boxes themselves are expensive, but also because the boxes require power sources, use electricity, and, most important of all, cannot be stacked. If cargoes do not require reefer box capacity in both directions, the cost per cargo ton accommodated can be several times the cost of accommodating cargo in conventional containers with a fairly good balance of cargo in two directions.

Regulated liner shipping cargo rates have never allowed for the high costs of reefer box accommodation, except when the gradual distortion of general cargo rates caused by ad valorem charging (see Chapter 1) permitted an increase in charges for high-value commodities shipped over short distances to levels that covered the costs of reefer box accommodation. Such rates greatly exceeded the costs, before discounts, of any other type of cargo accommodation. Concern about the general extent of cargo rate distortion brought about by ad valorem charging rather than concern about the cost of reefer box cargo accommodation led the PTF to recommend that ad valorem charging be discontinued. In 1989 this recommendation, except for permitting the continuance of a small surcharge, 0.3 percent of cargo value, took effect. Even this surcharge was subsequently abolished.

The end of ad valorem charging meant that official cargo rates could not cover even one-third of the costs of supplying reefer box cargo services. In view of this, MARINA deregulated reefer box service rates in November 1990. Two of the three largest interisland liner shipping operators and two medium-sized operators have a few reefer boxes, mostly 20-foot units, but also several 40-foot units. As soon as rates were deregulated, these four operators raised their reefer box rates; one of the medium-sized operators, in March 1991, imposed rates that were twice Class A commodity rates; while

the largest operator imposed rates that were three times Class A rates, and the other large operator chose values midway between the two. None of these increases takes fully into account the cost differential between accommodation of cargo in reefer containers and accommodation in conventional containers.

In the past, an important user of reefer boxes has been the Magnolia Division of San Miguel Corporation (SMC). Magnolia ships ice cream and dressed chicken frozen and other dairy products chilled. Magnolia has been shipping ice cream from Manila to 27 other ports, including 18 in the Visayas and 9 Mindanao ports. Generally, the company prefers to ship on cargo-passenger vessels rather than full cargo vessels because the former are faster and adhere rigidly to their schedules. Magnolia's use of reefer boxes has declined in recent years, however, as the company has established new dairy product plants in the Visayas and Mindanao. In March 1991, Cebu, Cagayan de Oro, and Davao all had ice cream plants already in operation and a larger plant (100,000 gallons annual capacity) was due to begin operation at Iloilo later in the year. In the past, Magnolia shipped forty 20-foot equivalent units (TEUs)/month to both Davao and Cagayan de Oro, but this traffic has ended.

Although Magnolia's use of reefer boxes has declined, total demand has apparently been rising. Magnolia indicates that in the "buyer's market" that previously existed, it could dictate the cargo charges to be paid but no longer can. (Export bananas from Davao are sometimes accommodated in reefer boxes and account for some of the recent rise in demand.) The shipping operators that provide reefer box accommodation, however, express uncertainty over the future of reefer box service. The SRRS team is recommending that an interisland agro-transport study (IATS) be conducted mainly to identify the potential market for reefer box accommodation in interisland shipping, taking into account the alternative of air transport for many of the same commodities. Terms of reference for the IATS are included in the appendix to Volume V.

### Transit Traffic

Reefer box rates were deregulated to permit shipping operators to raise charges to correspond to the costs of providing such services. Transit traffic rates, also deregulated in November 1990, were deregulated for the opposite reason: to permit interisland liner operators to lower rates to levels that compete with direct shipment to the principal international ports of the Southeast Asia region—Singapore, Hong Kong, and Kaohsiung, which are all ports of cargo consolidation for shipping services connecting with Europe, Japan, and the Americas.

Most of the shipments between the Philippines and these ports of cargo consolidation pass through the ports of Manila or Cebu, but increasing volumes of international cargo at the ports of Iloilo, Cagayan de Oro, Davao, and General Santos are making direct international calls at these ports economical, and this trend can be expected to continue. It may, in fact, be desirable to accelerate the trend by upgrading Cagayan de Oro and Davao or General Santos or both, and perhaps Iloilo. The SRRS is recommending a first step toward accomplishing such upgrading, namely, the conduct of an international ports and container transport study (IPACTS); terms of reference for this study are included in the appendix to Volume V.

SRRS surveys revealed that bananas are being shipped from Davao to Hong Kong or Singapore (mostly on their way to Korea) and pineapples from General Santos are also being transported directly to foreign ports. The Davao growers of bananas indicate that the advent of direct shipment to foreign ports, which eliminates the need for transshipment through Cebu or Manila, has greatly encouraged production in and export from the Davao area. The cost saving is large, even though interisland liner operators have lowered rates for transit traffic. In June 1991, CISO transit rates for 20-foot containers loaded with exports ranged between ₱7,455 and ₱9,560, depending on the port of origin, going to Manila for transshipment. All of this can be saved by switching to direct shipment. In addition, shippers indicate that pilferage is greatly reduced if transshipment at Manila or Cebu is avoided.

### Livestock Shipments

Livestock are shipped principally from southern Mindanao and the islands of Negros and Panay to the port of Manila. Total tonnage approached 100,000 MT in 1987, but in most years ranges between 50,000 and 75,000 MT. In most years, tonnages of swine moved by interisland shipping exceed tonnage of cattle transported, but 1988 tonnage of cattle (approximately 37,500 MT) exceeded that of swine (approximately 34,800 MT).

Livestock were once herded aboard vessels and confined along the sides of the vessel, but now virtually all are carried in containers referred to as "hog vans" and "cattle vans." The hog van has three tiers and a rated capacity of 75 animals, although often more than 80 are actually carried. To the shipping operator, livestock did not constitute a desirable commodity when rates were regulated, because the low official rates did not cover the costs of accommodating livestock. Moreover, livestock are bothersome to the shipping lines because of water and feed requirements, the need for attendants ("convoys"), and the noise and smell, which make livestock offensive to passengers. Since rate deregulation in November 1990, rates, as expected, have been climbing rapidly; whereas the charge for a 20-foot hog van from southern Mindanao to Manila was ₱6,000 before deregulation, the charges had climbed, by June 1991, to a range of ₱12,000 to ₱15,000.

An example of the uselessness of some regulations affecting the liner shipping industry, although not a serious problem, is the Bureau of Animal Industry (BAI) inspection requirements. Livestock cannot be shipped until a BAI official inspects the shipments and signs a permit for each. Such inspections are rarely made, but the BAI official assigned the nominal job of inspection must be sought out (often away from the port area), presented with a typed permit for his signature, paid the official fee, and compensated for his "inconvenience." It is hardly surprising that shippers and shipping operators view the government as a hindrance to their commercial activities.

Still a problem, despite livestock shipment rate deregulation, is the inadequate number of hog vans. The shipping lines admit that the 35 hog vans available on each voyage from Davao to Manila (pure cargo vessels only) are simply not enough to meet current demand. However, the shipping lines also indicate that they are reluctant to invest in additional hog vans before a final decision is made about whether one or more abattoirs are to be established in southern Mindanao. For cattle also, the shipping lines are aware of both the possibility of introducing slaughterhouses into cattle-growing areas and the national decline in cattle populations. In 1992, the IATS, mentioned previously in regard to reefer boxes, will assess the desirability of introducing slaughter into livestock-growing areas and the implications for interisland transport.

Other problems that could and should be addressed immediately by the shipping industry and the shippers themselves are animal mortality and weight loss in transit. As indicated above, hog vans are commonly loaded beyond rated capacity, which must make it impossible for some animals to reach food and water when either is offered. An average of two animals die in each van while in transit. Livestock feed and water also run out during many voyages. Supplying livestock feed is the responsibility of the shipper, and supplying water is the responsibility of the ship operator. Cattle from southern Mindanao are estimated to lose an average of 12 kg of weight on their way to Manila, and hogs roughly one-half to two-thirds as much. Some shippers do provide sufficient feed for their animals, but despite the presence of one or more convoys of their own hire, their feed supplies diminish more rapidly than could be accomplished by their animals alone, and it is suspected that feeds are siphoned off to animals that are less well-supplied. Shipping operators should require that all shippers of livestock provide their animals with sufficient feed for voyages or their consignments would be refused. The operators themselves should ensure that water supplies are sufficient; now that livestock shipment rates have been deregulated and all costs can be covered by rates, there is no longer an excuse for operators to scrimp on providing water.

## Chapter 3

### GRAIN SHIPMENTS FROM MINDANAO

#### Characteristics and Problems of the Trade

Most areas of Mindanao are surplus producers of grains, with the notable exception of the Zamboanga peninsula. This is especially true of the Southern and Central Mindanao regions, which are surplus producers of both corn and rice. Surpluses of corn are also becoming large in Northern Mindanao. Shipments of rice are relatively limited in comparison to corn shipments, and they may be coastal (for example to Zamboanga) rather than interisland. Volumes of corn shipments are larger and are mainly to Manila and Cebu. Appendix A of this volume provides further information on levels of rice and corn production and the domestic patterns of trade.

Important characteristics of the corn trade are as follows.

- Corn production in the Philippines is much more costly than in the principal corn-exporting countries. The Philippines can therefore buy corn for significantly less than it can produce it. It is thus undesirable for the country to exceed production self-sufficiency levels or perhaps even to achieve self-sufficiency. The possibility of agricultural diversification away from grains makes developing an efficient bulk-handling system for grains less important than it would be if future high production levels were ensured.
- Corn is best shipped in bulk, and the large buyers of corn ship mainly by chartering tramp vessels, often a tug and barge set (two barges) that might carry corn in bulk (usually to Manila) or in bags (usually to Cebu). Large buyers include the National Food Authority (NFA), SMC, Vitarich Corp., Purefoods Corp., Republic Flour Mills Corp. (RFM), Southern Agro Export Corporation (SAGREX), CAPICOR, and others. These organizations do not usually have difficulty shipping corn because they have their own

drying and storage facilities and can charter vessels because of the large sizes of their consignments.

- Smaller shippers face some problems. They must buy or rent drying equipment in order to reduce corn moisture content (MC) to levels that will be accepted by consignees in Manila and Cebu; they must store the grain until it is shipped; and if their consignment sizes do not warrant chartering a vessel, they must rely on liner shipping to carry the grain. To the extent that liner vessels accommodate shipments of corn, the corn is primarily containerized; advantages of containerization include reductions of grain losses due to both spillage (bags are frequently of low quality and prone to splitting) and pilferage. There are not, however, a sufficient number of containers to accommodate all demand, partly because of the pronounced peaking of small shipper demand (they have little available capacity for grain storage) and also because of the low regulated rates for shipping grain by liner vessel. Tramp vessels, which are not regulated, usually impose higher charges than are permitted for the liner industry. The problems that afflict small corn shippers are generally passed on to the farmers through lower producer prices.<sup>1</sup>
- The rapid increase of corn production on the island of Luzon (principally in the Cagayan Valley) limits the amount of Mindanao corn that can be sold in Manila at the current level of efficiency of interisland shipping.

### SRRS Surveys of Grain Shippers

#### Davao

An interview with an NFA official revealed that NFA is shipping rice from Davao to Zamboanga and corn to both Manila and Cebu. NFA charters tramp vessels to ship consignments of 10,000 to 15,000 bags of grain (bags generally contain 50 kg of grain, so in tonnage terms NFA shipments are 500 MT to 750 MT). If liner shipping containers are needed by NFA to supplement tramp vessel services, they are difficult to find because the big commercial shippers of corn from Davao (Vitarich, URC Manila, Stanrico, and Juliet Yu) have year-round contracts with shipping lines for container space.

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<sup>1</sup>The problems are transferred because the traders (i.e., the small shippers) provide essential credit otherwise unavailable to the farmers, who must then enter into contracts that do not specify the prices they will receive for their corn.



At the time of the SRRS interview, NFA was paying farmers ₱4.50/kg of clean and dry corn, in comparison to small trader peak season producer prices of ₱3.60 to ₱4.00/kg; during the slack season (first 6 or 7 months of the year) small trader producer prices exceed the NFA price. Despite the higher NFA peak (harvest) season price, many farmers sell to small traders because they provide the farmers with preharvest credit. NFA believes that farmers should be educated about their sales options and the importance of storing grains in production areas beyond the harvest season in order to improve average producer prices. NFA offers farmer cooperatives an incentive of 7 centavos/kg of grain for constructing postharvest storage facilities in their area. NFA estimates that current methods of gathering, threshing, and drying corn result in grain losses of approximately 20 to 25 percent.

SAGREX ships corn to both Cebu and Manila and, like NFA, relies primarily on chartering trampers; however, it needs to supplement these services with liner containers, depending on their availability. The company is concerned about being eclipsed in the Manila market by corn from the Cagayan Valley, which bears only one-third of the transport cost of the Davao corn being moved to Manila. SAGREX indicates that 10 percent of its noncontainerized liner corn shipments to Cebu are lost to spillage and pilferage. Containerization reduces losses to just 1.5 percent of the shipment. A 20-foot container accommodates between 17.5 MT and 19.0 MT of bagged corn (350 to 380 bags). Using an estimate of 18,000 kg and the average 1991 market price for corn of ₱4.40 (the range has been from ₱3.65 early in the year to ₱5.20 in August), a saving of 8.5 percent of the shipment would mean that containerized transport for corn is worth a charge increment of approximately ₱6,730. The total current charge for a 20-foot container shipment of corn from Davao to Manila is ₱9,000.

SAGREX indicates that containers have frequently not been available because shipping lines give priority to higher-paying cargo. A SAGREX representative in Manila indicated that container availability was not a serious problem in Davao but was a problem in General Santos.

The preceding SRRS computation indicates that SAGREX and other shippers of corn consignments that are too small to permit vessel chartering should consider paying higher charges for containerization. It is also in the interest of the liner industry to hold down the costs of containerization, thereby encouraging it and eliminating the lengthy loading process of handling noncontainerized, bagged grain. The SRRS team considers the best solution to be the dual-rate system it is recommending, as discussed in Volume I of this report. The dual-rate system would mean that average rates paid for containerizing corn and other grains would be 20 to 25 percent higher than noncontainerized service; such an increment would be considerably lower than the average incremental value of containerization to the shipper.

## General Santos

The General Milling Corporation (GMC) charters tramp vessels when the company needs to ship between 2,500 and 3,000 MT of grain. The cost of chartering averaged 42 centavos/kg in 1990 but rose to 55 centavos/kg in 1991. In contrast, the 1991 charge for liner shipping containerized services is 45 centavos/kg or ₱8,500 for a container carrying 19,000 kg. GMC has a storage capacity of 15,000 MT at General Santos, but this has often been insufficient to accommodate the backup of GMC grain at its pier (GMC does not ship through the public port of Makar Wharf because it has its own pier). GMC and other shippers of corn from the General Santos area indicate concern about the expansion of corn production in the Cagayan Valley of Luzon, which tends to limit their market in Manila. Because of this, the shippers estimate that in 1991 only 11 to 15 percent of the planted corn area in the General Santos hinterland is planted in yellow corn (usually destined for Manila), while the remaining area is in white corn (usually destined for Cebu). Because yield of white corn is lower than that of yellow corn, total corn production can be expected to decline in 1991, in comparison to past years. Production will also decline as a result of the shift by area corn farmers to growing cassava, cotton, sorghum, and bananas.

A disadvantage of chartering vessels for users of the public Makar Wharf is that they do not control the cargo handlers, and demurrage of ₱30,000 a day must be paid to the vessel operator by the shippers if cargo handlers are not on hand to load the vessel when it arrives.

Private corn buyers and shippers estimate that NFA purchases about 10 to 15 percent of the corn harvest in the General Santos hinterland or about 300,000 to 450,000 bags from each of two harvests a year. At the time of the SRRS survey in June 1991, the private buyers believed that NFA warehouses were full and their corn stocks were rotting. According to the private buyers, failure to sell these stocks indicated that NFA was short of funds and could no longer offer the specified support price of ₱4.50/kg.

Rice millers in General Santos indicate a lack of liner shipping capacity for shipments of rice; several rice millers must therefore band together ad hoc when they have accumulated enough rice to charter a tramper. Shipments of approximately 1,200 MT of mixed grains (some corn as well as rice) are then transported to Cebu and Negros.

Shippers in General Santos indicate that whether shipping by chartered vessel or by liner shipping container, grain losses do not exceed about 1 percent of volumes shipped.

## Cagayan de Oro

A representative of CAPICOR indicates that it is difficult to obtain liner shipping container capacity for corn shipments at Cagayan de Oro, even though the port is served by a total of 11 shipping lines. Lack of capacity results mainly because pineapples, also grown in large volumes in the port hinterland, have a higher official cargo rate than corn, so shipping operators give container space priority to pineapples. In 1990, therefore, the corn shippers and traders at Cagayan de Oro requested an increase in shipping rates for corn to the same levels as those for pineapples, so that corn shippers might be provided with sufficient, or more nearly sufficient, container capacity. In April 1991 the company had halted shipment of corn to Manila because of the low prices then prevailing as a result of a bumper harvest in the Cagayan Valley of Northern Luzon.

A corn trader in Cagayan de Oro indicated that she normally chartered tramper vessels, including barges for shipping to Manila, Batangas, and Cebu and a ferry vessel for shipping to both Bohol and Cebu. Barge shipments are generally in the range of 20,000 to 30,000 bags (1,000 to 1,500 MT), and the ferry, which operates daily, carries 5,000 bags (250 MT)/trip.

### SRRS Recommendations

The discussions in the preceding sections of this chapter and in Appendix A of this volume pose some basic questions about grain and the improvement of interisland shipping services. The basic production and trade questions are as follows.

- Is it preferable for the Philippines to attempt to achieve self-sufficiency in rice and corn or to diversify out of grains production?
- Should the desirable level of self-sufficiency in corn be achieved primarily through reliance on Mindanao production (the method used in the past) or through a regional balance in production (the current trend)?
- To whatever extent self-sufficiency in corn is desirable, should value added be concentrated in areas of grain production, or should processing continue to be centered in two or perhaps a few urban areas?
- Is major expansion of the livestock industry desirable? If so, should such expansion be centered in corn-producing areas?

- Should a major effort be launched to assist small farmers in continuing to be corn producers, or should this subsector of agriculture gradually be converted to large-scale operations, with small farmers diversifying into higher-value agricultural commodities?

If the answers to the preceding questions show that (1) the Philippines should be self-sufficient in grains, (2) Mindanao should remain the primary source of domestic corn, (3) processing locations should not be significantly changed, (4) the livestock sector should be developed but not overly concentrated, and (5) converting grain production to large-scale operations is not desirable (perhaps more for social and cultural reasons than economic reasons), an effort is then needed to improve the interisland shipment of grain, especially for small shippers. In this case, it is likely that a minimum bulk grain handling and transport system would be economically feasible and would include bulk terminals at Manila, Cebu, and Cagayan de Oro. A more extensive system to include a bulk facility at one or more ports in Southern Mindanao might also be justified. These possibilities will be explored by the IATS. The terms of reference for that study are included in the appendix to Volume V of this report.

In the interim, it is highly desirable that higher shipping charges for grain, particularly for containerized grain, be permitted. This can be accomplished by abolishing commodity Class C (Basic) and instituting the dual-rate system discussed in Volume I of this report for all commodities currently included within the C (Basic) Class.

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## Chapter 4

### SHIPMENT OF FRUIT AND VEGETABLES

#### Shipment Characteristics and Volumes

The commodity category of fruits and vegetables includes diverse commodities, of which some are highly perishable and some (including bananas, pineapples, and mangoes) are now or may become important export commodities. Generally, fruits and vegetables are currently classified as Class C (Basic) commodities, but some commodities, including bananas and pineapples, have a higher classification. Chapter 3 of this volume recommended shifting grains from Class C (Basic) to higher classifications; such reclassification is even more desirable for fruits and vegetables. The low official charges for accommodating these commodities has deterred the liner industry from offering appropriate services. In the mid-1980s the Philippine Chamber of Commerce and Industry (PCCI) published a collection of papers identifying a desperate need for expanded air transport cargo services between Davao and Manila to accommodate horticultural crop shipments from Davao; the liner industry was exonerated in the same publication from responsibility for providing comparable services, at lower charges, by PCCI's recognition that regulated liner rates were unrealistically low. By 1991, failure to correct these rates had consequently led to

- Some demand not accommodated by any transport;
- Potential sea transport demand accommodated by air transport at higher, unnecessary costs;
- Potential ventilated box traffic that is accommodated in reefer boxes at higher, unnecessary costs; and
- Some demand that would be best accommodated in ventilated boxes but is instead accommodated in conventional, closed containers, resulting in deterioration of produce

- Some demand that would be best accommodated by ventilated boxes but is instead accommodated as breakbulk traffic, resulting in losses because of handling and pilferage.

Many domestic shipments of fruits and vegetables have been transit traffic, the interisland legs of international shipments. As direct international shipping calls to Cagayan de Oro, Davao, General Santos, and Iloilo have begun, fewer transshipments at Manila and Cebu have been necessary and domestic transit shipments of fruits and vegetables for the export market have fallen accordingly. From a 1987 peak of 348,000 MT of fruits and vegetables in interisland trade, the total declined to 243,000 MT a year later, and then to only 214,000 MT in 1989. Of the 1989 total, approximately 60,000 MT was transported from Davao to Manila, 42,000 MT from Northern Mindanao to Manila, and 20,000 MT from Northern Mindanao to Cebu.

### SRRS Surveys of Fruit and Vegetable Shippers

Southern Mindanao dominates in fruit, especially export fruit, as well as in corn (see Appendix A). The region accounts for more than 40 percent of banana production and is also a center for growing durians, pomelos, papayas, pineapples, and other fruits. In June 1991, bananas were selling wholesale in Davao for between ₱10 and ₱12/kg, while in Manila the wholesale value was ₱18. For some other fruits, the price differentials were much greater, permitting them to bear even the high costs of air transport. Three examples follow.

- Durian was being sold at wholesale in Davao for ₱30/kg and in Manila for ₱65/kg. The air cargo charge for a minimum-sized shipment of 51 kg was ₱12.30/kg, which could be covered nearly three times over by the fruit value increment between the two markets.
- Pomelo, valued at only ₱25 to ₱28/kg wholesale in Davao, is almost as profitable an air shipment from Davao to Manila as durian. In June 1991, it sold for ₱55/kg in Manila, a differential of ₱27 to ₱30/kg, more than twice the air transport cost of moving it to Manila.
- Papaya, not normally considered an air cargo commodity, had a very low wholesale price of just ₱5 to ₱6/kg in Davao, whereas it was valued at ₱18/kg wholesale in Manila. With a shipment size of 51 to 250 kg, air shipment would break even, but a shipment size of a ton or more would bear a lower air cargo charge of ₱10.30, making it marginally worthwhile to ship by air. (Air transport would also have the advantages of preventing produce deterioration and speeding sales transaction, so that a

low margin of ₱2/kg for a large shipment might occasionally be attractive.)

Shippers at Davao indicated a belief that the development of their port as an international port to attract direct calls by international shipping would benefit them more than any adjustment to or liberalization of rate regulation. They indicated that cargo shutouts (all commodities) had become a problem during the peak cargo season from September through December. Bananas were being accommodated either in the limited number of reefer boxes available, at a much higher charge since November 1990 deregulation, or as breakbulk cargo, including storage in passenger cabins. Shipment by conventional, closed container had been attempted but resulted in 80 percent spoilage. Ventilated vans would be most appropriate for bananas and a number of other commodities in the fruits and vegetables category, but none was available.

### **SRRS Recommendations**

The interisland liner shipping rate structure before November 1990 had been impeding agricultural diversification. In November 1990, reefer box shipment rates were deregulated, an important first step toward providing adequate accommodation of higher-value agricultural and agroindustrial commodities, of which many are perishable in varying degrees. The second, and equally essential, step is to adjust rate regulation so that commodities not requiring reefer boxes (or able to bear the cost of reefer box accommodation) yet subject to rapid deterioration in closed, conventional containers would be provided with the mode of accommodation most physically and economically suitable for them, namely, ventilated containers. To induce shipping operators to provide such containers, the SRRS team recommends that the commodity Class C (Basic) be abolished and that a dual-rate system be introduced, whereby fruits and vegetables will bear Class B charges when containerized and Class C when not containerized. To provide the market assessments needed by the shipping industry on the desirability of acquiring both reefer boxes and ventilated boxes, the SRRS team recommends conduct of IATS in 1992.

## Chapter 5

### INTERISLAND PASSENGER SERVICES

#### Nature and Volumes of Movements

Interisland liner shipping provides most of the sea transport of passengers, other than relatively shorter-distance ferry services. Liner shipping passenger services include First, Second, and Third Class services, and some liner operators divide one or more classes of services into subclasses. Since 1989, rates for both First and Second Class service have been deregulated; Third Class passage rates are still regulated, but operators are permitted to charge within a range of  $\pm 5$  percent of official rates, which vary only with distance. According to the National Transport Planning Project (NTPP), sea transport in 1982 accounted for approximately three-quarters of interisland passenger transport (in terms of passenger-km), and air transport accounted for the remainder. Philippine Airlines (PAL), the main air carrier in the Philippines, has subsidized its domestic operations with its international operations for many years, so the economic division of interisland passenger traffic may be even more in the direction of sea transport than is the actual division. (Sea transport cargo operations also subsidize passenger operations, but only slightly, as identified in Volume II of this report.)

Passenger sea transport demand exhibits seasonality, with peak periods from March to early June and from November to January. During these months, fiestas and holidays are traditionally observed. Likewise, these periods coincide with the summer and Christmas vacations of students, who constitute significant proportions of traveling passengers during these periods.

Sea transport passenger volumes grew rapidly in 1982 and 1983 and declined as a result of the severe 1984-1986 recession. More recently, they have resumed strong growth. The figures shown below are equal to one-half of embarkations and disembarkations in ports and include ferry passengers as well as liner shipping passengers.



Year	Passengers (thousands)	Growth/(decline) from preceding year (%)
1980	8,130	-
1981	7,730	(5)
1982	8,850	14
1983	9,740	10
1984	8,030	(18)
1985	7,230	(10)
1986	7,810	8
1987	9,390	20
1988	12,200	30
1989	13,110	7
1990	16,900	29

### Objectives of SRRS Passenger Investigation

The SRRS passenger investigation was conducted to determine the following.

- The extent of the influence of passenger services on cargo rate deregulation. In general, interisland passenger services are being provided by cargo-passenger vessels. The Government requires allocation of approximately 50 percent of passenger capacity to Third Class passengers, for whom rates are still regulated by MARINA. The SRRS team investigated the possible financial effects of passenger services on cargo operations in the event of cargo rate deregulation, considering continued Third Class passage rate regulation.
- Current service adequacy. The adequacy of existing passenger services in interisland shipping was assessed in terms of availability of fleet capacity, regularity of service, and service standards.
- Potential for enhancing passenger service profitability. The existing regulation of franchised routes stipulates that vessels follow rigid service schedules. The SRRS team investigated the potential for improving passenger service profitability during peak demand periods by permitting flexibility in service schedules.
- Strategy for improving service standards. The SRRS team investigated the existing service standards of various shipping companies that offer services on primary, secondary, and, to a limited extent, tertiary routes. An SRRS passenger survey was undertaken with the objective of identifying the scope and quality of services provided on board to interisland passengers.

- Desirable rate and service schedule adjustments. Interisland passenger traffic exhibits distinct seasonal peaks, which occur during summer months and on holidays. This situation results in overloading and overcrowding of passengers, rendering on-board facilities and amenities inadequate, with unfavorable implications for safety.

### **Survey Design and Conduct**

The SRRS team undertook interisland liner shipping passenger surveys with the following objectives:

- To determine the propensity for shifts in demand among the classes of passenger service (First, Second, and Third).
- To determine the extent of passenger dissatisfaction with current services and of desire for improved services, including additional service amenities.
- To determine the service price increments that passengers would be willing to pay to obtain the desired improvements to services.

The passenger surveys were conducted at Manila North Harbor and at the port of Cebu during April 26-28 and May 6-11, 1991, respectively. These survey periods fell within the peak period of interisland passenger travel, which extends from April to June. Appendix B of this volume describes the SRRS surveys and their detailed results. Attachments to the appendix include the survey form, the interviewer's guide, the identification of passengers surveyed by service class, the prevailing June 1991 Third Class passage rates, and, deriving from the results of the survey, a list of suggested measures for improving passenger service standards.

### **Survey Results and Conclusions**

#### **Nature of Survey Information**

Conclusions regarding the adequacy of current interisland liner shipping passenger services are based on the findings of the SRRS passenger surveys, as detailed in Appendix B. Survey results included

- Reasons for passenger travel,
- Reasons for choice of class of accommodation,
- Passenger frequency of travel,

- Passenger income profile,
- Passenger perception of service standards, and of amenities provided and possible additional amenities, and
- Passenger willingness to pay fare increments for improvements to service.

### Survey Findings

As might be expected, the SRRS learned from its survey that significant differences exist among liner shipping operators in the quality of the services they provide and that even a single operator may provide better services on one route than on another. A common complaint of the interisland passengers surveyed was that the service classification system is a poor indicator the quality of service, because the quality of First Class services of one operator may be lower than that of Third Class services of another. It was not the intention of the SRRS, however, to rank individual operators by the quality of the passenger services they provide. Rather, the SRRS was attempting to identify in its surveys the extent of dissatisfaction with liner passenger services. The findings presented below and in greater detail in Appendix B therefore identify general perceptions of passengers, which do not apply to all services across the board.

- Overcrowding is common, especially during periods of peak demand, such as April-June and December, sparking other complaints about insufficient facilities and supplies.
- Vessel crews are unresponsive to the needs and complaints of passengers.
- Sanitary facilities are unsatisfactory, both in terms of their general availability and their maintenance.
- Food and water are not available in sufficient quantity, and there are many complaints of poor food quality.
- Facilities for passenger sitting and resting are often inadequate; and passengers are frequently exposed to sun, rain, heat, and chilly air.
- There is little available to occupy the passengers during long hours of leisure.
- Services encounter lengthy delays and thus do not keep to schedule.

## Potential for Improvement of Service Standards

### Causes of Low Service Standards

The principal causes of low standards in passenger services, as identified in the preceding section and in Appendix B, are

- Poor condition of vessels,
- Management malaise among operators,
- Third Class passage rate regulation,
- Service schedule inflexibility, and
- Inadequate training of crews.

Interisland liner passenger services are provided almost entirely with cargo-passenger vessels, most of which are conventional. Increasingly, however, roll-on roll-off (RORO) vessels, which are the largest type of cargo-passenger vessel, are being acquired and placed into cargo-passenger service. Some of the many container vessels now in interisland service also accommodate a few passengers, but such accommodation is financially unprofitable. Many of the conventional vessels in cargo-passenger service are more than 20 years old, and some are more than 40 years old. A significant number of these vessels are not in class, that is, not rated as seaworthy. Even many newer, especially smaller vessels constructed in the Philippines are not now in class and cannot easily be improved to make them seaworthy. Besides the safety concerns arising from inadequate vessel condition, the poor condition of many vessels contributes to very low standards of passenger accommodation.

A second factor contributing to low passenger service standards is management malaise. From the survey, the SRRS found that a few liner operators are well regarded by passengers (as well as by shippers) because their vessels are considered to be in satisfactory condition and because they show other evidence of keeping passenger welfare in mind. An example is simply to have crews in uniform; this is an effective step toward improving service quality, because it both enables passengers to easily identify liner service personnel and helps instill a sense of responsibility in staff and develop good staff morale.

Rigid service schedules and passage rate regulation have contributed to low passenger service standards, although as stated previously they have not prevented a few liner shipping operators from providing good services. Third Class rate increases have not kept pace with the rate of inflation in the Philippines over the past two decades, which means that operators have

been forced to cut some costs in order to approach financial profitability in Third Class services. Service schedule inflexibility has meant that during periods of peak demand, operators have been faced with either failing to accommodate all demand offering or permitting vessel overcrowding. Since overcrowding can aid profitability, and since passengers are much less vociferous in their complaints regarding overcrowding than when demand is not met, overcrowding has become quite common during periods of heavy demand.

There is a general problem of inadequate numbers of fully qualified ship's officers to serve in the interisland shipping sector of the Philippines. Moreover, considering that passenger services are provided almost entirely by cargo-passenger vessels and that cargo is financially more important than are passengers to interisland liner operators, it is hardly surprising that vessel crews often are neither trained for passenger transport services nor inclined to be highly responsive to passenger needs.

#### **Actions for Service Standard Improvement**

There is evidence that the interisland liner shipping industry and MARINA are concerned about the standards of passenger services and that some improvements have been made. To begin with, as stated earlier in this chapter, some operators already provide services generally considered by passengers to be satisfactory. Other actions taken and under consideration which bode well for service standard improvement are as follows:

- CISO members are making an effort to bring all of their vessels into class, and MARINA is requiring that these and vessels of other liner operators be brought into class as soon as possible (with the short-term exceptions of vessels smaller than 500 GRT).
- Rates for liner shipping First and Second Class passenger services are no longer regulated. This change allows for the possibility of operating satisfactory Third Class services at a loss, while attaining overall profitability of passenger services; that is, it allows for cross-subsidizing of services.
- MARINA, in 1991, is looking into liner shipping passenger service standards and is considering possible actions to better ensure that service standards are satisfactory in the future.

SRRS analysis indicates that despite the possibility of cross-subsidization of liner passenger services, overall profitability has not yet been attained. Third Class services might be made more nearly profitable, and passenger services made profitable overall, by introducing "seasonal rates" in peak periods of demand. Instituting higher rates in the peak season would

also improve service quality because the higher rates would help to level out demand, thereby reducing overcrowding.

Instituting flexibility in service schedules could also improve service quality by better tailoring services to levels of demand. This is particularly important for relatively short-distance routes, which often have potential for increasing service frequency without requiring any additional shipping capacity. The SRRS survey identified one operator whose franchise for a secondary route permitted him to increase the frequency of service as required to meet demand; subsequently, the operator is reportedly able to meet demand in all seasons, including at times of traditional fiestas.

## Recommendations

### Rate and Service Flexibility

On the basis of identified problems resulting from limitations imposed by regulation, the SRRS team recommends flexibility in rates and service scheduling. Rates should take into account the seasonal demand for passenger services. It may be necessary to charge higher rates in periods with heavy passenger demand. This would inhibit passenger travel in peak periods and may reduce the number of passengers competing for whatever available services/facilities are on board.

The seasonal Third Class passage rates to be charged could be 15 to 20 percent higher than current levels. At these rates, some passengers may be encouraged to shift their travel schedules, especially those traveling for pleasure or to visit relatives. Passengers who traditionally travel for fiestas may also want to advance or delay their travel by a few days to avoid the additional charges for peak period travel. Students, who cannot easily shift their travel dates, and whose income is generally limited, should continue receive discount travel rates.

Flexible service schedules would also help to ease the overcrowding of vessels by permitting vessels to increase frequency of service to meet additional demand, particularly on short-distance routes. SRRS recommends therefore that franchises for liner routes with considerable but variable levels of passenger travel demand be amended to permit service schedule flexibility.

### Service Standards

The survey results suggest that further upgrading of standards of service on almost all routes is necessary. This includes

- Improved safety, comfort, and hygiene conditions on board and
- Improved reliability and frequency of services.

Hygiene standards apply to adequate toilet and washing facilities, satisfactory handling of food and utensils, cleanliness of kitchen and dining rooms, and general cleanliness.

MARINA could consider categorizing the services provided to different types of passengers into basic, standard, and superior services, and perhaps probational services.

"Basic" service would provide basic amenities (shelter, water, and sanitary facilities) and essentially be little more than moving people from port of origin to port of destination. "Standard" service would mean something better than basic and include whatever level of comfort plus food that MARINA identifies as desirable for standard First, Second, and Third Class services. "Superior" service would include additional amenities such as air conditioning, bedding, room service for meals, and entertainment on board.

Rates should reflect categories of services. Companies providing "superior service" must be allowed to charge an incremental rate 20 to 30 percent higher than the usual rate. Companies with a "standard" level of service should be permitted to charge 10 to 15 percent more, and the companies providing only services that are "basic" but acceptable to the public should not be allowed to charge more than the current rate.

To effectively implement this service standard rating system, MARINA would need to take an active role in examining and monitoring the services provided on most routes and identify any companies that might be charging more than they should for the level of services provided. MARINA would need to inform the public of the existence of such categories of service in order to effectively monitor the results of the rating system.

An attachment to Appendix B of this volume recommends other steps that might be taken to improve passenger service standards.

With possible improvement in service and provision of more comfortable accommodation, it is likely that a portion of interisland air traffic would shift to First Class and Second Class sea travel. This is made likely by large differentials between First Class sea fares and air fares. A comparison of air fares and First Class sea transport fares for selected origin and destination points follows.

<i>Trip</i>	<i>Air (Philippine Airlines) (-P)</i>	<i>First Class Sea (-P)</i>	<i>Air as a % of sea</i>
Manila-Cebu	1,348	680	198
Cebu-Tagbilaran	276	153	180
Cebu-Cagayan de Oro	621	295	211
Cebu-Iloilo	656	347	189
Cebu-General Santos	944	397	238

Besides lower cost, sea travel has an advantage over interisland air travel in permitting passengers to carry more baggage without additional charges. In the Philippines, where so many travelers have considerable accompanying baggage, this advantage is significant.

### Recommended Pilot Project

A pilot project should be carried out to determine the desirability of seasonal fare adjustments in interisland shipping.

This recommendation is based on the fact that passenger demand peaks during certain periods of the year and capacity tends to be limited and inadequate during those periods. The SRRS passenger survey conducted was unable to identify the percentage of travelers whose schedules may be sufficiently flexible to permit them to alter their travel schedules, thereby offering potential for reducing the overall demand for passenger services in peak periods. The recommended pilot project would identify the proportions of traffic on various liner routes that would respond to seasonal fare adjustments by advancing or postponing travel planned to periods when rates at normal levels.

Further, the pilot project should be designed to identify the amount of incremental fare that will inhibit passengers from traveling in peak demand periods.

The project should be undertaken on routes that exhibit distinct seasonality, such as

- Manila-Cebu,
- Manila-Davao,
- Manila-Iloilo, and
- Manila-Cagayan de Oro.



These routes are recommended based on the findings of the passenger survey, which shows that most passengers on these routes are traveling for pleasure. Thus, adjusting fares according to seasonal demand may enable the passenger to adjust travel plans to periods of lower fares.

The pilot project is recommended to begin on March 1992, which is approximately the start of the peak passenger season, and to continue until early June. Before the project is implemented, MARINA should launch a public information campaign explaining the objectives and manner of implementation of the project. MARINA should explain that the project will include only the selected routes. Coordination with CISO is desirable on various aspects of implementation, especially on the imposition of incremental rates to be charged. The public must be properly informed of such a proposal and the objectives made clear to them. Strict monitoring must be undertaken by MARINA to accurately identify the effects of adopting a seasonal fare and to check whether the companies are implementing fares in accordance with MARINA's guidelines.

## Chapter 6

### TERTIARY AND DEVELOPMENT ROUTES

#### Possible New Shipping Routes

There appear to be a number of new liner shipping routes that might be franchised, consisting of

- Routes between ports that are already liner ports, but do not now have direct services between them, and
- Routes on which one or more ports currently have no liner services.

Depending on the precise distinction between secondary and tertiary liner shipping routes and on the prospective volumes of traffic between two liner ports not now having direct services, a new route between such ports might be classified as either secondary or tertiary; it is likely, however, that most secondary routes are already being served, because (MARINA points out) the liner industry is rather quick to identify routes with good potential for heavy volumes of passenger or cargo traffic. Thus, to the extent that direct liner services are not yet being provided between liner ports, the routes are probably not better than marginally desirable to liner operators, at least at official rates for cargo and passenger service.

The second type of potential route not yet operated generally has poorer prospects for immediate profitability at official rates. Depending on the precise traffic prospects, these routes might be classified as either tertiary or development routes. MARINA recognizes that profitability may not be attainable at official rates for cargo and passenger services on these routes and, in some cases at least, permits operators applying for a new development route to specify the rates they intend to charge for services. Such flexibility on the part of the regulatory agency may have helped to induce services that otherwise would not have been initiated. Potential may remain to induce other new services by making rate flexibility a general

policy for to tertiary and development routes and promulgating the policy with the liner industry.

The SRRS examined one case of a possible new route, namely, Iloilo-Tagbilaran. This examination is described in the remaining sections of this chapter. MARINA subsequently informed the SRRS that an application to provide direct liner services between Iloilo and Tagbilaran, as part of a longer route, is under consideration by MARINA.

### **Economic and Demographic Background**

The economy of Panay Island, consisting of the provinces of Aklan, Capiz, Iloilo, and Antique, is basically agricultural. The five major crops are coconut, palay, banana, bamboo, and corn. Sugarcane is another important crop, but production has declined in past years because of unfavorable prices. Palay farmers use high-yielding varieties that result in surplus production that can be exported from the island. Bananas, another cash crop, intercropped with coconut, are being shipped to major consumption centers such as Manila. Marine products are likewise abundant in the fishing grounds surrounding Panay Island and include prawns, crabs, mussels, bangus, and "tahong," which are shipped to Manila and to other parts of the Visayas.

The ports of Panay include New Washington (Aklan), Iloilo, Estancia (Iloilo Province), and Roxas (Capiz).

In 1980 the province of Bohol had a population of 806,000 with about 155,510 households. In 1985, average annual household income in the province was ₱17,668 (₱1,472/month), which is ₱3,000 below the Central Visayas regional average of ₱20,756/annum (₱1,730/month).

In 1989, the Central Visayas had a total regional output of ₱8.13 billion. The per capita gross regional domestic product of ₱1,785 was almost equal to the national level of ₱1,788.

The main port of Bohol province is Tagbilaran port, and other ports are Tubigon and Jagna.

### **Current Interisland Transport Connection**

At present, significant volumes of cargo and passenger traffic between Iloilo and Tagbilaran must pass through Cebu. MARINA has already prescribed rates for Iloilo-Tagbilaran, although no liner services are yet being provided. The rates prescribed by MARINA for the Iloilo-Tagbilaran (188 NM) route, as of April 1991, were as follows:

	<i>Minimum (-P)</i>	<i>Maximum (-P)</i>
Third Class Passage	183.50	202.80
Cargo		
Class A	220.89	244.14
Class B	176.66	195.26
Class C	143.76	158.87
Class C (Basic)	127.75	141.21

The existing route via Cebu results in unnecessary transport costs, transfer time, and inconvenience to both passengers and shippers. Taking this circuitous route frequently involves a series of delays in transporting and handling cargoes and in long travel time between Iloilo and Tagbilaran. Traders and producers on Panay and Bohol are likely to be discouraged from trading with traders and selling to consumers of the other island because of the additional transport and transfer costs via Cebu. Thus, Iloilo shippers would prefer to negotiate with a Cebu-based trader who would then be responsible for trading with Bohol traders and consumers. This additional distribution channel creates added costs in the price of the product, and both producers and consumers lose in the process.

#### **Cost to Shippers**

The SRRS team considers rice an appropriate commodity to use in the economic analysis because Panay island is a rice surplus area, whereas Bohol is a rice deficit area. In fact, trampers transport incoming palay and rice to Tagbilaran. Rice is currently classified as a Class C (Basic) commodity. The present costs involved in transporting rice per revenue ton are summarized in Table 6-1.

These costs to shippers understate total costs because they do not take into account the incidental costs of pilferage or the possibility of shutouts as a result of the low priority given by shipping operators to grains, which bear lower transport charges than do most other commodities.

In addition, the estimated costs are representative of only Class C (Basic) cargoes. There are other cargoes that are affected by the lack of direct services, such as those belonging to Class A and B cargoes, like refined sugar.

The unnecessary costs of transporting the cargo are then translated into higher consumer prices, to the detriment of the consumers who bear the ultimate burden of higher transport costs.

**Table 6-1. Rice Shipping Costs between Iloilo and Tagbilaran, July 1991 (P)**

	Iloilo-Cebu (178 NM)	Cebu-Tagbilaran (43 NM)	Total (Iloilo-Tagbilaran)
Arrastre, origin	13.85	15.90	29.75
Wharfage, origin	1.98	1.98	3.96
Stevedoring, origin	8.20	6.93	15.13
Net sea freight	135.10	86.99	222.09
Stevedoring, destination	6.93	6.93	13.86
Wharfage, destination	1.98	1.98	3.96
Arrastre, destination	15.90	15.90	31.80
<b>Total Cost</b>	<b>184.44</b>	<b>136.61</b>	<b>320.55</b>
Percentage of total cost			
Arrastre/Stevedoring	24.6	33.4	28.2
Net sea freight	73.2	63.7	69.3
Wharfage	2.2	2.9	2.5

Note: Port costs for Cebu are assumed to be the same as those for Tagbilaran. These costs were estimated by applying the 20 percent increase effective May 13, 1991 on previous levels of arrastre, stevedoring, and wharfage costs.

### Cost to Passengers

July 1991 Third Class passage rates were ₱188.80 for the Iloilo-Cebu route and ₱50.50 for the Cebu-Tagbilaran route.

Other costs associated with this route are the time cost of going to another shipping line in Cebu to get a booking and the waiting time involved.

Based on the schedule shown below, passengers arriving in Cebu at 6 a.m. would prefer the departure time of the vessel Sweet Heart, which leaves at 12 noon daily for Tagbilaran. This schedule would require 6 hours of waiting time, which is the minimum waiting time under normal conditions, disregarding additional waiting time because of delays from engine trouble, Coast Guard inspection on board, and the like. Moreover, during peak demand periods, such as May (the month for fiestas), a 1-day wait would be necessary if all the vessels were fully booked.

	Vessel	Departure	Arrival
Iloilo-Cebu Cebu-Tagbilaran	Asia Korea	Wed 6 p.m.	Thu 6 a.m.
	Sweet Heart	Daily 12 noon	Daily 3:30 p.m.
	Sweet Time	Mon 10 p.m.	Tue 2 a.m.
		Fri 10 p.m.	Sat 2 a.m.
	Sweet Pride	Mon 10 p.m.	Tue 1:15 a.m.
		Thu 10 p.m.	Fri 1:15 a.m.
	Asia Taiwan	Sun 12 midnight	Sun 3:15 p.m.
		Daily 7:30 p.m.	Daily 11:30 p.m.

## Savings with the Provision of Direct Service

### Savings to Shippers

Cost savings to shippers (in the case of rice) that will result in the provision of direct service between Iloilo and Tagbilaran include

Handling: Arrastre (Cebu)  $\text{P}15.90 \times 2 = \text{P}31.80/\text{revenue ton}$   
 Stevedore (Cebu)  $\text{P}6.93 \times 2 = \text{P}13.86/\text{revenue ton}$

Wharfage (Cebu):  $\text{P}1.98 \times 2 = \text{P}3.96/\text{revenue ton}$

(a) Total =  $\text{P}49.62/\text{revenue ton}$

Difference in Freight: Iloilo-Cebu-Tagbilaran =  $\text{P}222.09$   
 Iloilo-Tagbilaran  
 (MARINA's prescribed rate) =  $\text{P}141.21$

(b) Difference =  $\text{P}81.88$

Total Savings (a) + (b) =  $\text{P}131.50$

Therefore, shippers would gain about  $\text{P}81.88$  in freight and  $\text{P}49.62$  in handling, or a total benefit of  $\text{P}131.50/\text{revenue ton}$  from a direct shipping service between Iloilo and Tagbilaran. If freight were 20 percent higher (to induce new services) than the MARINA-specified rate, the shipper's total savings would still amount to  $\text{P}102.26/\text{revenue ton}$ .

Trampers have been carrying 66 percent of inward shipments of rice to Tagbilaran. The average annual shipment of rice is between 3,500 and 4,000 MT.

Assuming that Iloilo shipment of rice to Tagbilaran reaches an annual average volume of 2,000 MT, the annual cost savings to shippers would be:

Savings in Freight	$\text{P}81.88 \times 2,000 \text{ MT} = \text{P}163,760$
Savings in Handling	$\text{P}49.62 \times 2,000 \text{ MT} = \text{P}99,240$
Direct Savings	$= \text{P}263,000$

In addition, the amount of pilferage and spillage would be reduced, as would the damage to sacks and cargo due from elimination of double handling in Cebu. The saving would be at least 1 percent of total shipments, which would amount to 20 MT of rice at a total shipment level of 2,000 MT. With a 1991 market value of  $\text{P}900/\text{kg}$ , the saving of 20 tons of rice would have a value of  $\text{P}180,000$ .

Including savings from pilferage and spillage without the double handling in Cebu, the total saving would then be ₱443,000 annually. This saving could have been avoided with the provision of a direct service rather than passage through Cebu. The amount of saving involved would be even higher if the other incidental costs were taken into account.

### *Savings to Passengers*

The savings that will accrue to passengers from Iloilo to Tagbilaran include:

(a) Difference in Fare:

Iloilo-Cebu-Tagbilaran = ₱239.30  
 Iloilo-Tagbilaran (Direct) = ₱202.80  
 (Prescribed by MARINA)

Difference = ₱36.50/Third Class passenger

(b) Time Saving

For the Western Visayas, a value of ₱2.80 an hour has been assumed on the basis of the estimate a road project study (based on the 1988 per capita income adjusted for proportion of working age and 3 percent annual growth of real income.) The time savings computed amount to

6 hours' waiting time (minimum) x ₱2.80/hour = ₱16.80/passenger

This is the value of time savings under normal conditions and the value could increase depending on the available space. If a booking is not available for a day, the total time savings with direct service is ₱67.20. Compared with the minimum daily wage of ₱120.00, the time savings could be substantial.

Using the lower of these estimates of time value, the average Third Class passenger would save a total of ₱53.30 as a result of direct service between Iloilo and Tagbilaran.

According to PPA traffic figures, annual passengers disembarking at Tagbilaran port have reached a level of 240,000. Assuming for purposes of analysis that 20 percent of this volume, all Third Class, originated from Iloilo, then the total cost savings would be

48,000 passengers x ₱53.30/passenger = ₱2.55 million

The potential cost savings of direct service to the economy are estimated at ₱0.44 million for cargo (rice only) and ₱2.55 million for passengers (Third Class only), or a total of approximately ₱3.0 million

annually. These savings could be channeled to more productive activities that would generate additional income in Panay and Bohol.

### *Other Economic and Social Benefits*

In line with the regional development plan (1990-1992), the government initiated an interprovincial and interisland development effort as its spatial strategy for Region VI, the Western Visayas. A major project is the Panay-Negros Agro-Industrial (PANAI) Area Development Project to be implemented through the establishment of the Regional Agro-Industrial Center (RAIC) in Pavia, Iloilo. One of the major objectives of the plan is to restore vital transport and communication linkages among the various provinces in Panay and other island provinces.

For Region VII, the Central Visayas, the Government's strategy is to enhance agricultural production capabilities of the provinces of Bohol and Negros Oriental. Bohol will serve as a major source of food crops, and efforts are being made to improve the productivity of land, fishery, and forestry resources.

Commercial and industrial activities in the urban centers of Tagbilaran City in Bohol and Dumaguete-Sibulan in Negros Oriental will be promoted through People's Industrial Enterprises (PIEs) such as micro-, cottage, and small enterprises that use raw materials (buri, nito, bamboo, and clay) from local sources.

Tourism is another major industry that could be developed. Tourist facilities will be made available on the islands of Camotes, Bantayan, Panglao, and Siquijor. In Panay, a favorite tourist destination of both local and foreign tourists is Boracay Island in Aklan.

The government realizes that in order to support these economic activities in the two regions and to physically and economically link the island provinces of Panay, Bohol, Cebu, Negros, and Siquijor, an efficient air, land, and water transportation system is essential.

However, the plan refers only to upgrading infrastructure such as roads, airports, and seaports and does not recognize the importance of providing direct connections between these island provinces. Shipping could play a vital role in integrating the different provinces of these two regions, both physically and economically.

### **Overall Expansion of Liner Services**

In the context of economic development, regulations inhibiting the introduction of new services may obstruct the strengthening of linkages



among the various provinces and regions of the country. Without a desirable transportation network to serve the different areas, the Government's Countryside Agro-Industrial Development Strategy (CAIDS) of spatial and economic integration of regions will never be effective. Hence, promoting direct shipping services as part of the overall transport system might facilitate economic and physical integration of the country's regional growth centers.

It is important that the government recognize that efforts toward improved production efficiencies and capacities of each region, rational distribution of the population, and sustainable and balanced development will never materialize without an efficient transport network and support infrastructure that links the regional centers. This is especially important in the Visayas, which are archipelagic.

Operators hesitate to apply to provide new services because of regulations, particularly route licensing and the limited flexibility of cargo and passenger rates prescribed by MARINA. These regulations can adversely affect the profitability of services, thereby discouraging operators from applying to provide new services. MARINA could encourage such applications by adopting a policy of rate flexibility for low-demand routes taking an active role in developing information on potential new routes, and promoting the initiation of new services. Such a change in stance by MARINA could generate millions of pesos in transport cost savings annually, and would help to accelerate the rate of economic and social integration among islands of the archipelago.

## Chapter 7

### ECONOMICS OF DEREGULATION

#### Effects of Recommended Cargo Rate Liberalization

Most of the adverse effects of cargo rate regulation can be eliminated by the liberalization actions recommended by the SRRS team, even before the next step is taken to deregulate cargo rates. The rate regulation liberalization actions and adverse effects likely to be eliminated are as follows

- Abolition of the commodity Class C (Basic) and institution of a dual-rate system for the commodities currently in that class; Class B rates for containerized commodities and Class C rates for noncontainerized commodities. In the past, rates that were too low deprived shippers of Class C (Basic) commodities of appropriate service. The charges would improve service availability for these commodities and help to induce shipping operators to provide the ventilated containers that a number of these commodities require. The desirable effects can be hastened by conducting market studies within the context of the IATS recommended by the SRRS team to assess needs for specialized equipment to accommodate these and other agricultural and agroindustrial commodities.
- Widening of the fork tariffs for the remaining three commodity classes to  $\pm 15$  percent of reference points of each class. This change is desirable in part because of the wide variations in costs among operators and routes; it is also desirable to permit cost competition among operators (which existed until ad valorem charging was ended in 1989), for example, in attracting backhaul container traffic.
- Changing to route-by-route rate identification. This will help to induce new services on routes that were previously not

adequately served because past official rates, based on averages for all routes considered together, understated required rates for viable operations on a number of routes.

- Basing cargo rates on design load factors and target efficiency levels. In the past, rate increases were approved regardless of load factors or the degree to which the industry was inefficient, provided only that the industry required additional revenue to obtain a 12 percent return on assets. By focusing the rate adjustment process on load factors and target efficiency levels, the industry and all individual operators are given incentive, largely lacking in the past, to achieve efficiency and to avoid overtonnaging. A desired indirect effect will be an awareness by the government (MARINA) of the impediments to achieving improved efficiency faced by the industry and subsequent provision of greater assistance to the industry in overcoming these impediments.
- Institution of container freight—all kinds (f.a.k.) rates, with a fork tariff of  $\pm 20$  percent. One service subsidizing a competing service represents a misallocation of resources. Containerization has proceeded quite far in domestic cargo services, partly because it has been subsidized by breakbulk services; that is, containerized services have been undercharged and noncontainerized services have been overcharged. The institution of container f.a.k. rates, based on costs of providing container services, should lower breakbulk charges and temporarily reverse or slow the trend toward containerization. This seems contrary to achieving efficient operations, but it should be noted that container services as they are currently operated in the Philippines are not yet efficient.

### General Incremental Effects of Cargo Rate Deregulation

Even with liberalization, limits continue to be imposed on regulated matter. Deregulation occurs only when these limits are removed. "Full" deregulation, as the term is used in this report, applies only to liner shipping cargo rates and means that all limits on charging are removed and the government does not intend to reinstitute such limits. This is not the same as saying that the government will under no circumstances reinstitute limits. It is the view of the SRRS team, in fact, that MARINA, closely working with SHIPPERCON, should continue to monitor cargo rates and retain the authority to intervene if an industry otherwise free to set its own rates takes a course seen as seriously detrimental to shippers—and the industry itself—in the short or long term. This continued attention will, in any case, be legally required by virtue of the law stipulating limits on the returns that Certificates of Public Convenience (CPC) may earn on their assets (whether the current

level of 12 percent is adjusted will not affect MARINA's continuing role in monitoring returns of the interisland liner shipping industry).

Despite the law limiting returns on CPC assets, full deregulation will affect the industry. As stated at the beginning of this volume, the principal problem with regulating rates for cargo services is the inherent inaccuracy of the effort. In Volume II of this report, the SRRS team discusses improvements that need to be made in the accuracy of industrywide rates; in Volume I, the SRRS team recommends changing to route-by-route identification of rates to further improve the accuracy of rate identification. The team recognizes, however, that averages still must be employed and that they will not be appropriate for all operators, or even for all efficient operators. The width of the fork tariff, rather than any adjustments made in the methodology of rate computation, most improves the rate identification process to make it appropriate for large numbers of operators. The most appropriate step, however, is to permit each cargo shipment to be decided individually, at the time and circumstance of the service, by shipper and shipping operator.

Besides this increment of accuracy in moving from considerably liberalized rate regulation to rate deregulation, there is an increment of competitive environment. Although the structure of the industry does not suggest a great deal of competition, with 3 companies much larger than any others and 11 companies accounting for about 85 percent of interisland liner shipping traffic, considerable evidence, in fact, exists that the industry has been generally competitive: twice in the past 13 years new technology has been introduced and rapidly adopted by the industry (containerization, followed by the acquisition of RORO vessels), and the prevalence of discounts during years in which ad valorem was charged was evidence of price competition. In mid-1991, some shippers argue, the general tendency of cargo rates to be near the upper end of ranges (instituted in November 1990), of  $\pm 5$  percent from reference points for four commodity classes, is evidence that the industry is not being competitive. In the view of the SRRS team, a fair test of the industry's competitiveness will be possible only when the fork tariff is widened, and the reference points represent the best estimates of required average industry rates at the time the new reference points are adopted.

### **Agricultural Production and Trade**

The adverse effects of liner shipping regulation have disproportionately fallen on the producers and traders of agricultural commodities. This circumstance was identified by the PTF in 1989, confirmed by the PTSR in 1990, and reconfirmed by the SRRS in 1991. Regulation has limited the availability of appropriate services for agricultural commodities and, in so doing, has resulted in high storage costs, commodity value losses resulting

from deterioration, and high charges for the alternative, and limited, services of trampers and air transport. The macroeconomic effects of the unavailability of sufficient liner shipping services for several agricultural commodities have included the following

- **Inhibition of the growth of interisland trade.** When commodity market price differentials between production areas and external market areas are significantly greater than the costs of commodity transport from production area to potential markets, either information on prices and marketing possibilities is inadequate or transport shortcomings exist that prevent shipment under appropriate conditions. In the Philippines, there have been and continue to be large price differentials between fruit and vegetable production areas of southern Mindanao and Manila. These price differentials have been sufficient to permit many fruits and vegetables to bear the costs of air transport, which are several times the charges for sea shipment, if only air transport capacity has been available. By deregulating liner shipping cargo rates for these commodities, shipping operators are permitted to raise their rates to levels that will induce the operators to provide sufficient and appropriate services. One probable result will be an increase in shipment of these commodities by interisland shipping rather than by air, with significant cost savings from the modal conversion. Consequently, overall levels of production will rise, partly because of the transport cost savings, but mainly because air transport capacity constraints have also served in the past to limit the levels of fruit and vegetable production.
- **Inhibition of agricultural diversification.** Grains may be produced in excess in Mindanao and sugar may be produced in excess in the Western Visayas. Diversification out of these commodities is probably desirable to some extent, perhaps to a considerable extent, and regional development studies, to be conducted during 1991-1992, of the Western Visayas and Southern Mindanao, will be examining the desirability of and options for agricultural diversification in those areas. Grains and sugar do not deteriorate rapidly after harvest, however, whereas a number of alternative crops are more perishable. Otherwise desirable strategies for increasing agricultural production value through diversification may fail, therefore, because of inadequate storage facilities and transport that would make it difficult or impossible to preserve the value of preferred commodities after harvest. By permitting shipping operators to raise their charges for transport of perishable agricultural commodities, cargo rate rationalization and deregulation can be expected to induce the operators to provide the equipment and services that will be required to support

agricultural diversification into perishable commodities other than grains and sugar.

- **Cargo value losses through deterioration.** Although grains are less perishable than a number of other agricultural commodities, they do deteriorate while awaiting shipment, especially if they are neither properly treated before storage nor properly stored during the wait for suitable transport. In the Philippines, it is certain that large losses of grain, fruit, and vegetable value have resulted from inadequate storage facilities and interisland transport, although estimates of the magnitude of such losses were not available to the SRRS.
- **Inhibition of agro-processing in production areas.** The dispersion of agro-processing activities outward from the current centers of Manila and Cebu would, most important, have implications for the division of GDP among regions of the Philippines. This dispersion could thereby help to slow or even to reverse the socially and environmentally undesirable population migration trends to the greater Manila and Cebu areas. In addition, cargo volumes required to support any given level of consumption are reduced, resulting in transport cost savings. By encouraging shipping operators to provide the equipment and services necessary to support such agro-processing undertakings as meat processing and dairying, cargo rate deregulation could give rise to shifts of agro-processing, especially livestock slaughter and processing, in production areas. (The deregulation necessary to achieve this, namely, the deregulation of rates for reefer box cargo shipping services, took effect in 1990.)

The SRRS team could not obtain sufficient information to accurately estimate the economic effects of past inappropriate cargo rate regulation that had some or all of the effects identified on the production and value of some agricultural commodities. The SRRS team would have been liked to obtain information on tonnages, by commodity and location, that suffered value losses due to deterioration or sale to suboptimal markets, in the absence of sufficient and appropriate liner shipping capacity. Even had the SRRS team found this information, there would have been a need to distinguish between the value losses that could have been avoided through proper treatment and storage and those that occurred strictly as a result of liner shipping shortcomings. Also, the SRRS team could not identify the extent to which agricultural diversification might have occurred in the various regions of the Philippines if only farmers and middlemen could have been assured that whatever they were seeking to ship could be adequately accommodated by the liner shipping industry.

Although an accurate estimate of the economic effects of cargo rate regulation cannot be made on the basis of the information collected by the

SRRS team, a conservative estimate of these effects might be made, as follows.

- Corn is the principal grain carried in interisland trade in the Philippines. During the conduct of the SRRS (November 1990-August 1991), the average value of corn was around ₱4.4 per kg. Because of a bumper harvest in the Cagayan Valley of Luzon, much of the Mindanao corn crop could not find a market in the Philippines, and the world market price (which is generally lower than the cost at which the Philippines can produce corn) did not make exporting attractive. Hence, in this particular year, corn shipments were constrained not by inadequacy of either storage facilities or transport, but by market limitations. The production trend in the Cagayan Valley suggests that in most future years, the corn surpluses that might historically be expected from southern Mindanao not find a ready domestic market and that agricultural diversification might therefore become increasingly important for the region. One condition necessary to allow agricultural diversification is rationalization of liner shipping cargo rates.
- The market price differentials for a few commodities produced in southern Mindanao and shipped (to the extent possible) to Manila were, in 1991, between ₱6 and ₱35/kg, whereas liner shipping charges were around 40 centavos/kg. A conservative estimate is that, after payment of higher liner charges than those currently regulated, a profit could still be realized by shippers that, with modest increases in volumes shipped, would average not less than in the range of ₱6 to ₱8/kg or ₱6,000 to ₱8,000/ton. The higher payments would induce operators to provide sufficient, appropriate shipping capacity (mainly ventilated containers). As shipment quantities would continue to increase, the price differentials between production and market areas would gradually decline until they reached the levels of costs plus profits on the trading-transport efforts. These commodities would be limited in tonnage terms in comparison to the grains they would be replacing, but shipment levels would not be less than 20,000 tons/year, and even shipments of that level would be likely to produce a net economic distribution value benefit in the range of ₱80 to ₱120 million.
- Additional benefits could be realized for other commodities and for other points than southern Mindanao to Manila. Also, the rationalization of passenger charges (Third Class passage) as well as cargo would help to create new services. A conservative (and certainly not very accurate) estimate of annual benefits deriving from liner shipping rate rationalization is ₱200 million.

Liner rate regulation policy has been to hold down rates on many agricultural commodities partly in order to aid (as it was believed) producers and traders of these commodities, but also to benefit the ultimate consumers by holding down prices. This goal, also, has not been achieved by regulation. As indicated above, rate regulation in the Philippines has acted to limit the availability of appropriate transport and has thereby limited supplies in some major market areas, principally in Manila. When supply is limited relative to demand, prices are forced upward. Some of the price differentials between Manila and production areas of the Philippines have exceeded, over the years, the costs of moving the agricultural commodities from production areas to Manila, provided only that sufficient and appropriate transport was available to perform the transport service. Sometimes these price differentials have even considerably exceeded the costs of the high-cost services of air transport.

From the foregoing, the liberalization of cargo rate regulation—to permit charging of higher rates for the transport of agricultural commodities—can be expected to result in falling market prices for some commodities in some markets. In particular, higher liner shipping rates for transport of fruits and vegetables should induce operators to provide sufficient appropriate shipping capacity for these commodities. As a result, a shift from the use of air transport should occur, and an overall increase in the volumes of these commodities in the Manila market should result.



## Appendix A

### PRODUCTION AND TRADE OF CORN AND RICE

#### National Production and Consumption

Statistics on rice and corn production and harvested areas are provided by the Department of Agriculture (DA) in its quarterly Rice and Corn Survey (RCS) and other material. RCS statistics indicate that the Philippines is approaching self-sufficiency during good harvest years in both rice and corn. In July 1991, the DA attempted (without much success) to export up to 150,000 MT of surplus corn. In 1990, national production and consumption of these two grains were as follows:

	<i>Rice</i> (1,000 MT)	<i>Corn</i> (1,000 MT)
End-1989 national stocks	1,470	138
1990 production	6,058	4,872
1990 importation	622	3,30
Total 1990 availability	8,150	5,340
1990 consumption	6,490	4,738
End-1990 national stocks	1,660	602

Rice production in 1990 was estimated at 65 percent of 9.32 million tons of palay, or approximately 90,000 tons of milled rice lower than Philippine record production of approximately 6.15 million MT in 1989. Average yield of palay actually improved from 2.70 MT/ha in 1989 to 2.81 MT/ha in 1990, but planted area declined by 5.1 percent.

Two types of corn are widely grown in the Philippines: yellow and white corn. Yellow corn had an average yield of 2.11 MT/ha during July-December 1990, whereas the white corn yield was 1.18 MT/ha. Yellow corn is used primarily for livestock consumption and white corn for human consumption. Because of the difference in yellow and white corn yields, significant shifts from one to the other from year to year can cause significant changes up or down in the average yield for all areas planted in

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corn. During the latter half of 1990, nearly 2 million ha of white corn were harvested, whereas the harvested area of yellow corn was much lower at about 700,000 ha, and the overall average corn yield was 1.42 MT/ha. The 1990 production total was a record for the Philippines, 7.7 percent above the 1989 production level, 17.0 percent above the average production level of the 1985-1988 period, and 51.0 percent above the average production level of the 1980-1984 period.

In July 1991 the DA tried to dispose of up to 150,000 MT of surplus corn on the world market; bid prices for the first 10,000 MT offered reportedly hovered around US\$90/MT, equivalent to ₱2.5/kg. According to the National Food Authority (NFA), domestic feed millers such as SMC, Republic Flour Mills Corp. (RFM), Vitarich Corp., and Pure Foods Corp., were willing to purchase corn at ₱4.4/kg. It is therefore not economical for the Philippines to attempt to export. According to the Confederation of Filipino Rice and Corn Traders Associations (Confed), a looming shortfall of corn production in Luzon in 1991, primarily the result of drought in the island's principal corn production area, is responsible for some improvement in the domestic corn price, which climbed to ₱5.20/kg in August 1991.

The Philippines cannot export corn at any price that would be remunerative to Filipino farmers and can buy corn on the world market at prices that, in 1991, have ranged from 63 to 90 percent of the domestic market price. These facts raise the question of whether continuing the trend toward attaining corn self-sufficiency is in the interest of the Philippines or whether there might better be agricultural diversification out of corn (and perhaps out of palay as well). This possibility will be examined by at least three studies being conducted during 1991-1992: regional studies for the Western Visayas and Southern Mindanao and the IATS recommended by the SRRS team (terms of reference for this study are included in the appendix to Volume V of this report).

## Regional Production and Interisland Trade

### Rice

During the latter half of 1990, the island of Luzon accounted for the production of 3.66 million MT of palay, or 62.7 percent of the national total of 5.83 million MT; Mindanao palay production was 1.31 million MT, or 22.5 percent of the national total; and the Visayas accounted for the remaining 14.8 percent of the total, or approximately 0.86 million MT. The Visayas rely on corn as a staple to a greater extent than either Luzon or Mindanao, but portions of the Visayas are nevertheless the principal rice-deficit areas of the Philippines. The island of Panay in the Western Visayas is in fact a surplus rice area and ships fairly substantial quantities of rice to other Visayan islands.

## Corn

The three main areas of the Philippines (Luzon, the Visayas, and Mindanao) are each, within themselves, nearly self-sufficient in rice. The same is not true of corn. Slightly more than one-half of national corn production is from southern and central Mindanao. Southern Mindanao produced more than 1 million MT in each year between 1980 and 1990 except for 1983, when it produced just under 1 million MT. During 1988-1990, Southern Mindanao averaged a production level of slightly more than 1.3 million MT. Central Mindanao did not attain 1 million MT until 1987 but has now exceeded 1 million MT in each of the last 4 years, topping 1.1 million MT in both 1989 and 1990.

Historically, northern Mindanao has not produced volumes of corn comparable to southern and central Mindanao. Northern Mindanao topped 300,000 MT for the first time in 1987. Since 1987, however, northern Mindanao corn production has been rising at a rapid pace, increasing by 16.4 percent from 1987 to 1988, by 20.5 percent the following year, and by 22.2 percent in 1990 to reach a 1990 total of 523,000 MT. In only 3 years, total expansion was more than 71 percent. Most of this expansion was in the hinterland of Cagayan de Oro. This port experienced a large and rapid increase in corn outflows from less than 15,000 MT in 1984 to more than 240,000 MT in 1989 (1990 figures were not available to the SRSS team).

After Mindanao, the principal area of corn production is the Cagayan Valley of northern Luzon. Except for 1983, when the production levels of Cagayan Valley and northern Mindanao were almost the same, the Cagayan Valley has produced more corn than northern Mindanao every year since 1980 and in 1990 achieved a production total of more than 546,000 MT, a 21.8 percent increase from 1989 and an increase of more than 48 percent from 1984-1988 average production levels.

Interisland shipments of corn originate primarily in the Mindanao ports of Cagayan de Oro, Davao, General Santos, and Cotabato/Polloc and are transported to Manila (primarily yellow corn) and Cebu (primarily white corn). Shipments of unmilled corn between these four ports of origin and two receiver ports are shown below.

	1989		1990	
	Manila	Cebu	Manila	Cebu
Cagayan de Oro	52,682	108,625	64,833	139,284
Davao	59,298	2,447	39,566	5,242
General Santos	21,167	3,078	56,429	606
Cotabato/Polloc	90,079	3,009	31,055	4,430
Four-port totals	223,226	117,159	191,883	149,562

## **Appendix B**

### **SURVEY OF INTERISLAND LINER SHIPPING PASSENGERS**

#### **Introduction**

SRRS passenger surveys were undertaken in April and May 1991 at the ports of Manila North Harbor and Cebu, respectively. The surveys were intended primarily to learn passenger views on the adequacy of liner passenger services, including First, Second, and Third Class services. The surveys were also designed to provide a profile of the passengers of each service class, including income levels and purpose and frequency of travel. Finally, the surveys were intended to identify the willingness of travelers to pay more for improved standards of service.

The results of these surveys are presented in the following sections of this appendix. Attachments B-1 through B-3 provide background information on the survey. Attachment B-1 is the survey form; Attachment B-2 is the instructions to interviewers for carrying out the survey; and Attachment B-3 identifies the number of passengers interviewed, by interisland liner vessel and class of service. Attachment B-4 indicates Third Class passage rates at the time of the survey, to put in perspective the responses of passengers in regard to willingness to pay more for better services. Attachment B-5 presents suggestions for the improvement of passenger service standards—these suggestions derive not only from passenger responses to survey questions, but also from vessel condition and operation inspections carried out by the SRRS survey team.

#### **Survey Results**

##### **Passenger Perception of Services and Facilities on Board**

Passenger views on interisland services and facilities are summarized next.

- Passengers were found to have different preferences for, and perceptions of, the facilities provided. This is partly because of differences in service standards among liner operators in the industry, even among CISO member vessels on the same route. Passengers generally favor the setting of minimum standards of facilities and services.
- The type and condition of facilities differs greatly between short and long routes. For short routes of between 1 and 6 hours of sailing most passengers sit on benches (wooden, upholstered, or fiberglass). For long-distance routes with travel time of more than 6 hours, passengers are provided with cots or beds, sometimes with bedding. In general, passengers complain of inadequate and unclean conditions of facilities.
- Overcrowding is common during the peak months of fiestas, holy week, Christmas, and summer activities.
- Approximately 90 percent of total passengers surveyed, regardless of class, answered that the vessels need improvement of service, including the following: crew presence and assistance to passengers, maintenance of clean facilities, clean food, adequate water on board, sufficient number of clean toilets, strict adherence to schedule, and sufficient bedding. Basic facilities such as garbage cans, lockers, and drinking fountains are absent and must also be provided.
- Provision of additional amenities such as recreation (television, sound system, etc.) depends on company policy. Some companies provide disco entertainment on board, which serves as an incentive to passengers, especially the younger generation. Such facilities depend on the market demand; shipping companies respond to preferences of the majority of their passengers.
- Many passengers said that shipping companies should request comments and suggestions on the improvement of service from their passengers. A few companies undertake such surveys periodically, including Negros Navigation, Trans-Asia, and William Lines, among others.
- Privacy is also of concern. Passengers on long-distance routes definitely prefer that more private rooms be available. Sanitation, above all, must be given priority.
- The results revealed that four vessels surveyed, the more modern and recently acquired ones, offer better crew, facilities,

food, and water compared with other companies' vessels for the same routes.

- Third Class passengers require more cots or "tejasas." One suggestion is for improvement in ticketing procedure. The cots and seats must be numbered systematically.
- For security reasons, shipping companies should limit the number of vendors on board. Crews must wear the proper uniform for easy recognition.
- On some secondary routes with only one operator, passengers said that they had no alternative but to continue to patronize vessels offering poor service.
- Third Class passengers experience a great deal of inconvenience. Common complaints are lack of water, unclean toilets, unaccommodating crew, expensive food, poor sanitation, and overcrowding. Third Class passengers believe they are entitled to better food services.

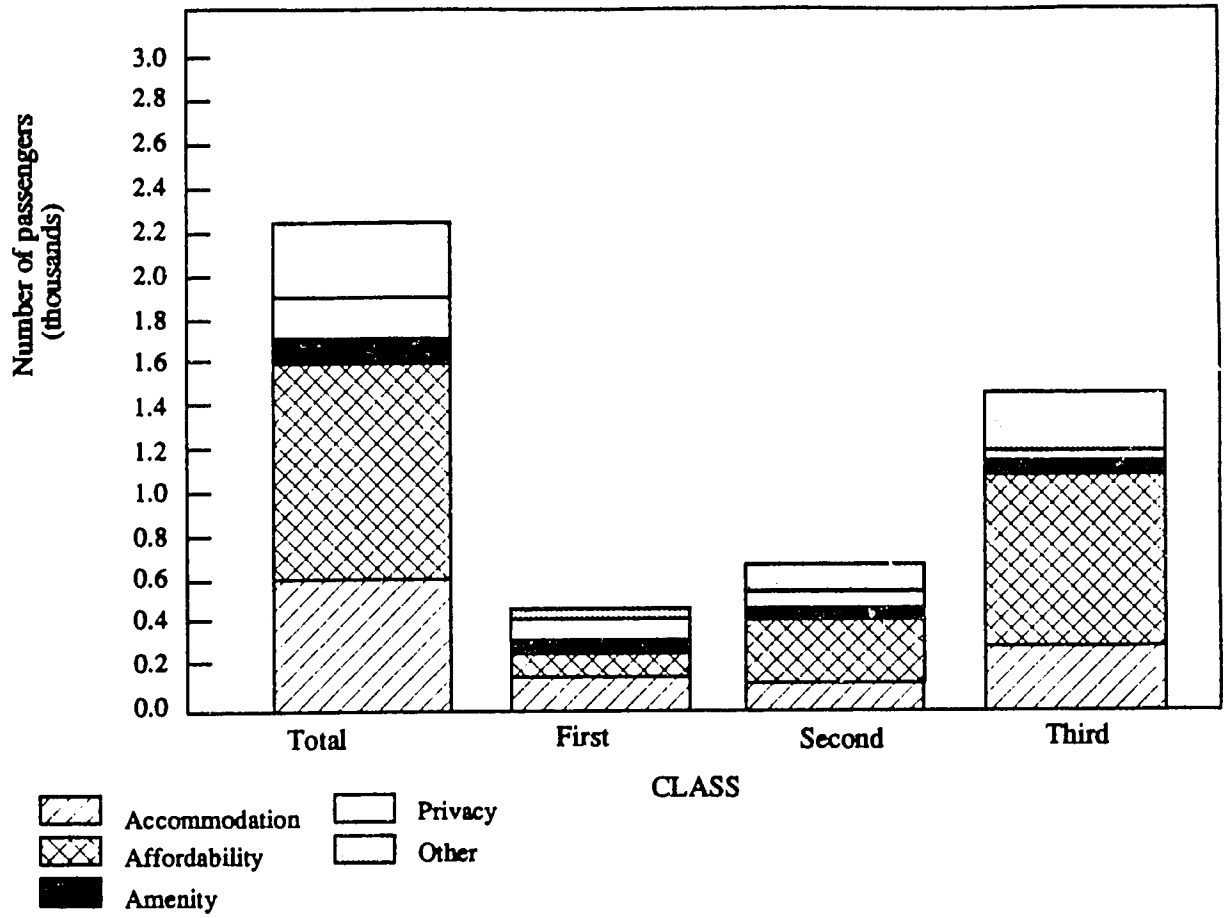
#### *Reasons for Choice of Class*

Survey questionnaire results were analyzed on the basis of the total number of passengers regardless of class, then according to class. A summary of the results is presented in the following paragraphs. There were 39 vessels covered by the passenger survey, with a total of 2,123 respondents. Of these, 329 were First Class passengers (16 percent), 520 were Second Class passengers (24 percent), 1,244 were Third Class passengers (59 percent), and 30 (1 percent) passengers did not identify their travel class.

Reasons for selecting First Class, Second Class, and Third Class accommodations, are illustrated in Figure B-1 and summarized below:

	Total (%)		First (%)		Second (%)		Third (%)		Class Not Identified (%)	
Accommodation	476	24	111	35	160	32	201	17	4	25
Affordability	934	44	49	15	192	38	690	58	3	20
Amenity	94	5	36	11	31	6	25	2	2	10
Privacy	145	8	91	28	30	6	23	2	1	5
Other reasons (Medical, business)	380	19	33	10	91	18	250	21	6	40
Total	2029	-	320	-	504	-	1189	-	16	-
No answer	94	-	9	-	16	-	55	-	14	-

Figure B-1. Reasons for Selecting Relevant Class



### *Third Class Passenger Willingness to Upgrade*

Third Class passengers were also asked about their willingness to transfer to a higher class--either First or Second Class. The number of Third Class passengers who answered was only 472 of 1,244 (38 percent).

Of the 472 respondents, approximately 145 passengers (31 percent) answered "yes" and 327 or 69 percent answered "no".

Of those who answered "yes", reasons cited for willingness to transfer to either Second or First Class are accommodation, service, overcrowding, and *under the condition that the First or Second Class fare is fixed or regulated.*

Conversely, respondents who answered "no" cited the following reasons: they cannot afford to pay for higher class, they are already satisfied with Third Class accommodation, the Third Class accommodations of the vessel (Super Ferry I) are comparable to First Class accommodations of other vessels, and they prefer to be outside the cabins to benefit from the sea breeze.

### *Purpose of Travel*

The results from the question regarding purpose of travel are presented graphically in Figure B-2 and in the following table:

	Total (%)		First (%)		Second (%)		Third (%)		Class Not Identified
Employees	146	7	23	7	36	7	91	7	1
Student	167	8	22	7	38	7	112	9	2
Business	293	14	65	20	69	13	160	13	0
Pleasure	1,401	67	206	63	356	69	811	66	16
Others	84	4	11	3	17	3	55	4	0
Total	2,091	-	327	-	516	-	1,229	-	19
No answer	32	-	2	-	4	-	15	-	11

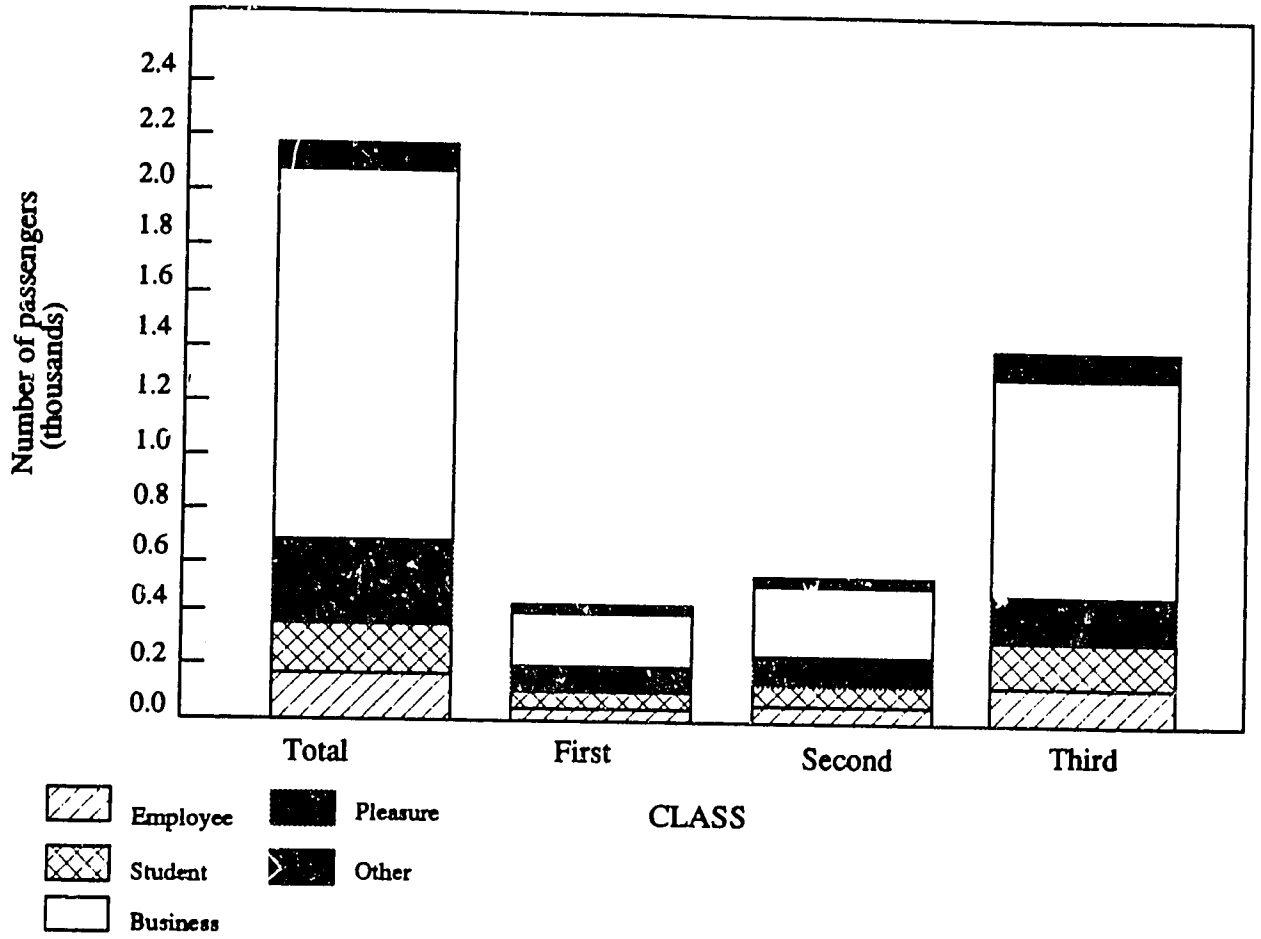
Overall, about 67 percent travel because of pleasure or for social reasons. Those who travel because of business account for about 14 percent. The lower percentages are accounted for by students on vacation (8 percent) and employees (7 percent).

If responses are considered responses by class of passenger, pleasure ranks first with 63 to 69 percent, followed by business (13 to 20 percent), students on vacation (7 to 9 percent), and employees (7 percent). A greater percentage of First Class passengers (20 percent) are traveling for business compared with other passenger classes.

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Figure B-2. Purpose of Travel



### *Frequency of Travel*

Of the total passengers, most (75 percent) travel six or fewer times a year. The remainder travel more than six times a year, and some travel weekly. Approximately 55 percent of passengers traveling more than six times a year are Third Class passengers.

### *Passenger Income*

The results for passenger income group are shown in Figure B-3 and the following table:

	Total (%)		First (%)		Second (%)		Third (%)		Class Not Identified
Low income	615	36	34	12	101	24	466	47	14
Middle income	625	36	84	30	171	41	362	36	8
High income	476	28	161	58	142	34	167	17	6
Subtotal	1,716	-	279	-	414	-	995	-	28
Others	44	-	8	-	7	-	29	-	0
No Answer	363	-	42	-	99	-	220	-	2

The monthly income categories specified in the survey questionnaire are as follows:

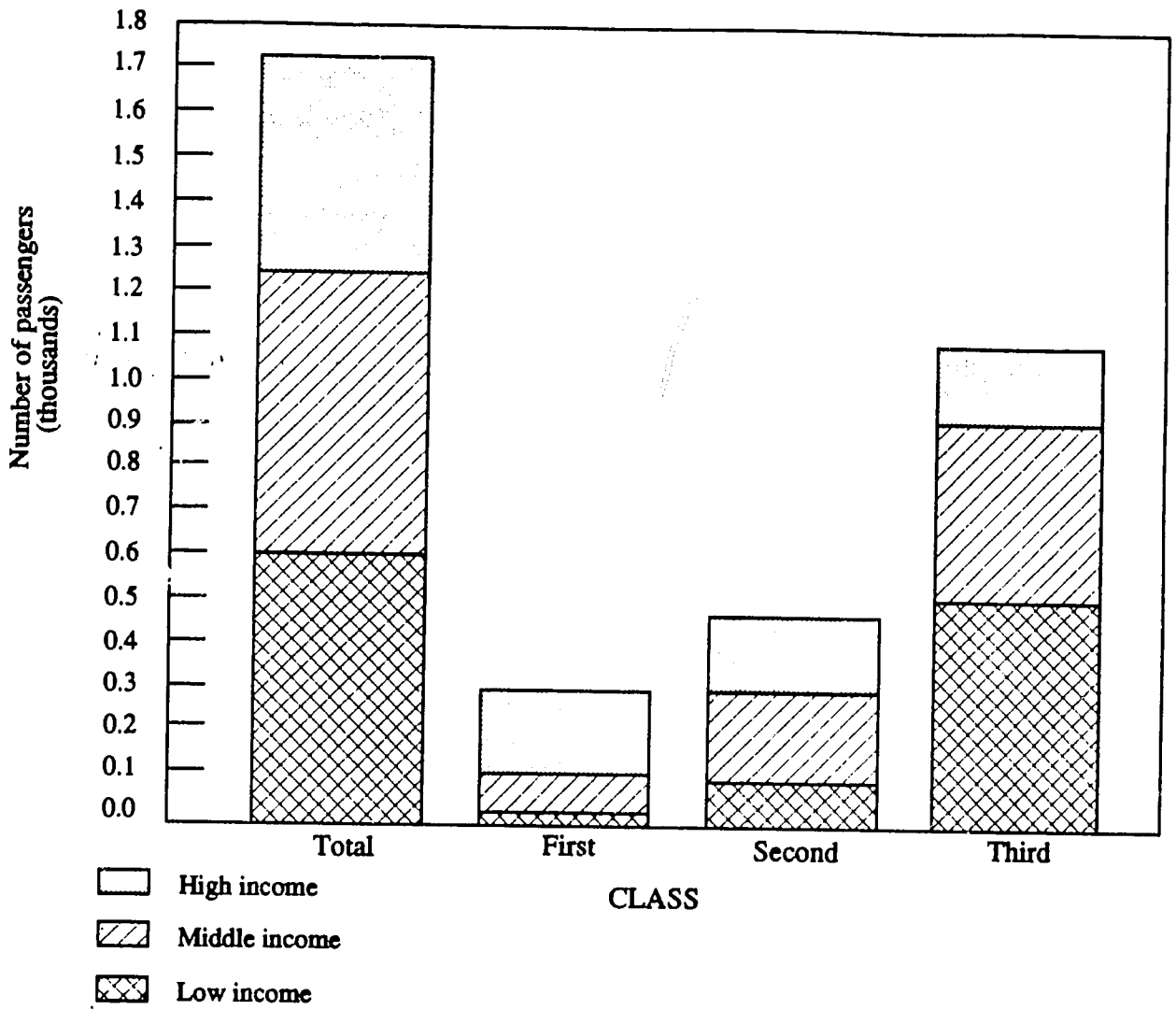
Low income	=	₱3,000 and less
Middle income	=	₱3001 to ₱5000
High income	=	₱5001 and above

The survey results for choosing the different types of accommodation are what might logically be expected. Affordability is the major reason for taking Third Class accommodation, because a greater number of Third Class passengers belong to the low-income group.

### *Composition of Monthly Expenses*

With regard to the composition of monthly expenses, food accounts for about 45 to 55 percent of total family expenses, followed by transportation expenses (10 to 20 percent), clothing expenses (10 to 15 percent), utilities (5 to 10 percent), and entertainment (5 to 10 percent). These percentages of expenses are similar for all classes of passengers.

Figure B-3. Passenger Income Group



### *Passenger Satisfaction with Service*

Answers to the question "How do you find the service given to passengers?" are illustrated in Figure B-4 and as follows:

	Total (%)		First (%)		Second (%)		Third (%)		Class Not Identified (%)	
Fair	1,219	60	136	42	296	61	776	65	11	48
Good/ satisfactory	710	35	149	46	171	35	380	32	10	43
Very good	100	5	40	12	15	3	43	4	2	9
Subtotal	2,029	-	325	-	482	-	1,199	-	23	
No answer	94	-	4	-	38	-	45	-	7	-

Most of the passengers (approximately 60 percent) answered that the service given to passengers is "fair" only and needs improvement. Those who thought service was "good/satisfactory" constitute 35 percent, and only 5 percent thought service was "very good".

### *Passenger Satisfaction with Fare*

Responses to the question "How do you perceive the fare charged as compared to service?" were as follows.

	Total (%)		First (%)		Second (%)		Third (%)		Class Not Identified	
Low	106	5	11	3	24	5	70	6	1	
Reasonable	1,477	74	250	78	367	77	844	72	16	
High/ unreasonable	404	20	59	18	88	18	255	22	2	
Subtotal	1,987	-	320	-	479	-	1,169	-	-	
No answer	136	-	9	-	41	-	75	-	11	

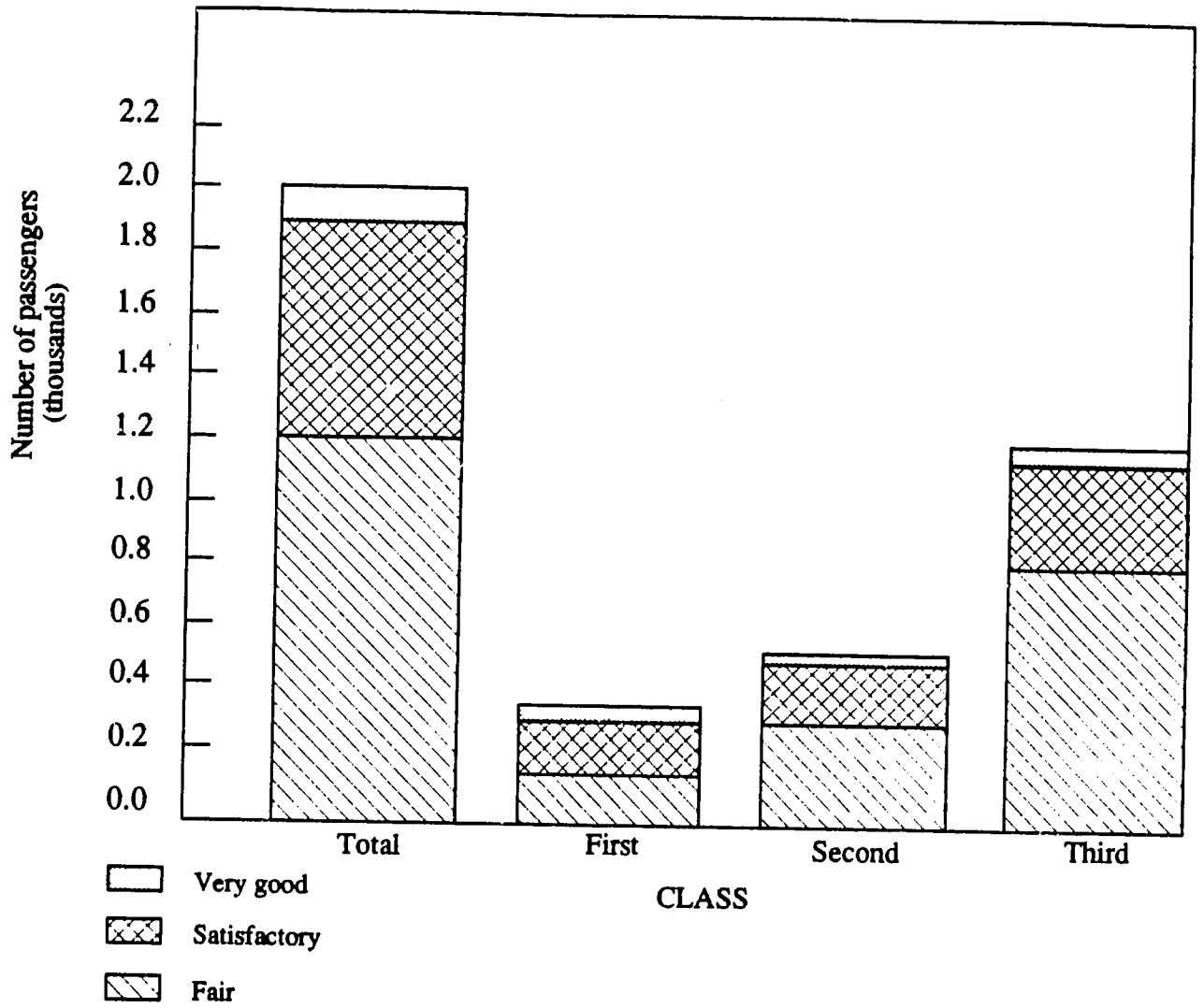
### *Willingness to Pay for Improved Service*

With regard to willingness of passengers to pay for improved service, the results:

	Total (%)		First (%)		Second (%)		Third (%)		Class Not Identified	
No	1,055	55	138	51	229	50	674	59	14	
Yes	880	45	182	49	226	50	465	45	7	
Total	1,935	-	320	-	455	-	1,139	-	21	

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Figure B-4. Passenger Satisfaction with Service



### Facilities and Amenities

On the question of what facilities and amenities the passengers would prefer to have on board, answers were:

	Total	First	Second	Third	Class Not Identified
Canteen	392	76	89	225	2
Toilet	1,030	178	261	585	6
TV/radio	440	80	112	246	2
Locker	254	51	80	112	7
Blanket	568	79	119	363	0
Electric fan	241	47	63	131	1
Others	114	27	21	65	2
Total	3,039	538	745	1,727	20

### Willingness to Pay for Facilities and Amenities

Willingness to pay for the use of the amenities mentioned above and the amount they are willing to pay are shown in Figure B-5 and given in the following table.

	Total	First	Second	Third	Class Not Identified
Yes	1,037	202	254	572	6
No	633	92	128	404	9
No answer	456	35	138	268	15
Amount					
-P 5-10	708	101	178	424	5
-P 11-20	194	68	39	86	1

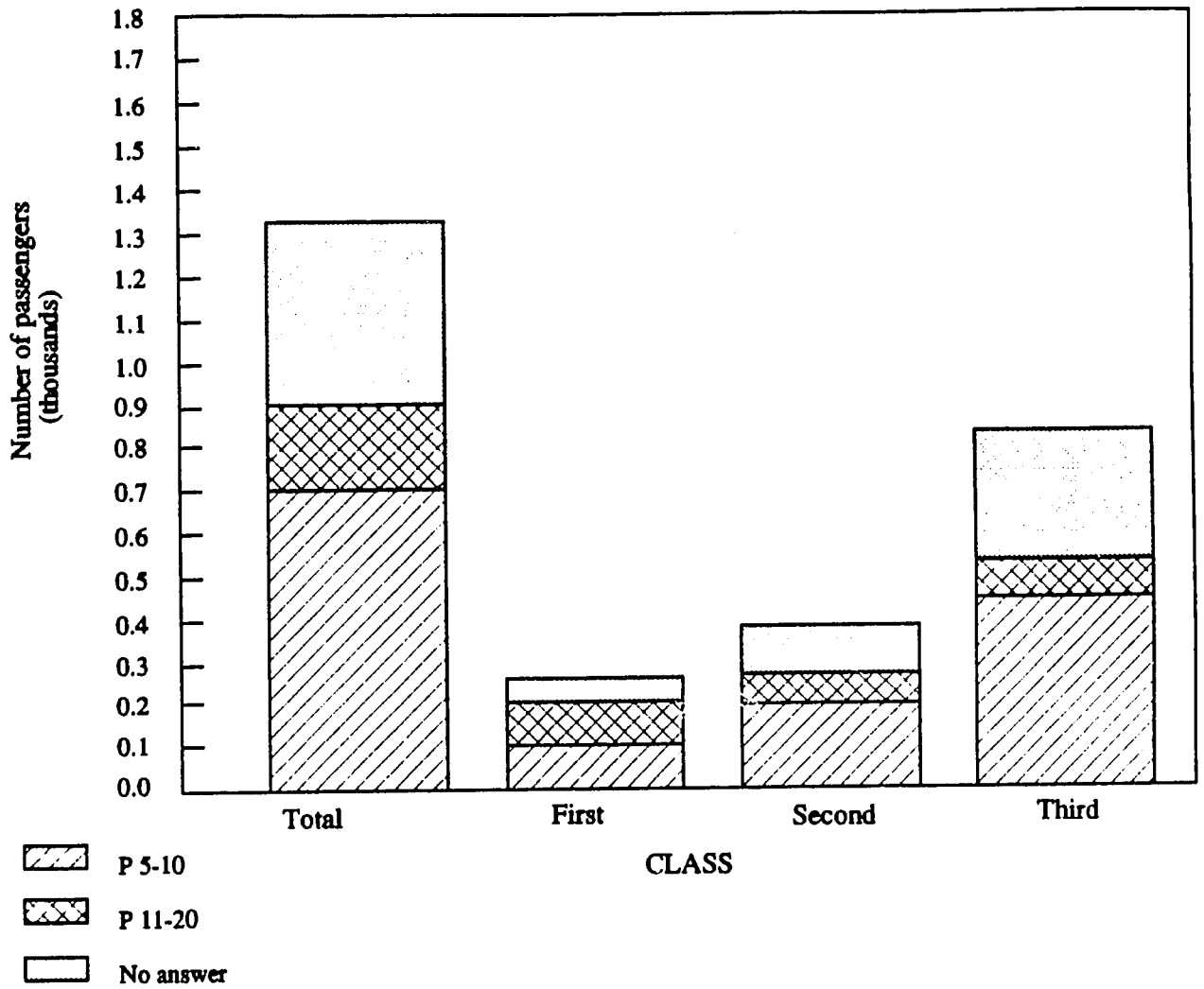
All classes of passengers prefer to pay only P5 to P10 for an upgrading of service, but a small percentage are willing to pay more (P11 to P20).

### Delays

Responses to whether the vessel departs on time were as follows.

	Total (%)	First (%)	Second (%)	Third (%)	Class Not Identified
Yes	1,330 69	202 65	320 70	798 69	10
No	604 31	111 35	135 30	350 31	8
Subtotal	1,934 -	313 -	455 -	1,148 -	18
No answer	189 -	16 -	65 -	96 -	12

Figure B-5. Amount Passengers are Willing to Pay for Amenities



### *Using Competitors on the Route*

On the question of whether the passenger has tried the service of the vessel of another company for the same route, the answers are as follows:

	Total (%)		First (%)		Second (%)		Third (%)		Class Not Identified
Yes	692	67	80	65	178	66	428	68	6
No	346	33	44	35	93	34	203	32	6
Subtotal	1,036	-	124	-	271	-	631	-	12
No answer	1,087	-	205	-	249	-	613	-	18

Clearly, passengers do try the services of another vessel on the same route. The reasons given are lack of availability of service with the other company, speed and travel time considerations, and differences in quality of service and accommodation.

### *Transferring to Other Vessels*

An additional question was asked: "After disembarkation, does the passenger have to transfer to another vessel to reach the final destination?"

	Total (%)		First (%)		Second (%)		Third (%)		Class Not Identified
Yes	182	18	18	15	58	21	104	17	2
No	848	82	103	85	214	79	519	83	12
Subtotal	1,030	-	121	-	272	-	623	-	14
No answer	1,093	-	208	-	248	-	621	-	16

Most of the passengers reported that the other end of the port link is their final destination and they do not have to transfer to another vessel before reaching their destination. Only a small percentage (20 percent) of the total respondents are "transit" passengers.



**Attachment B-1**

**INTERISLAND SHIPPING RATE RATIONALIZATION STUDY  
INTERISLAND PASSENGER SURVEY**

*bt*

INTERISLAND SHIPPING RATE RATIONALIZATION STUDY  
INTERISLAND PASSENGER SURVEY

DATE OF INTERVIEW : \_\_\_\_\_ TIME OF INTERVIEW : \_\_\_\_\_  
 PLACE OF INTERVIEW : \_\_\_\_\_  
 NAME OF VESSEL : \_\_\_\_\_ COMPANY : \_\_\_\_\_

DESTINATION : \_\_\_\_\_ ORIGIN : \_\_\_\_\_  
 HOMETOWN : \_\_\_\_\_

1. TYPE OF PASSENGER:	AMOUNT OF FARE:
FIRST CLASS : _____	₨ _____
SECOND CLASS : _____	₨ _____
THIRD CLASS : _____	₨ _____

ARE YOU WILLING TO TRANSFER TO 1ST/2ND CLASS? WHY?  
 YES \_\_\_\_\_  
 NO \_\_\_\_\_

2. REASONS FOR TAKING (1) ABOVE:

- ACCOMMODATION \_\_\_\_\_
- AFFORDABILITY/LOW FARE \_\_\_\_\_
- AMENITIES \_\_\_\_\_
- PRIVACY \_\_\_\_\_
- OTHER REASONS \_\_\_\_\_

3. PURPOSE OF TRAVEL

- EMPLOYEE \_\_\_\_\_
- STUDENT \_\_\_\_\_
- BUSINESS \_\_\_\_\_
- PLEASURE/VACATION \_\_\_\_\_
- OTHERS : \_\_\_\_\_

4. FREQUENCY OF TRAVEL:

NO. OF TIMES A MONTH : \_\_\_\_\_

NO. OF TIMES A YEAR : \_\_\_\_\_

5. PASSENGER INCOME GROUP:

	MONTHLY	EXACT AMOUNT
LOW INCOME - ₨ 3,000 BELOW:	_____	_____
MIDDLE INCOME - 3,001-5,000:	_____	_____
HIGH INCOME - 5,501 ABOVE:	_____	_____
OTHERS, SPECIFY :	_____	_____

MONTHLY FAMILY EXPENSES:

- FOOD : ₨ \_\_\_\_\_
- CLOTHING : ₨ \_\_\_\_\_
- TRANSPORTATION : ₨ \_\_\_\_\_
- UTILITIES : ₨ \_\_\_\_\_
- ENTERTAINMENT : ₨ \_\_\_\_\_
- OTHERS, SPECIFY : ₨ \_\_\_\_\_

6. HOW DO YOU FIND THE SERVICE GIVEN TO PASSENGERS?

FAIR \_\_\_\_\_

GOOD/SATISFACTORY \_\_\_\_\_

VERY GOOD \_\_\_\_\_

COMMENTS/OBSERVATIONS : \_\_\_\_\_

7. HOW DO YOU PERCEIVE THE FARE CHARGED. GIVE REASONS:  
LOW COMPARED TO SERVICE \_\_\_\_\_  
REASONABLE COMPARED TO SERVICE \_\_\_\_\_  
HIGH/UNREASONABLE COMPARED TO SERVICE \_\_\_\_\_

8. ARE YOU WILLING TO PAY FOR ADDITIONAL SERVICE OR  
UPGRADING OF PRESENT SERVICE ?

YES  
NO

IF NO, WHY: \_\_\_\_\_

IF YES, HOW MUCH ?

CLEANER/BETTER AMENITIES: P \_\_\_\_\_  
BETTER FOOD/SNACKS : P \_\_\_\_\_  
NEWER FACILITIES : P \_\_\_\_\_  
SUGGESTIONS/OTHER IMPROVEMENTS : \_\_\_\_\_

9. WHAT FACILITIES/AMENITIES WOULD YOU PREFER TO  
HAVE ON BOARD?  
CITE REASONS.

ADDITIONAL CANTEEN \_\_\_\_\_  
ADDITIONAL TOILET/COMFORT ROOMS \_\_\_\_\_  
TELEVISION SETS /RADIO \_\_\_\_\_  
ADDITIONAL LOCKERS \_\_\_\_\_  
BEDDINGS/BLANKETS \_\_\_\_\_  
ELECTRIC FANS/AIRCONDITIONERS \_\_\_\_\_  
OTHERS \_\_\_\_\_

10. WOULD YOU BE WILLING TO PAY FOR THE USE OF THE  
ABOVE AMENITIES IN NO. 9 ?

YES  
NO

IF YES, HOW MUCH ?

P 5 - 10.00

P 11 - 20.00

OTHERS, SPECIFY \_\_\_\_\_

11. WHAT ARE YOUR OBSERVATIONS/COMMENTS WITH RESPECT  
TO SERVICE, CREW'S ASSISTANCE, AND OTHERS (PLS.  
SPECIFY. \_\_\_\_\_

12. DOES THE VESSEL DEPART ON TIME/ AS PER SCHEDULE ?

YES  
NO

13. HAVE YOU TRIED THE SERVICE OF ANOTHER COMPANY FOR  
THE SAME ROUTE?

YES  
NO

14. GIVE OBSERVATIONS/COMMENTS ON SERVICE OF (13)

15. AFTER DISEMBARKATION, DO YOU HAVE TO TRANSFER TO  
ANOTHER VESSEL TO REACH YOU FINAL DESTINATION?  
EXPLAIN. \_\_\_\_\_

YES  
NO

**Attachment B-2**

**GUIDELINES FOR INTERVIEWERS**

## INTRODUCTION

Each interviewer will be provided with a survey schedule on which vessels and days they will be working. The work on board the vessel will be:

- Interviewing a sample of passengers
- Filling in the information needed (coding, etc.) on the survey form
- Observing the facilities on board, etc.

This procedure should be performed on every vessel covered.

The interviewers will be guided by a Team Leader on what passenger class accomodation cabins they will be assigned. He/she will instruct them from time to time on how to approach certain types of passengers and completing the blank spaces in the survey form during the interview.

The Team Leader should be aware of the facilities/amenities on board the vessel. He/she must interview the captain/master with respect to problems encountered with passengers, their complaints, and certain company policies on services offered.

## GENERAL INFORMATION

The following general information should be filled in on every sheet of the survey form:

- Date and Time of Interview
- Name of Vessel and Shipping Company
- Port of Origin
- Port of Destination
- Hometown where the passenger resides

## INTERVIEWS

The use of Tagalog, othr dialects and/or English is at the discretion of the interviewer. Responses should be recorded in ballpoint pen or pencil in English.

Prior to the interview, it should be made clear whether the passenger has already been interviewed or not. A passenger should not be interviewed more than once.

The interviewer should also find out whether the interviewee/passenger arrived to the port area from his trip origin by a vessel (boat, ship, ferry, etc.) before transferring to and embarking on the vessel of relevance; and whether the passenger will leave the port area of disembarkation by another vessel for his final destination.

The interviewer should make as many interviews as possible, a maximum of 100 depending on the availability and duration of survey for one vessel.

Finally, the Team Leader should make sure that every sheet of the survey form containing interview records are filled properly and completely.

#### CODING

The codes of the answers are:

Yes	1
No	0

**Attachment B-3**

**PASSENGERS SURVEYED, BY ACCOMMODATION CLASS**

VESSEL	FIRST	SECOND	THIRD	NOT IDENTIFIED	TOTAL
ANDY	14	30	7	1	52
ASIA JAPAN	0	0	58	0	58
ASIA KOREA	4	8	18	3	33
ASIA TAIWAN	0	2	45	0	47
BACOLOD EXPRESS	12	0	0	1	13
CARMEL	8	0	28	0	36
CEBU PRINCESS	7	13	60	0	80
CHARING	0	1	30	0	31
CHARISSE	9	48	12	0	69
COTABATO PRINCESS	27	8	75	0	110
CRISTINA	11	18	27	1	57
DAVAO PRINCESS	6	26	16	0	48
DON CLAUDIO	50	0	28	1	79
DON MARTIN	0	0	9	0	9
FILIPINA PRINCESS	49	45	151	0	245
GUADA CRISTY	0	0	4	0	4
HONEY	0	1	31	0	32
ILIGAN CITY	0	0	11	0	11
KATRINA	0	12	11	0	23
LEYTE QUEEN	7	24	28	0	59
LUZELLE	5	15	10	0	30
M.V. GUIAN	7	9	7	0	23
M.V. SUGBU	19	49	117	1	186
MANILA CITY	2	0	3	0	5
MILAGROSA	0	0	11	2	13
NASIPIT PRINCESS	0	17	13	0	30
OUR LADY OF FATIMA	12	17	32	0	61
OUR LADY OF LOURDES	4	11	34	1	50
PRINCESS JUAN	1	3	4	0	8
STA. ANA	7	3	82	13	105
STA. FLORENTINA	30	9	125	0	164
STA. MARIA	0	5	9	0	14
SUPER FERRY	14	26	58	1	99
SWEET GLORY	3	27	23	0	53
SWEET HEART	13	27	9	0	49
SWEET PEARL	8	13	20	1	42
TACLOBAN PRINCESS	0	51	9	0	60
TALIBON CRUIZER	0	2	10	0	12
TANDAG	0	0	19	4	23
	329	520	1244	30	2123



**Attachment B-4**

**THIRD CLASS PASSAGE RATES FOR JUNE 1991 (P)**

Port of Origin

Port of Destination	Port of Origin									
	Bacolod	Cagayan de Oro	Cebu	Davao	General Santos	Iloilo	Manila	Surigao	Tagbilaran	Zamboanga
Bacolod	-	257.80	175.85	N.S.	N.S.	28.20	330.50	N.S.	N.S.	N.S.
Butuan	N.S.	196.60	150.75	N.S.	N.S.	N.S.	545.90	N.S.	117.40	N.S.
Cagayan de Oro	257.80	-	145.60	412.15	N.S.	248.10	495.75	N.S.	117.40	265.35
Calbayog	N.S.	N.S.	129.45	N.S.	N.S.	N.S.	323.60	208.20	184.45	N.S.
Cebu	175.85	145.60	-	421.00	465.25	188.80	305.55	121.90	50.50	146.70
Cotabato	N.S.	N.S.	381.65	293.40	173.65	272.80	637.35	N.S.	N.S.	146.70
Davao	N.S.	412.15	421.00	-	154.25	552.80	815.40	323.60	527.20	323.60
Dibolog	N.S.	110.35	119.75	N.S.	N.S.	N.S.	426.90	N.S.	84.55	162.20
Ducaguete	N.S.	115.05	82.20	491.80	387.55	N.S.	425.90	N.S.	N.S.	N.S.
Dumaguít	N.S.	315.00	178.00	N.S.	N.S.	444.60	266.45	N.S.	N.S.	N.S.
General Santos	N.S.	N.S.	465.25	154.25	-	N.S.	711.15	N.S.	N.S.	N.S.
Iligan	N.S.	59.90	145.60	532.15	427.85	-	481.95	N.S.	427.85	243.80
Iloilo	28.20	248.10	188.80	552.80	444.60	N.S.	334.40	N.S.	444.60	262.10
Isabel, Leyte	N.S.	N.S.	51.65	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
Jagna	N.S.	84.55	108.00	N.S.	N.S.	N.S.	N.S.	N.S.	37.55	N.S.
Jolo	N.S.	N.S.	323.60	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
Larena	N.S.	N.S.	77.50	N.S.	N.S.	N.S.	N.S.	N.S.	38.75	N.S.
Maasin	N.S.	N.S.	82.20	354.10	N.S.	N.S.	407.20	56.35	N.S.	N.S.
Manila	330.50	495.75	385.55	815.40	711.15	334.40	-	451.45	427.05	502.60
Masbate	N.S.	284.80	159.65	N.S.	N.S.	N.S.	280.45	N.S.	N.S.	N.S.
Maui	N.S.	N.S.	338.35	N.S.	N.S.	N.S.	N.S.	252.40	N.S.	N.S.
Masipit	N.S.	N.S.	151.00	N.S.	N.S.	N.S.	545.90	N.S.	N.S.	N.S.
Ozamis	N.S.	77.50	245.95	N.S.	N.S.	N.S.	480.00	N.S.	N.S.	N.S.
Pagadian	N.S.	N.S.	367.85	N.S.	N.S.	N.S.	622.60	N.S.	N.S.	N.S.
Puerto Princesa	N.S.	N.S.	N.S.	N.S.	N.S.	261.05	257.05	N.S.	N.S.	N.S.
Pulupandan	N.S.	N.S.	188.75	N.S.	N.S.	29.35	347.20	N.S.	N.S.	N.S.
Romblon	N.S.	N.S.	N.S.	N.S.	N.S.	180.15	198.50	N.S.	N.S.	N.S.
San Jose, Antique	N.S.	N.S.	261.05	N.S.	N.S.	N.S.	298.80	N.S.	N.S.	N.S.
Surigao	N.S.	N.S.	121.90	323.60	N.S.	N.S.	451.45	-	N.S.	N.S.
Tacloban	N.S.	196.30	202.35	N.S.	N.S.	N.S.	366.30	N.S.	N.S.	N.S.
Tagbilaran	N.S.	117.40	50.50	527.20	N.S.	202.80	427.05	N.S.	-	N.S.
Zamboanga	N.S.	265.35	271.85	323.60	227.60	262.10	503.60	N.S.	235.15	-

N.S = No service at present. Even some of the port pairs with rates indicated have no services in June 1991, e.g., the case of Iloilo and Tagbilaran is discussed in Chapter 6 of this volume.

Source: Marina Interisland Shipping Rates Schedule (1991)

## **Attachment B-5**

### **MEASURES FOR IMPROVING INTERISLAND SHIPPING PASSENGER SERVICE STANDARDS**

A list of measures for improving service standards follows.

#### **Interisland Ships**

- All interisland ships must place the following visual aids at strategic places aboard ship.
  - Pictorial chart of crew officials and their positions;
  - Floor plan of the vessel indicating the passageways and location of passenger accommodation and facilities;
  - Instructional chart for emergencies—location of life jackets, lifeboats, and specific instructions; and
  - Other information about shipping schedules, route map, and the like.
- The speaker system must be adequate for important announcements to passengers.
- The ship's crew must teach the actual procedures for using life-saving devices.
- There should be systematic procedures during meal time. The passengers must be instructed by class/deck/batch of the time that they are to go to the dining room. Meal tickets, which are attached to passenger tickets, must indicate "dining table setting sequence." The "first come, first served" method must be discouraged especially in economy (tourist) class accommodation.
- Cleanliness of dining and kitchen areas, utensils, and work areas must be maintained at all times.

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- The crew members must wear complete uniforms with nameplates while on duty.
- The crew members should ensure that passageways and sleeping areas are cleared of any of the passengers' excess baggage and personal effects.
- The system outlined below must be followed upon the vessel's arrival at the port:
  1. Passengers disembark first. Those passengers who have only two pieces of baggages are allowed to disembark before passengers who have several pieces of baggage.
  2. A certain period is set for cleaning the vessel.
  3. New passengers embark 5 hours before departure. Crew members are assigned to control and supervise the embarkation and disembarkation.
  4. The practice of space and cot reservations by some crew members must be discouraged and the crew must provide the required bedding to ticketed passengers. Substandard or dilapidated cots must be replaced.

## **Passengers**

### **Passenger Tickets and Allocations**

- Only passengers with tickets should be allowed to board the vessel.
- The total number of tickets to be sold should not exceed the authorized passenger capacity of the vessel.
- Tickets should be sold until 2 hours before scheduled departure time.
- A passenger manifest indicating the number of passengers disembarking at each intermediate port is to serve as basis for determining the number of passengers to be allowed to board at each intermediate port.
- The suboffices and branches of the shipping company should be given allocations, provided that the allocations and the number of passengers already on board do not exceed the allowable passenger capacity.

- Ticket sales aboard the vessel must not be tolerated.

### **Passenger Visitors and Welcomers**

- Passenger visitors and welcomers should not be allowed to board ship for security reasons. A "control point" must be installed at the apron fronting the gangways to control embarkation and disembarkation.

If a situation arises that requires a visitor to board the ship, such as assisting an invalid, the visitor may board the ship but must disembark immediately after assisting the passenger.

- Passengers should be allowed a maximum of 25 kg of luggage. Beyond this weight limit, a fee will be charged for each kilo.

### **Passenger Manifest**

Passenger manifests at concerned government agencies need to be updated because they serve as an invaluable source of passenger statistics and basis for planning.

- Passenger manifest forms must be standardized, and easy-to-follow instructions must be provided to ensure effectiveness.
- A summary of the number of ticketed passengers boarding the ship must be indicated in the manifest and should include information on the breakdown of the total number of passengers according to their destinations, in case there are several intermediate ports on the vessel's route.
- The passenger manifest furnished to the Philippine Ports Authority must be legible.
- For intermediate ports, the original manifest must be supplemented with additional passenger manifest from the said port. This is the responsibility of the ship's purser.

### **Ports and Terminals**

#### **Passenger Terminal**

- A passenger terminal is proposed in every port of origin and destination, including the following:
  - Area for visitors and welcomers

- Separate embarkation and disembarkation areas, if necessary
  - Lavatories, canteen, drinking fountains, and toilet facilities
  - Adequate communication systems and facilities
  - Facilities for loading and unloading luggage such as checking counters
  - Necessary visual aids.
- The passenger terminal must be accessible to passengers and must consider the traffic inside the port, layout of port facilities and parking spaces.
  - The number of porters who board the vessel should be limited, the other porters should wait on the apron. They should be required to wear proper uniforms for easy recognition. When the vessel arrives, no one should be allowed to board until the gangplanks have been laid out properly.

Payment to porters must be centralized at the main terminal.
  - There should be periodic inspection and repairs undertaken with respect to port facilities.
  - The use of the apron for storing unloaded cargoes and containers should be prohibited.
  - For security reasons, newspaper vendors, manicurists, and the like should not be permitted inside terminal areas or on board the vessel.
  - Passenger ships must have priority over cargo ships and the port should ensure availability of docking space. There must be a systematic scheduling of ships' arrivals and departures.
  - Security procedures must be instituted by the shipping lines at the main terminal entrances.