3.3 First Seminar on the Development Roadmap Towards Competitive Indonesian Maritime Transport

3.3.1. ASEAN Cooperation in Transport (Bernard Tai – ASEAN Secretariat)

ASEAN Cooperation in Transport

STRAMINDO Seminar
Jakarta
15 July 2003

by Bernard KM Tai
ASEAN Secretariat

ASEAN Member Countries

- Brunei Darussalam
- Cambodia
- Indonesia
- Lao PDR
- Malaysia
- Myanmar
- Philippines
- Singapore
- Thailand
- Viet Nam

ASEAN vs Other Groupings, ‘98
(source: 2001 ASEAN-Japan Statistical Pocketbook)

<table>
<thead>
<tr>
<th>Member Countries</th>
<th>Population (mil)</th>
<th>GNP (US$ bil)</th>
<th>GNP per capita (US$)</th>
<th>Trade value (US$ bil.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN</td>
<td>503</td>
<td>554</td>
<td>1,100</td>
<td>604</td>
</tr>
<tr>
<td>EU</td>
<td>385</td>
<td>8332</td>
<td>21,600</td>
<td>4248</td>
</tr>
<tr>
<td>NAFTA</td>
<td>396</td>
<td>8852</td>
<td>22,300</td>
<td>2305</td>
</tr>
<tr>
<td>MERCOSUR</td>
<td>210</td>
<td>1087</td>
<td>5,200</td>
<td>185</td>
</tr>
</tbody>
</table>

Basic Facts on ASEAN (2000)

<table>
<thead>
<tr>
<th>Member Countries</th>
<th>Population (thousand)</th>
<th>GDP (US$ billion)</th>
<th>Per Capita GDP (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei Darussalam</td>
<td>335</td>
<td>4.823</td>
<td>14,094</td>
</tr>
<tr>
<td>Cambodia</td>
<td>12,200</td>
<td>3.230</td>
<td>289</td>
</tr>
<tr>
<td>Indonesia</td>
<td>204,700</td>
<td>153.252</td>
<td>723</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>5,218</td>
<td>1.712</td>
<td>336</td>
</tr>
<tr>
<td>Malaysia</td>
<td>23,286</td>
<td>39.321</td>
<td>4,076</td>
</tr>
<tr>
<td>Myanmar</td>
<td>49,008</td>
<td>7.083</td>
<td>155</td>
</tr>
<tr>
<td>Philippines</td>
<td>76,320</td>
<td>75.189</td>
<td>990</td>
</tr>
<tr>
<td>Singapore</td>
<td>4,010</td>
<td>40.297</td>
<td>25,965</td>
</tr>
<tr>
<td>Thailand</td>
<td>62,405</td>
<td>121.903</td>
<td>1,986</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>77,086</td>
<td>31.811</td>
<td>397</td>
</tr>
</tbody>
</table>

ASEAN

- ASEAN: a market of more than 520 million people, half of China’s population
- ASEAN’s GDP of US$556 billion, about the same as China’s.

Benefits from ASEAN economic integration

- Export and FDI competitiveness
- Improved welfare
- Strengthen role in international arena
- Political stability

8th ASEAN Summit, Nov 02

- The idea of striving for an ASEAN Economic Community (AEC) by 2020 was proposed for the first time.
- AEC: “A logical extension of ASEAN’s goal towards integration”.
- Agreed to explore the possibility of transforming ASEAN into AEC by 2020 with ASEAN’s integration being deepened and accelerated through the AEC.

Rooms for further regional integration?

- Intra-ASEAN trade accounts for nearly 25% of ASEAN’s total trade, up slightly from 21.4% in 1993

- (vis-à-vis the Intra-EC trade was at 35.3% in 1958 and 50.3% in 1970)
Export-oriented economic models

In these times of depressed global demand, ASEAN may need to find new strategy for growth

Growth to come from within may be needed.

New wave of globalization
- Global trade & investment liberalization
- Intertwined regional production and trading networks
- Rule-based economic system (WTO, IMO, etc)
- IT revolution
- Global safety, security and environment concerns

Rising trend towards integrated production network in ASEAN: Regional solution is necessary

Challenges
- To stay competitive, ASEAN’s transport sector need to be a lead factor in economic growth

IMPLICATIONS FOR ASEAN’s TRANSPORT SYSTEMS
- Demand for time reliability
- Demand for certainty
- Demand for safety
- Demand for security
- Demand for clean technologies

ASEAN’s response
- ASEAN Vision 2020
  Kuala Lumpur, 15 December 1997
ASEAN Vision 2020
Kuala Lumpur, 15 Dec 1997

• “ASEAN as a concert of SEA
 Nations, outward looking, living
 in peace, stability and
 prosperity, bonded together in
 partnership in dynamic
development and in a
community of caring societies”

ASEAN Vision 2020

• Meet the ever increasing demand
for improved infrastructure and
communications by:
• Developing an integrated and
harmonized trans-ASEAN
transportation network

ASEAN Vision 2020

• Promoting open-sky policy
• Developing multi-modal transport
• Facilitating goods in transit.

Hanoi Plan of Action
(16 Dec ‘98)

• A middle term plan
• It specifies an array of
activities designed to achieve
ASEAN’s Vision 2020

Hanoi Plan of Action: Main Thrusts

• Infrastructure Development
• Competitive Transport Services
• Capacity Building
• Transport Safety and Environment
• Private Sector Participation

ASEAN Transport Cooperation - Scope

• Air Transport
• Land Transport
• Maritime Transport
• Transport Facilitation

Hanoi Plan of Action: Transport Agenda

• Trans-ASEAN Transport Network Development
• Facilitation of Goods in Transit and Inter-State Transport
• Multimodal Transport Operations
• Competitive Air Services Policy Development
• Maritime / Shipping Policy Development

• Harmonization of Road Vehicle Standards and Regulations
• ASEAN Highway Network Project
• Singapore-Kunming Rail Link Project
• Sectoral Negotiations in the Air and Maritime Transport under the 1995
ASEAN Framework Agreement on Services (AFAS)

Transport Infrastructure 1999

<table>
<thead>
<tr>
<th>Country</th>
<th>Area (1000 km²)</th>
<th>Length of Road (km)</th>
<th>Length of Railway (km)</th>
<th>No. of Int. Port</th>
<th>No. of Int. Airport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei</td>
<td>5,778</td>
<td>5,758</td>
<td>not available</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Cambodia</td>
<td>147,857</td>
<td>24,000</td>
<td>0.32</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1,919,800</td>
<td>266,020</td>
<td>4.91</td>
<td>101</td>
<td>18</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>237,000</td>
<td>3,018</td>
<td>not applicable</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>332,000</td>
<td>44,000</td>
<td>1,344</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Myanmar</td>
<td>677,000</td>
<td>27,966</td>
<td>4.76</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Philippines</td>
<td>295,000</td>
<td>29,924</td>
<td>474</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Singapore</td>
<td>634</td>
<td>3,068</td>
<td>15,44</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Thailand</td>
<td>514,000</td>
<td>51,330</td>
<td>3,979</td>
<td>16</td>
<td>29</td>
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<tr>
<td>Viet Nam</td>
<td>331,000</td>
<td>210,000</td>
<td>3,143</td>
<td>not available</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: ASEAN Transport Statistics 1999
Maritime Transport

- Maritime transport plays a critical role in moving intra- and extra-ASEAN trade.
- Improvement of ASEAN’s shipping and port facilities and operating environment is of paramount importance.

Present status of maritime transport in ASEAN

- Varying in logistics infrastructure and services development
- Lack of integration (between different modes of transportation and between member countries)
- Fragmented industries
- Uncoordinated approach to regional and national maritime transport development
- Lack of modern distribution channels: low intra-ASEAN containerization rate
- Lack of quality/skilled labour
- Varying sophistication of consumers, customers and vendors
- High degree of government involvement in CLMV

Top 20 container terminals, 2001

<table>
<thead>
<tr>
<th>Top 20 container terminals, 2001</th>
<th>World ranking</th>
<th>TEUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>2</td>
<td>15.5 mil</td>
</tr>
<tr>
<td>Port Klang</td>
<td>12</td>
<td>3.8 mil</td>
</tr>
<tr>
<td>Manila</td>
<td>17</td>
<td>2.8 mil</td>
</tr>
<tr>
<td>Source: UNCTAD, Review of Maritime Transport, 2002</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is ASEAN doing in port and shipping co-operation?

- Hanoi Plan of Action:
  - to develop a Maritime/Shipping Policy for ASEAN
  - enhancing the competitiveness of ASEAN ports
  - further liberalization of maritime transport services; and
  - integration of maritime transport in the intermodal and logistics chain.
### Formulation of a regional maritime transport policy:

- The ASEAN Maritime Transport Sector Development Study.
- To formulate a medium-term policy and development framework for the ASEAN maritime transport sector covering ports and shipping, which will serve as the guiding document for ASEAN cooperation for the period 2003-2008.
- The Study puts forward two broad policy and development goals in ASEAN maritime transport: (a) enhancing competitiveness of the regional maritime transport system, and (b) building capacity and narrowing gaps among member countries.

### Achieving international standard in maritime safety and legislations/standardization of maritime standards and legislations:

- IMO-ASEAN project on the Drafting and Updating of Maritime Legislation to support Adoption and Accession by ASEAN Member Countries to IMO Conventions.

### Creating a more liberal and competitive regional maritime transport sector

- Common ASEAN Near Coastal Voyages to allow seafarers manning vessels less than 3,000 GT to operate within the said defined limits for the ASEAN region and at the same time seafarers of such vessels in ASEAN countries to also operate within the near coastal voyage limits as prescribed in their respective maritime legislation.

### Cooperation in maritime human resource development/capacity building to narrow the development gap

- Bilateral MOU for the mutual recognition of certificates of competency in line with the requirements of the 1995 amendments to the International Convention on the Standards for Training, Certification and Watchkeeping (STCW 95);
- The ASEAN-China Training Project for Vessel Masters, Chief Engineers and Safety Administrative Personnel on the Lancang-Mekong River (Phase 1) in Jinghong China from 9-16 May 2002;

### Protecting the marine environment

- The draft TOR for the establishment of a sub-group on MARPOL/Port Waste Management (PWM) for deliberation at the next Working Group Meeting and for subsequent consideration/adoption in STOM.

### Cooperation in maritime human resource development/capacity building to narrow the development gap (cont.)

- Completion of the four (4) pilot courses at the ASEAN Inland Waterways and Ferries Training Center in Palembang (Indonesia). These courses were on Port Management, Traffic Engineering, Infrastructure Management and Plan Evaluation.

### Inclusion of NGOs and private sector in public policy formulation

- Engaging effective cooperation, dialogue and partnership between and amongst ASEAN port authorities, shipowners, freight forwarders and shippers’ councils in mutually beneficial areas to develop and expand ASEAN shipping and trade.

### Sharing and dissemination of maritime information

- Uploading in the ASEANWEB [www.aseansec.org](http://www.aseansec.org) of the Directory of ASEAN Maritime Training Centers and Educational Institutions and the ASEAN Search and Rescue (SAR) Cooperation Contact Points;
ASEAN Framework Agreements in Transport Cooperation

- The ASEAN Goods in Transit Agreement
- The ASEAN Multimodal Transport (MT) Agreement
- The ASEAN Inter-State Transport Agreement

The ASEAN Goods in Transit Agreement essentially provides:

- Right of transit transport across the territory of one or more Member Countries from point of origin to final destination, including the right to load and discharge goods;
- Road transit transport vehicles registered in one Member Country will be allowed to provide transit transport services in the territory of other Member Countries.

The ASEAN Goods in Transit Agreement essentially provides:

- Transit transport shall not be subject to unnecessary delays or restrictions and shall be exempt from Customs duties and other charges; and
- Goods carried in sealed road vehicles, combination of vehicles or containers shall not be subject to Customs examination.

The ASEAN Multimodal Transport (MT) Agreement will:

- Provide the minimum requirements for registration of ASEAN multimodal transport operators (MTOs);
- Define the liability and limit of liability of multimodal transport operators and consignors.
- Unify and set out the legal principles for multimodal transport operations in ASEAN.

The ASEAN Inter-State Transport Agreement has the following essential elements:

- Allow road transport operators duly established in one Member Country to undertake goods transportation into or from the territories of other Member Countries;
- Grant the right to load and discharge goods destined for or coming from Member Countries;
- Permit Cabotage only on the basis of a special authorization from the host Member Country.

Air Transport

- Under the 1995 ASEAN Framework Agreement on Services (AFAS), the third package of commitments for the air transport sector has been concluded.
- All 10 member countries have commitments in Selling and Marketing of Air Transport Services, with eight making commitments in both Computer Reservation System Services and Aircraft Repair and Maintenance Services.

Singapore – Kunming Rail Link Route
Air Transport

• ASEAN MoU on Air Freight Services is expected to be signed in the second half of 2002.

• This MoU is the first step towards the full liberalization of air freight services in the ASEAN region. It will allow the designated airlines of each member country to operate all-cargo services up to 100 tons weekly in 20 designated ASEAN airports.

ASEAN Major Rivers

• Mekong River: 4,880 km passing through China, Myanmar, Thailand, Lao PDR, Cambodia and Viet Nam

• Red River and its tributaries: 1,700 km in Viet Nam

• Chao Phraya River and its tributaries: 1,750 km in Thailand

• Ayeyarwady River and its tributaries: 3,130 km in Myanmar and serves as a natural transport artery

• Many rivers in South Sumatera, Kalimantan, Maluku, North Sulawesi and Irian Jaya in Indonesia

ASEAN – China Cooperation

• Land Transport Infrastructure and Facilitation

• Facilitation of Maritime and River Transport

• Expansion of Air Transport Services

ASEAN – India Cooperation

• Land Transport Integration, Interconnection and Technical Inter – Operability

• Facilitation of Maritime Transport Services

• Networking for Transport Education, Research and Development

ASEAN Inland Waterways Profile 1999

<table>
<thead>
<tr>
<th>Country</th>
<th>Navigable Length (km)</th>
<th>No. of Vessels</th>
<th>Carrying Capacity (DWT)</th>
<th>Freight Transport (Million Ton)</th>
<th>Passenger Transport (Million Pax)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>1,750</td>
<td>n.a.</td>
<td>8.10</td>
<td>n.a.</td>
<td>0.10</td>
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<tr>
<td>Indonesia</td>
<td>20,456</td>
<td>85,719</td>
<td>1,019,688</td>
<td>6.28</td>
<td>0.73</td>
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<tr>
<td>Lao PDR</td>
<td>4,600</td>
<td>793</td>
<td>8,500</td>
<td>1.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3,300</td>
<td>1,384</td>
<td>1,42,500</td>
<td>1.20</td>
<td>1.90</td>
</tr>
<tr>
<td>Myanmar</td>
<td>8,626</td>
<td>2,400</td>
<td>240,000</td>
<td>4.98</td>
<td>45.83</td>
</tr>
<tr>
<td>Philippines</td>
<td>1,033</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Thailand</td>
<td>1,750</td>
<td>43,711</td>
<td>1,465,105</td>
<td>15.36</td>
<td>129.89</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>114,000</td>
<td>752</td>
<td>239,502</td>
<td>22.70</td>
<td>145.00</td>
</tr>
<tr>
<td>Total</td>
<td>52,915</td>
<td>134,759</td>
<td>3,115,296</td>
<td>51.72</td>
<td>339.01</td>
</tr>
</tbody>
</table>

Source: ASEAN Transport Cooperation Framework Plan, 1999

Emerging Dialogue Relations

CHINA, INDIA and JAPAN

in the areas of:

• POLICY CONSULTATION

• PROJECT COOPERATION

ASEAN – Japan Partnership

• Facilitating Cargo Distribution and Logistics

• Promotion of Safer and Sustainable Shipping

• Enhancing Air Transport Safety and Efficiency

ASEAN – India Cooperation

• Land Transport Integration, Interconnection and Technical Inter – Operability

• Facilitation of Maritime Transport Services

• Networking for Transport Education, Research and Development

Institutional Structure
3.3.2. Japan’s Experiences in Domestic Fleet Development (Kimura Nobutaka – Member of JICA Advisory Committee)

Structure of The Corporation for Advanced Transport & Technology

15 July 2003
KIMURA Nobutaka
JICA ADVISORY COMMITTEE

Corporation for Advanced Transport & Technology

- Establishment: June 1957
- Capital: 18 billion Japanese Yen
- Staff: 75 employees

Organization

President

Executive Director

Engineering & Technology Department
Administration Department
Cargo Ship Department
Passenger Ship Department

Activity of Technical Department

Engineering & Technology Department

Passenger Ship Division
Cargo Ship Division

Activity of Cargo Ship Dept.

Cargo Ship Department

Contract Division
Repayment Management Division
Business Evaluation
Legal Division
Loan Monitoring
Risk Management

Money Flow

Procurement for low-interest Funds from MOF
Construction & Lease out to shipping company
Pay back to MOF
Get repayments as a leasing fees

Interest trend for the long-term prime rate and the interest of the treasury bonds

Activity of Passenger Ship Dept.

Passenger Ship Department

Contract Division
Repayment Management Division
Business Evaluation
Contract of Joint-Owtenship
Loan Monitoring

Activity of Business Department

1. To make standard requirements for modern equipment, living environment of the crew.
2. Supervise ship building processes.
3. To solves mechanical trouble.
Flow of Treasury Funds

Public Corporation → High way
MOF → Housing
Bridge

Sharing of Ownership

CATT's Ownership 70% – 90%
Shipping Company's Ownership 30% – 10%

Fundamentals of Passenger Ship Business in Japan
1. To start passenger ship business and to set fares are permitted by Government.
2. Governmental subsidies are provided to unprofitable shipping lines connecting remote islands. (4 billion Yen/year)

Policy Fundamentals in Domestic Shipping
1. Government to adhere to cabotage policy for the domestic transportation of cargo.
2. Government should adjust the total volume of domestic shipping fleet through the scrap & build policy.

Evaluation of Cargo Shipping Business
1. Almost all the domestic ships in Japan are industrial products carrier
2. Shipping companies make long-term charter contracts with big industrial companies.

Technical Services
1. Shipping companies are responsible for ship maintenance and management.
2. They do not have enough technology.
3. We provide technical support in building planning, supervision of building processes, and to solve any problem after launching.
4. Corporation’s ships are better than ships which build on the funds from other financial institutions.

Trend of Joint-ownership Volume

<table>
<thead>
<tr>
<th>Corporation’s Fleets in Y2001</th>
<th>Number of ships</th>
<th>Total Gross Tonnage</th>
<th>Corporation’s Share Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Ship</td>
<td>196</td>
<td>492,000 GT</td>
<td>145 bill. yen</td>
</tr>
<tr>
<td>Merchant Ship</td>
<td>824</td>
<td>1,000,000 GT</td>
<td>300 bill. yen</td>
</tr>
</tbody>
</table>

Attachment-34
General management costs of CATT

- Passenger Ship Share: 145 billion YPY
- Cargo Ship Share: 300 billion YPY
- Differential between the Long-term prime rate and interest of the treasury loans: 0.2%
- CATT's operation cost & personal cost, etc.: 1 billion YPY

Balance Sheet for FY2000

<table>
<thead>
<tr>
<th>Incomes</th>
<th>Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leasing Fee</td>
<td>Ship building cost</td>
</tr>
<tr>
<td>82 billion YPY</td>
<td>43 billion YPY</td>
</tr>
<tr>
<td>Treasury loans</td>
<td>Payment of debts &amp; interests</td>
</tr>
<tr>
<td>34 billion YPY</td>
<td>72 billion YPY</td>
</tr>
<tr>
<td>---</td>
<td>General management costs</td>
</tr>
<tr>
<td>---</td>
<td>1 billion YPY</td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>116 billion YPY</td>
<td>116 billion YPY</td>
</tr>
</tbody>
</table>

Assumption for calculation 1
1. Type of Ship: 1600DW cargo ship
2. Building Cost: 430 million Yen
3. Joint-Ownership period: 10 years
4. Loan Interest: 2.5% per year
5. Revolving funds: All fund is loan
6. Corporations & Banks have the same interest rate.

Cash flow for typical cargo ship

<table>
<thead>
<tr>
<th></th>
<th>First Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charter Money</td>
<td>132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>Crew Expenses</td>
<td>55.86</td>
<td>56.42</td>
<td>56.98</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>14.03</td>
<td>15.31</td>
<td>20.6</td>
</tr>
<tr>
<td>Debt Capital</td>
<td>42.57</td>
<td>42.57</td>
<td>42.57</td>
</tr>
<tr>
<td>Debt Interest</td>
<td>10.75</td>
<td>9.68</td>
<td>8.62</td>
</tr>
<tr>
<td>Balance</td>
<td>8.79</td>
<td>8.1</td>
<td>3.23</td>
</tr>
</tbody>
</table>

Denomination: Million Yen

Assumption for Calculation 2
1. Crew Expenses: 776,000 Yen × 6 persons × 12 months
2. Crew Expenses include meal expenses, crew insurance fee, etc.
3. Fuel oil is supplied by operator.
4. Other expenses include ship equipment, repairing costs, lubricating oil, insurance fees, real estate tax, general management costs, etc.
5. Charter money: 11 million Yen × 12 months

One Proposal in JICA M/P
1. To establish Maritime Credit Corporation in Indonesia

Maritime Credit Corporation & Risk Guarantee System

- Government of Indonesia
- JIBC
- Private Bank
- MCC
- Maritime Credit Corporation
- Ship Management Companies
- Shipping Companies

Function of MCC
1. Own ships and lease out to shipping companies
2. Financing facilitation to shipping companies for building new ships
3. Guarantee to long term Private Loan

Remark: Risk Guarantee
3.3.3. Indonesia’s Experiences in Domestic Fleet Development – Shipping Line’s Perspective (Oentoro Surya – President Director of PT. Arpeni Pratama Ocean Line/INSA)

Background

Indonesia is often called ‘Benua Maritim (Maritime Continent)’ as being the largest archipelagic country in the world. It requires a large number of various vessels for domestic and ocean-going transportation. Special-purpose vessels like dredging, offshore drilling, building construction, rigs, and pilot boats should support them.

The Indonesian fleet of vessels could be developed on the following conditions:
1. The Government willingness to develop the Indonesian fleets.
2. The use of Indonesian vessels by the domestic shippers/cargo owners.
3. Long term agreements between cargo owners and shipping companies.
4. The availability of cargoes on continual basis.
5. The setting up of regular liner.
6. Joint operations between domestic ship-owners and foreign ship-owners for ocean-going transportation.
7. Non-bank financial institutions specifically set up for new building and purchasing of vessels with low interest rates.
8. Special incentives in the form of tax reduction, etc.

Brief History

1821-1945 Period: Under the Colonial Dutch rule, the Indonesian domestic cargoes were carried by the Dutch shipping company, KPM (Koninklijke Paketvaart Maatschappij), whereas exportation and importation by Royal Inter Ocean Line. The KPM had various types of small-size vessels for carrying passengers, cargoes, and animals.

1945-1957 Period: In the beginning of independence, Indonesia still utilized KPM and Royal
Ocean Line for domestic and international transportation respectively. In 1955, seaports, veems, expedition and stevedoring were nationalized, whereas sea transportation was still carried out by the KPM. Then in 1957, the KPM was nationalized. Some certain vessels were granted to the Indonesian Government. They were handled by the so-called PEPUSKA (Pemilikan Pusat Kapal-kapal), which then became PELNI (Pelayaran Nasional Indonesia). Some vessels were sold at lower price to local companies such as Sriwidjaya Raya Lines, PPSS (Perusahaan Pelayaran Sulawesi Selatan), PT Gapsu, PT Karimata, and MPS (Maskapai Pelayaran Sumatera).

1957-1969 Period: Some Dutch companies were allied to become Indonesian shipping companies, which among others are:

1. PT. Djakarta Lloyd
2. PT. Gesury Lloyd
3. PT. Trikora Lloyd
4. PT. Samudera Indonesia
5. PT. Bahtera Adhiguna (Ex Tunda Bara)

1969-1984 Period: The Indonesian Government introduced the so-called Peraturan Pemerintah (Government Regulation) No. 1/1969 on seaports and shipping regions and PP No. 2/1969 on sea transportation for the development of the Indonesian shipping business. A shipping company was required to own three units of vessels in minimum. In this period, there had been rapid development of the Indonesian shipping companies and fleets reaching 246 companies with 1,589 units/1,992,000 dwt.

They could be specified as follows

<table>
<thead>
<tr>
<th></th>
<th>Companies</th>
<th>Vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ocean going (Samudra)</td>
<td>6</td>
<td>64 units/955,000 dwt</td>
</tr>
<tr>
<td>Domestic (Nusantara)</td>
<td>46</td>
<td>361 units/418,000 dwt</td>
</tr>
<tr>
<td>Local</td>
<td>130</td>
<td>710 units/117,000 dwt</td>
</tr>
<tr>
<td>Special-purpose (Khusus)</td>
<td>64</td>
<td>454 units/619,000 grt</td>
</tr>
</tbody>
</table>

Shipping could be classified as follows:

1. The domestic shipping with the following routes: domestic route (route Nusantara), local route, Singapore route, pioneering route (route perintis), and tanker route.
2. The ocean going shipping with the following conference returned routes: Indonesia-Europe, Indonesia-Japan, Indonesia-Korea, Indonesia-Australia, and Indonesia-the United States.
3. The lumber agreement routes: Indonesia-Korea, Indonesia-Taiwan, and Indonesia-Japan vice versa.

In this period, the Indonesian shipping was supported by the so-called PT. PANN (Pengembangan
Armada Niaga Nasional) as a non-bank financial institution, which function was to finance the new building and purchasing of vessels at low interest rate.

Besides, stevedoring and general agency activities were bound to shipping business permit. And the Government introduced PP 18/1982 on the transportation of the Government-owned goods, which had to be carried by the Indonesian shipping companies’ vessels. In 1984, the number of Indonesian shipping companies was 264 with the following amount of vessels

<table>
<thead>
<tr>
<th></th>
<th>Companies</th>
<th>Vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ocean going</td>
<td>6</td>
<td>38 units/ 545,000 dwt</td>
</tr>
<tr>
<td>Domestic</td>
<td>49</td>
<td>343 units/ 479,000 dwt</td>
</tr>
<tr>
<td>Local</td>
<td>133</td>
<td>761 units/ 85,000 grt</td>
</tr>
<tr>
<td>Special-purpose</td>
<td>76</td>
<td>668 units/ 889,000 grt</td>
</tr>
</tbody>
</table>

1984-1992 Period: In this period, the Government issued the following regulations:

1. Surat Keputusan Menteri Perhubungan (Decree of Minister of Communication) No. 57/1984 to abandon the operation of vessels above the age of 25 years.
2. Instruksi Presiden (Presidential Decree) No. 4/1985
3. PP 17/1988 (Paknov 88)

Many old vessels were scrapped, so that the number of vessels and their capacity were drastically reduced, in spite of the dramatic increase of the number of shipping companies. One could easily set up a shipping company, though it just owned one unit of vessel of 175 grt in capacity. Then, stevedoring was separated from shipping and terminal operator was set up.

Yet, Indonesia was in the face of the containerization era. The Indonesian shipping companies were unable to compete against foreign shipping companies in container tracking.

Therefore, many shipping companies went bankrupt and many shifted to agency activities. PT PANN had also changed its basic function to multi finance activities. In this period, one may witness the strengthening of conference, the loosening grip of Government, and the slow growth of fleet development. Yet, some shipping companies existed with their own efforts without the support and assistance from the Government.

My company, PT. Arpeni Pratama Ocean Line, established in 1975 has grown as one of the prominent Indonesian shipping companies. We have diversified our shipping service from carrying log/timber product and general cargoes to carrying bulk cargoes, particularly coals, and liquid cargoes, as well as running and ship management. Presently we operate 18 own vessels and, by March 2003, 13 chartered vessels over half a million dwt in total capacity. We have consistently set up and maintained close relationship with our shippers, cargo owners, financial institutions, and other stakeholders, and enhance our service quality and human resource and management professionalism subject to the IMO conventions and company’s competitive strategies. In the
expansion of its fleets of vessels, the company has been making use of financial intermediaries in capital markets.

In this period, Indonesia had 278 shipping companies with the following fleets:

<table>
<thead>
<tr>
<th>Companies</th>
<th>Vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ocean going</td>
<td>6 32 units/397,000 dwt</td>
</tr>
<tr>
<td>Domestic</td>
<td>49 286 units/450,000 dwt</td>
</tr>
<tr>
<td>Local</td>
<td>140 619 units/94,000 grt</td>
</tr>
<tr>
<td>Special-purpose</td>
<td>83 761 units/842,000 grt (Bulk Carriers)</td>
</tr>
<tr>
<td></td>
<td>352 units/1,127,000 dwt (Tankers)</td>
</tr>
</tbody>
</table>

1992 till Present: the Government has been making a great effort to improve the Indonesian shipping industry by introducing Undang Undang Pelayaran (Shipping Laws) No. 21/1992 to develop the national fleet of vessels. It has tried to create incentives such as the abolishment of VAT on the purchase of vessels and spare parts. However, the economic and trade liberalization may have a great effect that has caused inconsistency on the implementation of the new regulation. There is also a movement to separate agency from shipping business (shipownership). Then, non-bank financial institution has been set up to finance the new building and purchasing of the second-hand vessels. Banking interest rate is still high. Therefore, the Government has not yet succeeded in raising the capacity of fleets of vessels.

The Indonesian national shipping companies are still lack of competitiveness. The foreign shipping tends to enhance its domination inside the Indonesian domestic transportation and the importation and exportation of goods from and to Indonesia. In 2002, the Indonesian vessels carried 89.9 million tons or 59.9% of 149.9 million tons of domestic trade, and only 22.5 million tons or 5.5% of 413 million tons of Indonesian foreign trade. The deficit of sea transportation services is reportedly US$11 billion per annum.

At present, the number of Indonesian vessels is:

<table>
<thead>
<tr>
<th>Companies</th>
<th>Vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ocean going</td>
<td>19 121 units/1,078,000 dwt</td>
</tr>
<tr>
<td>Domestic</td>
<td>820 2,361 units/1,548,000 dwt*</td>
</tr>
<tr>
<td>Special-purpose</td>
<td>118</td>
</tr>
<tr>
<td>Tanker</td>
<td>31 205 units/1,127,000 dwt</td>
</tr>
<tr>
<td>Bulk</td>
<td>39 109 units/682,385 dwt</td>
</tr>
<tr>
<td>Offshore</td>
<td>37 327 units/784,479 dwt/HP</td>
</tr>
<tr>
<td>Industrial</td>
<td>11 36 units/212,854 dwt/HP</td>
</tr>
</tbody>
</table>

* Consisting both Nusantara and local

Closing Remarks

As previously stated, the development of the Indonesian fleets is to require the followings:
1. There should be a national integrated policy on shipping. In this regard, the executive and legislative bodies should have a great concern on the importance of fleets for a maritime country like Indonesia. They must have their political wills to develop the Indonesian fleets.
2. The Government should provide special treatment in the form of maritime subsidy, because the industry is low yielding, capital intensive, high technology, and high risk in nature.
3. A non-banking financial institution has to be set up to finance the new building and purchasing of the second hand vessels.
4. The Indonesian shipyards and dockyards should also be developed.
5. The issuance of regulations, which are in supportive to the Indonesian shipping.
6. A benchmark with policy patterns in other countries, like Japan, Korea, Singapore, and Malaysia) should better be carried out.

3.3.4. Indonesia’s Experiences in Domestic Fleet Development – Shippyard’s Perspective (Mr. Adwin Suryodiprojo – President Director of PT. PAL)
1. THE CARAKA JAYA PROGRAMS

- 41 units out of 56 units general cargo, semi container and full container (up to 4180 DWT) in the program delivered.
- Up to 9 national shipyards involved and developed.
- Postponed/stopped since GoI left the program to shipping sector.
- 14 units of import material package stored at 9 national shipyards for more than 6 years losing technical, physical and commercial values.
- Could only be solved when everybody involved committed to put national interest over sectoral interest.

2. THE PALWO BUWONO PROGRAMS

- 5 units container vessel (up to 1600 TEUs) delivered.
- Executing shipyard suffered from financial engineering of the project involving modified credit export scheme.
- Role of these vessels in strengthen national sea transportation system questioned.

3. PASSENGER TRANSPORTATION PROGRAM

- 3 unit PAX 500 and 1 unit PAX 200 delivered, 1 unit fast PAX 120 to be delivered.
- GoI financing scheme in developing national passenger fleet ie export credit limited local shipyard participation in the program.

4. DEFENCE AND SECURITY PROGRAMS

- 12 fast patrol boats 57 M and 22 fast patrol boat delivered to navy, police customs.
- 10 years overhaul a submarine completed and delivered.
- Loose financing scheme from national budget system (on top) gave national shipyard the liberty to develop competency manage and delivered the project successfully.
- Built competency in defence industry need to be maintained and developed further ie national defence industries grow only / mainly from national need.
**5. PORT’S TUG BOAT BUSINESS MODEL**

- 2 units port’s tug boat delivered and 5 units more to delivered to Pelindo and Regional Port Authority.
- Business model involving shipyards, service operator and bank where bank provided working capital loan to the shipyard. Service operator pay the procurement in installment along the same tenor or the working capital loan.
- The model proved working properly when the overall model analyzed jointly and profit potential shared fairly among the parties.

**WHAT SHIPYARDS LEARNED FROM CONTRIBUTION & EXPERIENCE**

- Need an integrated policies and implementation program from up stream up to down stream of Indonesian shipping and maritime industries.
- Developed alternative and competitive financing for shipping fleet renewal and investment; with GOI assistance.
- Government’s investment:
  - Multilateral source rather than bilateral source (export credit)
  - Maximize domestic source of financing

**PRIVATE SECTOR INVESTMENT:**

- Introduction and formation of shipping finance institution / bank
- Government assistance in achieving competitive financing cost and sharing the financial risks
- Need a continuous program to allow completion learning curves and economic of scale for the growth of maritime supporting industries

**THANK YOU**
3.4 Workshop on Shipping Business Modernization

3.4.1. Modern Shipping Management for Inter-island Freight Shipping (Sakae Yusei – JICA Study Team)

**Modern Shipping Management for Inter-island Freight Shipping**
Capt. Sakae Yusei

**Inter-island Freight Shipping**

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of Ships</th>
<th>DWT</th>
<th>@ DWT</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Cargo</td>
<td>927</td>
<td>3,325,000</td>
<td>3,600</td>
</tr>
<tr>
<td>Bulk Carrier</td>
<td>31</td>
<td>580,000</td>
<td>18,700</td>
</tr>
<tr>
<td>Tanker</td>
<td>310</td>
<td>2,176,000</td>
<td>7,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,268</strong></td>
<td><strong>6,081,000</strong></td>
<td><strong>4,800</strong></td>
</tr>
</tbody>
</table>

(Except Tug Boats, Barges, Landing Crafts, and Pontoons)

Source: BKI Report 2000

---

**What is a Good Ship Operation?**
Whose Portfolio Includes:
- Fixed Schedule
- Good Care of Cargoes
- Operation at Competitive Cost
- Friendliness to the Environment

**How to improve Ship’s Operation?**

- **Target**
  → General Cargo

- **Methodology**

  ![Diagram of Methodology]

  Statistics Data (DGSC, INSA, BKI, Lloyd's)
  - Number of Ships
  - Ship’s Type, Size
  - Route, Service Pattern
  - Cargo Volume

  Interview Survey at Shipping Company
  Onboard Ship Survey
  Port Survey

  Issue/Problem
  Solution

**Objectives of Onboard Ship Survey**

- Productivity of Vessel Operation
  - Ship’s size, age, speed
  - Commissionable Days
  - Actual Working Days
  - Breakdown of Vessel Operation
  - Load Factor
  - Cargo Ship Productivity

- Ship Management and Navigation Safety
  - Insurance
  - Drawings, Instruction Books
  - Tools and Spare Parts
  - Planned Maintenance System

**Onboard Ship Survey**
- Container Vessel: 17 vessels
- Conventional Vessel: 27 vessels
- Total: 44 vessels
- Period: Jan 2003 ~ May 2003

---

Attachment-43
Result of Onboard Survey (No.1)

### Indonesian Domestic

<table>
<thead>
<tr>
<th>Classification</th>
<th>GRT</th>
<th>GT</th>
<th>Age</th>
<th>Work's Speed (at present)</th>
<th>Ship's Speed at Sea Trial</th>
<th>Load Factor</th>
<th>Cargo Ship Popularity (% of total GRT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container</td>
<td>8,000</td>
<td>4,941</td>
<td>22</td>
<td>11.2</td>
<td>13.1</td>
<td>48.5</td>
<td>208</td>
</tr>
<tr>
<td>General Cargo</td>
<td>2,083</td>
<td>2,082</td>
<td>22</td>
<td>9.8</td>
<td>11.7</td>
<td>45.8</td>
<td>251</td>
</tr>
</tbody>
</table>

### Japan Domestic

<table>
<thead>
<tr>
<th>Classification</th>
<th>GRT</th>
<th>GT</th>
<th>Age</th>
<th>Work's Speed (at present)</th>
<th>Ship's Speed at Sea Trial</th>
<th>Load Factor</th>
<th>Cargo Ship Popularity (% of total GRT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dock/Repair</td>
<td>4,724</td>
<td>3,677</td>
<td>9</td>
<td>16.1</td>
<td>20.6</td>
<td>85.0</td>
<td>550 – 600</td>
</tr>
<tr>
<td>Container</td>
<td>1,108</td>
<td>1,108</td>
<td>11</td>
<td>16.7</td>
<td>18.2</td>
<td>80.0</td>
<td>580 – 650</td>
</tr>
</tbody>
</table>

#### Cause of Low Operating Rate
- Waiting for Berth
- Waiting for Cargo
- Dock/Repair
- Delay due to Repair

#### Result of Onboard Survey (No.2)

<table>
<thead>
<tr>
<th>Container</th>
<th>General Cargo</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days</td>
<td>%</td>
<td>Days</td>
</tr>
<tr>
<td>Sailing</td>
<td>165</td>
<td>48</td>
</tr>
<tr>
<td>Cargo Working</td>
<td>123</td>
<td>34</td>
</tr>
<tr>
<td>Waiting for Berth (A)</td>
<td>44</td>
<td>12</td>
</tr>
<tr>
<td>Waiting for Cargo (B)</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Dock/Repair (C)</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>Delay due to Repair (D)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total (E)</td>
<td>365</td>
<td>100</td>
</tr>
<tr>
<td>Commission Days</td>
<td>366</td>
<td>95</td>
</tr>
<tr>
<td>Actual Working Days</td>
<td>288</td>
<td>79</td>
</tr>
</tbody>
</table>

#### Safety Management

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>General Cargo (27 Vessels)</th>
<th>Container (17 Vessels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Yes</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### Problem
- Insurance: Many captains did not know whether their ships were insured.
- Drawings, Instruction Books: They were written in Japanese or in a European language, crew did not understand them.
- Spare Parts: The engine parts of 30% of general Cargo Vessels were insufficient.
- Planned Maintenance System: 50% of General Cargo Vessels are dissatisfied.

#### Ship Management

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>General Cargo (27 Vessels)</th>
<th>Container (17 Vessels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Yes</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### Continued...

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>General Cargo (27 Vessels)</th>
<th>Container (17 Vessels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Yes</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Safety/Ship Management

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>General Cargo</th>
<th>Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Are the outside shell, upper deck and super structure maintained well or maintained?</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Are the navigation and bridge equipment operating well?</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Are the main engine and main engine room arranged in compliance with the rules and kept in good condition?</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>Are the fire fighting equipment and appliances arranged orderly?</td>
<td>14</td>
<td>1</td>
</tr>
</tbody>
</table>

Engine Control Panel in Japanese

- Technical Report 3 -
**Ship Audit Result**

- **<A Ship>**

- **<B Ship>**
  - Urgent rectification is needed.

**Amount of Loss by Accidents**

<table>
<thead>
<tr>
<th>Year</th>
<th>Operations</th>
<th>P &amp; I Loss</th>
<th>LOT</th>
<th>Repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Down Time Trend**

<table>
<thead>
<tr>
<th>Year</th>
<th>Per Ship</th>
<th>Nos of Ship</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>376</td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>384</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>380</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>373</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>402</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>441</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>301</td>
<td></td>
</tr>
</tbody>
</table>

**General Cargo Route Network 2024**

**Innovative Transportation and Logistics Solutions**

- Door to Door Service by Ro/Ro Ship

- Loading Cargo onto Truck
- Wing Trailer
- Roll on to Ro/Ro Ship
- High Productivity
- Low Cost
- Safety
- High Speed approx. 20 knots

**New Multipurpose Ship**

- **Approximate Cargo Carrying Capability**
  - Cars Ro/Ro 400
  - Four wheel drives 100
  - Small trucks/vans 50
  - TEU @ 15 MT 300
  - Reefer TEU 50
  - Break Bulk 3,000 RT

  - LOA 160.7 m
  - B 25.0 m
  - Draft 8.4 m
  - DWT 17,500 t
  - Speed 16.0 knots

---

**Terima Kasih...**
3.5 **Workshop on Traditional Shipping Modernization**

### 3.5.1. Past Experience on Introduction of Technology in Traditional Shipyard (Daniel Rosyid – ITS)

Sea Partnership Consortium-East Java Regional Centre  
Marine Research Centre ITS Surabaya  
E-mail: seagrant@its.ac.id

**Abstract**

The adaptability of traditional Indonesian shipyards to new technology is reflected, firstly, from the transformation of traditional boat building activities in Madura as a vehicle for a general, and wider industrial transformation in the coastal regions of Indonesia. The transformation is in this case introduced through improved boat building technology and skills improvement of local human resources by the introduction of a training facility. The facility pays a great deal of attention to the development of a more adaptive design and production methods of the traditional boat building industry taking into account the existing socio-cultural environment and local resources of Madura. This is also aimed at developing boat-building capacity to cope with increased demand for fisheries activities as a new engine of growth.

Secondly, it reflects on the redirection of existing institutions that provides education and training of various levels of skills related to naval architecture and shipbuilding in Indonesia. At present there are several such training facilities in Surabaya. Most of them -including ITS as an institution of higher learning-, however, have been focusing more on steel, large type of vessels to be built in large shipyard establishments, rather than wooden, small crafts to be built at simple, relatively low investment boat yards. This needs to be balanced to accommodate design and building skill development of small, wooden crafts.

The development of an adaptive design and production methods of the traditional, sail-using, wooden, boats is required, from an engineering point of view- to accommodate 1) the need for motorization to ensure regular, and facilitate planning of, shipping and fishing schedules which is mostly inter-island and offshore (beyond 12 nm) on one hand, and 2) the need for improved sailing technology to anticipate increasing cost of fossil-based fuel. The available design for boats of 15m or longer is no longer appropriate to cope with severe vibration problems resulting from the introduction of engine and propeller to drive the boats. This has resulted in significant reduction of their economic life amounting to 40% meaning 7 to 8 years or more reduction of useful life, and increased number of accidents mostly resulted from leakage of the wooden hull leading to capsizes. Shorter economic life of the boats may mean a more serious threat to sustainable forestry.

The present production methods of the traditional boats do not consider good
workmanship, and also is traditionally managed and therefore to a large extent limits its export potentials. This has resulted in poor quality and, frequently, endangering the existing environment through illegal woodcutting. The present design skill is only accessible to the very limited few of the “master” craftsman, thus making it difficult to develop a stronger and wider range of expertise sustainability. The training facility shall attempt to enhance the quality of the traditional maduranese boats up to an international standard of workmanship leading to, for example, export opportunity. The boat building training facility provides a physical focus to prepare local coastal community of Madura for the wave of industrialization once the Suramadu Bridge is completed in the near foreseeable future.

INTRODUCTION

The most important lesson Indonesians must learn from the present economic crisis is that centralized, land-orientated, large-sized corporations and foot-loose emphasis planning and development is both economically and socio-politically unsustainable. The way forward for the archipelago Indonesia is therefore a decentralized, land-marine balanced and small-business orientation planning and development. Higher learning institutions and training centres must also redefine their focus to accommodate opportunities for small-medium enterprises development.

The implementation of the new development paradigm, however, requires careful exercises. Within the general framework of industrialization in Madura -at its eastern end it is surrounded by approximately 70 islands (see Figure 1), mostly of Sumenep District- which is faced with some degree of cynicism by its religious leaders, it is realized that the industrialization should consider the socio-economic cultural aspects of Madura as well as its technical aspect. A more bottom-up, society-based development scenario is required (see Figure 2). Some industrial transformation model for Madura must therefore be one which make the best of local resources. Available industrial infrastructures need to be developed and enriched to strengthen the present agriculture-based industry.

Figure 1. Madura and its surrounding islands of Sumenep
Madura has been an important area of traditional shipbuilding in Indonesia. Local boatyards spread over various places, especially in Bangkalan and Sumenep areas. The tradition has survived years of changing economic climate, and involves substantial amount of local workforces. Local, self-organized groups of craftsmen at the local traditional boatyard and islamic schools can be used as vehicles for the industrial transformation in Madura.

The traditional fleets called the People Shipping Fleet (Armada Pelayaran Rakyat -PELRA) holds an important role in the provision of national domestic shipping services. They contribute more than 15% of the national inter-island cargo transportation. PELRA functions as both supplementary and complementary to the national inter-island marine transportation.

![Industrial Transformation Model]

The boats are traditionally driven using sail, and are designed, built using technologies inherited through generations (see Figure 3 for a Lete-lete type). Due to a traditional production management, the purchase of timber or wood material faces a continuous constraint on their provision and has lead to illegal wood cutting and therefore endangered the environment.

Due to the government program of Motorization (introduction of engine and propeller) to improve shipping schedule, marine accidents has risen considerably during the last 10 years of the motorization program. This has resulted in significant loss both economic terms and human casualties. The hypothesized problem in this case is that vibration is the major source of structural failure which leads to hull leakage and structural failure leading to capsize of the ships (see Figure 4). A study to improve their design through a standardization policy has been previously conducted.
However, the resulting prototypes have been considered very unsatisfactory by their potential users.

![Figure 3. Traditional Maduranese Lete-lete](image)

Modern wood ship technology which has been developed in Indonesia is lamination technology. The application of this technology has so far been restricted due to the need for relatively large size of investment. This has resulted in rather too expensive price of the ship in the view of the traditional shipping society. Furthermore, the transformation from traditional shipbuilding to the lamination industry involves a significant jump in technological input and skilled labor. Some other appropriate technology must therefore be developed.

A very recent preliminary survey on the Maduranese traditional boat building industry has been conducted by ITS. Potential boatyards in several locations in Madura have been identified. Potential production problems have been complied, and preliminary research problems have therefore been formulated.

**TRADITIONAL MADURANESE BOATS**

Madura is one of the principle maritime ethnic groups in the Archipelago. Its strength of a living tradition with a long history should be noted. Maduranese ships –constructed primarily of teak –jati- with their distinctive hull shapes, rigs, and painted designs can be found in many places far from home waters.
Figure 4. Problems of Traditional Maduranese Boats: effects of engine installation

Cargo vessels –notable here is the Janggolan type, the dimension may be 30 m in length, 9 m in breadth, and 4 m in depth- work to all the emigrant Madurese communities particularly in connection with the Kalimantan timber trade, some are even built there. The Lete type is somewhat smaller in size. The Lambo type is of larger sizes. They can be frequently seen in ports such as Gresik and Jakarta. About fifty years ago, they certainly traded as far as Singapore (Blake, 1920, in Hooridge). Such a wide-ranging trade makes it difficult to track down the larger vessels as they spend a great deal of the year away from home waters.

Fishing vessels too can be wide ranging the waters of Bali being one distant water fishery exploited, presumably because of better marketing prospects! Some of the popular type is the “female” Lis-a-lis (as opposed to the “male” type of the Golekan), a small inshore fishing vessel of about 8 to 12 m long suited to shallow and more sheltered waters, predominantly work with a gill net. Other popular type is the Mayang. These fishing vessels are much more easily tracked down to their individual homeports.

The development of the diversity of individual types of crafts were then complicated by the motorization. Although many vessels retain sail, motors are now very common, their introduction has not been without problems, and may in hindsight have been shortsighted, especially if one is to consider a very likely increase of fuel and machinery costs. These ships in spite of their spectacular appearance and undoubted efficiency as sailing vessels must now be regarded as anachronisms, as they do not seem well adapted to the addition of even a modest...
engine. Most have small auxiliary engines and a mixed sail-motor vessel seems to offer the best chance for successful long-term operation in changing economic climate.

Sail construction uses polypropylene cloth and is capable of great technical improvement. Both the Lete and Nade types have technically efficient rigs with the added advantage of minimal spar windage under power. They all have the raised hatch with either a flat or an apex top that is typical of Maduranese boats.

Generally speaking the hull construction is generally very rough, the principle deficiencies seem to be in the internal frame structure and the use of untreated mild steel fastenings alongside the traditional “treenails” (wooden dowels). These defects are shared in most of the craft seen under construction, and therefore subject to more comprehensive redesign, especially for the larger vessels.

However, we may find a nearly European standard of workmanship at particular places like in Pegerungan Island (close to Kangean Island). What is outstanding about the boats built there are their combined synthesis of good design, construction and finish that marks an exceptional craftsman within the limits of his environment and materials. Notable is the elegant and practical radiuses ands fore and aft to the raised cargo hatch and an excellent frame structure of alternating long floors and frames overlapping them to the topsides. There is still no clear on what the fastenings are, but since no marks of rust can be seen, the may well use treenails.

A common problem with the most ports in Madura is the shallow water imposes great design limitation. This is not the case for the Kangean and Puteran islands which have some deep-water facilities that would allow the development of fishing boats of deep draft for oceanic fisheries such as tuna long lining.

At present, we may see some Janggolan type of vessels being broken up. A very sad sight to see such a rich cultural heritage disappearing. In spite of excellent timber, ship life here is shorter, perhaps 10-15 years as opposed to perhaps 50 years that for the European boats. This might be the result of motorization which brings about unanticipated inherent engine-propeller induced hull vibration, and also those resulting from poor shaft alignment and weak foundation. This subsequently leads to hull leakage, especially at the stern part of the skeg. However, this requires a more detailed investigation as a significant extension of working life could be very beneficial to the community.

In the previous surveys conducted as described by Poillet and Horridge, none of the vessels observed were engined, but now almost all are. It is not clear if this change is entirely beneficial, as this must have over doubled the unit vessel cost in many cases. Also the introduction of engines were made at a time of artificial deflated fuel costs. The economic crisis has approximately tripled the cost of fuel and it may well continue to rise ahead of income to bring it in line with world prices. In addition, the costs of imported engines and spares have risen sharply. Community incomes do not seem to keep pace with these increases.
Certainly in the case of cargo vessel engines have also enabled much larger vessels to be built, may be at the expense of the viability of the smaller ones. The addition of better accommodation has been made possible, but there has been a sharp increase in accidents at sea largely due to the lack of pumping capacity during leakage as noted previously. Some may lead to insufficient damaged stability, or due to poor design of too high deckhouses.

**AREAS FOR APPROPRIATE TECHNOLOGY DEVELOPMENT**

The preliminary findings have given an understanding that is a good basis for further detailed technology introduction and training material (see Figure 5). There is no space in this paper to outline the processes in detail, but it may be useful to list areas where training in design and production/construction improvements could be beneficial. Some of these are quite basic and simple to implement, others will be much more difficult due to large cultural and educational shift required. All have profound social, economic, technological and environmental implications that at present are neither fully defined or understood. Just it is possible to introduce technological change does not mean that such changes will in all cases be beneficial. Fisheries are particularly vulnerable in this respect. Nonetheless, it is felt that it should be possible to very significantly increase a vessel working life, without increasing the costs by the same amount. An estimate
would be that if working life could be increased by a factor of 2 to 3 whilst initial cost by a factor of 1.5 at the maximum then the results would be most advantageous economically, as well as significantly reducing timber consumption for shipbuilding.

The centerline structure is generally quite adequately constructed of durable timber, Jati or Ulin being favorite. The timber, however, is often of insufficient size to get out the member required so swooped and bark are included and the member fails in its desired dimensions in places. The other areas requiring development is the design and construction of after deadwood and keel to form propeller aperture and provision for center line rudder. In several cases, this was just bolted on to the existing Pajala type Hull and had little structural integrity. An alternative solution would be to forget about this adaptation and install two smaller engines on either quarter. The rudder could be dispensed with as maneuvering in harbor could be with engines, at sea the traditional lateral rudders would be more than adequate. In cargo ships, the addition of a heavy keelson would be advantageous.

The vessels are built with the planking first. This process is identical to the Northern European tradition of clinker (i.e. overlapping), planking so there may well be historical lessons to be learnt in the process of technological change in those countries. This method means that the form of the vessel exists only in the mind of the master builder, and this may be a carefully guarded trade secret only passed to chosen apprentices.

Neither should the validity of such traditional knowledge be underestimated. Though this obviously works well in many cases, there are a number of disadvantages. Particularly in that it is impossible to predict hull shape or exactly replicate desired hull features. To build frame first may well be too large a step to make at this time, especially if it requires formal plans, empirical data, and ultimately Computer Aided Design. They may well however be a middle ground using either temporary moulds or partial initial framing in conjunction with scale builders models. It is also possible that this way of planking would work well if it was edge bonded using epoxy, the result could then be not unlike modern epoxy yacht construction. The relevance of modern timber/epoxy construction needs to be researched as this can carried out more successfully by small-scale enterprises than the older lamination techniques using resorcinol resin used in the PT.PAL Dockyard for their FPB28 patrol boats.

The main defect with the planking as it is presently practised is that there is a tendency to make the plank scarfs too short, and to place these joints to close in planks in proximity. A basic “shift of butts” rule for this construction would be advantageous, as the present arrangements induces areas of weaknesses that if they fall where there are framing defects may well be fatal. The advantages of a back rabbet in the keel and stem and stern posts needs to be explored. Another possible defect is that a European hull is stressed by the caulking between the planks and by the expansion due to saturation of the planking, this substantially aids the structures ability to resist imposed strains.
The frame and floor structure which is added after planking is particularly weak. The short scarf used to join the segments of the frames, futtocks, has almost no strength in and direction. The timber utilized is usually of insufficient dimensions to ensure the resultant frame is square and of equal size to its neighbors. This “failing” of timber stock to meet required dimensions is both a source of weakness, and of increasing hull weight and reducing internal volume needlessly.

These frame defects are partly mitigated by the use of closely spaced stringers, which in fact makes the latter problem worse. The whole question of internal framing, including that of a deck/hatch structures is vital to produce a hull with a long, safe working life and should be a central area for research. There are alternatives to traditional grown, built frames. They may be made up of shorter pieces of straight stock, particularly if epoxy were used. They can be laminated inside the vessel, or in the case of a very small boats stem bent. There is also a case for using a certain amount of forged steel knees, suitably galvanized to further strengthen the timber.

In many cases observed, the engine beds and installation were very poor. This may be the major cause of vibration even if the engine and shaft were properly aligned before launching, but was not rechecked when the hull had “set” some time after launching. This along with the lack of bearings to the stern tube could well account for excessive vibration.

Fastenings are the last major area of defect found. Mild steel is not expected to last more than five years before major wastage has occurred, total wastage within ten years. This is not improved by not sinking the heads into the planking and sealing them. The other end of the bolt and nut projecting from the stringer must be a major source of damage to the cargo where carried, eg. rice sacks.

Plank frame fastenings can of course be replaced, however the steel pins used between planks can not. Simply introducing a program of hot dip galvanizing into the yards, perhaps with a mobile plant would at least increase their working life to twenty years. This would be further enhanced by introducing specialized European ship fastenings, these could be forged locally. These include driven drift bolts and spikes as well as through rivets of soft iron. Through bolts were in fact only used sparingly. Stainless steel is both expensive and useless for underwater fastenings in a large timber structure as it quickly crystallizes and becomes brittle. The wooden treenails used, about 2cm diameter for plank edge fastenings are good, they could be better if set in epoxy. However, the same size used to fasten plank and frame is not. These make excellent low cost plank/frame fastenings but the diameter must not be less than ¾ of plank thickness, heads have to be cross wedged and epoxy would make the result perfect.

Given the strong cultural traditions of the islands as well as environmental issues discussed subsequently, any design innovations need to be approached with caution. This is particularly important in the case of artisanal fisheries where the links between technological innovation in boat design and environmental and economic collapse are poorly understood. In addition, such fisheries have extreme design limitations placed on them if operating, as is the case here, from open beaches or shallow harbors. There are however many possibilities of further
refining these design advantageously. There may be a case for developing decked boats capable of working distant waters, but the resource needs to be carefully quantified. Also such boats need deep-water harbors and quantity markets and were only developed in Europe as a response to the industrial Revolution.

In the case of cargo vessels there appear to be less constraints to innovation, even if the timber trade with Kalimantan collapsed due to deforestation, affecting the very large vessels; there will continue to be a large demand for general domestic cargo. Bearing this in mind it would seem that moderate sized vessels would be the best to concentrate on in the first instance. The design proposal for a 15-20m vessel seems a sound point of departure.

In all design development improvement need to be sought in economical and efficient operation as well as improving crew safety and comfort as well as overall ship safety. This should also respect the diverse and active maritime traditions of the island which have a continued major role in the future. This is also a factor that may well mean it will be difficult to limit the planned innovations to just two designs. Other different types of vessels need also be identified. Since tourism can be a potential economic sector, the design of a marine tour vessel can be explored. Another type is a research vessel which is capable of carrying out marine environmental and geological survey for shallow waters.

PUTTING APPROPRIATE TECHNOLOGY INTO TRADITIONAL BOATBUILDING

The effort to introduce better technology into traditional boat building is best done through actual improved boatbuilding involving traditional boat builders. Some “informal” training for the traditional boatbuilders are necessary. There are three boatbuilding training facilities available in Surabaya: 1) Pusdiklat PAL Indonesia which provides a wide spectrum of ship-building skills at senior high school level, with minor interest in wooden-boat building, 2) STM Perkapalan Sidoarjo which is very much similar to the one at PT. PAL, 3) ITS’ Shipbuilding Polytechnics which provides a vocational, university level skills in shipbuilding, and 4) Woodworking and Carpentry Workshop at the Department of Naval Architecture and Shipbuilding (NAS) of ITS. All these facilities have in general put steel, large type of vessels as their main focus, putting wooden, small boat building training as a very minor interest. Even at the NAS, wooden, small craft has been by tradition considered of minor importance.

A new facility to provide relevant skills improvements to the available boat building skills of the craftsmen and those who are interested in boatbuilding skill development has been prepared for a traditional Islamic school in Modung, Bangkalan (south coast of Madura). This has been initiated jointly by ITS and the East Java Electricity Distribution Company (PLN) which provides various assistance including funds through its community development programs. JICA is invited to further developed this training facility. The facility is positioned on a piece of land of approximately 500 m² within the school’s premises located nearby a river close to a sea waterfront. The target trainees are the 17-22 year disciples of the school and the local boat builders or craftsmen. The primary objective of the training, perhaps slightly different with the one adopted at
the Lowestoft International Boatbuilding Training Centre, East Anglia, is formulated as in the following:

1. To provide basic understanding of engineering drawing
2. To provide basic understanding of boat drawing and design principles
3. To provide basic joinery, carpentry, and wood working skills
4. To introduce various relevant modern materials for boat building, rules and regulations
5. To provide understanding and skills in efficient wooden boat production methods
6. To provide basic skills in electrical, electronics, mechanical, and hydraulics
7. To introduce basic production and quality management skills
8. To provide basic entrepreneurial skills

This paper opines that the existing boat building training facilities in Surabaya need to be redirected back to provide greater proportion of wooden, small craft building skills developments. Students at NAS-ITS need also to experience practical small, wooden boat building practices, probably through a boat design, produce, and race scheme. This scheme is to be started in September 2003 when 2 wooden tuna longlining fishing boats of 18m long –the owner of which is the Pemerintah Kabupaten Jembrana, Bali- are scheduled to be built in Pusdiklat PAL Indonesia involving traditional mandarese (Sulawesi), maduranese, and Balinese craftsmen and students of NAS of ITS. The design of these boats have been developed by the Small Craft Research group of ITS.

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3.6 Workshop on Shipping Investment and Ship Finance

3.6.1. Institutional Development for Favorable Shipping Investment Environments
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Shipping has always been regulated in Indonesia, and over the course of time the industry’s regulatory situation has taken the shape of various government shipping policies.

At the time of the Dutch Administration, before World War II and Indonesia’s independence, the government played a determining role in shipping. In that period a private Dutch shipping company, “Koninklijke Paketvaart Maatschappij” (KPM) held the monopoly in serving trade and industry throughout the entire Indonesian archipelago comprising of thousands of islands as well as maintaining certain shipping services between Indonesia and its neighbours (Singapore and the Malacca States, Hongkong, Australia and South Africa).

To ensure the adequacy and regularity of the shipping services throughout the archipelago, an agreement was entered into by the Dutch Indies government and KPM which was called the Great Archipelago Contract. The agreement stipulated the terms and conditions under which the shipping services throughout the Indonesian archipelago were to be performed, including the fixing of tariff rates.

Besides KPM, there were other Dutch shipping lines that participated in Indonesian foreign trade, and native small sailing vessels (perahu), carrying small quantities of cargo played a significant role in serving trade in the remote islands of Indonesia by carrying transit cargoes to the accumulation ports served by the KPM vessels.

Policy Regulations

It was only in 1936 that the Dutch Administration in the Netherlands issued a regulatory law on shipping for Indonesia (Scheepvaartwet 1936) which mainly included the regime on cabotage and port. The law provides that interisland/coastal shipping is to be performed by Netherlands Indies (i.e. Indonesian) flag vessels or foreign flag vessels under dispensation. Further, the Law makes a distinction between coastal ports and sea-ports which are declared open for foreign trade. Other laws/regulations were pertaining to registration of vessels and marine safety.

When Indonesia gained its independence, the government of Indonesia abolished the monopoly held by KPM and the company, due to the then prevailing political situation ultimately ceased its operations in Indonesia.

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Since then, while the Shipping Law 1936 and related laws and regulations remain in force, the government has issued various regulations to promote the development of national shipping companies with an emphasis on servicing the inter-island trading. The government established two state shipping companies (Djakarta Lloyd for the deep-sea trade and Pelni Shipping Lines for the inter-island trade), and allowed private shipping companies to operate, resulting in their rapid growth. These shipping companies were subject to the government’s licensing policy and were required to comply with certain requirements regarding capital, ship tonnage, skills etc.

For inter-island shipping, the government determined a system which allocated routes to the various shipping companies, and in order to look after the interests of the public, put controls on the inter-island freight rates level, as well as on the passenger fare tariffs.

At present, however, the government no longer has control on the freight rate system, providing only basic criteria and guidance to be taken into account by the shipping companies when fixing the rates. The rates themselves are, therefore, left to the market.

In the early 1960s when the number of shipping companies had grown exceedingly, the government was forced to impose stricter requirements as a means of limiting the number of companies operating. However, by the 1960s, the government adopted a more liberal attitude and policy towards the shipping industry. Tonnage requirements were no longer strictly observed, again causing a rapid growth in the number of shipping companies in operation.

Most of the shipping companies, however, had no ships and were reliant on the activities of agencies. This was due to the fact that ship financing has been an on-going problem for Indonesian shipping companies, with most bank financing terms offered being too heavy for Indonesian shipping companies.

Another worrying aspect for the government was that the large number of shipping companies operating was not correspondent with the growth of the national fleet. The above situation caused the government to continously reconsider its policy on shipping.

A Shipping Act was promulgated by the Indonesian parliament in 1992, for the purpose of restructuring the shipping industry in Indonesian which entered into force in 1994.

The new Shipping Act and its few implementing regulations set forth the following main provisions:

1. Only vessels owned by Indonesian citizens and Indonesian legal entities can be registered in Indonesia.
2. Shipping companies in Indonesia are subject to licensing requirements.
3. To engage in the Indonesian inter-island trade or foreign trade, a shipping company must own at least a vessel of 175GT.
4. Only shipping companies may act as a shipping agent. Shipping companies acting as the general agent of foreign shipping companies must at least own an Indonesian registered fleet of a minimum of 5,000GT.

5. Joint venture shipping companies must own at least an Indonesian registered vessel of 5,000GT.

At present, Indonesia has a merchant fleet of approximately 4.2 million dwt (in 2000). More ships are needed to support the Indonesian inter-island and foreign trade activities. The total volume of the Indonesian inter-island trade is approximately 152 million ton/m3, of which only about 50% is carried by Indonesian flag vessels, whereas the balance is carried by foreign flag vessels under charter. The concept of cabotage (that the coastal/domestic trade is to be carried by national flag carriers) as stipulated in the above mentioned Shipping Act cannot, so far, be fulfilled.

The volume of Indonesian foreign trade totals around 354 million ton/m3, of which only approximately 5% is carried by Indonesian flag carriers. The concept of having fair share participation in the national foreign trade leaves much to be desired.

As mentioned above, ship financing has always been the crucial problem in the development of the national shipping industry in Indonesia. As earlier said, shipping companies in Indonesia have practically no access to the bank’s financing system and that unbearable high interest rate, short repayment period and over 150% collateral are factors which caused such situation.

In an attempt to overcome this problem, Indonesia has opened the door of its shipping industry to foreign investment by encouraging the establishment of joint ventures. Under the current system a foreign partner may take up as much as 95% participation, in cash or in kind, in the capital of the joint venture. A joint venture agreement needs to be entered into by the parties concerned, in which the management and administrative issues are determined. As aforesaid, a joint shipping company must own at least one Indonesian registered vessel of 5,000 GT.

As far as its operations are concerned, under the Shipping Act a joint venture shipping company is regarded as a national shipping company.

Furthermore, under the Indonesian foreign investment regulations, a joint venture shipping company is entitled to import duty and value added tax facilities relating to the importation of capital goods and any raw and intermediate materials required for the implementation of the investment and subsequent operations. A joint venture shipping company is also entitled to ship and registration duty exemption in accordance with the pertinent regulations.

Since financing problem is the dominant factor that has been hindering the fleet development of the country, of course the problem need to be solved and improved.

Apart from the above, it is also important to improve the business environment surrounding the shipping industry.
Legal certainty is one of the factors which may affect the business condition of the industry. The relatively frequent changes of policies and inconsistency in the implementation of laws and regulations may contribute to the less favourable situation.

The Indonesian National Shipowners Association (INSA) considered that the intention of the government to completely revise the Shipping Law No. 21 of 1992 as too premature due to the fact that the few implementing regulations have only been quite lately enacted so that, the provisions of the Law have never been fully implemented. This is the more so since while the government has passed many laws and regulations on shipping and related matters in the field of public law, such as laws and regulations pertaining to shipping industry licensing, port and harbour, marine safety, including seafarers, pollution etc., it appeared that the government has no or very little interest in the private/commercial law aspects of the shipping industry. The private law aspects of shipping mostly relates to the international maritime commercial regime, which is reflected in various international conventions.

**Private Maritime Law**

The Indonesian private maritime (shipping) law forms part of the Indonesian Commercial Code, which, dated back from 1848 and which was originally identical with the Dutch Commercial Code of 1838. As far as the maritime law part is concerned, the latest revision was made in 1934, following the revision of its Dutch counterpart. The maritime law part of the Indonesian Commercial Code remains unaltered until now. The inclusion of the provisions of the Hague Rules which took part in 1952 in the Dutch Commercial Code was not adopted by Indonesia.

The Commercial Code is considered as a lex specialis vis-à-vis the Civil Code as the lex generalis. Principles of the general private law embodied in the Civil Code are applicable when the Commercial Code is silent on certain issues or specifically refers to the provisions in the Civil Code. The contract of carriage has as its basis the principles of contract law in the Civil Code. The general provisions concerning hypothec (mortgage) for instance, are applicable to ship hypothec.

In addition to the above, there are ad hoc laws or regulations which the Commercial Code refers to, such as the regulations concerning registration of ships and rights on ships and the regulations pertaining to the nationality of ships. Under the Indonesian law, only ships owned by Indonesian citizens or Indonesian companies can be registered in Indonesia. Ship hypothec or mortgage in Indonesia is only eligible for ships which are registered in Indonesia. In addition to the above, it is to be noted that most of the provision with respect to sea transport in the Commercial Code are applicable to transport in rivers and inland waterways.

In the case of the Indonesian maritime law, Dutch case laws (jurisprudenties) dated before the enactment of the new codification laws, as well as writings of authoritative Dutch scholars are often used as references in the interpretation of the corresponding Indonesian Code’s provisions.
The Dutch law is part of the Civil Law system, which understandably is different from the Common Law system, in that the two systems do not always give the same answers to the same questions. The legal terminologies in the Civil Law system are not always easily and accurately translated into an English version of the Common Law system and vice-versa. Many examples could be cited in this respect. One of those examples is the concept of mortgage in the Common Law system and hypothec in the Civil Law system.

This fact is particularly true and it is important to underline this since Indonesia is one of the few countries in this part of the world which resorts to the Civil Law system, whereas a substantive amount of Indonesia’s trading counterparts are Common Law countries.

Particularly in international shipping or maritime transport, the influence of shipping practices in Common Law countries are quite evident.

**International Commercial Shipping Regime**

Indonesia does not ratify any of the international conventions on carriage of goods at sea. However, the provisions of international shipping regulations, such as The Hague or Visby Rules could be made applicable to the Indonesian international/foreign trade through the implementation of the concept of choice of law. The Indonesian national shipping line PT Djakarta Lloyd, for instance, includes The Hague Rules as a paramount clause in its bill of lading. In order to take benefit of international financing facilities a few Indonesian shipping companies take the benefit to register their vessels abroad, in particular under the flag of convenience registration.

In the light of the urgent need for inviting funding for fleet development, by persuading the government to pursue the improvement of the financing terms for the shipping industry, INSA took the initiative to establish a working group to prepare a draft bill on maritime claims and ship mortgage. Such working group consists of members of INSA and the Directorate General of Sea Communication’s officials. A draft bill has been prepared and submitted to the Directorate General of Sea Communications which is now under discussion at the ministerial level Parallel to that INSA has proposed for the ratification of the U.N. Convention on maritime liens and mortgages.

Mortgages and hypothecs are charges on a ship created by agreement between the borrower and the lender or by unilateral declaration of the borrower to secure the payment of sum of money. The borrower in the mortgagor the (grantor of the hypothec) and the lender is the mortgagee (the holder of the hypothec). Mortgages and hypothec usually are used to secure the repayment of the long-term loan required to finance the building or the purchase of a vessel (generally speaking mortgages are the word in common law countries and hypothecs are in civil law countries. This draft bill if enacted as law may attract domestic and foreign bankers/creditors to provide loans to the shipping companies against the mortgaging/hypothecation of the vessel. The draft bill provides that Indonesian registered vessels and bare-boat chartered vessels (provided that the registration in the original flag country be suspended/deleted) can be subject to mortgage/hypothec in Indonesia. The draft bill also provides the execution of the mortgage/hypothec when the mortgagor/hypothec
grantor is in default. However, in this connection, it is important to note that in order to secure the effective enforcement of the regulation pertaining to ship mortgage/hypothec, the law on ship registration and the law pertaining to arrest of vessel need to be reviewed.

Indonesia now adheres to the concept of closed registration of vessels. Reviewing the relevant provision by allowing the bareboat chartered vessel be registered in the Indonesian registry will contribute to the accumulation of national shipping tonnage by not only depending on direct purchase of vessels requiring huge amount of investments.

**Arrest of vessel**

To secure an effective and efficient enforcement procedure when the mortgagor is in default, there is a strong need for the government to review the current law of procedure with respect to arrest of vessel. As a matter of Indonesian law arrest of vessel, which is categorized as attachment of property, is to be part of a civil claim. The provision embodied in the (Old Dutch) Law of Procedure (RV) requires a rather complicated and lengthy procedure to follow before legal execution and forced sale can be conducted.

It is therefore, important for the government of Indonesia to ratify the U.N. Convention on Arrest of Vessels (1952) and review the respective law of procedure accordingly. The International Convention on Arrest of Vessels 1952 provides that the claims in respect of which a vessel may be arrested are the following:

a. Damage caused by any ship either in collision or otherwise,

b. Loss of life or personal injury caused by any ship or occurring in connecting with the operation of any ship;

c. Salvage;

d. Agreement relating to the use or hire of any ship whether by charter party or otherwise,

e. Agreement relating to the carriage of goods in any ship whether by charter party or otherwise,

f. Loss of or damage to goods, including baggage carried in any ship,

g. General average,

h. Bottomry,

i. Towage,

j. Pilotage,

k. Goods or materials wherever supplied to a ship for its operation or maintenance,

l. Construction, repair or equipment of any ship or dock charges and dues,

m. Wages of masters, officers or crew,

n. Master’s disbursements, including disbursements made by shippers, charterers or agent on behalf of the ship or its owner,

o. Disputes between co-owner of any ship as to the ownership, possession, employment, or earning of that ship, and

p. The mortgage or hypothecation of any ship.
The first aim, protection of creditors, is achieved by requiring Art. 10) that prior to the forced sale, the competent authority of the state where the sale is to take place should give at least thirty (30) days written notice of the time and place of such sale to all holders of registered mortgages and hypothecs.

While this requirement is reasonable, in real business, the arrest of ships has been done preceding the forced sale. On this arrest of ship, contents of Articles 2, 3, 4 and 6 of the Convention stipulate as under, will be self-explanatory.

Article 2: A ship flying the flag of one of the Contracting States may be arrested in the jurisdiction of any of the Contracting States in respect of any maritime claim.

Article 3: A claimant may arrest either the particular ship in respect of which the maritime claim arose, or any other ship that is owned by the person who was, at the time when the maritime claim arose, the owner of the particular ship, even though the ship arrested is ready to sail.

Article 4: A ship may only be arrested under the authority of a Court of the appropriate judicial authority of the Contracting States in which the arrest is made.

Article 6: The rules of procedure relating to the arrest of a ship, the application for obtaining the authority referred to in Article 4, and to all matters of procedure which the arrest may entail, shall be governed by the law or the Contracting State in which the arrest was made or applied for.

From the above, it is clear that a holder of mortgage (hypothec) can arrest the ship (ships) in any of the Contracting States and that the application of arrest is varied depending on the country where the arrest is carried out. Ultimately, the most important thing is the provision of the law of procedure with regard the execution of the arrest and the application of the forced sale which should be quick and effective.

It is to be noted that a new Convention on arrest of vessel has been adopted in 1999. This new Convention provides some flexibility with respect to the list of claims in respect of which a vessel may be arrested, namely in relation to damage covering environmental claims. The new Convention is applicable to all vessels whether or not they are seagoing and whether or not they are flying the flag of a state party to the Convention.

Since the 1952 Convention has been ratified by 70 countries which would mean that its application is supposedly has been widely accepted, the Indonesian government may consider to adopt this Convention or the new Convention due to its flexibility. In addition, the issue on arrest of vessel becomes a serious matter in Indonesia in connection with various kind of alleged violation of law conducted in Indonesian waters. It is a matter of fact that under the various laws and regulations, various authorities, such as the port administrator/harbour master, the customs, the police and the Indonesian Navy have certain power to take the necessary action against the alleged act of
violation committed under those specific laws and regulations. Some examples could be cited in this regard, such as accidents committed by a vessel against government’s properties, such as collision against harbour wharfs or government’s vessels, vessel accident causing loss of life or personal injuries, the so-called illegal logging, illegal sand mining, illegal fishing, alleged pollution etc. Quite frequently occurred that the authorities tend to impose criminal charges to almost any alleged violation of law at sea. There were even cases where the authority refused to release a vessel which has been released from arrest by court order.

Furthermore, there are general tendency in practice here in Indonesia that the public authority as mentioned above interfere although the case in question is basically a matter of private law. As an example as a matter of Indonesian law a vessel can only be arrested under a court order. The port administrator or the harbour master has no right to detain a vessel unless based on marine safety reason. However, quite frequently ship detention is imposed by such authority as a mean of pressure on the disputing parties (in a collision case) to come to a settlement, in particular if it involves a foreign vessel. Such practice is in fact an illegal and discriminatory practice. The port administrator/harbour master or any other public authority should not interfere the settlement process between the parties concerned which normally involves the insurers of the parties concerned by taking into account international shipping practices. Those mixed-up situations with respect to detaining or arresting of vessels, should be seriously addressed by the Indonesian government and parliament not only for legal certainty reason, but also in order to avoid abuse of power by the respective public authorities.

**Responsibility and Liability**

Another issue which is important to the shipping company and sea-borne trade is the shipowner/carrier’s responsibility and liability including the limitation of liability. As earlier mentioned Indonesia has not ratified any of the international conventions on carriage of goods at sea, either the Hague Rules, Hague-Visby Rules or the Hamburg Rules.

The Indonesian Code of Commerce provides a package liability limit of 600 guilders (article 470) and a tonnage liability of 50 guilders per cubic meter. (Article 474 and 541) for the Shipowner/carrier.

Question my arise as to how those figures should read, whether in Rupiah which will then result in a ridiculously low value because of the heavily depreciated value of the Indonesian Rupiah, or in old Dutch guilders considering the provision was inherited from the Old Dutch Indies Code of Commerce. An interpretation could be analogously applied by referring to a Supreme Court Jurisprudency (case decision) regarding the application of pre-World War II gold value to an old debt expressed in Old Dutch guilder. The appropriate amount is to determined by relating the monetary amounts to the gold standard value. The debt or the nominal obligation which is in old Dutch guilders is converted into gold value using the rate, prevailing at the time when the nominal amount was determined (i.e. nominal figure of the obligation). This gold value is in tern translated back into present currency value.
The Central Jakarta District Court on request of a party in dispute has in 1994 ever made a calculation of the application of article 541 (on collision) of the Commercial Code based on the above mentioned formula which turned out that 50 Old Dutch guilders is equal to Rp. 567,840. However, since the disputing parties came to an amicable settlement, no decision has been made in relation to the case.

Further, to the best of our knowledge, no precedent is known as to the application of the limitation provisions in court decisions.

It is important for Indonesia to consider to ratify the Hague or Hague-Visby Rules and Shipowner Liability Convention (1957) and to gain international confidence in the country’s shipping business and national flag ships.

**Carrier-Shipper Relationship**

The sea-borne trade in which the shipping companies are engaged, is in fact a business relationship between carriers and shippers. Therefore, a close relationship between the carriers and the shippers need to be established and be well maintained. Both parties are interested in the adequacy and regularity of shipping Services, the profitable stability of freight rates and the clarity of shipowner/carrier’s responsibility and liability.

However, in practice, for a long time the shipping companies have been complaining of the decreasing trend of freight rates in certain trade/routes. In such situation, the shipping companies may consider to come to an agreement on sailing schedules and rates to be quoted to shippers. In view of the provisions of Law No.5/1999 concerning prohibition of monopoly practices and unfair business practices, the shipping companies recently have been summoned by the Business Competitive Supervisory Commission on the charge that the agreement made between the shipping companies without involving shippers is allegedly violating the provisions of Law No.5/1999. It is therefore important to note, that close relationship between the shipping companies and the shippers need to be established and maintained either directly or through their respective associations.

The existing shippers organization (Dewan Pengapalan Indonesia-Depalindo) may be reactivated in this regard in cooperation with INSA.

Besides, it is of great importance to undertake a study whether the shipping industry could be excepted from the provisions of the above Law No. 5/1999 since transportation is an industry that does not always work for the benefit of the public at large since fierce competition between shipping companies may lead to a deterioration of service and stable financial situation. The reality that competition is not feasible in all circumstances in transportation has caused the US Government to change its policy from regulation of monopoly to the regulation of competition. The Indonesian government and parliament should look into this matter seriously.
In conclusion, it is to be said that the improvement of the legal certainty in the shipping business in Indonesia and the ratification and enforcement of the international commercial regime, such as regime pertaining to maritime liens and mortgage, arrest of vessels and regime on shipowners/carrier’s responsibility and liability, will prove a useful policy measure in raising international confidence in Indonesia’s shipping business and national flag ships.

3.6.2. Institutional Development for Favorable Shipping Investment Environments
(Uematsu Hideaki – JICA Study Team)

Towards Better Industrial Environments
Hideaki Uematsu

As Mr. Husseyn Umar pointed out, the introduction of international maritime legal regime needs to be done in order to create a business environment which can attract foreign and domestic banks and investors. This is a thing which must be done first of all, but this thing alone may not be sufficient for securing plenty amount of money-inflow as expected. To realize constant inflow of investment by banks and investors, the profitability of inter-island shipping business needs to be stable. A long time ago, there were the days when the world’s shipping business was symbolized by such word as “adventure sailing” in which lots of risks were involved. If the ship could overcome the difficulties over the ocean, it could make a large profit, and that was the reason why many investors of the then shipping nations put out their money for such ships. All these have become the things of the past. There can be no fortune-making one-time profit in shipping now. Therefore, for banks and investors the stability of the profitability of borrower shipping company is definite prerequisite condition for putting out their money.

Then, how can such prerequisite condition be in place in the inter-island shipping of this country? In one word, it may be the “restructuring of the industry”. However, the components of the structure are varied and the problem is not so simple as to be described easily. Besides, I am not a person who knows the details of Indonesian inter-island shipping industry very well.

So, to begin with, let me introduce to you recent Japanese efforts in designing regulatory measures meant for the improvement of business structure of Japanese coastal shipping in the days of nation-wide deregulation. I do this, because I feel Indonesian inter-island shipping and Japanese coastal shipping have many characteristics in common.

This August in Tokyo, a committee named “Investigation Commission on Coastal Shipping System” submitted a report titled “Concrete System Design in Reviewing Business Regulation” to the Ministry of Land, Infrastructure and Transport which had requested the Commission to conduct the investigation. The 16 member Commission consisted of 3 university professors, chairmen of 7 coastal shipping associations each, president and a director of Japan Seamen’s Union, and Director-General of Maritime Bureau of the Ministry and 3 other officials of
This report analyzes the value and problematical point of the Japanese coastal shipping like this. “Coastal shipping, as the major artery of physical distribution, is indispensable in 21st century as well, and as the key transport mode of this country, has to continuously contribute positively to various national needs in the early days of the new century, including such requirements as efficient physical distribution and environmental protection. But the market structure of the coastal shipping is characterized by its pyramid shape with cargo owner entities at the top of it, in which such phenomena as subordinative relation to particular cargo owners each and multi-layered transaction relationship between ship-operators and ship-owners are observed. Such a market structure, in one aspect, has a merit in securing stable and safe transport, but on the other hand, increases the closedness of the coastal shipping market, and becomes hindrances to the activation and expansion of the market.”

Standing on such basic understandings, the report has struck out various concrete measures to bring about competitive, efficient market. The report emphasizes particularly among other things, “Subordinative relation to particular cargo owners, multi-layered transaction relationship, etc., namely pyramid shaped market structure with cargo owner entities at the top” has often lead to the possibility of the abuse of the superior position, and broadly observed stiff and closed transaction customs, and accordingly it has turned out obstruction against the full swing of appropriate competitive market mechanism”.

Then the report concludes in this connection that it is necessary to adjust relationships among cargo owners, ship operators and ship owners, and describes the relevant measures to be taken like this. Firstly, as for transaction among ship operators and ship owners, delivery and preservation of documents should appropriately be carried out in accordance with so-called “Subcontractor Law”. In Japan, there has been “Law for the Prevention of Delay in Paying Prices to Subcontractors” i.e. so-called “Subcontractor Law”, covering transactions in manufacturing and repairing businesses. As this Law has become applicable to all service industries from next year onward, relationship among ship operators and ship owners in coastal shipping industry should also be regulated by the said Law. That is one of the conclusions of the report.

And the next measure, in terms of cargo-owners, is really worthy to note, I think. As for transaction between cargo owners and ship operators, the report declares that normalization is to be attempted by strengthening the application of the Anti-monopoly Law. And, as a matter of fact in line with this judgment, Japan Federation of Coastal Shipping Associations, at its Committee for the Prevention of Unfair Transaction, is presently progressing their investigation, with reference to other industries’ cases, on what transaction patterns of cargo owners are to be considered as “unfair transaction way” stipulated in Article 19 of the Anti-monopoly Law,. On the basis of the coming results of this investigation, the Ministry of Land, Infrastructure and Transport is expected to contact with the Fair Trade Commission to attain common understandings in the matter.

To invoke the Anti-trust Law positively concerning the relationship with powerful cargo
owning shippers is a new idea even for Japanese coastal shipping industry. But there is a clear reason why they have to resort to this way now.

Up to 1996 coastal shipping in Japan had been exempted from the Anti-trust Law and freight rate conferences had been officially admitted. Once such exemption was abolished in accordance with national deregulation policy, and then unfair transactions originating from the gap of economic power between shippers and carriers became to be apparent. Beating down the freight rates on the pretext of poor profitability of shippers’ side, or forcible lowering of freight rates which had been once agreed upon, are said being observed as patterns of such unfair transactions.

As I said before, Japanese coastal shipping is characterized by its multi-layered structure. Primary contractor operators, secondary operators, tertiary operators, and bigger or smaller owners. Primary contractor operators sublet their contracts to secondary operators, and then secondary operators to tertiary operators. So even if the afore-said “Subcontractor Law” is applied on relationships between primary contractor operator and secondary operator, or between secondary operator and tertiary operator or owner, if transactions at the top, I mean, transactions between strong cargo owners and primary contractor operators, are not in order, no material results are expected. Fairness at downstream cannot be secured without fairness at upstream. This is the one of the key judgment of the report. By the way, it is said the same kind of phenomena are happening in trucking industry in Japan, after the deregulation.

Now, out of various policy designs contained in the said Report, let me hereby introduce to you a few of administrative or regulatory measures which might prove of some reference to you in terms of today’s subject “better investment environment”.

These are

1. “Shipping companies are required to have appropriate funds program at the start of its business”,
2. “The Ministry is to continue to calculate and publicly announce appropriate lifting capacity.”, and
3. “Every shipping company is required to file its business report continuously with the Ministry.”

Let me add some more explanations on each of these three points.

Firstly, on the funds program:

To date, starting of coastal shipping business in Japan is subject to the Ministry’s permission, and the applicant is required to satisfy three requisites, namely, requisite of ship owning, requisite of business stability, and requisite of appropriate business operation. This permission system is expected to be changed into “registration” system in near future. In reference to this coming regulatory change, the report says that most of above permission requisites should be abolished. However, the report says requisite of “appropriate funds program”, which has been a part of business stability requisite, should be maintained as before as a requisite subjected to
examination by the Ministry. The possibilities of such requirements as tendering of cargo guarantee documents or ship-chartering contracts is also maintained in this connection as before.

Secondly, the calculation and public announcement of appropriate shipping capacity by the Ministry:

As I told you at the time of our seminar in last July, Japanese coastal shipping had long been affected by a supply-demand imbalance, or over-tonnage. To cope with such excess capacity situation, every year, the Ministry of Transport, now the Ministry of Land, Infrastructure and Transport, has been determining the appropriate level of lifting capacity by vessel type, so that it can work as a medium–long-term guideline for coastal shipping community in terms of building vessels. The appropriate lifting capacity figures were set for six different types of vessel respectively, namely general cargo ships, earth products carriers, cement tankers, pure car carriers, oil tankers and special tank ships. In figuring out an appropriate lifting capacity, supply-demand situation and other economic factors were taken into account. To be specific, future traffic volumes of principal cargo items such as iron and steel, construction materials, cement, petroleum products, coal and automobiles were estimated, and thereafter respective ship type’s fleet tonnages necessary to carry the estimated quantities of the traffic were calculated as appropriate lifting capacity tonnage.

In 1996, the Japanese Cabinet established an over-all deregulation policy to the effect that any of governmental intervention for supply-demand adjustment should be abolished in the field of transport.

Although such being the case, the report of this time clearly states that the public announcement of the appropriate lifting capacity is to be continued for the time being.

The reasoning of this is explained like this. “The construction or deployment of ships is liable to be done in line with the peak of the demand, while the transport demand fluctuates subject to business trends. But, once a ship is built, it is operated for a long period of 15-20 years because ship’s building price is high and its depreciation period is long. This has been the coastal shipping’s market structure that is likely to result in demand/supply gap of almost constant excess in lifting capacity. Therefore shipping business entities are required to use prudent judgments before building ships, and in this connection, some kind of index to be referred to is desired to be available.

The report says in addition, explaining this decision, “With current easiness in obtaining relevant information from shippers’ bodies in mind, and recognizing the current index has gained external confidence, continuously for the time being, as a part of information offering service by the administration, the country (the Ministry of Land, Infrastructure and Transport) is to continue the calculation and public announcement of appropriate lifting capacity.”

The third and the last point I wish to introduce to you from this report is that it says “All the shipping business entities are obliged to file their business reports with the Ministry”, with
additional comment that “As for the exact formulas of the business report, those should be necessary minimum in order to lighten a burden of business entities. And in this regard, investigation shall be done from now among the parties concerned.”

As the reasoning of this new regulatory measure, the report explains, “As for the business a field on which entry regulation is applied, administration has an external accountability. And also in order to carry out proper policy judgment, it is necessary and indispensable for administration to grasp the actual condition of business entities.”

Well, I have recently heard that container vessel operators in this country have come to an agreement with respect to sailing schedules and rates to be quoted to shippers. And, unfortunately, the operators were summoned by the Business Competition Supervisory Commission, with the charge that the operators have violated Law No.5/1999 concerning prohibition of monopoly practices and unfair business practices, and the matter is still pending.

In a sense, I think, this might be a very good opportunity for ship-operators here to bring this matter for open, public discussion.

In Japan, up to 1996, the coastal shipping operators, in the same manner as deep-sea shipping operators, had been exempted from the application of the Anti-monopoly Law, with exception of cases which were deemed still unfair.

Well, I might have spent too much time on just one report. So, before concluding my speech, let me touch upon three other examples of Japan, Europe and the Philippines, all of which indicate some kind of adjustment efforts in terms of the supply-demand balance in coastal or inland water transport services.

Firstly, Japan’s case:

Efforts to bring about better supply and demand balance had been done almost over 30 years by Japan Federation of Coastal Shipping Associations, through the scrap-and -build system named “Fleet Tonnage Adjustment Business”. This Fleet Tonnage adjustment system was to scrap ships at a fixed ratio in proportion to new building tonnage of the relevant shipowner. This system had been based on some articles of the Coastal Shipping Association Law and had been excluded from the Antimonopoly Law. This tonnage adjustment in the form of scrap and build system has been abolished since March 1998. And yet presently, some tentative measures for the likewise purpose have been introduced to encourage those who quit shipping business or scrap their ships. Though it is named “Tentative”, many people expect that this measure will be continued for coming 15 years or so.

Secondly, European Union’s case:

There has been “Community-fleet capacity policy” in terms of inland navigation of European Community. This policy was established in 1989 for the structural improvement in the
inland waterway transport sector. (By the way, in this EU regulation, inland waterway means the linked inland waterway networks of Belgium, Germany, France, Luxembourg, the Netherlands and Austria). The objective was to reduce fleet over-capacity and avoid the emergence of new overcapacity, by introducing the “old for new” rule for a period up to then April 1999. “Old for new” meant scrapping of designated ratio of old vessels is required as the precondition of building a new vessel. This ratio had been set year by year in varied levels in accordance with supply/demand balance situation of the market. And then this policy application was renewed to be effective for further 5 years up to April 2003, with an additional condition that “old for new” ratio must gradually reduced to zero by 29 April 2003.

Though the “old for new” ratio has been declared to be zero at the end of this April, the system itself is still maintained as a standby mechanism which might be activated at the time when there is a serious disturbance of the market. Even now the owner of a vessel must pay the special contribution or acrap an amount of old tonnage when placing a firm order for the construction of a new vessel or making an application for import, or when the new vessel or imported vessel is taken into service.

EU Member States must establish an internal water-way fund, which is fed by the contributions paid under “old for new” rule and this fund can be used at Community level for promotion or social measures aimed at persons wishing to leave the inland waterway transport sector, or measures to stimulate groupings.

Finally, the Philippines’ case:

Although the Philippines’ deregulation is often talked about, the MARINA is still carefully watchful on the new entrant to liner routes. Its Memorandum Circular No. 161 in November 2000 stipulates rules on entry into routs as flows:

It says firstly that all routes/links shall have at least two (2) operators. Then says, “All routes/links which have been served by any operator for an aggregate period of at least five (5) years shall be open for entry to additional operators provided that the entry thereto will not result to ruinous competition. Competitions are ruinous --- when an existing operator/s in a given route carries less than the average annual break-even load factor as determined by the MARINA.”

In addition, the MARINA’s Situation Report 2003 explains its basic position in such a way “From the government’s perspective, --- it may be important to try and determine at what stage of the industry’s development (as well as the national economy’s) would full deregulation be suitable and advisable.

Ladies and gentlemen, I would be happy if the above explanation of mine can prove of some reference to you in understanding that there may be many kinds of things which administration can or should do for raising economic position, profitability and stability of coastal or inter-island shipping industry, even in the days of national trend of deregulation. Thank you for your attention.
3.6.3. Development of Indonesia’s Sea Transportation Fleet: Reliable Data
(Petrus Sumarsono – BAPPENAS)

By Petrus Sumarsono

Introduction

It is obvious that sea transportation has a key role in Indonesian economy. In 2001 sea transportation had transported 99 % of export-import in terms of weight, which was 337.9 million ton, and 95 % of the value of export-import, which was US $ 87.2 billion (Table 1: Trend of Export and Import By Mode 1996-2001).

Table 1: Trend of Export - Import By Mode 1996 - 2001

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Million ton</td>
<td>%</td>
<td>Value (US$ Billion)</td>
<td>%</td>
<td>Million ton</td>
<td>%</td>
<td>Value (US$ Billion)</td>
<td>%</td>
<td>Million ton</td>
</tr>
<tr>
<td>Export by air</td>
<td>0,20</td>
<td>0,09</td>
<td>1,90</td>
<td>3,82</td>
<td>0,80</td>
<td>0,31</td>
<td>2,80</td>
<td>5,24</td>
<td>0,90</td>
</tr>
<tr>
<td>Export by sea</td>
<td>214,00</td>
<td>99,91</td>
<td>47,90</td>
<td>96,18</td>
<td>253,60</td>
<td>99,69</td>
<td>50,60</td>
<td>94,76</td>
<td>244,00</td>
</tr>
<tr>
<td>Total Export</td>
<td>214,20</td>
<td>100,00</td>
<td>49,80</td>
<td>100,00</td>
<td>254,40</td>
<td>100,00</td>
<td>53,40</td>
<td>100,00</td>
<td>244,90</td>
</tr>
<tr>
<td>Import by air</td>
<td>0,30</td>
<td>0,51</td>
<td>4,00</td>
<td>9,32</td>
<td>1,10</td>
<td>1,86</td>
<td>4,00</td>
<td>9,62</td>
<td>0,40</td>
</tr>
<tr>
<td>Import by sea</td>
<td>58,50</td>
<td>99,49</td>
<td>38,90</td>
<td>90,68</td>
<td>58,00</td>
<td>98,14</td>
<td>37,60</td>
<td>90,38</td>
<td>50,80</td>
</tr>
<tr>
<td>Total Import</td>
<td>58,80</td>
<td>100,00</td>
<td>42,90</td>
<td>100,00</td>
<td>65,10</td>
<td>100,00</td>
<td>41,60</td>
<td>100,00</td>
<td>51,20</td>
</tr>
</tbody>
</table>

Source: BPS, Statistic International Trade Eskport - Import (various year 1996-2001)

In addition, 77.1% and 15.6% out of US $ 30.9 billion of Indonesian import were raw/support material and capital goods respectively (Table 2: Import Value by Broad Economy Categories and Its Share to Total Import). It is hard to imagine what happens to Indonesian economy if sea transportation does not work well. Not only will the export-import but also manufacturing activities will be disturbed. The revenue of foreign currency will decline and many manufacturing companies will stop their production. At the ends, unemployment is going to increase. When the Indonesian economy is not able to accommodate unemployment, the social unrest will arise.

1 Planner Staff at Directorate Transportation, BAPPENAS
Knowing that sea transportation has a key role in Indonesian economy, the government of Indonesia (GOI) should adopt policies that guarantee not only the smoothness and safety of sea traffic in Indonesia but also the increase of the national fleet’s market share. With the export-import cargo around 300 million ton and the domestic cargo around 150 million ton indicates that there is abundant opportunities for shipping industry to develop. The problem is how the national fleet can compete for the maritime cargo transport and how the GOI could set up policies which create a sound business climate in shipping industry for the national fleet.

In this paper we focus on the development of Indonesia’s maritime cargo fleet. Therefore, passenger fleet and pioneer fleet will not be discussed in this paper. For the sake of this discussion, the shipping in Indonesia is divided into two principal categories namely inter-island shipping or domestic shipping and international shipping or export-import shipping. The sources of the data used in this paper are mainly from Bank of Indonesia, Badan Pusat Statistics (BPS) and Directorate General of Sea Communication (DGSC).

### International Shipping

All the time we hear that freight as a major element of Balance of Payment has contributed a deficit to the BOP. It is true. From 1991 to 2001 freights were a deficit with average US $ 2.5 billion (Table 3 Trend of Freight and Balance of Payment). On the other side, BOP was deficit from 1991-1997 but started surpluses in 1998 (Graphic 1 Trend of Freight and Balance of Payment). This condition indicates that there is no strong relationship between a deficit contributed by freight and balance of payment. Moreover the value of deficit contributed by freight is

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Freight Export-Import</th>
<th>Balance of Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>-2,385,0</td>
<td>-4,392,0</td>
</tr>
<tr>
<td>1992</td>
<td>-2,601,0</td>
<td>-3,122,0</td>
</tr>
<tr>
<td>1993</td>
<td>-2,730,0</td>
<td>-2,298,0</td>
</tr>
<tr>
<td>1994</td>
<td>-3,189,0</td>
<td>-2,960,0</td>
</tr>
<tr>
<td>1995</td>
<td>-4,118,0</td>
<td>-6,760,0</td>
</tr>
<tr>
<td>1996</td>
<td>-4,430,0</td>
<td>-7,801,0</td>
</tr>
<tr>
<td>1997</td>
<td>-4,606,0</td>
<td>-5,001,0</td>
</tr>
<tr>
<td>1998</td>
<td>-3,050,0</td>
<td>4,097,0</td>
</tr>
<tr>
<td>1999</td>
<td>-2,365,0</td>
<td>5,783,0</td>
</tr>
<tr>
<td>2000</td>
<td>-2,709,0</td>
<td>7,991,0</td>
</tr>
<tr>
<td>2001</td>
<td>-2,367,0</td>
<td>6,900,0</td>
</tr>
</tbody>
</table>


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**Table 2: Import Value by Broad Economy Categories and Its Share to Total Import (1996 - 2001)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumption Goods</th>
<th>%</th>
<th>Raw/Support Material</th>
<th>%</th>
<th>Capital Goods</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>2.806</td>
<td>6.5%</td>
<td>30.470</td>
<td>71.0%</td>
<td>9.653</td>
<td>22.5%</td>
<td>42.929</td>
</tr>
<tr>
<td>1997</td>
<td>2.166</td>
<td>5.2%</td>
<td>30.230</td>
<td>72.5%</td>
<td>9.284</td>
<td>22.3%</td>
<td>41.680</td>
</tr>
<tr>
<td>1998</td>
<td>1.918</td>
<td>7.1%</td>
<td>19.117</td>
<td>71.2%</td>
<td>5.808</td>
<td>21.6%</td>
<td>26.842</td>
</tr>
<tr>
<td>1999</td>
<td>2.468</td>
<td>10.3%</td>
<td>18.475</td>
<td>77.0%</td>
<td>3.060</td>
<td>12.7%</td>
<td>24.003</td>
</tr>
<tr>
<td>2000</td>
<td>2.719</td>
<td>8.1%</td>
<td>26.019</td>
<td>77.6%</td>
<td>4.777</td>
<td>14.3%</td>
<td>33.515</td>
</tr>
<tr>
<td>2001</td>
<td>2.251</td>
<td>7.3%</td>
<td>23.879</td>
<td>77.1%</td>
<td>4.832</td>
<td>15.6%</td>
<td>30.962</td>
</tr>
</tbody>
</table>

Source: BPS, Statistic of International Trade Eksport - Import 1996-2001
insignificant value because it was less than 5% in average of the value of international shipping. This reality does not mean that efforts to increase the national fleet’s market share in export-import are unnecessary. The reality reminds us that the efforts to increase its market share should be done carefully so that they will not intrude on the smoothness of export-import activities. Therefore, the GOI should recognize the characteristics of international trade before it sets up its policies.

The characteristic of the international shipping or export-import in Indonesia as follows:
1. Terms of trade whether CIF (Cost, Insurance and Freight) or FOB (Free on Board) is decided by an agreement between exporter and importer or buyers and seller. The government does not have a role key to determine what kinds of the terms of trade. Actually, it does not matter what kinds of terms of trade is chosen. The most important thing is how the national fleet is selected to transport the export and import commodities by the exporter or importer that has the right to nominate a ship.
2. The weight of export and import is unbalance. Yearly, the weight of export is almost four times than those of import. This condition provides a more competitive advantage to the foreign fleet than the national fleet. The reason is that the coming vessels with cargo to Indonesia will have a wider opportunity to obtain cargo when they return.

In the last six-year (1996-2001) BPS and DGSC published data for International shipping or export-import. These data were quite different. (Table 1: Export-Import by mode in 1996-2001 and Table 4: Market Share Of National and Foreign Fleet in the International Shipping 1996-2001). The least difference was 15 million ton in 1998 and the biggest gap is 75 million ton in 2001. In general, data from DGSC were higher than those of BPS except data in 1997. The differences are significant for planning especially for fleet development. Since the BPS’ data are less than those of DGSC are it is better to use the BPS’s data for fleet development. Unfortunately, BPS does not present the market share of foreign and national fleet. For the sake of discussion, we adopt DGSC data for distribution of market share in international shipping between national and foreign fleet.
In 2001 from market share point of views the national fleet contributed only 5.5% in term of weight (Graph 2: Trend of Market Share of National & Foreign Fleet in International Shipping 1996-2001).

Meanwhile the number of vessels that were involved in international shipping was only 25 vessels with total capacity only 234.974 DWT (Table 5: Vessel Involved in International Shipping 2001.) They served only to Asia and Europe. Comparing between the capacity and the weight whether use data from DGSC or BPS which counted 412.7 million ton and 337.9 million ton respectively, it is indispensable that Indonesia needs foreign fleet to transport export-import cargo. It is hard to push the national fleet to obtain a higher market share. Not only is the capacity small but also there are OECD’s Code of Liberalization concerning shipping which prevent the GOI to involved directly fostering the national fleet in the international shipping. (Table 6: Trend of National and Foreign Fleet Capacity in International Shipping).
The reason is that in broad term OECD’s Code of Liberalization government should:

1. Apply no pressure on shippers as to choice of ship to carry their cargoes, this choice should be a matter of a normal commercial considerations.

2. Restrain from discriminating against those of their importers/exporters who wish to “ship foreign” by imposing export/import licenses, refusing to grant them foreign exchange or force them to employ home-flag vessel.

3. Even the government-controlled organizations should conduct their business on the basis of normal commercial principles.

<table>
<thead>
<tr>
<th>Year</th>
<th>Loading</th>
<th>Unloading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>75.674</td>
<td>94.504</td>
</tr>
<tr>
<td>1992</td>
<td>87.107</td>
<td>111.664</td>
</tr>
<tr>
<td>1993</td>
<td>94.000</td>
<td>112.462</td>
</tr>
<tr>
<td>1994</td>
<td>111.131</td>
<td>123.332</td>
</tr>
<tr>
<td>1995</td>
<td>178.554</td>
<td>136.068</td>
</tr>
<tr>
<td>1996</td>
<td>160.953</td>
<td>141.515</td>
</tr>
<tr>
<td>1997</td>
<td>147.769</td>
<td>148.055</td>
</tr>
<tr>
<td>1998</td>
<td>113.487</td>
<td>119.792</td>
</tr>
<tr>
<td>1999</td>
<td>113.633</td>
<td>122.368</td>
</tr>
<tr>
<td>2000</td>
<td>127.740</td>
<td>137.512</td>
</tr>
</tbody>
</table>

Source: BPS, Transportation & Communication Statistic, 2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Loading</th>
<th>Unloading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>75.674</td>
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<tr>
<td>1997</td>
<td>147.769</td>
<td>148.055</td>
</tr>
<tr>
<td>1998</td>
<td>113.487</td>
<td>119.792</td>
</tr>
<tr>
<td>1999</td>
<td>113.633</td>
<td>122.368</td>
</tr>
<tr>
<td>2000</td>
<td>127.740</td>
<td>137.512</td>
</tr>
</tbody>
</table>

Source: BPS, Transportation & Communication Statistic, 2002
Activities in domestic shipping are smaller than those in international shipping. According to DGSC the inter-island cargo was 149.9 million ton in 2001. It was less than half of export-import activities that counted for 412.7 million ton. Although BPS hasn’t published the similar data but it confirmed with this reality. According BPS in 2000 the inter-island cargo loading was 127.7 million ton that was also less than half of the export-import activities, which transported 290.4 million ton (Table 7: Inter-island Cargo loading and Unloading at Indonesian Ports 1991-2000 from the latest data published by BPS in 2002). Meanwhile based on DGSC data in that year the inter-island cargo loaded 152.1 million ton that was less than half of the export-import, which counted for 364.5 million ton. The difference of the inter-island cargo was almost 25 million ton (152.1 ton and 127.7 million ton). The difference is significant for planning especially for fleet development.

With the smaller economic of scale and less complicated compare to international shipping, domestic shipping should be easier to be handled by the national fleet. The GOI should promote national fleet to fight over that market share. As indicated by DGSC that from 1996 to 2001 the national fleet’s market share was only 51.9% (Graph 3: Trend of Market Share of National and Foreign Fleet in Domestic Cargo). Considering cabotage principle that disallows foreign fleet to transport the inter-island cargo in Indonesia actually Indonesia has the right and opportunity to develop the national fleet for domestic cargo as many as possible.

By comparing the national and foreign fleet capacity in term of unit and DWT (Table 8: Trend of National and Foreign Fleet Capacity in Domestic Shipping) it is recognized that the foreign fleet have a higher capacity per vessel. That is the comparative advantage of the foreign fleet. Therefore, if the government of Indonesia has desired to implement the cabotage principle, the government should have the policies that will replace the smaller vessels with the bigger vessel at least the capacity is similar to those of foreign fleet.

<table>
<thead>
<tr>
<th>Year</th>
<th>National Fleet</th>
<th>Foreign Fleet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit</td>
<td>DWT</td>
</tr>
</tbody>
</table>


Necessity of National Fleet Development & Budget Limitation to the National Fleet Development

Considering the cargo volume, both international and domestic, and the capacity of national fleet the GOI should pay attention to how national fleet can be assisted to develop. Unfortunately during the last five year the ability of GOI’s budget to invest in transport infrastructure is decline. (Table 9: Transportation Developments in The National Budget 1999/2000-2003).

Attachment-78
From the table it can be seen that the development budget was decline from Rp 82.4 trillion in 1999/2000 to Rp 65.1 trillion in 2003. The trend of development budget was decrease. Fortunately, the allocation of sea transportation was constantly increased. The increase was caused by procurement of three-passenger vessels type 3000 passenger. For the future it is difficult to expect that sea transportation sector will get a higher allocation except there is a political will not only from executive but also from parliament. Meanwhile the operational and maintenance cost in transportation was increase (Table 10: Routine Budget in Transportation Sector 1999/2000-2003).

The routine budget for sea transportation was the highest among transportation sector. These conditions impose the government to let the national fleet to develop by itself.

The government can assist the national fleet to develop by providing accurate data. Until now, there are confusing data from DGSC, BPS and BI. The data cannot be reliable to be used by private companies to develop their businesses. First, the differences among the data are quite big and significant. Second, they do not present the data in a complete formula. For instance, the BPS’s data do not provide the detail concerning market share of the national and foreign fleet. Meanwhile DGSC’s data do not provide the value of cargo. Moreover Bank of Indonesia does not provide the detail of freight. How much foreign currency had been paid to foreign fleet and how much money the national fleet had received. In addition, it is needed data that show the vessel productivity. Shipping companies should provide these data. Therefore, it is necessary for the three government institutions and INSA (Indonesia National Ship owner Association) to formulate the data needed for the development of the national fleet. Hopefully, project proposals that are
established from the reliable data concerning a procurement of merchant vessel could be more bankable.

Table 10: Routine Budget for Transportation Sector 1999/00 - 2003

<table>
<thead>
<tr>
<th>No.</th>
<th>Budget Classification</th>
<th>Fiscal Year (1999-2000)</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2000</td>
<td>2001</td>
<td>2002</td>
<td>2003</td>
</tr>
<tr>
<td>1.</td>
<td>National Budget</td>
<td>219.603,8</td>
<td>197.030,3</td>
<td>315.756,0</td>
<td>344.008,8</td>
<td>370.591,8</td>
</tr>
<tr>
<td>2.</td>
<td>Routine Budget</td>
<td>137.155,5</td>
<td>155.424,6</td>
<td>271.768,7</td>
<td>291.709,7</td>
<td>305.462,0</td>
</tr>
<tr>
<td></td>
<td>% National Budget</td>
<td>62,5%</td>
<td>78,9%</td>
<td>86,1%</td>
<td>84,8%</td>
<td>82,4%</td>
</tr>
<tr>
<td>3.</td>
<td>Routine Budget for Transportation</td>
<td>311,7</td>
<td>264,1</td>
<td>320,2</td>
<td>355,0</td>
<td>426,1</td>
</tr>
<tr>
<td></td>
<td>% Routine Budget</td>
<td>0,2%</td>
<td>0,2%</td>
<td>0,1%</td>
<td>0,1%</td>
<td>0,1%</td>
</tr>
<tr>
<td>4.</td>
<td>Routine Budget for Road Transportation</td>
<td>35,3</td>
<td>17,1</td>
<td>17,4</td>
<td>19,1</td>
<td>22,1</td>
</tr>
<tr>
<td></td>
<td>% Routine Budget</td>
<td>11%</td>
<td>6%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>5.</td>
<td>Routine Budget for Land Transportation</td>
<td>34,3</td>
<td>30,2</td>
<td>39,0</td>
<td>41,6</td>
<td>35,2</td>
</tr>
<tr>
<td></td>
<td>% Routine Budget</td>
<td>11%</td>
<td>11%</td>
<td>12%</td>
<td>12%</td>
<td>8%</td>
</tr>
<tr>
<td>6.</td>
<td>Routine Budget for Sea Transportation</td>
<td>179,2</td>
<td>158,0</td>
<td>192,3</td>
<td>214,4</td>
<td>268,0</td>
</tr>
<tr>
<td></td>
<td>% Routine Budget</td>
<td>58%</td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
<td>63%</td>
</tr>
<tr>
<td>7.</td>
<td>Routine Budget for Air Transportation</td>
<td>62,8</td>
<td>58,8</td>
<td>71,5</td>
<td>79,9</td>
<td>100,8</td>
</tr>
<tr>
<td></td>
<td>% Routine Budget</td>
<td>20,2%</td>
<td>22,3%</td>
<td>22,3%</td>
<td>22,5%</td>
<td>23,7%</td>
</tr>
</tbody>
</table>

Source:UU No. 29 Tahun 2002 tentang APBN TA 2003
- UU No 7 Tahun 1999 tentang APBN 1999/2000
- UU No 2 Tahun 2000 tentang APBN 2000
- UU No 35 Tahun 2000 tentang APBN 2001
- UU No 19 Tahun 2001 tentang APBN 2002

Tahun 2001 direncanakan total anggaran Rp 315.756,0 miliar termasuk didalamnya dana perimbangan Rp 81.676,5 miliar
Tahun 2002 direncanakan total anggaran Rp 344.008,8 miliar termasuk didalamnya dana perimbangan Rp 94.531,5 miliar dan Rp 3.437,0 miliar
Tahun 2003 direncanakan total anggaran Rp 370.591,8 miliar termasuk didalamnya dana pembangunan daerah Rp 116.877,7 miliar

3.6.4. Philippines’ Experience in Public Ship Finance (Samuel C. Custodio – Former Director, DOTC, Philippines)
Study on the Development of Domestic Sea Transportation and Maritime Industry in the Republic of Indonesia (STRAMINDO)

Maritime Transport in the Philippines

- Primary Routes
  - Manila to:
    - Cagayan de Oro
    - Cebu
    - Davao
    - Dumaguete
    - Gen. Santos
    - Iloilo
    - Zamboanga
  - Cebu to:
    - Cagayan de Oro
    - Dumaguete
    - Iloilo
    - Zamboanga

Philippines’ Experience in Public Ship Finance

- Domestic Shipping Modernization Program – Package I (DSMP I)
- Domestic Shipping Modernization Program – Package II (DSMP II)
- Ideas for the Future

Domestic Shipping Modernization Program – Package I (DSMP I)

- Events leading to DSMP I
- Particulars of DSMP I
- Status of DSMP I
- Effects of DSMP I on the domestic shipping industry

Events leading to DSMP I

- Presidential Task Force on the Inter-Island Shipping Industry was created on 22 November 1988 “to formulate short-term measures and medium-term plans for the improvement of the inter-island shipping industry…”
- Task Force submitted recommendations on 19 April 1989

Presidential Task Force on the Inter-Island Shipping Industry

- Recommendations
  - Safety
    - Competence of Crew
    - Vessel Seaworthiness and Safe Voyage
    - Delineate responsibility for maritime safety
  - Cost and Adequacy of Shipping
    - Partial Deregulation of the Fare Structure
    - Update Basis of Fare Determination
    - Deregulation of Entry into Particular Route
    - Reduction in the Cost of Vessel Acquisition and Operation

- Recommendations
  - Institutional Recommendations
    - Create a Ports and Shipping Advisory Council
    - Create and Admirely Court
    - Strengthen and Expand the Functions and Responsibilities of the Relief and Rehabilitation Units of the National Disaster Coordinating Council

Attachment-81
Study on the Development of Domestic Sea Transportation and Maritime Industry in the Republic of Indonesia (STRAMINDO)  
- Technical Report 3 -

Events leading to DSMP I

- Development Bank of the Philippines undertook the Industry Restructuring Program
  - Pulp and Paper
  - Textile
  - Cement
  - Steel
  - Shipping

Domestic Shipping Modernization Program I (DSMP I)

- Project Purpose
  - To provide financial assistance to enterprises engaged in domestic shipping and shipping support industries to promote the improvement of the efficiency, reliability, safety, affordability and overall service quality of the domestic shipping industry

Particulars of DSMP I

- Loan Amount = JY 15,000 M
- Loan Agreement No. PH-P151
- Bank = Overseas Economic Cooperation Fund (OECF) now Japan Bank for International Cooperation (JBIC)
- Interest Rate of Loan = 3% p.a.
- Eligible Borrowers:
  - Filipino Citizens
  - Domestic Corporations

Particulars of DSMP

- Eligible Projects:
  - Shipping
  - Shipyard
  - Cargo Handling
  - Related Terminal Facilities
- Lending Interest Rate:
  - WAIR – 2 but not lower than 12%, fixed
  - WAIR – 2 but not lower than 12%, variable

Terms and Condition of the Sub-loan

- Denomination: Philippine Peso
- Maturity: 3 – 15 years inclusive of grace period
- Grace Period: Up to 5 years
- Limits: From minimum of PhPeso 500,000 up to equivalent of JapY 1.5B
- Eligible Expenses: up to 80% of project cost

Framework of DSMP I

Overseas Economic Cooperation Fund
JY 15 Billion
Interest Rate = 3%

Philippine Government Guarantee Fee = 1%
Foreign Exchange Risk Cover = 4%

Development Bank of the Philippines
Retail Lending

Status of DSMP I

<table>
<thead>
<tr>
<th>Item</th>
<th>Foreign</th>
<th>Local</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub Project</td>
<td>14,838</td>
<td>12,466</td>
<td>4,346</td>
</tr>
<tr>
<td>Consulting Services</td>
<td>162</td>
<td>129</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>16,000</td>
<td>12,595</td>
<td>5,001</td>
</tr>
</tbody>
</table>

Figures in Million Japanese Yen

Status of DSMP I

<table>
<thead>
<tr>
<th>Vessel Type</th>
<th>Number</th>
<th>%</th>
<th>Value</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cargo</td>
<td>12</td>
<td>23%</td>
<td>555.72</td>
<td>17%</td>
</tr>
<tr>
<td>Fastcraft / Passenger / Cargo</td>
<td>19</td>
<td>36%</td>
<td>1,305.70</td>
<td>40%</td>
</tr>
<tr>
<td>Tanker</td>
<td>11</td>
<td>21%</td>
<td>704.81</td>
<td>22%</td>
</tr>
<tr>
<td>Tugboat / Barge</td>
<td>8</td>
<td>11%</td>
<td>319.75</td>
<td>10%</td>
</tr>
<tr>
<td>Shipyard / Terminal</td>
<td>5</td>
<td>9%</td>
<td>343.80</td>
<td>11%</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>100%</td>
<td>3,229.76</td>
<td>100%</td>
</tr>
<tr>
<td>New</td>
<td>21</td>
<td>40%</td>
<td>1,057.18</td>
<td>33%</td>
</tr>
<tr>
<td>Expansion</td>
<td>32</td>
<td>60%</td>
<td>2,172.90</td>
<td>67%</td>
</tr>
</tbody>
</table>

Money Figures in Million Philippine Pesos
Status of DSMP I

### Effects of DSMP 1 on the Domestic Shipping Industry

- **Out of the 53 subloans**
  - 8 are start-up companies
    - 1 was foreclosed
  - 10 posted decline in net profit
    - 4 between -1% to -3%
  - 35 posted gains in net profit
    - 12 more than 100% increase
    - 10 between 50% and 100%
  - 10 between 20% and 50%

### Effects of DSMP 1 on the Domestic Shipping Industry

- **End-users’ view of subloans**
  - DSMP 1 is a big help to the shipping industry.
    - They were able to secure long-term financing for their various projects
  - DSMP 1 was an educational experience
    - Before DSMP 1, they were only concerned with cost of acquiring very old second-hand vessels
    - DSMP 1 guidelines made them realize the importance of safety and efficiency of vessels
    - They also learned the proper way of rehabilitation of vessels to have safe and efficient vessels
    - They realized the advantage of acquiring younger vessels

### Effects of DSMP 1 on the Domestic Shipping Industry

- **End-users’ view of subloans**
  - DSMP 1 influenced the mindset of end-users on the advantages of having their vessels classed
    - Before DSMP 1 ship owners were hesitant to have their vessels classed because of cost considerations
    - Advantages in terms of repairs, seaworthiness, insurance and prestige associated with classed ships are now well appreciated
  - End-users now realize that viability of operations lies in the efficient utilization of the vessel

### Effects of DSMP 1 on the Domestic Shipping Industry

- **Effects on end-users**
  - They now ask for plans and specifications, machinery and equipment listing, survey reports and general vessel condition before negotiating
  - They now consider adaptability of vessel to intended service areas, cargo volume, cargo type and passenger density
  - Vessel design, stability weight factor and class approval are checked before vessels are converted
Domestic Shipping Modernization Program – Package II (DSMP II)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>DSMP 1</th>
<th>DSMP 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Amount</td>
<td>JY 15 B</td>
<td>JY 20 B</td>
</tr>
<tr>
<td>Re-lending</td>
<td>14.838 B</td>
<td>19.500 B</td>
</tr>
<tr>
<td>T &amp; TA</td>
<td>0.162 B</td>
<td>0.500 B</td>
</tr>
<tr>
<td>Mode</td>
<td>Retail</td>
<td>Retail and/or Wholesale</td>
</tr>
<tr>
<td>Policies Target Sub-sectors</td>
<td>Shipping, Shipyard; Cargo Handling &amp; Port Terminal Facilities</td>
<td>Expanded to include Port Dev't/operations, Maritime Schools, etc.</td>
</tr>
</tbody>
</table>

Domestic Shipping Modernization Program – Package II (DSMP II)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>DSMP 1</th>
<th>DSMP 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policies Product</td>
<td>Long-Term Loan</td>
<td>Diversified to include Equity Investment and Leasing</td>
</tr>
<tr>
<td>Eligible Borrowers</td>
<td>Filipino-owned enterprises engaged in the business of shipping, shipyard operations, cargo handling and port/terminal operations</td>
<td>Expanded to include LGUs, schools, universities and relevant training institutions</td>
</tr>
</tbody>
</table>

Domestic Shipping Modernization Program – Package II (DSMP II)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>DSMP 1</th>
<th>DSMP 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emphasis</td>
<td>Transport Chain Efficiency Adaptable</td>
<td>Geographical Area Development and Safety Efficiency, Safety and Productivity Development Impacts Geographical Area Development</td>
</tr>
</tbody>
</table>

What of the Future?

- Creation of a Maritime Equity Corporation
  - Currently under study by MARINA
  - Need to move away from a banker mentality
  - Partnership between the Government and the Domestic Shipping Industry
  - Patterned after the Maritime Credit Corporation of Japan
- Continued support for the Domestic Shipping Industry
3.7 Second Seminar on Building Public-Private Partnership in Domestic Shipping Development through Implementing STRAMINDO Action Plan

3.7.1. Action Plan 1: Expanding Ship Investment Schemes (Sasanuma Mitsuhiro – JICA Study Team)

SEMINAR On Action Plan For Ship Finance
Sasanuma Mitsuhiro
JICA - STRAMINDO

3. Present Situation of Ship Finance
   (1) Government owned ship – Government budget
   (2) SOEs owned ship – OOF
   (3) Transport SOEs owned ship – OOF
   (4) Foreign company owned ship – Foreign private loan
   (5) Domestic company owned ship – Foreign & domestic private loan
   (6) Small domestic owned ship – Own fund

4. Problem of Ship Finance
   (1) Government fund – Limited resources
   (2) ODA – No resources
   (3) OOF – Limited resources
   (4) Foreign bank loan – Guarantee problem
   (5) Domestic bank loan – High interest rate

5. Rationale for strengthen Ship finance
   (1) Rationalization of Shipping sector
   (2) Restructuring of Shipping sector
   (3) Promotion of Privatization
   (4) Modernization of Fleet
   (5) Tertiary shipping support
       (Balanced development of the country, poverty reduction – livelihood support, socio economic development – health, education, security)
   (6) Shipping related industry development
       (GNP contribution, export promotion, job creation, B/P support)

6. Action plan for strengthening Ship finance
   6.1 ODA for various purposes
      (a) ODA – Project (Procurement of Model ship)
      (b) ODA – TSL (Rehabilitation and improvement of existing fleet)
      (c) ODA – Project (Procurement of Pioneer ships)
      (d) ODA – TSL (Support for tertiary shipping)
      (e) ODA* – Equity investment (SMHC, shipyard etc)
      (f) ODA – TSL (for Forwarders)
      (g) ODA – TA (Planning, implementation, capacity building)
* FDI Counterpart fund
   (1) Top priority project of the country
   (2) Feasibility and effectiveness confirmed
   (3) Last resort
   (4) Project content confirmed
   (5) Ready for implementation
3.7.2. Action Plan 2: Modernizing and Maintaining Domestic Fleet (Katsurada Toshisada, Nomori Etsuo – JICA Study Team)

**STRAMINDO SEMINAR**

**Action Plan II**

**Modernizing and Maintaining Domestic Fleet**

**KATSURADA & NOMORI**

15th January, 2004

**JICA STUDY TEAM**

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**ACTION PLAN 1**

Needs for Designing of Model Ships

- Future Transport Demand in Liner Services
  - Concentration to 13 major ports
  - Characteristics of Sea Transport Conditions
    - Shallow Draft of Several Ports
    - Long Inter-island Routes
- Fleet Assignment Issues
  - To meet massive traffic demand effectively
  - To meet the needs for quicker delivery
  - To serve small and scattered demand

---

**Modernizing and Maintaining Domestic Fleet**

- Building and Assignment of Most Suitable Vessels on Regular Inter-island Routes
- Introduction of Ship-Management System

---

**Model Ships (1)**

- **a. Shallow and Wide Container Ship**
  - Calm water of Java Sea
  - Existence of Major River Ports in Sumatra, Kalimantan, Sulawesi
- **b. Ro-Ro Ship**
  - Short to Medium distance container routes
  - Transport Demand of High-value goods
- **c. Multipurpose Ship**
  - Long inter-island routes
  - Various types of cargo demand
Package Deal: Joint venture ship-building between well experienced foreign shipyard and local shipyard

Implementation Schedule of New model Ships

<table>
<thead>
<tr>
<th>Work Item</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional and Financial Arrangement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of Basic Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of Conceptual Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tendering Procedure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shipbuilding by Foreign Shipyard as a Joint Venture Project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shipbuilding by Local Shipyard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Package Deal: Joint venture ship-building between well experienced foreign shipyard and local shipyard

Possible Ship-Management Service Areas and Expected Interactive Effects

- Preparation of annual maintenance budget and schedule
- Most effective spending of annual maintenance budget
- Reduction of commissionable days due to decreasing engine malfunctions and accidents
- Possible reduction of insurance charges
- Conduct of routine onboard maintenance by owner
- Improvement and training of seafarers
- Budget ship-time to enable ship owners

Manning Insurance JM I 5

Problems due to current seafarer management system:
- Difficulties in retaining seafarers willingness to work and concentration
- Decrease in operating rate of and capacity of equipment due to the lack of maintenance
- Increase in equipment failure and subsequent increase in repair cost
- Declining overall ship performance

Problems due to current ship maintenance system:
- Few companies know the current conditions of their ships
- Long period of preparation for repairing ships
- Declining overall ship performance

Needs of Improvement of Ship-Management

- Improvement of seafarer management
- Re-education of seafarers
- Restructuring of ship maintenance
- Establishment of Ship Management System

Action Plan 2

Introduction of Ship-Management System

Profitability of Shallow and Wide Container Ship

Profitability of Model Ships

Matrix of Ship Types of Routes

<table>
<thead>
<tr>
<th>Route</th>
<th>Ro-Ro</th>
<th>La-La (Container)</th>
<th>Multi Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shallow draft and Short distance ≤ 500'</td>
<td>A</td>
<td>P</td>
<td>x</td>
</tr>
<tr>
<td>Shallow draft and Long distance ≤ 500'</td>
<td>x</td>
<td>A</td>
<td>P</td>
</tr>
<tr>
<td>Middle draft and Short distance ≤ 500'</td>
<td>A</td>
<td>A</td>
<td>x</td>
</tr>
<tr>
<td>Middle draft and Long distance ≤ 500' on heavily demanded routes</td>
<td>x</td>
<td>A</td>
<td>P</td>
</tr>
<tr>
<td>Middle draft and Long distance &gt; 500' on moderately demanded routes</td>
<td>x</td>
<td>P</td>
<td>A</td>
</tr>
</tbody>
</table>

Note: A – Attractive Vessel, P – Practical Vessel, x – Not practical Vessel

Docking Days

Possible Ship-Management Service Areas and Expected Interactive Effects

Attachment-88
Study on the Development of Domestic Sea Transportation and Maritime Industry in the Republic of Indonesia (STRAMINDO) - Technical Report 3 -

Introduction of Ship-Management System

Function of Ship-Management System

- Responsible for: Ship Maintenance and Repair
- Insurance Management
- Crewing (Assignment and Education)

Benefits for Shipping System

- Reduction of Docking Period or Increase of Commissionable days
- Keeping Good Condition of Ships within Estimated Maintenance Budget
- Extension of Ship Life

Training of Superintendents

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2014</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Vessel over 3,000 dwt/grt</td>
<td>912</td>
<td>1,396</td>
<td>1,807</td>
</tr>
<tr>
<td>No. of Senior Superintendents</td>
<td>152</td>
<td>226</td>
<td>301</td>
</tr>
</tbody>
</table>

Note: 1/ Cargo vessels over 3,000 dwt and passenger vessels over 3,000 grt
2/ Workload assumption – 6 vessels per senior superintendent

A Model Ship-Management System

40 staffs including 5 senior superintendents (SI) taking care of 30 vessels (of more than 3,000 DWT)
The ship management fee will be US$ 5,000/month/vessel

Organizational of A Model Ship-Management System

(Staffing Plan: 40 personnel)

Management Director
+ Secretary

General Affairs Manager
+ 2 Assistants

General Ship Manager (GSM)
+ Secretary (Expatriate Senior SI)

General Ship Manager: Container Ship
+ Secretary (Expatriate Senior SI)

General Ship Manager: Tanker
+ Secretary (Expatriate Senior SI)

General Ship Manager: Bulker
+ Secretary (Expatriate Senior SI)

Financial Prospect of A Model Ship-Management System

Refer to Table 16.2.2

Refer to Table 16.2.3

Profitability Increase due to Ship-Management

Comparison between With and Without Ship-Management contract

Container Ship 5,000 DWT (10 yrs old)
3.7.3. Action Plan 3: Advanced Management Education (Nagaya Toshiaki – JICA Study Team)

Problem to be understood

• Is financing difficult?
  If so, Why?
• Old ship is the problem?
  → Government program is not enough?
  → Fund supply is not enough?

If we properly understand the problem, we have half solved them. --Carlos Ghosn president of Nissan Motor Co.

Present Condition of Declining Shipping Industry

There is a vicious cycle: No improvement

Lack of Money
Limited Selection

Old Second-Hand Vessel

Not much Profit

Vicious Circle of Shipping Industry Declining

Poor Performance Problems in Operation
The fact is …
Bank is not willing to lend money… Because…
Repayment in the future is not sure.

Why ?
Because there are Lack of
1) Management Capacity,
2) Collateral,
3) Company size
… etc

Company Credibility supported by National Credibility

Everybody needs to change
• Company needs to change
  ➤ Family Business to Corporate Business
• Government needs to change
  ➤ Strong Leadership & Grand Vision
• New system to be introduced
  ➤ Ship-management

Government Needs to change
• Strong Leadership on International conventions: IMO, MARPOL, ISPS
  • Operation Reporting
  ➤ Fairness in law enforcement
• Planning of Development strategy of shipping business in Indonesia
  ➤ Implementation of STRAMINDO Action Plan
  ➤ Benefit to Shipping Company and National Economy

Function of Ship-Management (Proposal for Indonesia)

New system to be introduced
Ship-management as a new business
Incubator
➢ Advanced Management Education
  Expert course to develop Ship-management Specialist (Superintendent: SI)
➢ Supporting Consortium : (encouraged)
  Companies to join the operation of Ship-management company and Advanced Education
PPP: Public Private Partnership

Attachment-91
Study on the Development of Domestic Sea Transportation and Maritime Industry in the Republic of Indonesia (STRAMINDO)
- Technical Report 3 -

Career Track for Ship-Management Candidates
- Employment Opportunity as Superintendent (assistant) in Ship-Management companies
- Proposed Advanced Education awards Certificate: Expert of Ship-Management
- Practical Experience on Board or in office for 5 – 10 years

Career Track for Candidates of Management Courses
- Proposed Advanced Education awards: “Master of Management in Shipping Industry”
- Master’s Degree in Management Education
- University 4 years Strata-1
- Sekolah Tinggi 4 years College Degree III
- Academy 4 years Diploma IV or Equivalent
- SMA (High School)

Establishment Scheme of Management Education
- DGSC & ETA: Education and Training Agency
- Appoint a University to set-up a new Program
- Proposed program of Management Education
- Expert Course of Ship-Management
- Existing Courses
- BPPTL or National University (Balai Pendidikan Pelatihan Transport Laut)
- Proposed program of Management Education
- Cooperate with New Program
- STMT Tri Sakti
- STIP Jakarta
- Other universities

Courses in the Advanced Management Education Center
- Mandatory course: Quality Management and Project Coordination
- Expert Courses
- Administration & Government Mandate
- Shipping Business Management
- Repair and Shipyard Management
- Interdisciplinary activities for integration of all courses

Ship-Management
- Planned Maintenance and Procurement
- Technical Management for Ship Operation
- Budget Control Accounting and Reporting
- Organizational Control and Human Resource Management

Administration & Government Mandate
- Legal issues and Maritime Administration
- Insurance & Risk Assessment (concept and practice)
- Environmental Issues in Shipping Industry
- Port Management, Cargo handling operation, and Development Planning

Shipping Business Management
- Business Management and Marketing
- Logistic system and Economics
- Operation Planning, Costing and Accounting
- Finance and Risk Management

Operation, Repair & Shipyard Management
- Repairing and Ship Building Supervision
- Procurement Management
- Human factors for safety and productivity
- Operational Analysis and Solution Technique
Interdisciplinary Activities

- Case Studies of Business Development
- Conventions and Symposium
- Inter-modal Transportation & New Technologies
- Field Work and OJT

Target of Advanced Education

- Shipping Company
  - Top Manager & Director
- Government office
  - Gov. Administrator
- Shipyard & Port Operation
  - Operation Manager
- Ship-management Company
  - Superintendent

- Existing Education for Ship Operation
  - Deck Officers, Engineers
  - Ratings

Advanced Education Center as a Meeting Plaza for the future

Advanced Education Center

Shipping Company
- Shipyard
- Freight Forwarders

Government Educational Institution
- University of Mercantile Marine, STIP
- Other institutions

Advanced Education Center
- Good Young Graduates for Seafarers and Management Candidates
- University of Management Education on Transportation (STMT)

Future Vision of Shipping Industry with National Development

- International Credibility
  - National Wealth of Indonesia
- Successful Management
  - Improvement in Operation
- Attain International Standard

Education
- Improvement of Shipping Related Industries
- Quality Conscious Resources
- SHIP as a Networking Industry for Efficient Activity of National Economy

3.7.4. Action Plan 3: Advanced Management Education (Capt. Indra – ETA)

Study on the Development of Domestic Sea Transportation and Maritime Industry in the Republic of Indonesia (STRAMINDO)

Advanced Management Education

Seminar on “Building Public-Private Partnership in Domestic Shipping Development through the Implementation of STRAMINDO Action Plan”

Jakarta, 15 January 2003

Review

The Overall Study Objectives
To increase the share of Indonesian flagged vessels in domestic shipping by providing improved shipping service to shippers and passengers on all domestic shipping routes.

The Specific Objectives
1. To formulate Master Plan (up to year 2024);
2. To prepare Action Plan for the implementation of priority projects;
3. To facilitate technology transfer.

Illustration

World Fleet

Types of ship (>100 GT)

Source: Ton Van Essen, STC Rotterdam, 1 August 2003

Country | National Flag | Foreign Flag | Total |
---------|---------------|-------------|------|
Others   | 2525          | 708         | 3233 |
France   | 470           | 176         | 646  |
China    | 4601          | 376         | 4977 |
Singapore| 319           | 175         | 494  |
Japan    | 809           | 2093        | 2852 |
Germany  | 1378          | 442         | 1820 |
USA      | 900           | 936         | 1836 |
Brazil   | 234           | 1489        | 1723 |
Italy    | 36            | 142         | 178  |
Indonesia| 463           | 108         | 571  |
Turkey   | 463           | 571         | 1034 |
Singapore| 463           | 277         | 736  |
Korea (Republic of) | 463 | 441 | 904 |
Korea    | 463           | 441         | 904  |

Source: Ton Van Essen, STC Rotterdam, 1 August 2003

Attachment-93
Knowledge, understanding and proficiency

<table>
<thead>
<tr>
<th>Competency</th>
<th>Knowledge, understanding and proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officer</td>
<td>50%</td>
</tr>
<tr>
<td>Engineer</td>
<td>40%</td>
</tr>
<tr>
<td>Navigator</td>
<td>30%</td>
</tr>
<tr>
<td>Steward</td>
<td>20%</td>
</tr>
<tr>
<td>Chief</td>
<td>10%</td>
</tr>
</tbody>
</table>

STCW '95

- Training ship experience
- Simulator training
- Laboratory equipment training

Is there any consequences on achieving those competencies through the Competency Based Training and Competency Based Assessment?

The fact is ...

Bank is not willing to lend money due to..... Repayment in the future is under uncertainty.

Why?

Because there are Lack of 1) Management Capacity, 2) Collateral, 3) Company size, etc.

Management Course

- Proposed Advanced Education Award: Master of Management in Maritime Industry
- University or Polytechnic 4 years
- Senior High School (SMA)
- Practical experience on board or in office for 5-10 years
- Education and Training Agency: ETA of MOC and DGSC

Establishment Scheme for Advanced Management Education

- BPPTL (Balai Pendidikan dan Pelatihan Transportasi Laut)
- Education and Training Agency: ETA of MOC and DGSC
- Proposed Program of Management Education
- Expert Course of Ship Management
- Existing courses

1/2 of the world fleet is owned in Europe, but most of officers are in Asia

Shortage of Officers (BIMCO/ISF 2000)
in 2000: 4% of 460,000 = 18,400 seafarers
in 2010: 10% of 460,000 = 46,000 seafarers (competition)

½ of the world fleet is owned in Europe, but most of officers are in Asia
Courses to be Prepared

Mandatory course: Quality Management and Project Coordination

Expert Track
- Ship-Management
- Administration and Government Mandate
- Shipping Business Management
- Repair and Shipyard Management

Management Track

Ship Management
- Planned Maintenance and Procurement
- Technical Management for Ship Operation
- Budget Control Accounting and Reporting
- Organization, Human resource management.

Administration and Government Mandate
- Legal issues and Maritime Administration
- Insurance (concept and practice)
- Environmental Issues in Maritime Industry
- Port Management and Development Planning

Shipping Business Management
- Business Management and Marketing
- Logistic system and Economics
- Operation Planning, Costing and Accounting
- Finance and Risk Management

Repair and Shipyard Management
- Repairing and Ship Building Supervision
- Procurement Management
- Human Factors for Safety and Productivity
- Innovation Management

Interdisciplinary Activities
- Case Studies of Business Development
- International Trend and Inter-modal Transportation
- Conventions and Symposium
- Field Work and OJT (On the Job Training).

Sustainability

Illustration
International Competition of Seafarers Market:
- Top 25% companies are willing to pay the price for good quality crew.
- The Bottom 20% companies do not care.
- 55% companies in between are marginal influenced by the pressure of shippers or by regulatory action.

Cost of Training for Crew and Staff

Ratio of training to operational cost

<table>
<thead>
<tr>
<th>Educational &amp; Training Expense</th>
<th>Total Operating Cost</th>
<th>Current World Average Reported</th>
<th>Future Target expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>= 0.5 %</td>
<td></td>
<td></td>
<td>2 %</td>
</tr>
</tbody>
</table>

Source:
Capt. Pradeep Chawla, LSM Manning & Training Conference in Manila, ITFIMA Dec. 2003
Alternative
Japan’s ODA Charter

Basic Policies:
1. Support self-help efforts
2. Perspective of “Human Security”
3. Assurance of fairness
4. Utilization of Japan’s experience and expertise
5. Partnership and collaboration with the international community.

(1) Support self-help efforts
Japan’s ODA is to support the self-help efforts of developing countries based on good governance, by extending cooperation for their human-resource development, institution building, ...

(2) Perspective of “Human Security”
Japan will implement ODA to strengthen the capacity of local communities through human resource development.

(3) Assurance of fairness: fair value of people to gap rich & poor, gender issues;
(4) Utilization of Japan’s experience and expertise;
(5) Partnership and collaboration with the international community.

Japan will actively promote the South-South Cooperation.

System of Formulation and Implementation of ODA Policy

- Coherent formulation:
  - Japan will be mindful of the balance between hardware-type and software-type cooperation;
  - Human resource development;
  - Development education.

Matters Essential to Effective Implementation

1. Enhancement of Evaluation;
2. Ensuring appropriate Procedures;
3. Prevention of Fraud and Corruption
   - Ensure the transparency of the activity-selection and implementation process, and to prevent fraud, corruption, and improper diversion of aid;
4. Ensuring the safety of ODA personnel.

Thank you for your kind attention