

January 20-22, 2010 Hilton Colombo Hotel Colombo, Sri Lanka

Hosted and Organized by the "Friends of WMU, Japan" Secretariat in Cooperation with The Nippon Foundation and Sri Lankan Sasakawa Fellows

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WMU SASAKAWA FELLOWS' NETWORK MEETING IN THE SOUTH ASIAN REGION

RESOLUTION

We, the participants of the WMU Sasakawa Fellows' Network Meeting in the South Asian Region held in Colombo, Sri Lanka from 20 to 22 January 2010:

IN REALIZATION AND RECOGNITION of the need to pursue enthusiastically the creation of the WMU Sasakawa Fellows' Network in the South Asian Region for the purpose of establishing and maintaining useful and constant links among national networks and Fellows for mutual cooperation and exchange of knowledge; and

CONSIDERING the availability of resources and the maximum utilization of modern information and communication technologies;

Do hereby **ADOPT** an ACTION PLAN to drive for the fulfillment of the objectives of the WMU Sasakawa Fellows' Network and its future development and expansion, as follows:

- Enhancement of the Friends of WMU, Japan Website to provide a more effective means of communication among fellows and for the promotion of the Sasakawa Fellows' Network to benefit the maritime Sector;
- Understanding of the urgency for regular updating of the Fellows' Directory to ensure maximum utilization and benefits;
- Improvement of the Newsletter of the Friends of WMU Japan for wider distribution covering governments and other agencies concerned as a tool for promotion of the Sasakawa Fellows' Network, and with active contribution from every Fellow;
- Select countrywide Focal Points for better coordination to further the Network;
- Derive benefits of professional growth through the exchange of expertise related to the maritime policies or affairs of each country; and
- Expansion of the Sasakawa Fellows' Network through the sustained activities of each country as well as regional cooperation;

and **RESOLVE** to cooperate actively and effectively in the implementation of this Action Plan within the South Asian Region.





Participants and WMU Graduates





At the Prior Discussion for the Network Meeting





Reunion of Sasakawa Fellows





First Day at the Meeting



Special Lecture on the fist day



A Scene of the City of Colombo



At the Lunch Break



A Group Photo at the Prior Discussion





Scenery from the Network Meeting



City of Colombo - near Colombo Port



On the Way to the Port



Mr. Jayatissa introducing the entire area of the port



Scenery from the Colombo Port





With Two other WMU Graduates at the Colombo Ports Authority



Control Tower at Port of Colombo





Scenery from the Colombo Port



A Group Photo in front of the Hilton Colombo Hotel



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Time Schedule

January 19, 2010 / Tuesday

Prior Discussion for the Network Meeting (2.5 hours)

January 20, 2010 / Wednesday

1. Opening Session

Welcome Speech

Mr. Tilak Deepthi Jayasinghe (Representative of Sri Lanka Sasakawa Fellows)

Opening Remarks

Mr. Masazumi Nagamitsu (Executive Director of The Nippon Foundation)

2. Special Lecture

Special Lecture (1)

"Sri Lanka's Port Development: Toward a Logistics Hu"

by Mr. Upul Jayathissa - Deputy Chief Manager (Marketing & BD) Sri Lanka Ports Authority

Special Lecture (2)

"Port Management in the New Globalization"

by Dr. Satoshi Inoue, Secretary General Emeritus International Association of Ports and Harbors (IAPH)

Special Lecture (3)

"Modern Technology and the Seafarer"

by Capt. Nalaka Jayakody, Dean, Faculty of Commercial Sciences Colombo International Nautical & Engineering College

3. Exchange of Information on Maritime Affairs

Presentation on the Maritime Affairs (Bangladesh Fellows)

- Mr. Iqbal Karim
- " Impact of Oil Spillage from Ships "
- Mr. Abu Hena Mohammad Mamun
- "Brief Report on Current Maritime Affairs in Bangladesh"
- Mr. Khalid Mahmud
 - "Ship Recycling Safety Culture for a Sustainable Global Environment and Marine Ecosystem"

Presentation on the Maritime Affairs (India Fellows)

- Mr. Sudhir Kumar Sinha
 - " Coastal Trade in India "
- Mr. Shantanu Paul
- "Why Don't We Act Prudently?
- Supply and demand of quality seafarers in the wake of the financial crisis "

Presentation on the Maritime Affairs (Japan Fellow)

- Mr. Tomonori Okamura
- "Maritime Society and Human Resource Development in Japan"

Presentation on the Maritime Affairs (Maldives Fellow)

- Mr. Hussain Naeem
- " Maritime Affairs of Maldives "

Presentation on the Maritime Affairs (Pakistan Fellows)

- Mr. Mohammad Ashraf Zafar
 - "PAKISTAN'S MAJOR MARITIME ISSUES"
- Mr. Asghar Ali
- "Maritime Awareness and Capacity Building"

Presentation on the Maritime Affairs (Sri Lanka Fellows)

- Mr. Y.A. Tilak Deepthi Kumara Jayasinghe
 - "New Project: Hambantota Port Construction"
- Mr. Sarath Kumara Mathurana Gedara
- " Major Maritime Issues in Sri Lanka"

4. Welcome Reception (at Curry Leaf Restaurant)



January 21, 2010 / Thursday

1. OPRF Presentation Session

- Mr. Shinichi Ichikawa (Coordinator, "Friends of WMU, Japan" Secretairat, OPRF)
- "Ideal Network Structure for the Sasakawa Fellows"

2. WMU Presentation Session

- Ms. Susan Jackson (Associate Registrar, WMU)
- "WMU:Moving Ahead into the Next Decade"

3. Network Meeting

Session 1

- Recent Sasakawa Fellows' Activities
- Updating Fellows' List

Session 2

- Mutual Communication by Internet
- Website Utilization

Session 3

• Friends of WMU, Japan Newsletter

Session 4

• Methods to Enhance Sasakawa Fellows Network

January 22, 2010 / Friday

1. Preparatino for the Discussion Report

Writing up the Discussion Report Debriefing the Report in each Session

2. Closing Session

Closing Words on behalf of WMU

Ms. Susan Jackson (Associate Registrar of the World Maritime University - WMU)

Closing Remarks

Mr. Eisuke Kudo

(Special Adviser of the Ocean Policy Research Foundation - OPRF)

3. Field Study Tour

Port of Colombo Mohammad Mahbub Morshed Chowdhury (Bangladesh) - arranged by the Sri Lanka Sasakawa Fellows -

4. Farewell Reception (at Curry Leaf Restaurant)



Opening Session

I. Welcome Speech

Tilak Deepthi Jayasinghe (Representative of Sri Lanka Sasakawa Fellows)

II. Opening Remarks

Mr. Masazumi Nagamitsu (Executive Director of The Nippon Foundation)



Welcome Speech

Tilak Deepthi Jayasinghe Representative of Sri Lanka Sasakawa Fellows

Distinguished Secretary, Ministry of Ports & Aviation Distinguished Delegates from OPRF and The Nippon Foundation Representatives from WMU Guest Lecturers WMU Sasakawa Fellows in South Asia and Japan Dear participants, ladies and gentlemen:

It is a great honor to have the opportunity to say a few words on behalf of WMU Sasakawa Fellows Sri Lanka.

I welcome all of you to the WMU Sasakawa Fellows Network meeting in the South Asian Region.

It has been a long time since we gathered in Tokyo, 2001 at Tokyo in 2001. We particularly welcome the presence of the Special Advisor of OPRF, Mr. Eisuke Kudo, and staff members. We are grateful to them for making this event a reality and enabling the members to reunite.

I know that many of you have traveled from quite a distance and I'd like to acknowledge WMU Sasakawa Fellows from South Asia and Japan, Delegates from WMU, for your attendance.

The exact words fail me to acknowledge the efforts of the founder of The Nippon Foundation, the late Mr. Ryoichi Sasakawa and the present Chairman of The Nippon Foundation, Mr. Yohei Sasakawa, who rendered a yeoman's service to the world of shipping by initiating the scholarship program and network activities. We are also pleased to welcome Mr. Masazumi Nagamitsu, Executive Director of The Nippon Foundation.

We extend a very warm and hearty welcome to Dr. Satoshi Inoue, Secretary-General Emeritus, International Association of Ports and Harbors.

Inspiring speeches from guest lecturers and presentations regarding current affairs of shipping and ports will lead to more insightful studies during this meeting.

WMU Sasakawa Fellows have the opportunity to develop their capacities for research, harmony with different cultures, and the strength of working through network activities. Hence, a dedicated and enterprising group will be created that has the ability to strengthen the development of the maritime industry in each country. We hope that this network meeting will be successful, and that it will contribute greatly to further procedural developments in network activities.

I would like to close my speech by expressing our sincere wishes for the success of this network meeting.

To all of you, thank you for coming here, welcome, and please enjoy the conference!



Opening Remarks

Masazumi Nagamitsu Executive Director, The Nippon Foundation

I would like to begin by extending a warm welcome to the WMU Sasakawa Fellows, who have taken time out of their busy schedules to attend this South Asian meeting of the WMU Sasakawa Fellows Network. My gratitude also goes out to your work supervisors and colleagues, who have given you permission to come to this meeting.

Under the Sasakawa Fellowship Program, you studied and graduated from WMU with excellent academic results, before returning to your respective countries and taking up positions related to maritime affairs at places such as maritime bureaus, port authorities, coast guards and various educational institutions. For this dedication and continuous effort, I applaud you. I trust you will continue to apply yourselves in the maritime field for many years to come.

As you are aware, the maritime world is at present riddled with problems.

Among them are transportation disruption by pirates and terrorists, maritime accidents in international straits, and oceanic contamination attributable to ship dismantlement. Other problems include delays in developing a maritime safety management system amid increased complexity caused by the presence of ships flying a flag of convenience and the use of multinational crews.

These are issues that cannot be easily resolved through separate efforts by individual countries.

Resolving these issues requires human resources with leadership and the capacity to address matters from a broad perspective, as well as a system of collaboration among the countries concerned. Fortunately, during your time at WMU, you have gained the precious experience of studying with people of different national, cultural and religious backgrounds, and have become part of a valuable human network as a result.

The human network, the WMU Sasakawa Fellows Network, currently has over 400 members from 53 countries. I hope you value your connection with other Sasakawa Fellows not only within South Asia but also across the rest of the world, and make active use of this network as an effective tool for solving various issues.

This meeting will include reports of the activities of Sasakawa Fellows in South Asia, an exchange of information on maritime administration, and discussions on how the network should evolve into the future. I hope that during the course of this meeting, you will engage in debates regarding these issues to further reinforce the WMU Sasakawa Fellows Network in South Asia.

In closing, let me wish you all, on behalf of The Nippon Foundation, the very best of health and a life filled with happiness.



Special Lecture

I. "Sri Lanka's Port Development: Toward a Logistics Hub" Mr. Upul Jayatissa (Deputy Chief Manager (Marketing & BD) Sri Lanka Ports Authority)

II. "Port Management in the New Globalization" Dr. Satoshi Inoue (Secretary General Emeritus, International Association of Ports and Harbors (IAPH))

III. "Modern Technology and the Seafarer"

Capt. Nalaka Jayakody (Dean, Faculty of Commercial Sciences, Colombo International Nautical & Engineering College)



Sri Lanka's Port Development: Toward a Logistics Hub

Upul Jayatissa Deputy Chief Manager (Marketing & Business Development) Sri Lanka Ports Authority

Presentation Structure

- Changes in Port Administration
- Historical Evolution of Port of Colombo
- Current Operational and Logistics Status
- Port Development Projects
- Sri Lanka: Toward a Logistics Hub

Sri Lanka Ports Authority

- The Ports Authority, as a corporate body, was constituted under the provisions of the Sri Lanka Ports Authority Act, No. 51 of 1979 as amended by Act, No. 07 of 1984 and Act, No. 35 of 1984, was established on 1st August 1979.
- The Ports Authority has been empowered to develop, maintain, operate, and provide port and other services in the ports of Colombo, Galle, and Trincomalee and any other port.

19, Church Street, Colombo 1, Sri Lanka www.slpa.lk

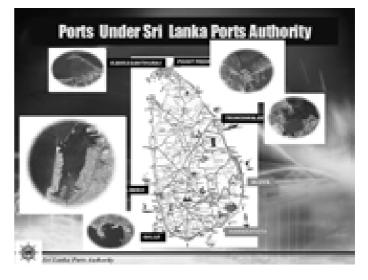
There are five ports under the Sri Lanka Ports Authority

- Port of Colombo
- Port of Galle
- Port of Trincomalee
- Port of Point Pedro
- Port of Kankasanturei

Two new ports are under construction

- Port of Hambantota
- Port of Oluwil





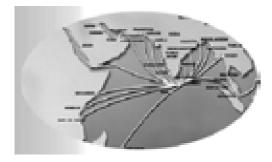


About the Sri Lanka Ports Authority

Sri Lanka, an island nation, has four commercial ports: Colombo, Galle, Trincomalee and Kankasanthurai. The Sri Lanka Ports Authority manages these ports.

The seaports in Sri Lanka form the gateways, linking seaborne traffic to road and rail transport and vice versa. Being strategically situated, the port of Colombo forms a base for transshipment activities.

The Port of Colombo has now developed into one of the best ports in South Asia, handling both conventional cargo and containers. In fact, the Port of Colombo has been acknowledged as one of the most economical ports in the region.



With highly skilled and trained staff, noted for their dedication to provide a fast turnaround, Colombo port has always been a major attraction for the world shipping lines.

Container Freight Station activities and clearance of cargo are done at warehouses within and outside the port premises, thus ensuring more efficient service for multi-country consolidation and entrepot operations.

With a planned approach to handle all shipping documentation through Internet/EDI facilities and the adoption of state-of-the-art technologies for handling containers, the Port of Colombo is now poised to become the best service provider in the region.

Containerization of seaborne transportation was introduced by major shipping operators of developed countries in the early 1960s and it came to Colombo a decade later. It was a foreign liner operator that pioneered containerization of the routes as well as operating feeder services to Colombo. The lead was taken by American President Lines (APL) in 1973, followed in the early 1980s by other lines.

The formation of the Sri Lanka Ports Authority took place in August 1979, the aim of which was to explore the strategic location of the Port and transform it into a modern container handling port for transshipment traffic in the region.







Services Provided by the Sri Lanka Ports Authority

- Multi-country consolidation
- Entrepot business
- Bonded warehousing
- Supply of water
- Bunkering
- Container freight stations

Other Facilities Available at the Port of Colombo

- Ship repairs/ship building
- Bunkering
- Ship chandlers
- Salvage and towing
- Safety and security

Port of Colombo is the

- Hub port in the region
- 27TH port in the world ranking in 2008
- Handled 3.68 million TEUs in 2008
- Handled 3.46 million TEUs in 2009
- Direct shipping opportunities
- Economies of scale benefits
- Working 24/365

Capacity Enhancement Projects

- JCT Capacity enhancement New equipment/terminal management system
- SAGT capacity enhancement
- Feeder berth project
- Colombo Port Expansion Project (CPEP)
- Hambantota New Port Project
- Galle Port Development Project
- Trincomalee Harbour Development









Colombo Port Expansion Project (CPEP)- Colombo South Harbour

Phase 1

Basic Infrastructure - Breakwater Three Container Terminals

Navigational Data

- Depth 18 m 20 m
- Basin 285 ha
- Two-way channel

South Terminal

- Three berths
- 1,200 m quay
- Land area of 58 ha
- Capacity 2.4 m
- Terminal cost \$500 million
- Ready by 2012

Phase 2

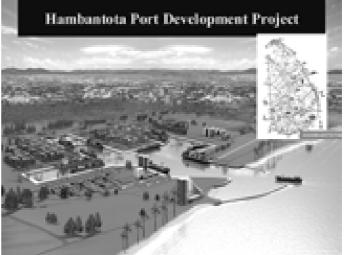
- Extension of breakwater •
- One container terminal

Hambantota Port Development Project – Phase 1

- Depth 17 m
- Turning basin 600 m
- Two general cargo berths 600 m
- Oil & gas terminal 310 m
- Service berth 105 m
- Estimated cost U.S. \$361 million
- Chinese government funding
- Commenced construction Jan. 2008
- Completion 1st April, 2011 •

Proposed Services

- Oil & gas
- Bunkering/high seas bunkering
- Cement
- Fertilizer
- Flour
- Automobile transshipments
- Coal
- Industrial cargo
- Ship repair & building •
- Supply of water/chandlers •



Colombo Port Expansion Project (CPEP)- South Harbour



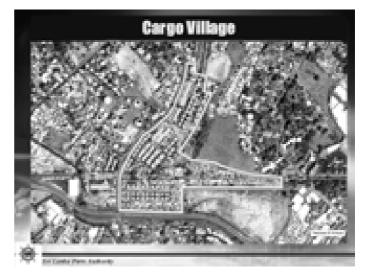




- Offshore services
- Port-related industries
- Warehousing
- Larger fishing vessels

Our Vision

- Improve transshipment container/vehicle
- Value-added logistics
- Cargo village
- Logistics hub
- Global port operator
- Investment and partnership



Martin Carrow Region Carrow Re





Port Management in the New Globalization

Satoshi Inoue Secretary General Emeritus International Association of Ports and Harbors (IAPH)

Good morning. I would like to thank The Nippon Foundation and the Ocean Policy Research Foundation for inviting me to this WMU Sasakawa Fellows' Network Meeting here in Colombo. It is my great pleasure to discuss with you this morning the main issues facing the world port community today.

My talk will go this way: Following a brief introduction of IAPH, I would like to discuss how we should run our ports after the current recession is over, then discuss the major challenges we need to address, and the new roles of port authorities.

Introducing IAPH

The International Association of Ports & Harbors, IAPH for short, is the only worldwide organization representing the world port community. IAPH was established in 1955, and we just celebrated our 50th anniversary five years ago.

At present, some 200 ports in 90 maritime countries around the world are our members, including, of course, Sri Lanka Ports Authority, the major ports of India, Chittagong, Maldives and Karachi. Also about 140 port-related organizations have joined us from a wide range of sectors, such as national



and regional port associations, shipping lines, service providers, contractors, universities and many others. Together, our member ports handle over 60% of the world's maritime trade and 90% of the world's container cargo.

IAPH provides the world' ports with an outstanding platform to network and share best practices. Granted NGO Consultative Status by UN agencies, IAPH plays a pivotal proactive role at international forums, such as IMO, ILO and UNEP, representing the world port community. Our technical committees tackle major problems and issues ranging from port safety, security, and the environment, port planning, operations and logistics to IT applications and facilitating trade.

Preparing for Economic Recovery

Last year, about 700 port executives and experts from some 70 countries met in Genoa, Italy, for the 26th IAPH World Ports Conference, May 25–29. Discussed, among other topics, was the current global recession that is severely hitting the world port community.



Ports around the world have been dramatically affected by the downturn of the world economy. A clear sign is yet to be seen for a recovery. However, it was only one and half year ago that most of the ports were suffering severe congestion due to a lack of capacity. Unlike building ships, building ports takes years, and often decades are needed to develop terminals, channels and other infrastructure. Therefore, as resolved at Genoa, all ports are urged to move ahead, despite being in the midst of a recession, with continued efforts to improve productivity and expand capacity based on their strategic long-term port plans. Otherwise, ports will not be able to cope with the demand and will quickly become bottlenecks once the economy rebounds.

Entering a New Phase of Globalization

What will the world economy look like after the recovery? As many economists are predicting, the economy will recover, though slowly. But I do not think it will keep on going with globalization in the same manner as before the recession. Many companies have already started reassessing the ways that they will operate in the new environment. In the previous phase of globalization, economies solely pursued growth in profits by bringing all materials to produce goods from around the globe, so long as this was economical, and then exporting these

goods all over the globe. But after the recession, we will have to clearly meet not only the economic requirements but also other global requirements, such as environmental and security issues. The new phase of globalization, therefore, will place more emphasis on growth in quality rather than simply in quantity. Production is likely to move closer to the end-market. Growth will be characterized by emerging trends, such as an increase in intra-regional trade; higher priorities for logistics, reliability, and sustainability; provision of integrated logistics services; and more innovative approaches to port capacity.



In the new phase of globalization, the world economy will once again be restructured more around the principle of distance. Regional —and undoubtedly shorter— supply chains significantly save energy and transportation costs; reduce CO₂ emissions; make security control easier; and increase the visibility of cargo flow. Industries, therefore, will look for more imports of materials from neighboring countries and more exports of goods to neighboring markets. This will lead to remarkable increases in intra-regional trade, while at the same time, continuing to take advantage of improved accessibility to markets all over the world. In other words, world trade in the new globalization phase will further develop in a two-layered structure: inter-continental trade and intra-regional trade.

In this sense, intra-regional coordination among ports will play a more important role. In particular, it will be increasingly necessary to develop a regional port networking system. For instance, there is a greater need for regional port security systems through mutual recognition of Authorized Economic Operator (AEO) system



based on the WCO's supply chain security regime. This also applies to regional development of short-sea container and ro-ro shipping. For human resources, attention should also be paid to making port personnel within the same region better acquainted with each other through various regional channels and activities.

Transforming Ports into Logistics Hubs

In parallel with the development of global supply chain management, ports will be compelled to change basic functions from the mere interface between shipping and land transport into a logistics center within a seamless global supply chain. As ports are a single part of the global supply chain system, they will increasingly face difficulties in meeting customer's sophisticated needs for integrated logistics services, unless they become a pivotal link in the whole chain.



Predictability and visibility of cargo flow through

the entire transport process is as critical for today's customers as are cost and time. In fact, efforts for this kind of port transformation are already taking place. To provide value-added logistics services to customers, ports are developing large logistics complexes, called either logistics parks or distri-centers, among other names. Ranging from warehousing and distributing to processing, assembly, checking and just-in-time delivery, logistics services will need to be tailor-made for each of the port's customers.

Ports and Supply Chain Security

Safety is always critical at any port, and this is especially true in the age of globalization. If a port is forced to stop operations due to an accident—for example, a ship collision in its main channel—the world economy could be instantly paralyzed. In particular, therefore, we at IAPH are working hard on safety in ports for navigation, workers, and cargo. Through the IMO and other UN agencies, IAPH has been instrumental in setting up a new international framework, while advocating and promoting new technologies for the safety of the port industry.

Equally important is the intensified need for port security. It is imperative for a port to be internationally accepted as a sustainable and reliable partner of the global trade industry. Enhancing security is high on the agenda of the world's ports today and it will be even more so in the future. Since July 1, 2004, all international trade ports must now run terminals with new security systems that comply with the ISPS Code. Moreover, efforts are being made to secure the supply chain as a whole. IAPH has been working closely with the World Customs Organization on the WCO's Framework of Standard for Security and Facilitation, which was formally adopted in 2005.

Based on this framework, nearly 20 countries have already introduced a supply chain security regime called



the Authorized Economic Operator, or AEO. While urging other countries to follow suit, IAPH is pushing those countries hard to go a step further for the mutual recognition of AEO systems so that the security of international logistics chains between two or more countries will be significantly enhanced.

Climate Change and Ports

For environmental concerns at ports, IAPH is a global forum for port authorities to share best practices and experiences. In particular, climate change is recognized as a top priority for the port industry. In March 2008, we made available the IAPH Tool Box for Port Clean Air Programs, a Web-based guideline and reference site for improving air quality at ports. This is accessible to all ports in the world, both for our members and non-members. Please access this Web site at <u>www.iaphworldports.org</u>. Soon it will be expanded by adding a section on how to reduce CO_2 emissions in ports.

As one measure to reduce CO₂ emissions, on-shore power supply at ports is becoming popular. This allows ships at berth to stop their engines and use the electric power supply from the shore. Until now, however, ports introduced different connection systems due to the lack of an international standard. To prevent this situation from continuing, IAPH worked with ISO to set up a working group to develop a single technical standard for on-shore power supplies. In March 2009, ICE and ISO adopted a PAS, or publicly available standard, for on-shore power connection.

In November 2008, IAPH launched the World Ports Climate Initiative (WPCI) as a global platform for the world's ports to join forces and share knowledge to fight climate change. For all ports around the world, IAPH members and nonmembers alike, the WPCI is now carrying out various projects, such as a carbon inventory, developing hybrid yard equipment, as well as

IAPH Tool Box for Port Clean Air Programs

 Web-based planning guide for port clean air programs



- No one-size-fits-all approach
- Measures for each of major emission sources
- Tools readily available, including application cases and pros/cons

On-Shore Power Supply

- Shut down ship engines completely while at berth
- On-Shore Power Supply, Alternate Maritime Power(AMP),
- cold-ironing IEC & ISO technical
- standard for HVSC, March 2009



World Ports Climate Initiative Global platform for port climate actions launched by IAPH in November 2008 Raise awareness, initiate studies & actions, share best practices & information Projects in progress Caston fortprinting MMH TextBox Ver2 Constone power supply Lease contract template Low emission yard equipment Environmental Ship Index (ES) Modal shift of histeriand access



creating an environmental ship index and lease contract templates, etc. You are urged to join the WPCI to effectively address the global issue of climate change together with all members of the world port community.

Also, port adaptation to climate change increasingly requires the serious attention of port authorities. In 2009, IAPH conducted a worldwide survey—in conjunction with Stanford University and the American Association of Port Authorities—to gauge ports' awareness and readiness to prepare for climate change's impact, including sea level rise, increased extreme weather, flooding, sedimentation and coastal erosion. Given the complexity of climate change, it is considered most practical, in my view, for ports to proceed with an incremental approach based on the scientific risk analysis of the impact of the climate.

An Innovative Approach to Increasing Port Capacity

Tremendous growth for port demand is yet to come in the new phase of globalization. No doubt, ports will have to quickly cope with increases in maritime trade; otherwise, ports will seriously hinder economic growth in their respective countries and also of the world as a whole. Container cargo has grown by nearly 300% over just the past 10 years. In 2007, 481 million TEUs were handled around the world, and this is expected to grow further after the world recession ends. For reaching economies of scale, container vessels have never stopped increasing in size; there are now vessels of even more than 10,000 TEUs carrying capacity. This increase in size applies to bulk carriers as well.

To expand port capacity, many large-scale development projects are in progress throughout the world. In Asia, for instance, the Busan New Port in Korea will have 30 new container berths. In Europe, the well-known Maasvlakte 2 in Rotterdam has started to reclaim more than 1,000 hectares of land for new terminals and an industrial complex. Here in Sri Lanka, the Port of Colombo is carrying out the large-scale South Harbour Development Project.

When looking at these developments, we should keep in mind that it is always essential for the success for every port to develop its own approach, taking into account its unique situation and constraints, such as severe space limitations and environmental requirements. In this sense, I would say we have quite a lot to learn from other ports around the world, while strengthening our own in-house capability.

Improving Productivity

Increasing the productivity of existing terminals is as critical to ports as expansion. To this end, a number of innovative terminal systems are aggressively being introduced, including automation of yard operations and high-speed cargo handling systems.

One of those projects is a new container facility called the Pasir Panjang Terminal in Singapore,





where they can stack containers 9 to 10 high using an elevated yard crane system. Another example is the Ceres Paragon Container Terminal in Amsterdam, which has the world's first indented container berths for loading/unloading boxes from both sides of a vessel, cutting in half a ship's turnaround time.

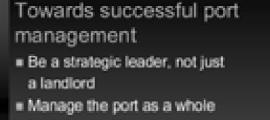
Access to the hinterland is more and more critical if your port is to be successful as a logistics hub in a seamless supply chain network. Today, most shippers value predictability and transparency of overall cargo movement from origin to destination more than the cost and time spent at port terminals. Therefore, ports are working hard with various partners to provide multi-modality and dedicated shuttle services to inland load centers, and to develop inland depots and dry ports.



New Roles for Port Authorities

Now, let us discuss the role of port authorities. Most of the world's ports today are managed by what we call "landlord-type" port authorities. This means that while cargo-handling and terminal management are handed over to private operators, the port authority is responsible for the port as a whole. Their concerns range from long-term policy and strategy planning, infrastructure development, concessions, regulations for port safety, security and the environment, to marketing and promotion.

On top of that, to be successful, port authorities have to be strategic leaders in their port's community, not just landlords. We need to manage ports as a whole and even look beyond the port. Today, therefore, port authorities have to play a leading role as managers or coordinators of the local port community. I have always said that a port authority is just like an orchestra conductor, who blends players' skills to produce a harmonious symphony.



- Look beyond the port
- Form up partnerships with existing or new parties
- Network globally, act locally

Whatever type of projects are contemplated at a port, they must develop an effective partnership for that project with other organizations, both public and private. For instance, to improve productivity, it is essential to have close coordination, at least among customs agencies, terminal operators, and land transport providers. Nobody else is willing to take the trouble to coordinate all those partners until the port authority itself steps in.



For innovative terminals, the port authority will also be better off forming a close partnership with private organizations to share project funds as well as project risks, coordinating the knowhow of terminal management with all parties concerned and jointly promoting the terminals in the world market.



Let's Work Together with IAPH

Today, we face many changes and challenges. Ports are running at the real forefront of globalization. Without efficient and high-quality ports, port cities and maritime countries will no longer be able to enter into a bright future. It is therefore the port that plays a critical role as the strategic engine of a nation's or region's development.

I would cordially invite you to take an active part in IAPH. As an IAPH family member, you could learn from each other and share best practices with all the ports around the world, and you could, in turn, contribute to the furtherance of the world port community.

Every two years, IAPH organizes a global conference where port executives and experts from all over the world meet and discuss issues of today and tomorrow. They will meet once again for the 27th IAPH World Ports Conference to be held in Busan, Korea, from May 23rd to 27th, 2011. This year, the members of the Asia and Oceania region will meet in Bandon, Indonesia, from February 3rd to 5th. You are kindly encouraged to join the discussions there on a range of key issues facing the ports of the region.

Thank you all for your kind attention.

Dr. Satoshi Inoue, Secretary General Emeritus, IAPH The International Association of Ports and Harbors (IAPH) 7th Fl. South Tower, New Pier Takeshiba, 1-16-1 Kaigan, Minato-Ku, Tokyo, 105-0022, JAPAN Tel: 81-3-5403-2770 / Fax: 81-3-5403-7651 URL: <u>http://www.iaphworldports.org</u> E-mail: s_inoue@iaphworldports.org



Modern Technology and the Seafarer

Nalaka Jayakody Dean, Faculty of Commercial Sciences Colombo International Nautical & Engineering College

Abstract

This study examines seafarers' confidence and awareness of modern technology in maritime transportation. Questionnaires were distributed to 351 randomly selected employed seafarers. Graphical methods and some statistical tools were used for analysis. New technology in the maritime industry is to be welcome, however this also brings an element of change and risk. The expansion of the maritime industry also comes with an element of change and risk as well as some serious issues, notably a lack of experienced and up-to-date qualified crew. The introduction of new technology on board ships is brought about by a number of different causes. Sometimes it is driven by new regulations, as in the case of the Automatic Identification System (AIS). Increased technology on the bridge can, in some instances, result in a reduction of safe navigation. Some seafarers are not sensitive enough in this regard, perhaps because they do not feel confident with the technology. They do not really understand it and have not received any training on it. Maritime educational institutes worldwide also face a shortage of lecturers and demonstrators.

Introduction

Maritime transportation, like all transportation, is a derived demand. This represents about 80% of all freight shipped globally. In terms of weight, about 96% of world trade is carried by maritime transportation. Maritime shipping is one of the most globalized industries in terms of ownership. Maritime transportation, similar to land and air modes, operates in its own space, which is at the same time geographical (from its physical attributes), strategic (from its control) and commercial (from its use). While geographical considerations tend to be constant over time, strategic and especially commercial considerations are much more dynamic.

Today, in addition to the cruise and ferry industries, advanced technologies are also found in other sectors of the shipping industry. More and more companies understand the benefits, such as safety, from the application of new technologies. Modern technology has revolutionised the way in which the seafarer can conduct his business. Although, in principle, the more information that can be made available to the seafarer, the better should be his or her understanding of the situation and the better informed his or her decision making, but this is not entirely the case in practice. It is probable that technology is having an adverse effect on the way that some seafarers do their jobs. New technology creates the responsibility for shipowners to ensure proper training on the functions and limitations of the equipment. Port authorities have a similar responsibility to ensure that pilots are up to date with the latest technology and trained in its use. Training is an area that needs continual improvement. New technology alone will not improve safety. Training has a crucial role to play in getting the maximum benefit from new technology.

According to recent research on maritime technology and human integration on the ship's bridge by Lutzhoft, M. (2005), when people and technology have to work together, they have to coordinate resources, cooperate with devices and compromise between means and ends. In the process of integration, a mariner's



work includes representations of data and information; rules, regulations and practices; human and machine work; and learning and practice. Further, mariners largely have to perform integration work themselves because machines cannot communicate in ways that they see as useful. What developers and manufacturers choose to integrate into a screen or a system is not always what mariners would choose. It is commonly accepted that new technology often demands a new way of working. However it has not always been made clear that this also demands a new way of thinking. Despite a plethora of maritime studies, the topic of integration has received little attention, and when it does, the strategies usually suggested to improve work on the bridge are to add more technology and increase automation.

But the above opinion was challenged by Lutzhoft. It is an open question whether these will have the intended effects on the bridge; the navigators are not convinced. Lutzhoft also attempted to underline several questions: What is the job, and what tasks are being performed? What can technology do to help? What are the possible risks or downsides and how can they be avoided, as far as possible? The most important issues to follow up on are education, training, and providing a link between users and manufacturers, without giving the users responsibility for design. He further mentioned that there is no conspiracy at work. If designers and developers are not given what they need, they have nothing to resort to other than their own common sense and understanding of how others work.

Modern Technology in Maritime Transportation

Technology is an object or sequence of operations created by man to assist in achieving some goal. A technology is a body of human knowledge that can be passed along from one place to another and from one generation to the next. Many people see technology as a solution to some of the problems that exist on our planet. It's true that technology can be used for good, but with new developments come new challenges.

Technology could be the best thing that ever happened to us. The use of technology today has made people think harder and it encourages them to create other technology that will benefit us in the future for survival, employment, education, health, etc. Structural changes in international trade and the evolution of modern technology have a direct impact on the growth of maritime transportation.

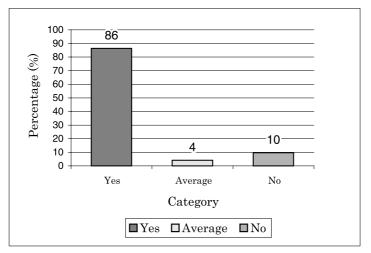
Several recent maritime accidents suggest that modern technology sometimes can make it difficult for mariners to navigate safely. A review of the literature also indicates that the technological remedies designed to prevent maritime accidents can, at times, be ineffective or counterproductive. In order to examine the seafarer's ability and knowledge of modern technology, I focused on several systems and equipment: Automatic Identification Systems (AIS), Electronic Chart Display and Information Systems (ECDIS), Integrated Bridge Systems (IBS), Integrated Navigation Systems (INS), Voyage Data Recorder (VDR), Long Range Identification and Tracking System (LRIT), e-Navigation, and Dynamic Positioning (DP).

Analysis

Questionnaires were distributed from March to December 2008. Participants were asked to express their personal experiences using modern technology in maritime transportation, their perception of training and development and how it helps them to improve performance on their jobs. In addition, participants ranked their level of job effort-reward fairness. Specifically, the questionnaires had 57 questions, and these were broken into four categories: personal information and perception of personal effort, perception of personal job performance, perception of training and development, and perception of job satisfaction. Participants ranked, based on their level of agreement, each statement listed on the survey.



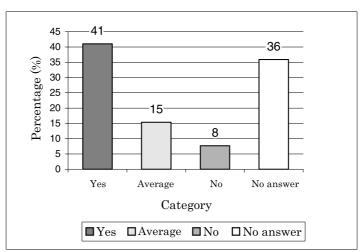
The study included an analysis of the survey results that were produced by 358 participants; out of these, seven participants' questionnaires (2%) were rejected due to late submission or incomplete information. Ninety-eight percent (98%) of the participants were male and two percent (2%) were female; their ages ranged from 20–60; and they represented all continents of the world's seafarer community. The sample consisted of 222 navigation officers and 129 engineering officers. According to the survey, a greater degree of job satisfaction occurs when modern technology is being used at the maximum level possible on board ships.



Graph 1: New technology and the ease of tasks on board ship

Source: Survey data (Nalaka, 2008)

Technology is credited with being a significant factor in increasing productivity in any industry; some people believe that more effective use of technology in ships could further improve the efficiency and quality of service. Research indicates that while there are poor uses of technology in shipping, appropriate technology use can be very beneficial in increasing industrial productivity. Graph 1 reveals that 86% of those sampled have accepted the fact that new technology makes their work easier, while 10% denied this and 4% accepted it to a certain extent.



Graph 2: Confidence in operating new technological systems



Source: Survey data (Nalaka, 2008)

Graph 2 shows the confidence level of seafarers when operating new technological systems. It shows that 41% of those sampled are highly confident in operating new technology systems, 15% are fairly confident, 8% have no confidence and, surprisingly, 36% chose the "No Answer" category.

According to graph 1, it is clear that seafarers believe the modern technology that is available on board ships makes their tasks easier. However, according to graph 2, they are not yet aware of all the modern technological systems and equipment available on board ships.

Conclusions

The introduction of new technology on board merchant ships is developing fast, and it is very important to train and develop officers to use modern technology competently, safely, and effectively when performing their duties on board ships. There were instances where the crew did not have adequate knowledge of the technical equipment used on board ships before they signed on. It was also observed that the development of new technology in the shipping industry is far too slow compared with other industries. Other observations include limitations in training and developing officers and crew due to non-standardized controls and displays. Also, there is an increase in the amount of training needed to make a seafarer familiar with and effective in the use of the equipment.

Technological improvements have reduced, to a great extent, the workload of the crew. On the other hand, all the technologically modified or developed equipment should be 100% accurate, because the crew is totally dependent on the information they receive from these systems (AIS/ECDIS, etc.) when it comes to decision making. Due to inaccurate information being received from these systems, some people have lost faith in the technology, and they are reluctant to use it when it comes to decision making.

Inexperienced seafarers may seek more data and information in stressful situations, often further confusing themselves. Problems can also develop when novice navigators are trained on desktop simulators, which do not have the advantage of a simulated window for visual observation. This may reinforce the habit of constant reliance on a digital display for situational awareness during actual operations. This equipment should be used as an aid to navigation and not be totally relied on.

The introduction of new technology on board merchant ships has the potential to improve the efficiency and effectiveness of keeping watch and could improve the safety of operations. However, it must be recognized that this technology brings with it the inherent training requirements needed to be able to operate the new systems and also the training needed to allow seafarers to use the systems to make better decisions. Standardization of design is necessary to create an environment where seafarers and pilots, working within the natural constraints of their trades, can operate the systems safely and effectively. Also users noticed that modern technology, even though good tools, frequently give false warnings, which make operators very uneasy during busy hours.

In the area of maritime education, this research confirms that the attention paid to safety issues by the STCW 95 Convention is not enough to guarantee the quality of maritime education. Some of the data indicates that implementation of the minimum required standards of the above convention in maritime education actually decreases the level of education in many developing countries. Analysis of continuing incidents also proves that the training and mastering of modern technology are not at the required level, and that they need improvement.



Most educational institutes in developing countries and policymakers tend to abide by the IMO requirement, which is regarded as only the minimum necessary to stay on the "white list." Also, seafarers are not willing to take any of the training programs unless they are a requirement of the IMO. However, the current global trend is that there is a severe shortage of training institutes and experienced seafarers for ships.

Implications for Policy and Practice

Development of Maritime Education in Developing Countries

- Because of non-standard controls and displays, there is an increase in the amount of training needed to make seafarers familiar with and effective in the use of equipment. There are clear dangers for seafarers who find that the systems they are required to use at sea are very different from those on which they have received training. One solution is to familiarize seafarers with equipment by training them using simulators (either desktop or full size) prior to joining ships. This is far more effective when manufacturers provide assistance in developing the training tools.
- Seafaring is a professional, skilled line of work. Therefore, seafarers need more practical experience than theory. Educational institutes should give priority to practical training over theory, and lecturers should upgrade their knowledge with hands-on experience of modern technology. The content, methodology and presentation, and evaluation systems for maritime education and training should be matched with the current requirements of the industry. Action should be taken to avoid teaching practices that are no longer in use. Also, syllabi should be frequently revised and updated.
- Government and shipping ministries should be totally involved when it comes to industrial training. They should ensure the fullest cooperation when providing infrastructure facilities, funds, the latest technology, and international expertise for quality maritime education for youth, seafarers, lecturers and industrial leaders. Also, the authorities and companies should take the necessary steps to sponsor seafarers' education.
- IMO model courses related to the STCW Convention have to be revised and updated to take into account the major revision to the convention in 1995. These updates are necessary to develop the knowledge and skills needed for increasingly sophisticated maritime technology.
- Maritime educations lack quality when it comes to practical, physical, and theoretical training because there are no policies or systems for continual improvements in the education circle. Poor planning, non-identification of weak areas, and a lack of research-based improvements are some of the reasons for a low-quality maritime education.
- In the present context of ever-changing technological advancements, it is very important for instructors and lecturers to gain hands-on industrial experience on the latest technology being used on board ships and within the related field of maritime and marine technology. For example, it is highly important to have practical experience when it comes to maritime education and training.

Development of Maritime Technology

• Though new technology is very helpful, sometimes it can go wrong due to the ever-changing environment at sea. In these situations, it is very important to have alternatives in order to overcome the limitations



and barriers of the technology.

- As a result, most of the time this falls to on-the-job training for the crew and the officers, which could be critical for the safety of the vessel, cargo and the lives on board. It is advisable to train the crew and the officers before they sign on and brief them about the new technology being used and how to use it effectively.
- It is important to understand what the new technology can do to make life easier for the people who sail on board ships, if you intend to get the best out of the technology. An important point to note is that some people do not like change. By trying to make things happen as they occurred before, in a highly sophisticated environment these people make work more complex, then make mistakes and try to put the blame on technology.
- Surveys show that maritime training in developed countries is matched with modern technology because technological training is included in their syllabi. Most of the time students are being evaluated using modern technology and simulators. The ship-owning companies must take the initiative and the responsibility for training their employees from their company account. It was noticed that some seafarers are willing to follow modern technology programs even though it is not mandatory by IMO. The problem they are having is paying the course fee. Generally speaking, modern technology is very useful but the advantages and benefits are minimised without proper knowledge and training.
- Maritime institutes in developing countries reveal that the number of hours that are allocated to modern technology is less than 5% of the total number of hours in the syllabi. Therefore, it is advisable to allocate more lecture hours for modern technology.
- Shipping companies try to reduce costs at all levels by introducing modern technology on ships and they have been successful in drastically bringing down the amount of manual work on board. As a result, they have been able to reduce crew sizes to the minimum level. However, companies and owners should realize that modern technology can be useful only as navigational aids; therefore, the required number of crew should be maintained at all times for the safety of the ship. It is being noted that the technological improvements taking place on board ships are far behind the changes taking place in shore-based industries, for example in the aviation industry, including checklists, AIS, and VDR (black boxes).
- Our survey revealed that there were instances where the crew was not capable of navigating out of danger due to their incompetence handling the latest equipment. Also, the technology that is being used on board ship should be user friendly; it does not have to be complex in order to minimize errors and it has to be as simple as possible to make corrections or repairs. Policymakers, industrialists, and owners should ensure that the crew of a ship is competent to handle these situations and that they are able to overcome difficult situations due to technical failures at sea.

Development of Maritime Administrations

- Shipping ministries, maritime colleges, manning agents, authorities, and shipping companies should work under one umbrella when it comes to maritime education and training in order to standardize policies, procedures and standards, etc.
- IMO should introduce the latest modern technology systems and advise administrations on including modern technology in their syllabi. Administrations in developing countries will not usually include any



additional information in their current training programs unless IMO initiates it. Users indicated that they do not wish to follow any modern technology programs unless local administrations make the necessary arrangements to introduce them into their syllabi.

- It is the responsibility of the authorities, employers and the respective organizations to look into the training and development of seafarers and to place them at the highest position when it comes to technological developments. If not, the users' experience will become outdated as they fall behind the latest technology.
- The seafaring community, administration, and institutes should update their skills and expertise on the latest developments of modern technology systems.

References

Beer, N. (2007).	`Voyage Data Recorders'. Seaways International Journal, February 2007, The Nautical			
	Institute, UK, pp. 21–22			
Deboo, K.N. (2003).	`Integrated Systems Value for Money'. Seaways Internationa Journal, January 2003,			
	The Nautical Institute, UK, pp. 5–9			
IMO (2008).	`Long range identification and tracking (LRIT)'.			
	http://www.imo.org/Safety/mainframe.asp?topic_id=905			
Jones, S. (2008).	`DP certification and training'. Seaways International Journal, February 2008, The			
	Nautical Institute, UK			
Lutzhoft, M. (2005).	`Maritime technology and human integration on the ship's bridge'. Seaways International			
	Journal, June 2005, pp. 4–9			
McCabe, R. (2008).	`AIS and the Mariner'. Seaways International Journal, January 2008, The Nautical			
	Institute, UK, pp. 6–9			



Exchange of Information on Maritime Affairs

I. Presentation on the Maritime Affairs (Bangladesh Fellows)

- 1. "Impact of Oil Spillage from Ships" Iqbal Karim (Bangladesh 1992)
- 2. "Brief Report on Current Maritime Affairs in Bangladesh" Abu Hena Mohammad Mamun (Bangladesh 2000)
- 3. "Ship Recycling Safety Culture for a Sustainable Global Environment and Marine Ecosystem"

Khalid Mahmud (Bangladesh 2007)

II. Presentation on the Maritime Affairs (India Fellows)

- 1. "Coastal Trade in India" Sudhir Kumar Sinha (India 2005)
- "Why Don't We Act Prudently? Supply and demand of quality seafarers – in the wake of the financial crisis " Shantanu Paul (India 2009)
- "Responses to Chemical Disaster at Sea A Neglected Area That Requires Serious Attention from Industry and Governments" Donny Michael (India 2004)

III. Presentation on the Maritime Affairs (Japan Fellow)

1. "Maritime Society and Human Resource Development in Japan" Tomonori Okamura (Japan 2002)

IV. Presentation on the Maritime Affairs (Maldives Fellow)

1. "Maritime Affairs of Maldives" Hussain Naeem (Maldives 2003)

V. Presentation on the Maritime Affairs (Pakistan Fellows)

- 1. "PAKISTAN'S MAJOR MARITIME ISSUES" Mohammad Ashraf Zafar (Pakistan 1994)
- 2. "Maritime Awareness and Capacity Building" Asghar Ali (Pakistan 2006)
- 3. "REGIONAL AND DOMESTIC MARITIME ISSUES: PAKISTAN" Altaf-Ur Rehman (Pakistan 2007)

VI. Presentation on the Maritime Affairs (Sri Lanka Fellows)

- "New Project: Hambantota Port Construction" Y.A. Tilak Deepthi Kumara Jayasinghe (Sri Lanka 1997)
- 2. "Major Maritime Issues in Sri Lanka" Sarath Kumara Mathurana Gedara (Sri Lanka 2007)



Presentation on the Maritime Affairs (Bangladesh Fellows)

Impact of Oil Spillage from Ships

lqbal Karim (Bangladesh 1992)

Assessing the Impact of Oil Spillage from Ships on the Coastal Environment: Means for Response and Mitigation

- Coastal environmental pollution, more than ever thought possible, is from manmade hazards that pose a severe threat to Bangladesh and the region.
- In many parts of the world, coastal areas are highly populated and are often the most developed stretches of land.
- It is estimated that 40% of the world's population lives within 100 km of a coastline (UNDP, 2000), and expectations are that this figure will grow further in the coming years.
- The coast of Bangladesh is known as a zone of multiple vulnerabilities as well as opportunities.
- It is prone to several kinds of natural disasters, such as cyclones, storm surges, and floods. In combination with other natural and manmade hazards, pollution from ships due to both operational and accidental oil spillage has made coastal dwellers more vulnerable than ever (PDO-ICZMP 2004)









- Spills are broadly categorized by size:
 - a. Less than 7 tonnes
 - b. 7–700 tonnes
 - c. Over 700 tonnes.
- Nearly 10,000 oil spill incidents were reported in the 30-year period from 1974–2004.
- The number of oil spills from tankers has decreased significantly during this period.
- Spills per year in the 1970s were approximately three times greater than in the 1980s and 1990s and six times greater in the present decade, despite the increase in seaborne oil trade since 1985.
- Much higher incidences of 7–700 tonne spills than over 700 tonne spills.
- Incidence of large spills over 700 tonnes is three to four times lower than 7–700 tonne spills.

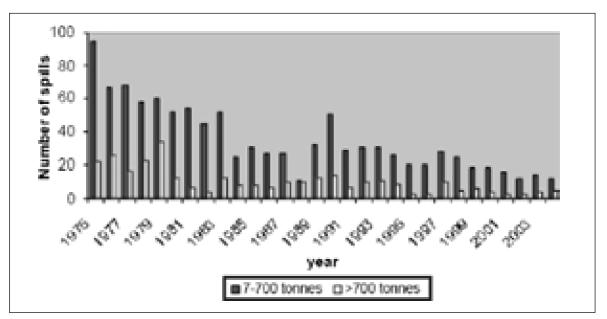


Figure 1: Number of Tanker Spills 7 tonnes and over, 1975 to 2004



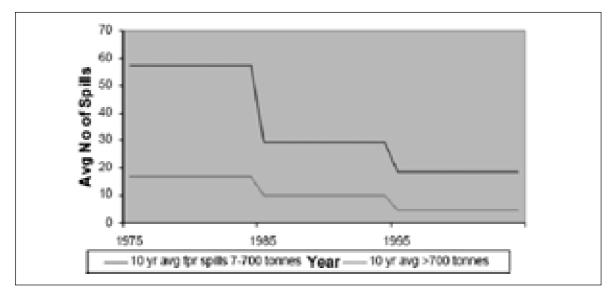


Figure 2: Ten-year Averages for Number of Tanker Spills for Size groups 7-700 tonnes and >700 tonnes

	No of Spills 7-700t	No of Spills >700t	Total spills ≥7t	5yr average for spills ≥7t
1995	20	3	23	
1996	20	3	23	
1997	28	10	38	27.8
1998	25	5	30	
1999	19	6	25	
2000	19	4	23	
2001	16	3	19	
2002	12	3	15	18.4
2003	14	4	18	
2004	12	5	17	

Table 1: No of Tanker Spills 7 tonnes and over, 1995 to 2004

Year	Volume (tonnes)	5 yr Average
1995	12,000	
1996	80,000	
1997	72,000	41,600
1998	13,000	
1999	31,000	1
2000	14,000	
2001	8,000	
2002	67,000	
2003	42,000	15,800
2004	15,000	
	287,000	

Year	Volume (tonns)
1985	85,000
1986	19,000
1987	30,000
1988	190,000
1989	174,000
1990	61,000
1991	430,000
1992	172,000
1993	139,000
1994	130,000
	1,430,000



	< 7t (%)	7-700t (%)	> 700t (%)
OPERATIONS			
Loading / Discharging	35	13	0
Bunkering	4	0	0
Other operations	9	1	4
ACCIDENTS			
Collisions	16	51	23
Groundings	13	24	62
Hull Failures	15	3	0
Fire & Explosions	2	3	12
Other / unknown	7	5	0

Table 3: Percentage of Spills in Three Size Catategories by Cause

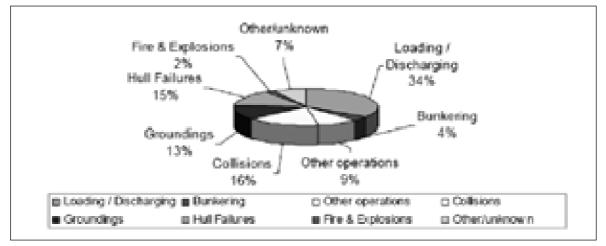


Figure 3: Causes of Tanker Spills < 7 tonnes, 1995-2004

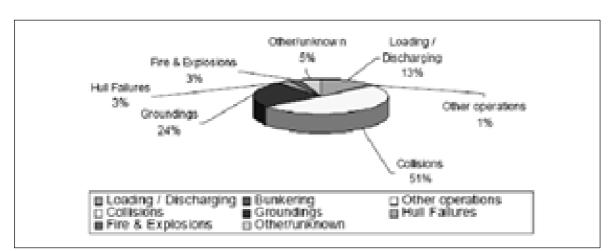


Figure 4: Causes of Tanker Spills 7-700 tonnes, 1995-2004



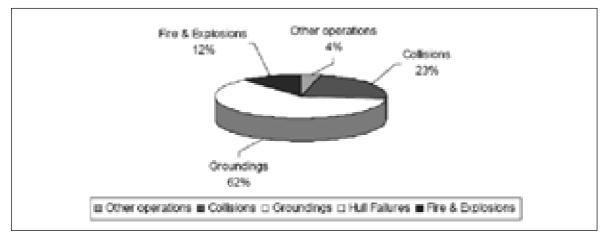


Figure 5: Causes of Tanker Spills > 700 tonnes, 1995-2004

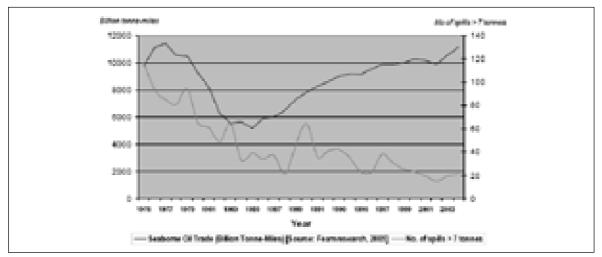


Figure 6: Comparison between the Number of Tanker Spills (7 tonnes and over) and Seaborne Oil Trabe from 1975-2004

Below Figure 7 shows the 10 year averages for tanker spills in relation to the years in which the abovementioned instruments came into force.

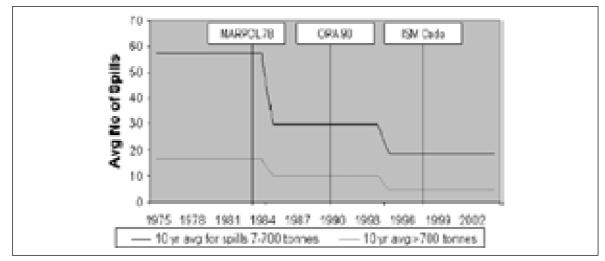


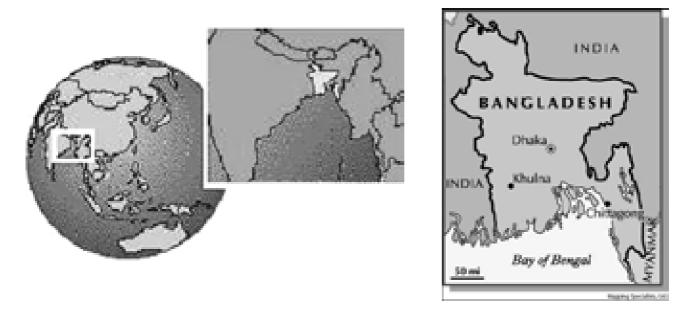
Figure 7: Ten-year Averages for the Number of Tanker Spills in Relation to the Introduction of shipping Regulations





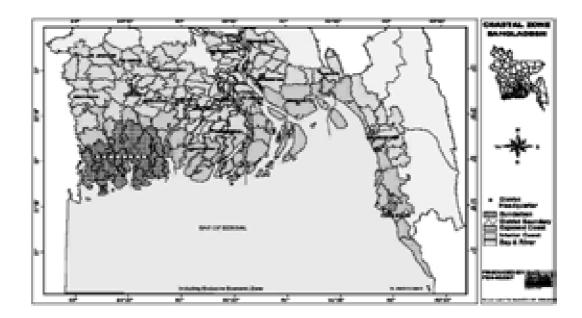
Background of the Issue:

• The coast of Bangladesh is 710 km long and has a diversity of unique ecosystems.



- In Bangladesh, about 30 million people live in the coastal area and their livelihood primarily depends on agriculture, fishing, and forestry.
- This coastal area is 47,211 km², 32% of the country's geographical area, where 30 million people live, i.e., 28% of the country's total population living in 6.85 million households (Population Census in 2001).
- For administrative reasons, 19 districts out of 64 are considered coastal districts.





Bangladesh's national territory on the ocean is shown below:

	Territory	Remaeks
Base line	The depth of water 60 ft (18m) line	As shoreline
Territorial water	12 nautical mile from base line	To ocean side
Administrative limit	24 nautical mile from base line	To ocean side
Economic Zone	250 nautical mile from base line	To ocean side
Border line limit	According to international Convention	Indea, Myanmer

Bangladesh Territorial Water - Boundary

Present Scenario of Bangladesh vs. Hazards from Oil Spillage:

- By a rough estimation, operational oil spills in Bangladesh now reach about 6,000 tonnes/year, much higher than that of Japan with 1,500 tonnes/year.
- This means that the oil spill danger in Bangladesh has already reached a worrying stage and, with increasing oil consumption, this is bound to reach more serious proportions.

Recent Oil Spillage-Related Incidents on the Bangladesh Coast:

Occurrence	Location	Name of Ship	Spilled Oil (MTon)	Cause of Spill
Year				
1989	Offshore of Cox's	Filothei	Crude oil 3,000	Grounding
	Bazar Coast			
1992	Khulna Coast		-	-
1994	Mongla	Pavlina	Bunker oil 193	Loading, Routine
				Operation
1995	Khulna	-	JBO, FO 10	Loading, Routine
				Operation
1999	Offshore of Hiron-	Ocean Wave	Bunker Oil 352	Loading, Routine
	Point			Operation
2001	Khulna	Kalindi	Diesel Oil 230	Loading, Routine
				Operation



Bangladesh Context:

- There is no national response system for oil spills.
- There is a little response equipment or material.
- There is no comprehensive contingency plan for mitigation or response.

Objectives:

Gap Identification:

- 1. Focus on this totally untouched scenario
- 2. Lack of awareness among the public and the media
- 3. In-depth assessment and identification of the potential of this hazard
- 4. Sector-wide impact assessment
- 5. Vulnerability assessment
- 6. Regional cooperation and cooperation from international communities
- 7. Preparation of comprehensive disaster management plan
 - Plan Will Take into Consideration:
 - The communities involved
 - Availability of resources
 - · Adaptability and capacity-building approaches commensurate with constraints and limitations
 - Short-, medium-, and long-term plans

Expected Outcome:

- Awareness of the need to take mitigation and preparedness measures that will address the hazards and impact of accidental oil spills from ships.
- A broad, general description of factors involved: crude oil, ships, tankers, etc.
- Understanding of the underlying factors associated with the risk and vulnerabilities of the community.
- Impact on different levels of the social life, the livelihood and people's preparedness and adaptive capacity.
- Strengthen institutional capacity of Chittagong Port Authority (CPA), Mongla Port Authority (MPA), and the Coast Guard to deal with oil spill emergencies.
- Understanding by authorities and government agencies with respect to preparation and adaptation of national and regional contingency plans for quick response and mitigation of impact.



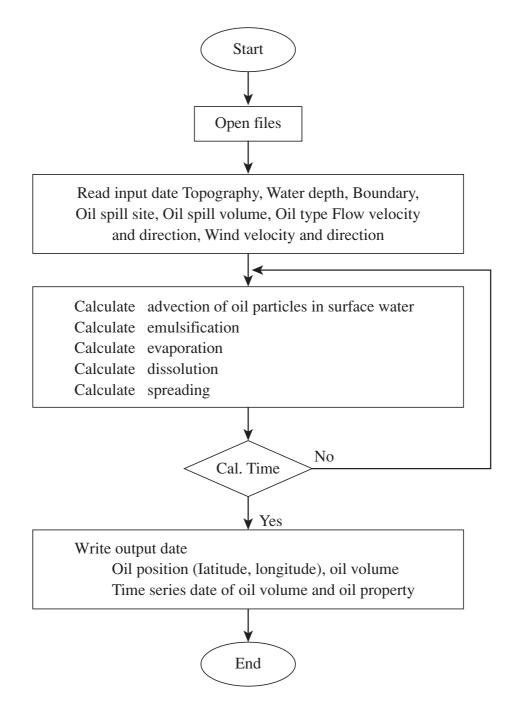


Figure 8: Block Diagram of oil spill



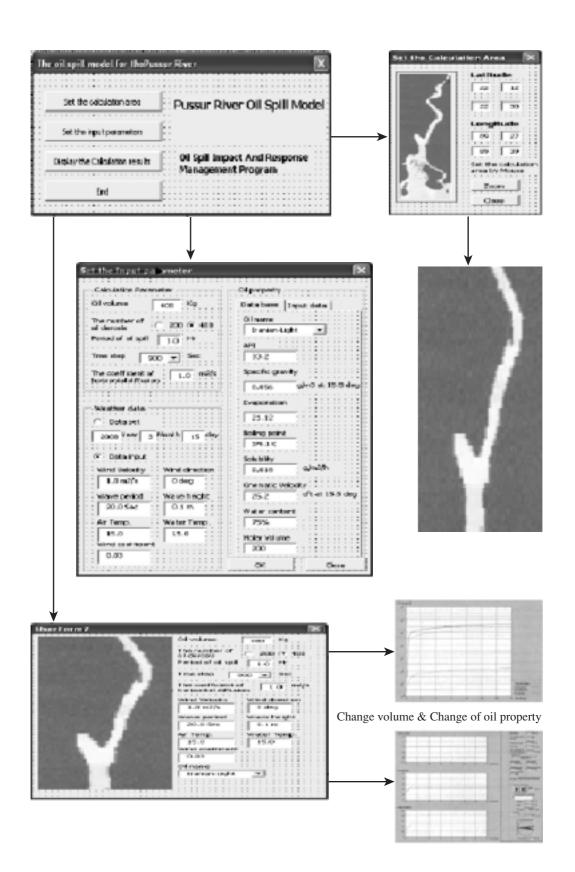
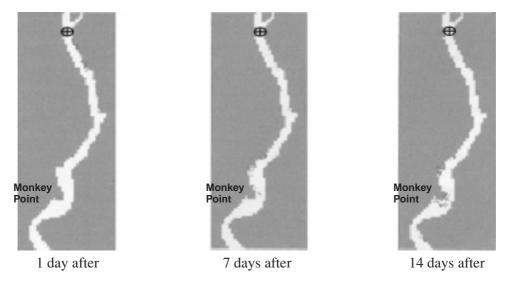


Figure 9: Input and Output of Model



Scenario:

- Oil type: fuel oil (high sulfur furnace)
- Oil volume: 450 kl in four hours
- Flood season
- The coefficients of horizontal diffusion: 1.0 cm cm2/s



⊕ : Spill point

Figure 10: Distribution of spilled oil in each time

Presentation on the Maritime Affairs (Bangladesh Fellows)

Brief Report on Current Maritime Affairs in Bangladesh

Abu Hena Mohammad Mamun (Bangladesh 2000)

It was quite cold in Bangladesh when we left for Colombo on 18th January 2010, but on arrival one day later in Colombo, we found not only that the temperature was warm here, but that the welcome we received from our Sri Lankan Fellows on behalf of the Ocean Policy Research Foundation (OPRF) of Japan was very, very warm. So, my heartiest thanks to the Sri Lankan WMU and the Sasakawa Fellows, to the OPRF Secretariat, to the World Maritime University, and above all to Dr. Yohei Sasakawa, the Chairman of The Nippon Foundation, who has always dreamed of a greater brotherhood among the maritime nations of the world.

Today, I am glad to have the privilege to represent my country, Bangladesh, in this regional forum of the Sasakawa Fellows of the South Asian Region. I would like to read a few brief points on Bangladesh's maritime affairs that may bring attention for regional cooperation as well as for global consideration.

Bangladesh is basically a riverine and a marine-based country with more than 4,000 kilometers of allseason, navigable internal waterways and about 720 kilometers of shoreline along the Bay of Bengal. The highly dense population per square kilometer and the very low altitude of the deltaic plain over almost all the country has made us very respected for sustainable development with very limited resources.

However, for a long time the maritime sector has been given a high priority by the government, which established a separate ministry for shipping affairs, known as the Ministry of Shipping. It incorporates the Department of Shipping, the Mercantile Marine Department, the port authorities in Bangladesh for the two seaports (Chittagong and Mongla), the National Shipping Corporation, the Inland Waterways Authority, the Inland Waterways Corporation, the Marine Academy, the National Maritime Institute, and the Land Ports Authority.

Aside from the Ministry of Shipping, other ministries, such as the Ministry of Water Resources, the Ministry of Environment, and the Ministry of Foreign Affairs, are also working side by side for the development of the waterways, coastal and maritime sectors. Apart from these government organizations, there are quite a few private organizations that have been established in the maritime sector. The attached schematic diagram shows the major government organizations that are related to different maritime activities in Bangladesh.

A few issues are presently drawing a great deal of attention, including:

- Ship Recycling: This is one issue in Bangladesh that has been drawing worldwide attention over the last few years. Our colleague, Mr. Khalid Mahmud, will highlight this topic in his presentation. However, in short I would like to mention that this industry makes a great contribution to the development of my country. So, this industry has been given top priority in order to make it safe and environmentally friendly.
- **Shipbuilding:** Long ago, Bangladesh had a history of the best quality wooden shipbuilding. With the recent re-entrance into the world shipbuilding industry, Bangladesh has established a new era of



shipbuilding. Already two privately owned shipyards have gotten orders from three European countries, Denmark, Germany, and the Netherlands, to build small seagoing vessels of up to 7000 dwt. One ship has already been delivered in the last year and a few others will be ready during 2010. Hopefully, in the near future, this industry is going to be one of the sectors boosting Bangladesh's economy due to the highly skilled labour force and, at the same time, very low labour costs.

- **Coastal Development:** About 45% of Bangladesh's population lives in the coastal region, and most of the people there are living below the poverty line. So, an integrated development of the coastal region is a top priority with the government. A coastal development policy has already been passed by the parliament. A high-powered committee for policy making and a focal points committee with members from related organizations for coordination have been established for the integrated and sustainable development of the coastal region. This policy is expected to enhance the livelihood of the people leaving in the area.
- **Deep-Sea Port:** Bangladesh has also successfully completed the first phase of a feasibility study for the establishment of a deep-seaport in Bangladesh, which is expected to serve as a hub port for the northern part of the Bay of Bengal. Although this is a very high cost project, the government is determined to go ahead with this port in three phases spread over the next forty-five years, from 2010 to 2055.
- Demarcation of Maritime Boundary: Bangladesh is trying its best to establish an understanding with two neighbouring countries, India and Myanmar, to demarcate maritime boundaries through bilateral discussions based on UNCLOS. Both India and Myanmar expressed similar views in recent official dialogues. We hope that better regional cooperation will prevail and that this dispute will soon be resolved.
- Climate Change: Possibly this is the most sensitive issue that Bangladesh will face in the near future, unless the sea-level rise is restricted by the prevention of global warming. The International Maritime Organization (IMO) has also made this issue a top priority, and the theme for last year's Maritime Day was based on the issue of climate change. The address given by Mr. E. Mitropoulos, the Secretary General, at the COP 15 conference last December highlighted the commitment of the IMO to reduce emissions of greenhouse gases from ships by 15 to 30% in order to prevent global warming.

We would like to urge all representatives at today's regional forum to strongly campaign for the prevention of global warming, especially considering the fact that countries of this region, such as Bangladesh and Maldives, are going to be the worst sufferers of climate change due to global warming. Bangladesh has already been facing the effects of climate change from frequent tidal surges, such as those caused by the cyclones Sidr and Aila in the recent past, which not only brought enormous damage to nature, but also the loss of many lives.

With this, I would like to end my presentation, and thank all the participants for listening patiently.



Presentation on the Maritime Affairs (Bangladesh Fellows)

Ship Recycling Safety Culture for a Sustainable Global Environment and Marine Ecosystem

Khalid Mahmud (Bangladesh 2007)

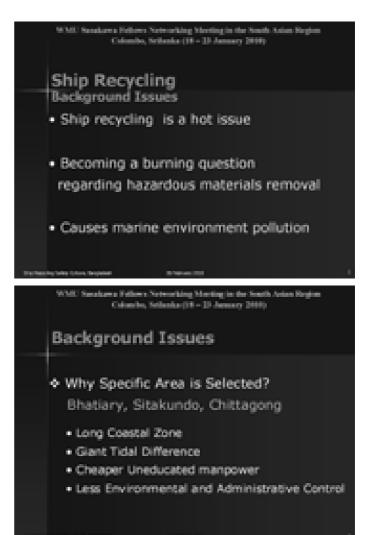
Background of the Issue

Ship recycling is a hot issue in this globalization era and a burning question is hazardous materials removal that causes marine environmental pollution. One big issue made us think more about this: *In the year 2010 all single-hull oil tankers* will be phased out and will be replaced by double-hull, according to International Maritime Organization (IMO) MSC circular.

This indicates that a large number of ships will be sent for recycling in 2011 and a lot of new ships are going to be built.

General Overview of the Topic Area

Although IMO is working with the environmental issues of ship recycling and approaching toward a new convention, it is assumed by some experts to be hardly possible for the recycling industries in the developing countries to comply with the proposed convention. For developed countries, it is possible to implement the full provisions of the standard recycling process. However, on the one hand, if we consider the domestic policy for the recycling of



UK Government-owned vessels, they have relevant waste controls and recommendations for owners and operators of UK-flagged vessels, and this gives us environmentally friendly recycling standards. On the other hand, due to expensive manpower, hazardous material removal, and environmental issues, in practice there are no major recycling processes in Europe or OECD countries. A number of experts are working on this issue. For example, Capt. Chowdhury F.R. (2003) wrote the a report entitled *Recycling is a Shore-based Industry*.

Some of the literature focuses on the difficulties of implementing IMO regulations through domestic legislation.

These problems are due to geographical disadvantages, socio-economic conditions, technical backwardness and an overall lack of knowledge.



Why This Specific Area Was Selected

Bhatiary under Sitakundo sub-district and Chittagong District is the most suitable place for ship recycling due to the long coastal zone, giant tidal differences, uneducated cheap manpower and less environmental and administrative control. Moreover, there is scope to ignore workers health and safety measures as well as damage to the environment. WMU Sanakawa Pelines Networking Monting in the South Asian Region Colorubu, Scilankar (18 – 20 January 2000)

Existing Ship Recycling Culture Stake Holders

- Beneficiaries: Developing as well as Developed Countries
- Implementers: Recycling Industries, Operators, Workers
- Decision Makers: Governmental Agencies and Ministries
- Financiers: Users, Still Rerolling Industries, Markethold
- Involved Community: Land lord, Cultivators, Fishermen.

Who Are the Stakeholders?

- Beneficiaries: Developing as well as Developed Countries
- Implementers: Recycling Industries, Operators, Workers
- Decision Makers: Government Agencies and Ministries
- Financiers: Users, Steel Rerolling Industries, Markethold
- Involved Community: Landlord, Cultivators, Fishermen

Problem Analysis

With a view to finding the problems, I have investigated the above issue by raising some important questions pertaining to the global environment:

- i) Who is going to recycle the ships?
- ii) How will they perform the tasks?
- iii) Are their workers well trained?
- iv) Are they well equipped?
- v) Are there any existing domestic policies regarding safety procedures?
- vi) Are these adequate enough to deal wish environmentally friendly task?

The answers are found inside the present status of the ship recycling process. The major ship recycling industries are in the developing countries. Their working environment is poor, workers are poorly trained, lack of technology, and the overall domestic policies for waste control and environment protection are not adequate.



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MJ. Sanakawa Fallows Networking Monthly in the South Asian Regist Columbu, Scilanka (18 – 10 January 2000).

Existing Ship Recycling Culture

Problem Identification

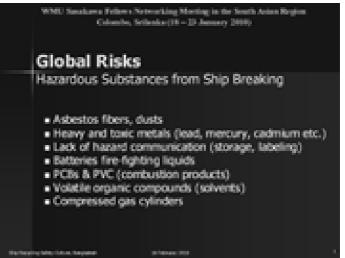
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- vi) Are they adequate enough to deal with task environmentally friendly?



This situation creates a common scenario during the recycling process that includes accidents of workers, and hazardous materials and waste being thrown into the sea. In addition, workers lack of knowledge damaged the environment heavily and missing safety culture.

Furthermore this inadequate practice produces global risks through hazardous substances from ship breaking, like asbestos fibers and dust.

- Heavy and toxic metals (lead, mercury, cadmium, etc.)
- Lack of hazard communication (storage, labeling)
- Batteries, fire-fighting liquids
- PCBs & PVC (combustion products)
- Volatile organic compounds (solvents)
- Compressed gas cylinders



My Proposed Project (A Working Title for the Topic Area)

"Ship recycling safety culture and awareness practices through effective training and motivation for a sustainable global environment and marine ecosystem"

Vision:

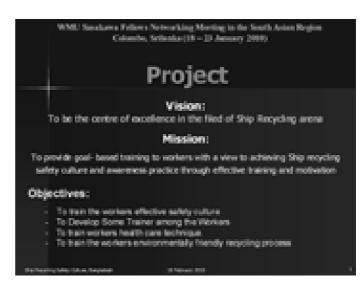
To be the centre of excellence in the field of ship recycling

Mission:

To provide goal-based training for workers with a view to achieving a ship recycling safety culture and awareness practice through effective training and motivation.

Objectives:

- To train the workers in effective safety culture
- To develop some trainers among the workers
- To train workers in healthcare techniques
- To train the workers for an environmentally friendly recycling process





Planning:

Training Duration Setup and Curriculum Development, Practical Training Set Up, Audio-Visual Training Preparation, Sampling of the Workers, Workshops.

Activities: Training Plan per Group: 2 weeks, Curriculum: Lecture, Practical, Audio- Visual, divide the workers into groups, and use the assistance of university students and researchers.

Resources: Training Materials, External and Internal Environment, Audio-Visual materials, hands-on practice, some contributory funds from NGOs, stakeholders.

Risks: Finding the vulnerable issues during training, operations and places.

Conclusion

The impact of ship recycling is not only on environmental damage but also on the marine ecosystem. Also, from the evidence shown by some studies of the Bay of Bengal region, the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks were affected. This is the time to undertake the responsibility to mitigate all types of damage by a planned ship recycling process.

Recommendations

- Simplified ship breaking guidelines
- Establishment of a pilot model ship recycling yard
- Development of a model waste disposal facility.



Presentation on the Maritime Affairs (India Fellows)

Coastal Trade in India

Sudhir Kumar Sinha (India 2005)

Table of Contents

- Some Interesting Facts
- Contribution of Shipping to Nation's Economy
- Significance of Coastal Trade
- International and National Rules
- Definitions in Relation to Coastal Shipping
- Indian Fleet Position on 30.06.2009
- Indian Relevant Shipping Acts
- Foreign Ships' Requirements to Operate in Indian Waters
- Conclusion with Personal Views

Some Interesting Facts

- India has 7,517 km of coastline.
- $\circ~$ There are 12 major and 185 minor and intermediate ports.
- Approximately 1,500 million tonnes of cargo are moved across India.
- 75% of cargo is handled by major ports and 25% by other ports.
- India has 14,500 km of navigable inland waters, out of which 5,200 km are major rivers suitable for water transportation.
- Buckingham Canal is to be declared a national waterway 1,079 km shall be dredged to 2 metres.
- 1.2 million people have lost their lives and 50 million have been injured in road accidents (WHO data), which causes approximately 40,000 crore in economic loss each year.

Contribution of Shipping to Nation's Economy

- The population of India is approximately 1.029 billion (2001 Census) and expected to reach 1.13 billion by March 2008.
- Employment of non-skilled and semi-skilled persons.
- Opportunities for technical persons.
- Other opportunities related to sea transport & shipping activities.
- Commodities generally moved across India are mainly food grains, iron ore, coal, construction materials, fertilizers, machinery, medical supplies, oil and oil products, etc.
- The modes of transportation used or available are roadways, railways, waterways and airways.

Why Waterways?



- **Roadways:** Door-to-door service but expensive and generates a lot of air and noise pollution; maintenance is expensive.
- **Railways:** Cheaper than roadways but delays and pilferage are unavoidable and maintenance is also very expensive.
- Airways: Except for saving time, everything is more expensive, hence can mainly be favorable for high value commodities and goods, such as life saving drugs, etc.
- Waterways are cheaper, more environmentally friendly and cost the least for maintenance. Therefore, 90% of total cargo is moved across the world on waterways.

How Do Maritime-Related Activities Contribute to Society?

- ▶ Maritime people work for the most energy efficient form of transport, thereby saving energy and reducing pollutions, e.g. 4,000 kg of cargo requires 1 HP by waterways as compared with only 150 kg of cargo by road transport and approximately 500 kg of cargo by rail (15% of RT, 54% of rail).
- ► It is the cheapest means of transport especially for long hauls, e.g. the capital investment for 1 km haul and maintenance costs:

<u>Waterways</u>	Roadways	<u>Railways</u>
1.25 to 1.5 Lakh	1.5 to 4.5 L	4.5 to 10 L
Rs. 1000/	Rs. 4500/	Rs. 9500/

It is estimated that the total expenditure for coast-to-coast operations for coastal shipping is 21% of road and 42% of rail.

Significance of Conventions

- ▶ International conventions have contributed a lot to bring quality to shipping. The fact is that this is not limited to international shipping. Coastal shipping has also benefited from adopting various rules and guidelines from international conventions, etc.
- One international treaty defines the rights and responsibilities of nations in <u>their use of the world's</u> <u>oceans</u>, establishing guidelines for businesses, the environment and the management of marine natural resources.
- We must understand the jurisdiction and role of a nation under international conventions with respect to (a) flag state, (b) coastal state, and (c) port state.

What is Coastal Shipping?

- Coastal shipping can be said to be the transportation of goods and/or people through water bodies from one port or place to any other port or place within the jurisdiction of a country or between neighboring countries having common interests.
- India, Bangladesh, Myanmar, Maldives and Sri Lanka, or the BIMMs, have agreed to accept rules and regulations for their ships under Near Coastal Voyages (NCV) under regional cooperation programs.



Understanding Coastal Shipping

- **High Seas** State has no sovereign rights
- **CS** 200 NM
- **EEZ** 200 NM
- $\mathbf{CZ} 24 \text{ NM}$
- **TW** 12 NM
- IW landward side

Indian Acts for Shipping Activities

- ▶ Indian Merchant Shipping Act 44 0f 1958
- ► Coastal Vessel Act 1838
- ▶ Inland Vessel Act 1919
- Indian Ports Act, 1908 (Harbour Craft Rules)
- State maritime acts or laws

AND various rules made under the above acts

Some Important Information about Coastal Shipping

- **Home trade ships:** A ship not exceeding 3000 gt which is employed in trading between any port or place in India or any other port or place on the continent of India.
- **International voyage:** A voyage from or to a port or place in India to or from a port or place outside India.
- Near coastal voyages: The coastal trade or voyages from any port or place in Bangladesh, India, Maldives, Myanmar and Sri Lanka to any other port or place in these countries including the proximity of safe havens on such voyages.

Total ships	938	94,48,636 gt.	1,56,30,382 dwt.
Coastal ships	635	9,67,791 gt.	10,00,945 dwt.
General cargo	73	Operated by	36 companies
Bulk carriers	11		09 companies
Petroleum tankers	13		11 companies
Chemical tankers	02		01 (SCI Ltd.)
Pax. cu cargo	30		11 companies
Pax. ships	32		18 companies
Ethylene carriers	03		01 (Reliance)
Ro-Ro	01		01 company



Tugs	185	Operated by	79 companies
OSV	94		28 companies
Specialized	36		17 companies
Dredgers	22		05 companies
Port trusts, maritime boards and others	95 + 35		13 companies
Total	635		230 companies

Indian Fleet Position - 30.06.2009

Government of India's Initiatives to Boost Shipping

- 2/2008 Centralization of issuance of CDC
- MS (Cons. and Survey of Passenger Ships), 2008
- 5/2008 Permission to Foreign seafarers to b employed on Indian Ships.
- 2/2008 MS (Registration of Ships) Rules, modified.
- 4/2008 Construction, Survey, Certification and of Indian River-Sea Vessels

Salient Points of 4/2008 Circular

- Type I engaged in shore operation up to 12 NM in fair weather only.
- Type II engaged between near by ports during day light in fair weather only.
- Type III engaged between Indian Ports up to 12 NM in fair weather only.
- Type IV engaged between Indian Ports in al weather conditions.

Limitations – 3000 GT & 3000 KW, however 1600 GT and 1500 KW is considered.

- Indian River Sea Vessel Safety Certificate.
- Manning: Deck Dept. (500<GT<=1600) 2nd WK Inland Master (1st/2nd Class) with 1 yr experience. Engine Dept. (750<KW <=1500) 2nd WK Inland Driver (1st Class) with 1 yr experience.

Some Sections of MSA, 1958

- Requirement of manning
- Requirement of CDC (> 200 GT) sec 99
- Requirement of registration (>15 NT) sec 22
- Requirement of license to trade in Indian waters (>150 GT) sec. 406, 407
- Power of central government to protect interests of Indian shipping from undue foreign intervention.
- Coastal conversion: Advantage: No LDT and berth hire is comparatively less



Coastal Cargo Movement in India Compared with Some Other Countries

- India 87 million tons (approx).
- and • China 870 MT • Japan 650 MT • Korea 141 MT • Indonesia 133 MT

In terms of percentage, only 7% of domestic cargo is moved in India, whereas 40% is moved in Europe. I will show examples of a few maritime nations to understand our position in comparison with those countries.

- <u>Australia</u>: coastal fleet of 41 ships, 37 are Australian flagged and 4 are foreign flagged, carries approx. 30% of domestic cargo.
- Navigation Act, 1912 Part VI deals with cabotage.
- Licensing: may or may not be licensed but preference to licensed ship. Conditions: to be paid in Australian dollars and every seaman engaged in coastal trade is subject to lawful deductions and no foreign subsidies are allowed.

<u>Code of Safety for Caribbean Cargo Ships</u>

Fairly new code (1996) – applicable to ships less than 500 GT – Incorporated most of the international instruments' requirements.

- <u>EU:</u> 43% of cargo. Trade within EU is totally free from custom duties EU has 27 member states.
- <u>U.S.:</u>15% of cargo.
- **<u>GREECE:</u>** has many islands, islets and geographical peculiarities 440 ports. Only 123 ports charge port dues. Coastal ships: 408 ships (32% are open ferries and 29% are closed type).
- Greek flag 3,225 ships of 1000 GT and above 10.9% of international fleet. Greek registered fleet of over 300 GT holds first place in EU with 58% of tonnage and 21% of total number of ships.
- Greece number of shipping companies is approximately 835.
- <u>Cabotage:</u> Transport of goods or passengers between two points in the same country.
- Commonly understood as "cabotage rights," a form of protectionism.
- Justifications for cabotage regulations include nation security and the need to protect public safety.
- Japan, the U.S. and the EU have their coastal rules in place.
- Tonnage tax: Alternate method of calculating corporate tax profits based on ship's NT (w.e.f. 1.4.05)

Constraints and Impediments for Indian Coastal Shipping

- **Operational:** Higher manning scale; duty on bunkers, stores, spares; no economies of scale, obsolete tonnage, shortage of officers; much time spent at port; stringent requirements for construction; inadequate facilities at ports, no proper connectivity.
- **Fiscal:** No duty concession on imported spares, bunkers; no financial concession on ship acquisitions; insufficient budget allocation for shipping; no infrastructure status/tax holiday; lack of low-cost ship



repair facilities; repair problems

- **Institutional:** Non-institutional governing body; no common regulation/procedure, especially for minor ports.
- Cumbersome documentation, similar to FG ship
- **Legislative:** No specific legislation; tardy implementation of various study group/ committee's suggestions & recommendations.

My Personal Opinion or Conclusion

- Coastal shipping has been given less priority than rail, road and air transportation.
- **I** No infrastructure status to shipping as yet.
- **H** A lot of constraints, as mentioned earlier.
- Lack of transparency in implementation of cabotage law.
- **W** No true facilitative policy and supporting system.
- Poor infrastructures at minor ports.
- **No** national port sector plan.
- Indian shipping and coastal shipping come under MSA, 1958, and most parts still reflect the legacy of British shipping of pre-independence era, whereas British shipping has already been reformed.
- Cross-subsidization for coastal cargo would give a significant boost to Indian coastal shipping.

To conclude, I wish to say that India is not looking at coastal shipping as an end in itself. Our government is looking at how it will fit into the overall movement of goods across the country and its total integration with rail, road and inland transport and, finally, integration with international shipping.

Thanks and Jai Hind



Presentation on the Maritime Affairs (India Fellows)

Why Don't We Act Prudently? Supply and demand of quality seafarers – in the wake of the financial crisis

Shantanu Paul (India 2009)

1. Introduction

The "supply and demand of quality seafarers" (mainly officers) is an area of major concern as the shipping industry has been bogged down in the same situation for almost two decades. Today, the financial crisis, which is transforming itself into a global recession, is gravely affecting the profitability of various markets and shipping, which transports much of the world's trade. This is creating a very hard pinch. Cancellations of new shipbuilding orders, cancellations of liner services and lay-ups of container ships by leading liner operators, as well as vessels scheduled for being scrapped are regular shipping news.

Against this backdrop, it is not unreasonable for many in the shipping industry to assume that the ongoing problem of the shortage of "quality officers" might be over now. However, post-credit crisis research on manning by reputable maritime industry analysts shows that the problem may be moderating but it has not gone away. The quality officer, which is certainly not the same as a qualified officer, has significant impact on various aspects of the shipping business. However, quality cannot be achieved without qualifications and strategies, and shipping companies have influence on both of these. With few exceptions, shipping companies have not acted prudently to develop qualified officers, the core competence required for quality officers. Arguably, as a short-term solution, many shipping companies have tried to "polish" qualified officers to fill their needs, and this is the basic reason for the officer shortage.

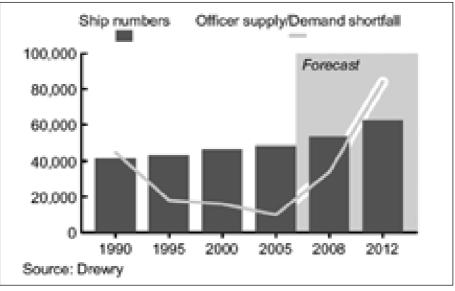
Although various surveys, including the highly reputed, five yearly BIMCO/ ISF Global Manpower Update, repeatedly warned the industry that the supply/demand ratio of qualified seafarers was heading towards a dangerous zone, the shipping industry by and large remained relaxed. The industry had an attitude that "If we ignore this, it will go away" and the shortage developed into a manning crisis during the last super boom. Now, the expected "super slump" possibly will not change the scenario. BIMCO/ISF 2010 Manpower Update is yet to come, but the Drewry forecast shows that the problem is exacerbating (see Table 1 and Fig. 1).

Many shipping experts are cautioning now that, if ignored further, the manning problem is likely to return to bite the industry very hard. So why don't we act prudently and provide a long-term solution for this essential industry's manpower provisions?

Officers	BIMCO/ISF 2000	BIMCO/ISF 2005	Drewry/PAL Global	Drewry/PAL Global
	Manpower Update	Manpower Update	2008 Manpower Model	2009 Manpower Model
Worldwide	16,000	10,000	Forecasted 83,000	Revised forecast
Shortage	in 2000	in 2005	by 2012	43,000 by 2013
Global	World fleet grew by	World fleet grew by	Unprecedented influx	Considering the
Scenario	1.0 % per annum	1.0 % per annum	of new building orders	growing order book,
	between 1995-2000	between 2000-2005		there is uncertainty
				(due to the financial crisis)









2. From Where Do We Get More Quality Officers?

STCW-95, being the minimum standard, does not provide much comfort to many reputable shipowners and charterers. Many administrations have set their standards higher than what convention prescribes, which results in their certified officers being highly regarded in the international market. For example, STCW-95 Regulation II/1 makes one year onboard training mandatory for a trainee to be certified as an officer in charge of a navigational watch, but the onboard training requirement for DGS (India) is 18 months and the Philippines is 12 months. Traditionally, it is accepted wisdom in shipping that onboard training is more effective to develop practical ability—the skills needed onboard—and this could be more relevant for vessel employment at a time when shipping demand is dominated by globally uncertain economic conditions. On 19th Jan, 2010, a leading shipping magazine reported that Bermuda-based Frontline, the world's largest tanker company, will recruit 400 Indian officers on a regular basis to man nearly 40 ships. Table 2 shows India's potential to supply quality officer as per the BIMCO/ISF Manpower Updates of 1995 and 2005. The inference probably can be drawn from this trend that maritime training will continue to shift to India, possibly at a faster pace.

Officer Supply	India	Philippines	China	Japan
1995	12,000	49,430	29,009	23,788
2005	46,500	46,400	42,700	13,000
% Change	+ 287.5%	- 6.1 %	+ 47.2%	- 40.5%

3. How Can We Increase the Supply of Quality Officers?

To increase the supply of quality officers, the lack of training berths on board is often a real problem as too many ships are built without any additional accommodation. INTERTANCO conducted a survey of members in 2006 and determined that there were insufficient berths on new ships to accommodate cadets. India submitted



a proposal to the IMO in 2007 that there should be mandatory requirements to provide training berths on all new ships, which *Lloyd's List* commented was a "thoughtful" proposal. However, in STW, 39 member states realized the importance of this but considered that it will be a costly affair and an economic incentive is required. Now, India has submitted a new proposal to exempt the accommodation of trainee berths from the 1969 Tonnage Convention and progress is expected in the right direction.

Undoubtedly seafaring has lost its attraction, something that must be improved to attract young talent to shipping. To man the large number of increasingly sophisticated ships that are expected to join the world merchant fleets in spite of the global downturn, the IMO campaign "Go to Sea" is very relevant now. We all need to give our sincere efforts for its success. However, this may be a part of the long-term solution and mandatory training berths onboard can only increase the supply, which is yet to be agreed. So what's next?

4. Accept Reality

History shows that the willingness of people to go out to sea is largely dependent on the supply of jobs in their country and the wage differential between salaries in the home country and the salaries offered by shipowners. So, the "Go to Sea" campaign will possibly have a different impact in different regions of the world. It has become increasingly difficult to attract people from the industrialized or well-to-do nations to go out to sea. There are fewer than 1,000 Singaporean seafarers working on the large fleet of over 3,000 ships registered under the Singapore flag, and any fresh effort will possibly not change this scenario. The situation in Japan probably will be the same (see Table 2). So, it will be prudent to intensify the "Go to Sea" campaign to attract bright youngsters where the possibilities are quite high, and the South Asian region definitely holds merit for that. To support the IMO initiative, from June 2009 BIMCO launched a Web-based series called *BIMCO Seascapes*. WMU graduates and Indian seafarers are being projected as attracting youngsters to marine engineering. All WMU graduates in our region can play an important role in the campaign.

In India, large numbers of trainee officers have completed their shore-based pre-sea courses but are unable to get their Certificates of Competency in the entry grade because of their inability to fulfill the requirement for 18 months sea-time training, which the administration has prudently now made obligatory for training institutes to arrange through tie-ups with shipping companies. So, the supply of quality officers from India can be increased by more tie-up arrangements for onboard training slots, as many institutes can further increase their intake.

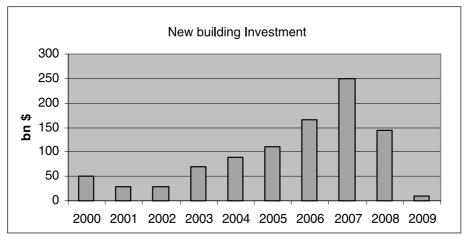
5. Unprecedented New Building Orders—The Height of Imprudence

The financial crisis has gone beyond anybody's imagination but the end of the shipping boom and overcapacity due to huge new shipbuilding orders were predictable. Although many shipping analysts, including the eminent Dr. Martin Stopford, were continually warning the industry since 2004 that such a large order book would hit the shipping industry hard if the trade growth slowed down. Dr. Stopford also demonstrated—by an indicator called the fleet growth multiplier that had reached 5, an all-time high, in 2007—that the continuation of the shipping boom was very doubtful. But new ship investment continued till the crisis hit the industry very hard in 2008. On 2nd December, 2008 *Lloyd's List* reported that the Capesize Index fell less than 1% of the record high of \$233,988 recorded on 5th June, 2008. Unprecedented investment in all types of new building orders during the super boom (2003–2008) reached \$835 billion, which will only exacerbate the shortage (see Fig. 2 for billions of dollars and Fig. 3 for numbers).

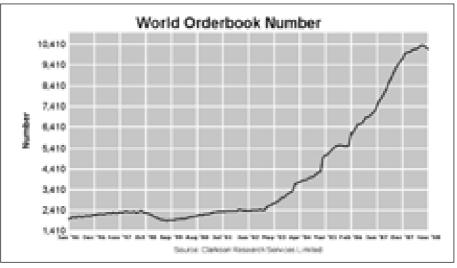


6. Overcapacity—We're in a Very Serious Situation

Today, the problem of overcapacity is affecting both the shipping and shipbuilding industries. Recently, China has become a shipbuilding superpower with more than 3,000 shipyards employing 400,000 workers. World shipbuilding growth is mainly shared between China and South Korea, as Japan prudently restricted the growth of its shipbuilding industry (Fig. 4). Currently, new building order cancellations in Japan are almost nonexistent but in Korea and China they are a big problem. In 2009, shipbuilding demand was only 25% of the capacity of China. It is now a question of huge unemployment and obviously the governments in China and Korea are providing financial assistance. So, the majority of the huge "toxic" new building orders will come onto the market. This shipbuilding overcapacity will result in overcapacity in shipping for many years. Lower freight rates and intense competition is the fate of the industry, and ships with quality officers will have the competitive edge. Imprudently, China has asked state banks to boost financing for new ships not only to safeguard jobs but for supporting a plan to pass South Korea in ship production by 2015. Dr. Martin Stopford commented on this in December 2009, saying that "this sort of target really should be put aside for the time being," to prevent a flood of new vessels prolonging and extending the industry-wide losses. Possibly his advise will be ignored, just as before, and the demand for quality officers, officers competent to operate modern ships safely and efficiently, will grow further.

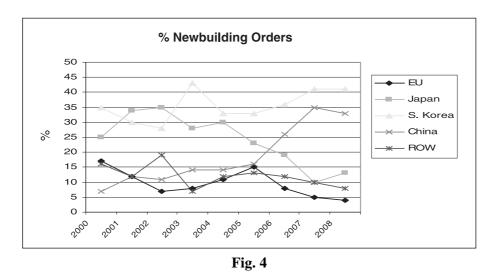












7. Have Shipping Companies Learned Any Lesson During the Manning Crisis?

Caused by the lack of officers' expertise, tanker accidents and accidental pollution started increasing from 2006. Marine insurers also believe that, in a modern high-tech vessel, the skill shortage increases the risk to life, property and the environment and that insurance premiums will depend on issues of manning. Ship operating costs surged by almost 16% in 2008, mainly due to soaring crew (officers') wages, as per the latest Op-Cost 2009 by Moore Stephens. Today, the upward pressure on operating costs has been halted but, as per the latest analysis by Drewry, it is only a temporary respite. The manning cost will be back on the same track as early as 2012. The global trend for officers' salary increases more or less followed the same pattern (Fig. 5). This shortage has only increased the bargaining power of officers during the boom, but in a depressed market a rise in manning costs is not at all a pleasant situation.

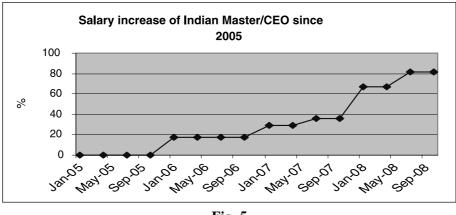


Fig. 5

8. Indian Maritime University—A New Reality in India

Quality maritime education is the need of the hour. The Government of India established (IMU) Indian Maritime University in November 2008 to facilitate and promote maritime studies and research and to achieve excellence in the areas of maritime science and technology, the maritime environment and other related fields (Fig. 6). Cadet training in nautical science is conducted under IMU at 24 approved training institutes with a total annual intake capacity of 2,356 till May 2009.



Indian Maritime University

A long cherished dream of the maritime community of India. Set up like the World Maritime University (WMU) Malmo.



Fig. 6

Maritime Training Institute

A Branch of World Maritime University My place of work — Where WMU MLP Students are coming during a field trip



Fig. 7

Maritime Training Institute (MTI) was set up in 1987 by The Shipping Corporation of India Ltd. (SCI). MTI has extensive modern training facilities and is equipped with marine engineering workshops, laboratories, a well-equipped library, seminar rooms, classrooms, hostels, an auditorium and a planetarium with audio-visual facilities. Apart from various STCW-95 maritime courses, we also conduct value-added courses. At MTI, we also train 200 nautical science cadets under IMU and all cadets complete their onboard training requirement on SCI ships (Fig. 7).



Tough Times Ahead—It Is Time to Act Prudently

- The key to safe and efficient operation is people. In today's scenario, if shipowners lose their reputations for issues like safety, there is less chance for them to do business. So it will be a prudent choice for reputable shipping companies to be proactive, and possibly they can turn their "searchlight" toward India for quality seafarers.
- Today, when the number of Japanese seafarers is declining, Japan's top trio—NYK Line, Mitsui OSK Lines and K Line—are the business partners of the Indian national shipping company, SCI Ltd. This four-company consortium, transporting LNG by ships, can possibly think of more Indian officers as a quality workforce for their modern fleet. Tie-up arrangements for onboard training slots with Indian training institutes will be a win-win situation.
- During the boom period, shipyard order books were full till 2010—2011 and shipbuilders were not ready to compromise with any changes, even an extra accommodation for a trainee, which is a totally different scenario now. Possibly shipping companies can bargain with the shipyards, maybe without any extra cost. This will be a real long-term solution for the officer shortage problem.
- The Nippon Foundation, which has worked prudently for half a century, apart from developing global maritime expertise, has promoted the Japanese shipping and shipbuilding industries from a state of devastation to glory; it is a centre of wisdom and prudence, and definitely will maintain its pride to resolve the officer shortage issue. Today, new shipbuilding orders placed at Japanese shipyards are close to 64 million gt, and more importantly almost all are from Japanese owners. Possibly, The Nippon Foundation will have a role in the issue of additional training berths onboard, which is not mandatory but most desirable at this moment.

It is better that we act prudently

Note: The opinion(s), view(s) and conclusion(s) in this presentation are purely the author's personal views.



Presentation on the Maritime Affairs (India Fellows) Responses to Chemical Disaster at Sea – A Neglected Area That Requires Serious Attention from Industry and Governments

Donny Michael (India 2004)

It is a privilege to make this presentation on Indian Coast Guard initiatives to respond to marine chemical disasters to the Sasakawa Fellows from the South Asia Region in order to share the information and also for fomenting cooperation for joint coordination of responses to marine chemical disasters that may occur in the South Asian Region.

The preamble to any statement on chemical spill responses at sea should always begin with the proverbial words: "For every organization even remotely associated with the safe transportation of chemicals at sea, it is of important to consider when managing any operations to concentrate on preventing spills. Despite the best efforts of individual organizations, spills will continue to occur and will affect the local environment; response to spills should seek to minimize the risk to human safety and minimize the severity of environmental damage; and the response should always seek to complement and make use of natural forces to the fullest extent possible." It is of utmost importance that the above statement should always be considered prior to preparing any emergency response plans for chemical spills at sea.



Modern society depends increasingly on the products of the chemical industry. Raw materials, chemical intermediaries and the products themselves are often transported over long distances because of the international character of the industry. The chemical industry has grown dramatically over the past 40 years, both in size and complexity. At the same time there has been an equally dramatic increase in the quantity of chemicals transported by sea. This is unlikely to stop, as

the demand for chemical products continues to rise. Not all chemicals are harmful. However there are many chemicals that pose a serious threat to human, animal or plant life. An increasing number of ships are carrying cargoes that include some of the most dangerous substances. They present a serious risk to the ship's crew, to the marine environment and, potentially, to people far removed from the ship both in space and time.

HNS Incidents in the South Asia Region

The Indian Coast Guard, which has developed an elaborate contingency plan and the capacity to respond to oil pollution, has recently faced two chemical spill incidents. First, the **MT Kew Bridge**, which ran aground off Ratnagiri Port (about 150 miles south of Mumbai) on 14 Sept., 2006, where 6,000 tonnes of the LPG that she was carrying could not be maintained at the required temperature and there existed the threat of an LPG explosion and imminent danger to the port and the surrounding town. The Coast Guard coordinated with the salvors; the vessel was provided with external cooling and she was safely pulled away.





Second, the **MT Granba**, carrying 6,000 tonnes of sulphuric acid from Tuticorin to Calcutta, developed a leak in her tanks on 02 April, 2009. The vessel was advised to approach the nearest port for assistance. When she was near Trincomalee in Sri Lanka, the entire crew abandoned ship. The vessel started to drift into Indian waters. The Sri Lankan Navy was advised to pull the vessel out to the high seas. Prior to the arrival of the expert salvors, the vessel sank with the sulphuric acid cargo.

The Indian Coast Guard during the above two incidents

did not have adequate ready-made plans to tackle these situations and had to depend on other agencies, such as the U.S. Coast Guard and the Australia Maritime Safety Authority, to devise plans to tackle chemical spills. The above two situations necessitated the development of the Coast Guard Chemical Contingency Plan, called in short **ChemPlan**, which will be dealt with in detail in subsequent paragraphs.

What are HNS?

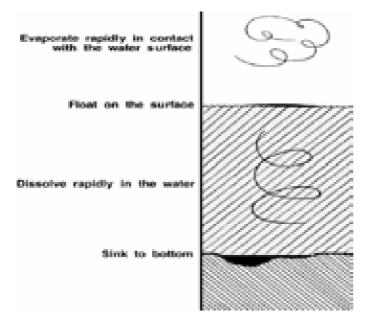
Chemical substances, the world over, are described using various categories and terminologies, but chemical substances that are transported on sea ships are generally termed hazardous and noxious substances, called in short HNS, whenever these substances create dangers to the vessel and crew. Even seemingly harmless rice when transported as bulk cargo can become hazardous if it is not transported properly. Then, what are **HNS**? The International Maritime Organisation OPRC HNS Protocol 2000 Convention defines them as, "Any substance other than oil which, if introduced into the marine environment, is likely to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea."

HNS Transportation

It is estimated that more than 200 million tonnes of 3,000 different chemicals are transported by sea annually. In India, it is estimated about 4.5 million tonnes of HNS cargo is handled in major ports and minor ports. HNS cargo generally includes oil derivatives, noxious substances, liquefied gases, liquids whose flashpoint is less than 60 degrees Celsius, and solid bulk chemicals. The problems related to HNS incidents include hazards to crew, responders, the marine environment, the coastal population if such incidents take place near ports or near the shore and to other vessels nearby. However, it should be noted that though HNS accidents are not as frequent as oil spills, they are not rare. The past 10 years has seen more than 30 HNS incidents, and the wide range of HNS cargo is considered to be potentially threatening. Most accidents mainly involved two classes of HNS, **flammables** such as LPG, LNG, etc., and **corrosive materials**, such as acids. HNS are carried in specialized ships such as chemical tankers, product tankers and gas carriers. The types of accidents involving HNS include collisions, contact, grounding, fire/explosion, sinking, container loss and sabotage.

Prior to undertaking any response to an HNS incident, it is important to know certain properties of HNS. The

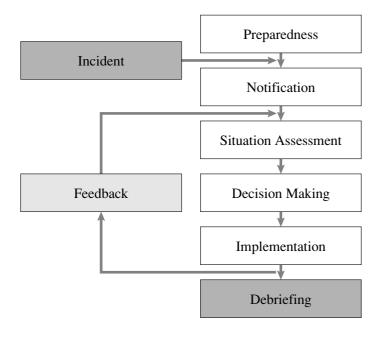




physical properties of HNS include flammability, vapour pressure, flashpoint, fire point, explosivity, toxicity and reactivity. It is also important to note that when chemicals come into contact with the marine environment (sea water), they behave in certain ways, and these are grouped into four categories: **evaporators**, **floaters**, **dissolvers** and **sinkers**.

The important point that every response organisation should bear in mind is the toxic

effects of chemical spill evaporators. Inhalation and ingestion affect critical parts of the body and so it is very important that the responders to a chemical spill have the correct personal protection gear to deal with the incident.



The internationally followed response framework involves preparedness, notification, situation assessment, decision making, implementation and debriefing. The response priorities that an organisation should adopt must include life saving, searching for casualties and rescuing survivors from the risk area; stopping or limiting or combating the discharge; neutralizing the spill or washing it overboard; and reducing the damage by fighting the fire or moving the products or cargo to a safe area. Some of the responses include, maneuvering the ship so that the vapours move away from inhabited areas and spraying water. But it is also important to note that the consequences of water reacting

with a certain HNS should be worked out beforehand. The other response options for the vessel, for the cargo, for the released HNS differ depending upon the situation, the type of ship involved and the environmental conditions, such as weather, etc.

Section 14 of the Coast Guard Act 1978 provides the charter of duties, which includes protection of artificial islands, protection for fishermen, preservation and protection of the marine environment, prevention and control of marine pollution, assisting customs in anti-smuggling operations, etc. The Coast Guard is also empowered,



under section 356 G of the Indian Merchant Shipping Act 1958, to board and inspect oil or chemical tankers and to check pollution control preparedness. Section 356 J of the Act provides the power to the Coast Guard officers for issuing notices to polluting ships for clean up, and section 356 K of the Act empowers the Coast Guard to direct the polluting ship to take measures to clean up oil or chemical spills that occur in any maritime zone in India.



Accordingly, the Coast Guard has established three pollution response teams at Mumbai, Chennai and Port Blair, with one additional centre at Vadinar in Gujarat. The pollution response inventory include 6,000 metres of booms of various types, 40 skimmers of various types and capacities, floating storage tanks, oil spill dispersant application from fixed and rotary wing aircraft and from ships. As the central coordinating authority for responding to oil spills, the Coast Guard assists and

inspects the ports, oil plants and offshore installations for their oil spill contingency plans. Having established the requisite capacity and capability for oil spill response, it was considered that the time is ripe for the Coast Guard to step into the world of chemical spill incidents, and accordingly a small beginning has been made this year by developing the Coast Guard Chemical Spill Contingency Plan, or ChemPlan. This is a standalone plan used exclusively for responding to incidents at sea. The National Disaster Management Authority and the respective ports address chemical disasters on land and port areas by implementing the provisions of their respective emergency plans.

The aim of the ICG ChemPlan is to provide the framework for **at-sea emergencies** for responding to chemical spills by describing the measures to be taken for protecting the crew and responders, protecting the marine environment from chemical pollution and, where this is the only possible response, to minimize the effects. The other regulations or arrangements that the Coast Guard has come across for addressing chemical spill incidents that can be extended into the maritime arena and that are reflected in the ChemPlan are the Merchant Shipping Carriage of Cargo Rules 1995; Chemical Accidents (Emergency Planning Preparedness and Response) Rules 1996; National Disaster Management Guidelines for Chemical Disasters 2007; and Hazardous Materials Rules 2008.

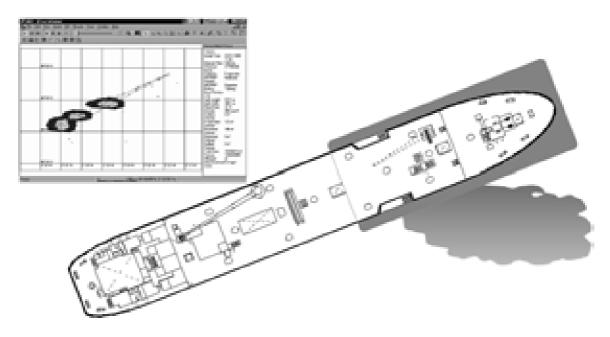


ChemPlan's content includes the response policy, levels of response, risk assessment, response planning, response organisation, chemical pollution controller, on-scene coordinator, and international assistance. Presently ChemPlan does not provide for a full-fledged response to a chemical spill due to lack of resources and availability of trained personnel. However, responses are categorized into **passive** and **active responses**. A passive response to spills includes monitoring gases in the air, monitoring the water



column by taking samples, monitoring surface slicks and sunken vessels. These measures can be undertaken by the Coast Guard with assistance from the National Institute of Oceanography and other research laboratories and institutes. An active response includes saving the crew of the chemical carrier, dousing the fire by using the Fi-Fi class of Coast Guard ships, pulling the ship out to the high seas to prevent pollution of Indian maritime zones and employing oil spill response inventory to contain chemical spills, if these are found to be compatible. The other essential elements of the contingency plan include initial reporting, activation, situation reports, onshore pollution response, obtaining samples, collection of evidence, and termination of response.

The way ahead measures for augmenting ChemPlan include measures for communicating information by the manufacturers and consignors of chemical products when required by responding agencies such as the Coast Guard, establishing a software database for classifying chemicals in accordance with the UN coding and IMDG classification systems, etc. Other measures which are required to support the response should include preparation of a software database for forecasting chemicals that evaporate, float, dissolve and sink and the required response measures for specific chemicals that have been released, formation of specialized strike teams with equipment and training to combat chemical spills, and support from the central agencies dealing with chemical spills or the manufacturers or the chemical industry for the response measures by providing neutralizing agents to reduce the impact of the chemical spill.



Apart from the above measures, the Coast Guard would seek the support from the established agencies, like the NDMA, and chemical disaster management organisations for coordinated responses by integrating ChemPlan with national plans. The Coast Guard would also like to have some institutional arrangement for seeking international support during major chemical disasters at sea through MoU/agreements. Any chemical spill incident that occurs near a port area is bound to affect the local population and it is essential that the necessary compensation and liability regime for damages to the environment from chemical spills should be established by making legislation that exclusively addresses chemical spills. The Indian Coast Guard has just made a humble beginning, and we hope to improve upon it in the coming years.

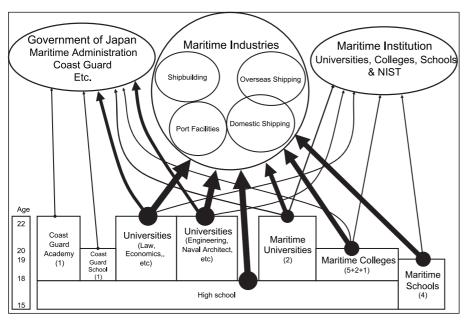


Presentation on the Maritime Affairs (Japan Fellow)

Maritime Society and Human Resource Development in Japan

Tomonori Okamura (Japan 2002)

1. Introduction



It is generally said that maritime transport is significant for many countries. In Japan, about 90% of international trade and 40% of domestic transport are by seaborne shipping. So personnel acquisition in the maritime sector is directly connected with Japanese life.

Figure 1 shows three sources of recruitment in the Japanese maritime sector: administration, institutions and industry. First, graduates

Figure 1: Sources of recruitment in the Japanese maritime sector

of non-maritime universities are major sources. However, the only source for Japan Coast Guard officers is the Coast Guard Academy and School. Second, the source from maritime institutes is mainly graduates of the Maritime Institute. Finally, sources for maritime industries are many, but graduates of maritime institutions are appreciated because of their knowledge of maritime skills. Graduates from maritime institutions are the focus of the next section.

2. Japanese Merchant Mariner's Resources

Figure 2 shows the reduction in the number of Japanese seafarers and the trend in Japanese domestic shipping volume. After 1985 (the year of the Plaza Accord), the number of Japanese ocean–going seafarers dropped to 10,000 in 1992 and 4,500 in 2005 because of the officers/crew reduction plan. At the same time, the number of domestic seafarers was reduced from 60,000 to 30,000. However, as shown in Figure 2, Japanese domestic shipping has increased. Accordingly, the reduction in the number of domestic seafarers is probably the result of smaller crews. So, though the demand for domestic shipping will be constant, the Japanese Ministry of Land, Infrastructure, Transport and Tourism states that a shortfall of 4,500 domestic seafarers will occur in this decade.



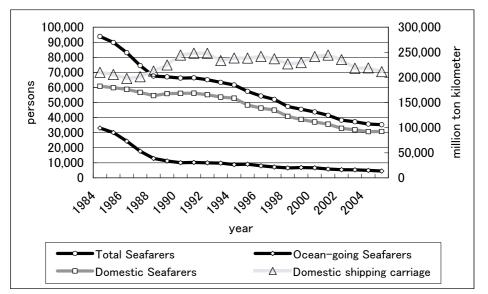


Figure 2: Reduction of Japanese seafarers and the trend of domestic shipping

3. Role of NIST



Figure 3: NIST training fleet

Sea Training Scheme						
MARITIME UNIVERSITIES	COLLEGE OF MARITIME TECHNOLOGY	MARINE TECHNICAL COLLEGE	NATIONAL MARITIME POLYTECHNIC COLLEGE	NATIONAL MARITIME POLYTECHNIC COLLEGE		
3rd Grade Maritime Officer (Overseas)		4th Grade Maritime Officer (Domestic)				
NATIONAL EXAMINATION FOR COMPETENCY						
Sea Training Course 6 months 4th year 3 months						
3rd year 1 month	6th year 6 months					
2nd year 1 month	5th year 6 months	2nd year 9 months	2nd year 9 months			
1st year 1 month	4th year	1st year	1st year	Sea Training Course 6 months		
Senior high school	3rd year	Graduate of SST Regular Course	Senior high school	3rd year 3 months		
	2nd year			2nd year		
	1st year			1st year		
Junior high school						
•ODA Seafarers Training Scheme : 3 months •MAAP (Philippines) Training Scheme : 2 months NOTE: SeaTraining terms irbold numbers						

Figure 4: NIST's training scheme

There are fifteen maritime institutions in Japan: two universities and five maritime technology or technical colleges (mainly for ocean–going seafarers: 3rd grade license), three national maritime colleges, and four national maritime polytechnics (mainly for domestic seafarers: 4th grade license). The National Institute for Sea Training (NIST) is to train students of these 15 institutes who are going to be a marine officers and engineers using five training ships. Figure 3 shows the training fleet (two sail training ships, one steam turbine ship and two diesel engine ships).

Figure 4 shows NIST's sea training scheme. According to NIST, the scheme constitutes a part of the approved training of each institute. This system is unique because an institute provides the same training quality for all other institutes.



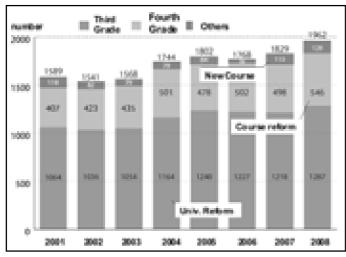


Figure 5: Number of students accepted

Figure 5 indicates the number of students accepted. The number of students in the third grade course is over 1,000. However, this is due to the sandwich training system in universities (duplicated count). Thus, the total number of graduates annually is 300 for the ocean–going seafarer course and 400 for the domestic shipping seafarer course. Moreover, there needs to be new courses and some reforms if training courses are able to increase the number of students accepted.

4. Problems of Human Resources in the Maritime Field

The seafarer's circumstances make it difficult to recruit young people. Japanese youths these days are addicted to communications through mobile phones, so they become anxious when they go to sea where mobile phone service is not available. Thus, the number of graduates who trained as seafarers but who do not intend to work as seafarers is increasing.

On the other hand, young people don't know the job. Entry to berths is strictly prohibited because of the ISPS code. Cargo vessels are now out of most citizens' view because of deeper draft vessels and specialized carriers. The importance of shipping is unknown to many citizens. To create the circumstances where ships and shipping are familiar is important. NIST takes measures to introduce the importance of the maritime field, especially for children. In particular, sailing drills (to set sails in port) and ships open to the public have a positive effect. The government of Japan has started the taxation of shipping companies and would like to increase ocean-going seafarers by half in this decade.

This shortage of seafarers is not only in Japan but also worldwide. According to Drewry Shipping Consultants, the current shortfall of officers in the world fleet is some 34,000, against a requirement of 498,000. And BIMCO/ISF Manpower Update assessed the officer shortage as 10,000, with the shortfall rising to 27,000 by the year 2015. Nothing can be done by just waiting.

5. Conclusion

International Maritime Organization (IMO) has begun "Go to sea! A campaign to attract entrants to the shipping industry." Mr. E. Mitropoulos, Secretary-General of IMO stated, "In the beginning of this campaign, as we like to say in the industry, without ships—and in the context of this press conference, without the seafarers to man them—one half of the world would freeze for lack of the fuel to heat it, and the other half would starve for lack of the grain that gives it its daily bread."

We have to take this issue seriously. Please introduce your friends to shipping. This may be the first step to solve this problem.



Presentation on the Maritime Affairs (Maldives Fellow)

Maritime Affairs of Maldives

Hussain Naeem (Maldives 2003)

This paper is presented as part of the proceedings of the Sasakawa Fellows' Network Meeting for the Asia Region held in Colombo from 19th to 23rd of January 2010. This presentation will give an overview of the maritime affairs of Maldives highlighting some of the important challenges in the maritime sector.

Republic of Maldives

Republic of Maldives is a group of islands scattered along the equator from north to south. One thousand two hundred islands are grouped naturally into 19 atolls, or groups of islands. Out of these, 202 islands are inhabited. As you most likely know, the Maldives is a famous tourist destination. At present, it has about 94 resort islands, 13 hotels, and 143 luxury yachts. In total, the tourist capacity in terms of beds is about 23,500. Maldives was a sultanate until the early 1960s. The country was under British protection during the world wars. Maldives was not occupied or invaded, however they had a British naval base in the south of Maldives. Maldives

became a republic in 1968. The population of Maldives is only 300,000. The language is Dhivehi, a unique language used only by the Maldivians. The currency is called the rufiyaa and it is about 12.85 to one U.S. dollar. The economy is based on tourism and fishing as the main industries. GDP per capita is U.S. \$2,900. The climate is generally warm throughout the year. The capital is Male', an island located around the middle of the island chain, and it is the most densely populated with about 100,000 people. The size of the capital island is only about 3 square kilometers.



Maritime Administration

The maritime sector is regulated by the Transport Authority. The Ministry of Transport, Housing and Environment has a division dealing with the Transport sector. The Transport Authority deals with land and maritime transport. The maritime transport sector has two divisions: shipping and ports. The Shipping division deals with both domestic and international maritime transport, whereas the division dealing with ports looks after affairs related to international ports and domestic ports, in addition to island harbors.

The domestic maritime transport sector is mainly dominated by travelling between the capital island and other islands for various reasons. As the population is dispersed to many islands in small numbers, and all the stock of essential and basic items are available from the capital, small, privately owned wooden boats are used for maritime transportation. There is no regular ferry system or established transport system, which makes travelling



between islands often very difficult, inconvenient and costly. Most of the islands have some form of a harbor to cater to the small boats used for this type of transport. However these facilities are often inadequate, even for small boats. Development of these small domestic ports and harbors are always ongoing and this is considered to be a basic need for all the inhabited islands.



International shipping is a developing area with a history dating back decades. From the early days, Maldivians traded with Sri Lanka, India and other countries and heavily depended on imports. These activities have definitely taken place using some form of international shipping. In the golden years of the national shipping line, which is called Maldives National Shipping Limited, around the 1970s and early 1980s, it owned more than 50 vessels. But unfortunately the company is now in financial difficulties and the international shipping sector is dominated by privately owned vessels and companies.

To cater to the international shipping sector, there are three officially recognized international ports. The main seaport of the country is located on Male' and the other two small ports have been in operation since 2005. These are small ports built at the two far ends of the country, one in the north and the other in the south. These were built in an ambitious project by the government to decentralize the port activities, reduce congestion, and to create an economically vibrant area around these islands. However the ports have not yet served these purposes, mainly because of regulations in the port sector.





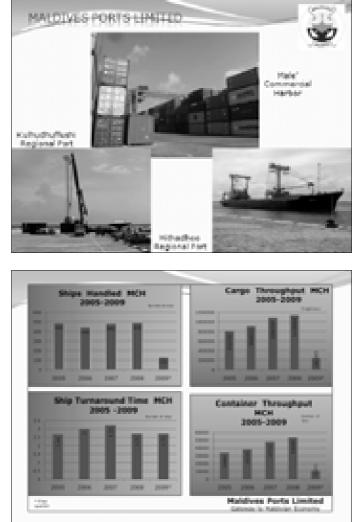
Maldives Ports Limited

Maldives Ports Limited is one of the key institutions in the maritime transport sector. It is considered to be the gateway for the Maldivian economy because most goods and commodities are imported using maritime transport. It was established as an authority (Maldives Ports Authority) in 1986 to operate and manage all ports within the country. It was incorporated as a 100% state-owned enterprise on 31st of July 2008 and named Maldives Ports Limited. The company is administered and managed by a board whose members are appointed by the President

of the Republic of Maldives. The CEO, or the Managing Director, is also appointed by the president and he is one of the two executives on the Board of Directors, which has seven board members.

The management of the company has three divisions under which the 11 departments conduct daily management and operations. The company has a workforce of approximately 500, including about 100 expatriate (foreign) workers. The new management is working toward reducing the workforce to make the company leaner and more efficient.

The Maldives Ports Limited currently manages the main international port, Male' Commercial Harbor, which is located in the capital. The container throughput of the port in 2008 was 53,000 TEUs. The other two small international ports are also managed by MPL under a management contract between MPL and the Transport Ministry. The two ports are the Kulhudhuffushi Regional Port, located in the north and Hithadhoo Regional Port, located in the south.



Statistics above show the first quarter of 2009 only.

Maritime Challenges

The Maldives, with water over 90% of its territory, faces many challenges that are maritime related: development, wellbeing, as well as how to govern and manage. The items below are some of the major challenges that have been identified in this regard.

1- Connectivity within the Country

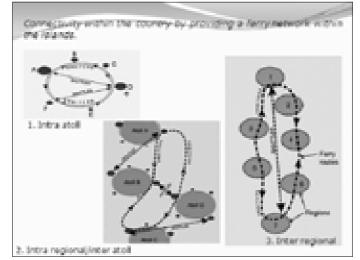
With a population of about 300,000, living on 200 out of 1,200 islands dispersed across an area about 840 km by 40 km, connectivity between these islands is a huge barrier to achieving development targets and for providing basic needs for living. Some of the islands are populated with only a few hundred people, so any project targeting development, and even projects for basic needs, such as



electricity, water, and medical facilities, are provided at a very high cost, mainly because of low economies of scale. Given all these challenges, the Government of Maldives has initiated a project as one of the key pledges to the public to provide a public transport system. The project will develop a sustainable maritime-based transportation network to increase accessibility and mobility for people

and transport of goods within all the inhabited islands.

The network would divide the archipelago into seven regions. Each region would have 20 to 50 ferry terminals. The project is open for privately owned local or foreign investors or joint ventures. The successful investors will be granted appropriate incentives and concessions under the agreement. An illustration of the network is given:



2- Regulatory Mechanism in the Port Sector

The Transport Authority is the regulatory authority for seaports. However this authority was recently established and the regulatory functions over the years were under the mandate of the Transport Ministry. Although this is the case, the port sector grew without any regulations for them to follow. It developed in a natural and traditional way. The situation was the same until now, although the Transport Authority is working on formulating a port act and regulations for the development and operation of seaports within the country. In the present scenario, ships calling from other countries can go anywhere in the country, although there are only three official international ports. Cargo can be unloaded near any island in the country, which probably does not have any proper facilities. Because of this, there are real issues for security and safety. As well, the risk of environmental pollution is high. So establishing regulatory mechanisms for construction, development and operation of the seaports is an urgent issue.

3- Maritime Training

There is only one establishment that provides training for the maritime industry. This is the Center for Maritime Studies. The main areas of training provided in this center are targeted at seafarer training. There are several long-term and short-term training programs, and some of them are given regularly.

Training for workers and officers working in the port sector has not been provided in a systematic or structured manner over the years. The Maldives Ports Limited trains their staff overseas on an ad-hoc basis. This is mainly for officers from middle management level and higher. Sometimes very basic training for lower level staff also needs to be done abroad. This is very expensive and often ineffective. MPL is currently working toward establishing a port training center to serve as the training center for the staff of the company and also for the port community as a whole.

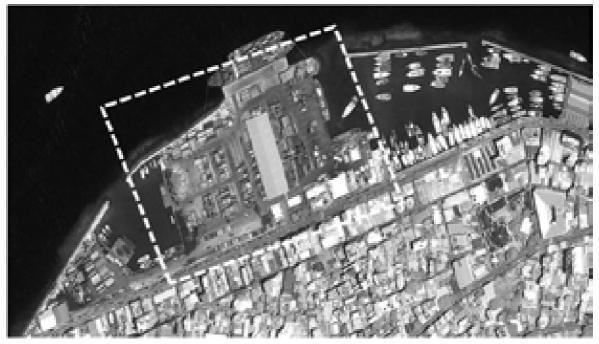


4- Development of Male' Commercial Harbor

The main international seaport, Male' Commercial Harbor, is nearing full capacity. The port is located on the capital island of Male', which does not have any more room for development of the port and support services. If this growth rate prevails, by the year 2012 the existing berth occupancy will reach over 90%. This will result in long queues for berths, and the waiting time for ships will be very high. The economy will be directly impacted due to this, and the cost of goods will go higher. Male' Commercial Harbor, with an open storage area of about 45,000 square meters, and a covered warehouse of 2,900 square meters, has the following physical characteristics. The Physical Characteristics of Male' Commercial Harbor:

Berth	Length	Vessel Size	Max. Draft
Northern Pier	101 m	150 m	10.5 m
Eastern Quay	140 m	40 m	3.5 m
Western Quay 1	120 m	50 m	3.5 m
Western Quay 2	80 m	25 m	3.5 m
Western Quay 3	75 m	25 m	3.5 m

View of Male Commercial Harbor:

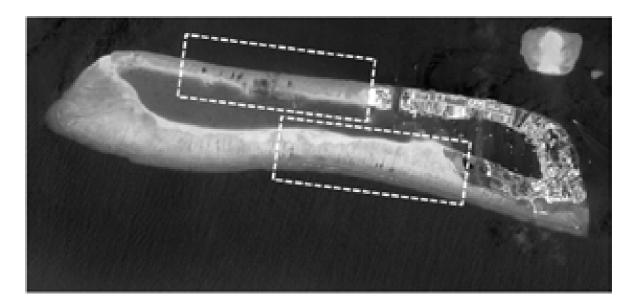


As the company with the mandate for providing port services to the maritime trade, MPL had a feasibility study conducted by a Japanese consulting group. The study showed that berth occupancy would reach about 90% in a few years, and the need for expansion of the existing berths is urgently required. However, it also showed in the long run that port operations will have to be relocated considering the congestion in Male'. Before committing to expansion, MPL has to get approval from the national planning authorities, and it was decided that the policy of the government was not to



invest further in the existing port in Male'. Alternatively MPL was assigned to find other options for the existing port services until the new port opens in the new location. Hence the management is now working on the possibility of acquiring a crane fixed on a platform or a barge with sufficient container stacking capacity.

The picture shows possible locations for the new port. The locations are marked on a lagoon where the new port is going to be built after land reclamation. The island called Thilafushi is an industrial island, created by dumping and disposing of garbage inside a lagoon.



Conclusion

This paper was prepared to give some background on the Maldives and to highlight some of the key challenges for the maritime sector. Hence the following could be noted as a summary of what was discussed:

- Maldives, traditionally and naturally a maritime nation, has some serious maritime issues and challenges that need to be addressed promptly and effectively.
- The inhabitants of the dispersed islands are desperate to be connected by a maritime transport network in order to fulfill their basic needs and to realize the planned development projects.
- There is a need to develop transport authority regulations for the national maritime sector, and specifically the port sector.
- To have a sustainable maritime industry, systematic training and retraining facilities need to be developed and managed professionally.
- There is an urgent need to develop the existing Male' Commercial Harbor or to build a facility on the nearby island of Thilafushi. In the meantime, MPL is urgently required to find an alternative solution to deal with the growing demand.



Presentation on the Maritime Affairs (Pakistan Fellows)

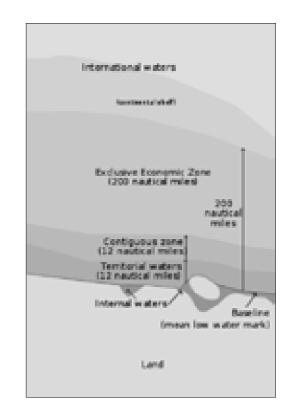
PAKISTAN'S MAJOR MARITIME ISSUES

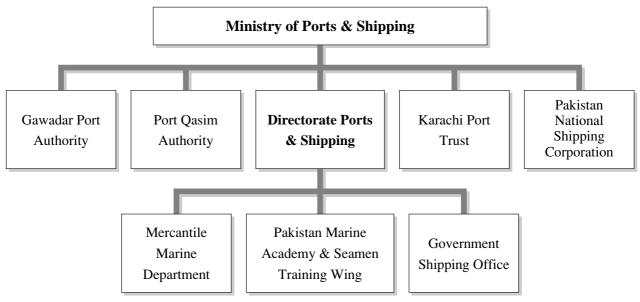
Mohammad Ashraf Zafar (Pakistan 1994)

PREABLE: Pakistan has a <u>coastline</u> of 1046 kilometers (650 miles) and an Exclusive Economic Zone (EEZ) of 200 nautical miles from the baseline with total EEZ area of 240,000 sq. km. Similarly, the continental shelf extends 350 nautical miles from the baseline, but this has not been yet been recognized by the UN.

The EEZ has not been exploited to its full potential due to various reasons, including political instability, lack of awareness, expertise and proper resources. Due to the lack of proper education in the maritime sector, we mainly use oceans for fishing and maritime transport. We have various departments and organizations which are functioning satisfactorily but mostly in isolation. The Pakistan Navy is, however, in touch with all such departments through the Ministry of Defense but the Ministry of Ports and Shipping primarily deals with the ports and shipping sector.

Speaking of other departments and organizations dealing with maritime affairs and activities, every organization has constraints and limitations, but being part of ports and shipping in the early stages of my sea career and later in government service as Deputy Captain Superintendent of Seamen Training Centre for about 20 years, I would like to highlight the <u>maritime</u> <u>issues</u> related to the ports and shipping sector.







Ports and Harbours:

Pakistan has three major ports: Karachi, Port Bin Qasim and Gwadar Port. Karachi and Port Bin Qasim are operating successfully but the newly built Gwadar Port is lagging behind in many respects. Gwadar Port cannot be utilized to its full potential for a number of reasons. Gwadar Port has been turned over to the Port of Singapore Authority (PSA) to operate it, but due to a lack of inland roads and other infrastructure and security in the province of Baluchistan, this port cannot be run at its full potential.

Shipping Fleet for General Cargo:

Pakistan has, according to some estimates in 2009, a population of about 170 million. Pakistan, being an agrarian society, has one of the best canal systems. We produce a variety of crops, and after domestic consumption, we export some raw materials that rely heavily upon shipping, such as raw cotton and cotton goods. According to 2008-09 estimates, Pakistani ships, including those from the Pakistan National Shipping Corporation (PNSC), carried only 17% of total export-imports and the rest of the trade (export and import) was handled by foreign flagged ships. The Pakistan National Shipping Corporation is a major shipping company which had 14 ships last year. 5 ships were scrapped last year and presently there are 9 ships left in the PNSC fleet. The fleet includes 3 oil tankers (total tonnage: 302,000 tonnes), one bulk career (70,000 tonnes) and 5 cargo ship (70,238 tonnes). This means that Pakistan flag carriers are transporting a nominal amount of export and import cargo, and the country has to rely on and pay enormous amounts of foreign exchange to foreign shipping companies.

The acute shortage and recent reduction of ships in the national fleet also have serious implications and it is affecting employment of seafarers and other workers associated with the maritime allied industry.

Oil Tanker Fleet:

Similarly Pakistan is trying to develop its industrial sector, and a large number of the population is employed in the industrial sector. Industry in Pakistan requires electric power, most of which is produced through hydroelectric projects. These hydroelectric projects were built in the 1960s and their capacity is being drastically reduced due to silting and water shortages. Thus Pakistan is relying on power units on fuel oil, which needs to be exported from countries in the Persian Gulf.

Pakistan has only three oil tankers with a total tonnage of 302,000 tonnes. Though we have small oil tankers fleet, due to the short distance from the Persian Gulf oil trading ports, tanker ships are making frequent trips and carrying <u>80% of total oil imports</u> and about 20% is carried by foreign flagged ships.

Pakistan Marine Academy:

Pakistan Maritime Academy was transferred to the Higher Education Commission. The Chairman of Higher Education Commission visited Pakistan Marine Academy and declared the broad policy of establishing Benazir Shaheed University for general education and that Pakistan Marine Academy would be a maritime faculty of this proposed university, which would be made a degree awarding institution. Some miracle took place and luckily Pakistan Marine Academy was transferred back to the Ministry of Ports and Shipping on <u>1 January 2010</u>.



Pakistan has one of the best maritime academies, spreading over 139 acres, and it graduates 150 cadets each year from both the deck and engineering streams. But due to a shortage of ships in the national fleet, these cadets—after completing two years of pre-sea training at the academy—have to wait for a year or so before joining ships to complete their sea time (i.e., ship board training) to be eligible for taking the first Certificate of Competency (CoC) examination; (i.e., class 4 examination of the deck and engineering streams).

Seamen Training Centre:

Seamen Training Centre (STC) was established in 1960 and was functioning as a separate entity until 1997 when it merged into the Pakistan Marine Academy. It used to train several categories of seamen ratings. After I joined it in March 1990, I noticed that revolution is taking place in shipping technology and crewing pattern is changing from conventional crew of three department namely deck, engine and saloon to General Purpose(GP) crew to work in any of the three departments as and when required. So I tried to introduce GP system for training in the Seamen Training Centre, which took effect in 1995.

I also take pride in mentioning that before my joining, agents used to gather boys for training charging large amounts of money from prospective candidates, but due to my personal interest and initiative policy for the selection of seamen, a rating system was introduced whereby fairly educated youth from relatively poor families could be inducted for adequate training to have seafaring careers and earn a respectable livings. In fact, the idea was to give a fair chance to boys who could not afford a college education, thus producing seamen who would be willing to work on board ships. In 1999, this selection scheme from all over Pakistan and training started producing ratings who replaced uneducated elderly seamen. In addition to the Seaman Training Centre of the Pakistan Marine Academy, a number of private institutions are also inducting and training such ratings. These private institutions are duly approved by the maritime administration of Pakistan (i.e., the Directorate of Ports and Shipping) and have the same induction and training policy as public sector institutions (i.e., the Seaman Training Center), thus training standards have not been compromised. The syllabus for ratings made considering the jobs and tasks of the deck, engineering and saloon departments on ships and has been duly approved by the maritime administration is also conducted by the Ports and Shipping examiners. Thus the system of induction and training ensures that uniform standards are maintained in private and public sector training institutions.

I believe in this system as I was the one who left sailing and developed this training scheme and had to fight on many fronts with authorities and groups who had vested interests in the old system (whereby mostly uneducated and without any age verification; and proper medical examination system were recruited for training). Training used to be an "eye wash" because an uneducated man could not be adequately trained to operate modern ships.

Government Shipping Office:

There are about 8,000 officers and 10,500 ratings duly registered as seamen. Out of this total number, about 30% are employed on national as well as foreign ships. About 85% of the total seamen engaged in this field are employed on foreign ships.

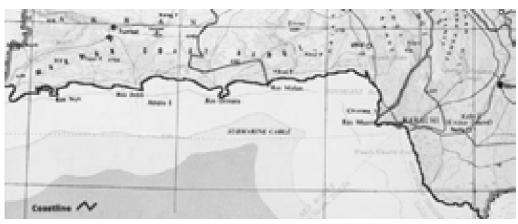


Unemployment among Seafarers:

I want to use this opportunity to say that shipping is a very complex and competitive industry. Due to drastic reductions in freight rates, it has become increasingly difficult to operate ships. Therefore one area where ship owners can save operating cost is crewig by hiring suitable, young, and well-trained boys from developing countries. Rather shipping companies should preferably employ young seamen in ships at an early stage on a permanent basis so that they can groom them in the company culture and adopt it at the early stage of their life and then continue to serve the same company for long time. In this way, safety will be promoted because a permanent crew is more familiar with ships and in emergencies they prove more efficient and competent than crews employed by contract. One good example is the British passenger liners of the P&O Line manned by the Karachi agents of Mackinnon, Mackenzie and Co. They take young boys from Pakistan's remote northern district called Swat who can hardly speak English but after sailing a few months on board they learn to communicate well. This company also inculcates its working culture into them and then they serve with the same company for the rest of their lives with total dedication and loyalty.

Developing countries can contribute immensely towards underdeveloped countries if they, instead of giving financial assistance, provide opportunities for hard work so that working people can earn respectable and dignified livings.

This will help poor countries in a proper way because normally the major portion of developed countries' financial aid goes into the pockets of corrupt officials and politicians. Poor people are then deprived of their due share. So, what developed countries should do is provide the opportunity to work, and in turn developed countries can benefit from cheap labour.



Continental Shelf & Exclusive Economic Zone Issues:

Delimitation of the Maritime Boundary with India:

It is well-known fact that Pakistan's claim to the <u>continental shelf</u> is to be resolved by the United Nation Commission on Limits of the Continental Shelf (UNCLCS). The required width of sediment for a continental shelf to be recognized by the UN Commission is 2.4 kms, and Pakistan has this width of 3.2 kms. If and when this issue is resolved, Pakistan's continental shelf will be further enhanced by 50,000 to 60,000 sq. km.



Security of Maritime Assets:

Due to worldwide overfishing, the fishing stock is fast being depleted. The nations having greater dependence on seafood tend to do the most unauthorized fishing in Pakistan waters. Pakistan, due to a lack of maritime resources, is unable to safeguard unauthorized fishing in its territorial waters and in its Exclusive Economic Zone.

Pollution of Maritime Environment:

The world is becoming more dependant on the generation of electricity through nuclear power plants. Thus, the nuclear waste generated in this way is generally dumped in areas which are not well guarded. Countries like Pakistan can ill afford to build up maritime forces to guard waters against this kind of dumping, which poses a severe pollution threat.

Maritime Security:

Due to a rising trend in sea piracy and armed robberies, poor countries like Pakistan need to develop maritime forces to ensure safe sea routes.

Transnational Crimes:

Terrorist groups can use the sea for carrying out cross-border crimes.



Presentation on the Maritime Affairs (Pakistan Fellows)

Maritime Awareness and Capacity Building

Mr. Asghar Ali (Pakistan 2006)

Bahria University

Bahria University has been established through a Presidential Ordinance. The President of Pakistan is the Chancellor of the University and a Board of Governors (BOG) oversees its affairs. The BOG comprises representatives from ministries of education, finance and science, along with eminent technologists, educationists, and scholars.

The university today is a multi-campus public university with its headquarters at Islamabad. The constituent units of the university are spread between Karachi and Islamabad. Each of these units has full-fledged physical infrastructure in terms of buildings, classrooms, laboratories, libraries and allied academic facilities (<u>www.bahria.edu.pk</u>).

When we scrutinize the maritime industry of Pakistan and its contribution to the national economy vis-a-vis its true potential, two main issues that need to be addressed come to the surface. One is the need for creating maritime awareness among the general populace and policymakers, and the second is the requirement for creating qualified maritime professionals of international standards for middle management in the industry.

National Centre for Maritime Policy Research (NCMPR)

Taking the lead from its name, Bahria (meaning ocean), National Centre for Maritime Policy Research (NCMPR) was established in January 2007 by Bahria University to provide a platform for think tanks, researchers, and scholars to work on maritime matters and recommend strategies and measures to develop the maritime sector through dissemination of knowledge to all stakeholders.

Research Fellows Ab	broad
Name	Country
Dv. Amin Tarzi	USA
Dr. James A. Boutilier	CNA
Dr. Harro Kucharzewski	GER
Prof. Geoffrey Till	UX
Dr. Stanley B Weeks	USA
Dr. M H Karim	IRI CONTRACTOR
Mr David N Griffiths	CND
Dr Sarah Palmer	UK
Prof. Bari Malik	UX



The centre is serving as a focal point for advice on maritime affairs to all relevant stakeholders including government and private organizations. The centre's Website address (URL) is <u>www.ncmpr.org.pk</u>. The centre also offers diverse research and consulting services in the fields of maritime industries and logistics for public and private sector organizations.

Research Areas and Interests

Major research areas and interests of the NCMPR as envisaged in the charter:

- Trade and Economy
 - Maritime transport and shipping industry
 - Ports and infrastructure development
 - Fisheries development and promotion
 - Human resource development related to maritime sector
- Marine Environment and Conservation
 - Marine environmental management
 - Sustainable utilization of ocean resources
 - Prevention of marine pollution
 - Disaster management and salvage
- Maritime Defense and Security
 - Confidence building and regional cooperation
 - National maritime defense and security
- Maritime Laws and Policies
 - UNCLOS 1982 and international conventions
 - Maritime boundaries and delimitation

Linkages

NCMPR has signed memoranda of understanding (MoU) and developed linkages with various national and international educational and research institutes for:

- Collaboration on research
- Exchange of faculty/students
- Joint projects
- Exchange of publications
- Access to libraries/research material
- Copyright research
- Joint educational programs

NCMPR has signed MoU and developed linkages at the international level with:

- Greenwich Maritime Institute (GMI), University of Greenwich, UK
- Centre for Foreign Policy Studies (CFPS), Dalhousie University, Canada
- National Academy of Oriental Studies, Azerbaijan



- Corbett Centre for Maritime Studies, King's College London
- Chabahar Maritime University, Chabahar, Iran
- The Centre for Military and Strategic Studies, University of Calgary, Canada
- International Ocean Institute (IOI), Malta

NCMPR has signed MoU/developed linkages at the national level for collaboration with:

- Federal Urdu University, Karachi
- Pakistan National Shipping Corporation (PNSC)
- Karachi Port Trust (KPT)
- Sustainable Development Policy Institute (SPDI), Islamabad
- Islamabad Policy Research Institute (IPRI), Islamabad
- Pakistan Petroleum Limited (PPL)
- Pakistan Navy War College (PNWC), Lahore
- Sindh University, Jamshoro
- Pakistan Metrology Department (PMD)
- National Institute of Oceanography (NIO), Karachi

Maritime Awareness Program (MAP)

Regarding the Maritime Awareness Program (MAP), it has the aim to create maritime awareness among the general public and policymakers. NCMPR has invested heavily in terms of financial and human resources in the subject program. The centre has been hosting multiple national, international conferences and seminars to bring various stakeholders under one roof and promote a culture of informal interaction and consultation for objective and results-oriented policy formulation by the state and non-state entities. Print and electronic media are approached regularly to highlight various maritime challenges and opportunities to create a broader maritime awareness among the masses and to put pressure on the policymakers for the right decisions.

Conferences and Seminars

Multiple conferences and seminars have been hosted by the centre since its inception with the basic aim of creating and spreading maritime awareness among the general public and policymakers. Some of the major events:

- First International Maritime Conference (IMC2007)
 - 4-6 March 2007
 - Topic Maritime Threats and Opportunities in the 21st Century A Global Perspective on Indian Ocean
- Second International Maritime Conference (IMC2008)
 - 25-27 March 2008
 - Topic Sustainable Economic Exploitation of Ocean Resources: Technological & Educational Needs and Solutions
- International Maritime Conference and Workshop (IMCW-07)
 - 6-7 September 2007



- Topic Non-State Actors Threats to Maritime Economy, Environment and Security
- Seven maritime organizations participated at institutional level to streamline coordination procedures
- Seminar on Importance of Maritime Management Studies for Maritime Sector
 - 5 February 2007 at PC Hotel, Karachi
 - Topic Maritime Business Administration Education
 - 23 heads of maritime organizations/entities of Pakistan attended including Chairman KPT, PNSC, Pak Shaheen Container, KICT and others
- Maritime Law Seminar Series
 - February 2007, 2008, 2009 and 2010 at PN War College, Lahore
 - Topic International Maritime Conventions and Regimes on Security at High Seas and Their Impact on UNCLOS
- Maritime Security Symposium
 - 6-7 September 2007 at Corbett Centre for Maritime Policy Studies, London
 - Topic Maritime Security in the 21st Century
- Third International Maritime Conference (IMC2009)
 - 5-7 March 2009
 - Topic Traditional and Non-traditional Threats, Force Postures and Extra Regional Interests: Implications for Arabian Sea and the Gulf Littorals

Maritime Study Program (MSP)

Regarding capacity building for the maritime industry, National Centre for Maritime Policy Research has initiated the Maritime Study Program (MSP) at its academic wing. NCMPR has successfully launched a unique two-year study program leading to the award of a master's degree in business administration specializing in maritime affairs (MBA-Maritime). The Program is focused on producing human resources for the middle management level in the maritime sector and specialized courses have been designed keeping in mind this particular requirement.

	Harting Secondation Courses
M07253	Purelamentals of Maritime Sector
MOT 251	Legistics, Supply Chain Systems & Methods
MGT 255	Puris & Shipping Management
METER	Maritime Scanonics
M67754	Markima Lagistics
M67764	Advance Maritime Management
MET 764	Countral Force Management
MSHOP	Maritime Safety & Disaster Management
MORE	Part & Unipping Security Regimes.
1246-2182	Marine Environmental Administration
LANK POL	Maritime Law Constitutions and Regulations
1444 205	Shipping & Adminute Level
1.555 255	International Trade Law



In addition to this, both undergraduate and post-graduate study programs in marine geophysics are being offered from the centre's platform. All this is in line with our vision to promote and support the exploration and exploitation of non-living resources from our rich and large exclusive economic zone and continental shelf.

Job Description

My job description at the centre:

- Administration of the centre and managing the human and financial resources.
- Acting as Staff Officer (Research) for dealing with projects/correspondence with ministries/ government, and providing consulting and expert opinions to various bodies on the subject of maritime education, training, and security.
- Acting as Resident Research Fellow for conducting research on contemporary maritime issues and presenting the viewpoint of the centre on national and international forums.
- Acting as a conference coordinator for various International Maritime Conferences (IMCs) hosted by the centre on the subjects of maritime security, economy, and the environment.
- Acting as Program Coordinator for Marine Study Program (MSP) initiated by the centre. A master's degree in business administration is awarded with a specialization in Maritime Affairs (MBA-Maritime).
- Acting as a permanent maritime faculty for the MBA (Maritime) program conducting study modules as per the laid down standards of the Higher Education Commission (HEC) of Pakistan.

Future developments

Based upon our work experience over the last three years for creating maritime awareness among the general public and policy makers, and for creating qualified maritime professionals for middle management for the industry, we are working on three main proposals for developing and expanding NCMPR. We are also seeking moral and financial support from governmental and non-governmental organizations at national and international levels to augment our in-house resources.





Proposal - I

Upgrading of NCMPR research and reference library

In pursuit of its academic and research endeavors, NCMPR is in the process of upgrading and expanding its research and reference library. NCMPR can be supported in this activity by provision of international publications on maritime education, maritime economics, port and shipping management and admiralty law. IMO publications and information resources can be very helpful for our future projects. Also, the availability of online libraries and databases will be a boost to our upgrading efforts.

Proposal - II

Linkages with international maritime bodies and organizations

NCMPR has established multiple linkages with international academic and research institutes and organizations for mutual cooperation and benefit. NCMPR can be supported in this activity by providing further such opportunities and sponsoring linkages with organizations such as the International Association of Maritime University (IAMU), World Maritime University (WMU) and Kobe University. Academic and scholarly guidance for the newly established NCMPR can go a long way for promotion of the maritime industry in Pakistan.

Proposal – III

Capacity building of the faculty of Maritime Study Program (MSP)

NCMPR has invested heavily vis-a-vis academic and financial efforts and resources for its Maritime Study Program (MSP). NCMPR can be supported in these efforts with investment in the capacity building of faculty members. Attendance at short courses organized at major maritime centers, participation in international conferences and seminars and opportunities for Ph.D. study programs will enhance the capacity of the faculty members and raise the academic standards of the center.

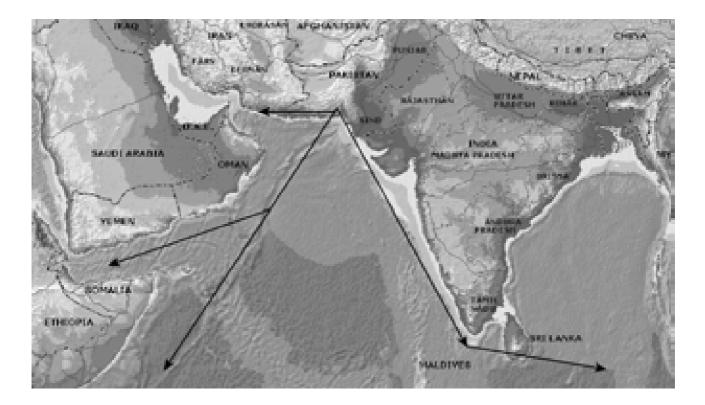


Presentation on the Maritime Affairs (Pakistan Fellows)

REGIONAL AND DOMESTIC MARITIME ISSUES: PAKISTAN

Altaf-Ur Rehman (Pakistan 2007)

Introduction: Admiral Alfred T. Mahan (1840-1914) of the United States Navy said, "Whoever attains maritime supremacy in the Indian Ocean would be a prominent player on the international scene." The Indian Ocean is the third largest ocean. It touches Asia, Australia, Antarctica, and Africa. Pakistan is among the Asian countries blessed with a long coastline on the Indian Ocean. 97% of Pakistan's trade by the sea is of cardinal importance for its survival. The following maritime issues pertaining to Pakistan in the context of the international, regional, and domestic maritime sectors are of prime importance.



Pakistan Sea Lines of Communication

International, Regional, and Domestic Security Concerns: Safety and security have always been of paramount importance in the sea trade. The interruption of Indian Ocean sea routes would have a devastating effect and could lead to a global energy crisis as the Gulf region contains 60% of the world's oil and 40% of the world's gas reserves, the Strait of Hormuz being an important energy route with oil transportation worth over U.S. \$300 billion every year. This region also offers minerals to many people. International players are also operating in this region, including the U.S., China, India, and Pakistan. Regional conflicts are also of great concern for international peace. The following are the major security issues:





How Can We Avoid It?

- Terrorist groups using sea routes all over the world is a common phenomenon. The sea, because of its peculiar nature, provides a vast range of routes, ways, and means for these terrorist groups. It is very difficult for the world's navies and other security agencies to keep watch 24/7, which is why the world is facing terrorist threats and bloodshed.
- Drug trafficking and arms smuggling on the sea are other big maritime issues having international and national implications. Afghanistan has become the major source of heroin production. The sea is the most used way of smuggling arms and drugs. Pakistan is suffering from a lot of unrest, especially in the provinces of NWFP (North-West Frontier Province) and Balochistan, where terrorists are using the sea as their main supply lines.
- Piracy is posing the biggest threat to the sea trade, although the international community is committed to eliminating piracy by enforcing international and domestic laws, such as the UN Charter, especially chapter 7; 1982 UNCLOS; the 1988 SUA Convention; the 2000 UN Convention against Transnational Organized Crime; and other IMO instruments. Recently the Chief of the Naval Staff Pakistan Navy agreed to work with India on the creation of a joint maritime security agency to prevent seaborne terrorist attacks, drug trafficking, arms smuggling and piracy. There is no doubt that piracy has intensified to the extent that between January and June last year, pirates hijacked 33 vessels in at least 140 attacks across the globe.
- Smuggling people in the recent past has also become a major worldwide maritime issue. In one odd incident about 40 Pakistanis died after being transported in a small shipping container.
- The lack of a security infrastructure along the coastline is another concern. Presently Pakistan is engaged in a multidimensional war along almost all of its borders. India, China, and the U.S. are vying to gain supremacy in the region, and the U.S.'s attempt to control world energy resources has destabilized the whole region.
- The lack of funds and expertise for security-related issues is another big hurdle. Presently Pakistan is fighting the terrorism menace to provide peace and stability for the whole world and is in dire need of funds, equipment, and expertise.



- It has become a legal and moral obligation for Pakistan to provide a transit route for Afghanistan, a landlocked country. This facility is being misused by people smuggling arms and ammunition.
- The lack of regional coordination as well as boundary and other disputes with neighboring countries, especially India, are awaiting maritime solutions. These include the Sir Creek issue between Pakistan and India and the boundary demarcation of the EEZ and the continental shelf between Pakistan and Bangladesh.

Shipping Industry: The shipping industry has always been the backbone of the national economy and development, however it is being ignored and lies at the bottom of government priorities. There are hundreds of shipyards, thousands of ports, tens of thousands of ships, millions of mariners and billions in financial activity in the world but Pakistan is out of all of this. The earning potential through the sea trade is not being explored. The onetime yearly earnings of U.S. \$1.2 billion from fisheries have been limited to half this size. The following are the major shipping industry issues:



Dreaming About This

- About 4,000 ships call at Pakistani ports every year, and ocean freight is worth about U.S. \$4 billion.
 Pakistan National Shipping Corporation is the only Pakistan flag carrier with only 11 aged plus 25 year ships and is just able to carry 17% of the national cargo, losing a lot of foreign exchange to other shipping companies for freight.
- Gwadar Port has been developed, and will be a great asset if it is used to its optimum. It has a lot of potential for trade with the central Asian nations.
- Pakistan has the best irrigation system in the world. About 36,000 miles of navigable channels are available in the form of rivers and canals, but none are being used.
- The major training institute, Pakistan Marine Academy, has huge potential after some restructuring and after acquiring modern training aids, like simulators, etc. As well, it needs to collaborate on exchange



programs with the regional maritime academies.

- The shipbuilding industry has been ruined. During the last 40 years, only four years were profitable.
- The ship breaking industry has also deteriorated because of government disinterest and the shortage of modern facilities. A high earning industry has gone to waste and many skilled people have lost their jobs.
- Pakistan was a big source for trained and skilled labor for the shipping industry, but presently our own small shipping industry can take in just 400 seafarers per year, and due to the global security situation and terrorist activities and as the media portrays Muslims as terrorists the global shipping industry is reluctant to employ Pakistan's seafarers.
- The fishing industry is operating at very low levels. Fishing boats and ports are substandard and the fishermen don't have access to world markets. There are inadequate traditional control measures and no institutional framework to implement an integrated approach for fisheries.
- Oil and gas and other mineral exploration are not a priority, resulting in the biggest energy crisis in the country's history, leading to a big disaster in the inland industry. Billions of dollars of export orders have been cancelled
- Environment protection has also not been given much importance. The big port city of Karachi is discharging its waste into the sea and destroying sea life and mangroves. When the Tasman Spirit caused a heavy oil spill in Karachi port, the shipping industry was neither ready nor equipped to handle the situation, and still has not learned the lesson.

Potential of the Pakistan Maritime Industry: Despite all the problems, there is a lot of potential in the Pakistan maritime industry in all spheres. During the 1970s, Pakistan had about 72 ships, which has now been reduced to 11. This situation can be improved. Pakistan is blessed with raw materials, steel mills and very good ship construction facilities. A comprehensive shipping policy and prioritization of the industry would do wonders.





Gwadar Port

- Private shipping companies can be given incentives to register their ships under the national flag in the way that Panama does. Bahria Foundation (a foundation established for the welfare of retired naval personal) should be tasked to buy, build and operate ships because presently many retired naval officers are working in this foundation.
- Much foreign exchange can be saved by picking up cargo from neighboring ports and within Pakistan.
- The ports are also underutilized. Bigger ships can be handled. Roads and other transportation infrastructure can be improved. LPG terminals, transshipment and transit businesses should be introduced.
- Dredging is another viable industry for the private sector. Also, providing surveys for the 4,000 ships visiting Karachi port, and improvements to maintenance facilities, etc., would open up new avenues in the shipping business.
- For the development of human resources, the Pakistan Marine Academy needs lots of improvement to be able to provide training compatible with international standards.
- Fisheries are another goldmine in the Pakistan maritime industry, which is being underutilized. Big foreign trawlers are fishing in Pakistan's waters. Our own fishermen have neither been provided job security, training, insurance and good money nor any other protection. They also don't have access to the world's markets for their best fish catch and jumbo prawns.
- Presently the management structure of the shipping industry needs lots of restructuring and improvement. There are only 11 ships and two ministers with a number of non-professional staff.
- A new shipping policy needs to be promulgated that would cover all the facts and figures and take into account all weaknesses and strengths of the industry.
- Pakistan's EEZ is very rich in minerals. Many neighboring countries have explored their minerals, such as Iran and the Persian Gulf countries. We are still lagging behind. There is a current need to explore the EEZ.
- Foreign investment is the backbone of the industry. We can invite and attract foreign investors to the maritime industry by improving law and order, and by making rules and regulations easy and comprehensive.

Conclusion: There is no doubt that the shipping industry has become a global business and no country can work in isolation. That is why Sasakawa Fellows are working together like a family and trying to bring some positive changes to the maritime industry. This is also a small effort from my side for the same big cause being undertaken by OPRF and Dr. Yohei Sasakawa.

Recommendations: The following are a few recommendations to improve upon the security situation in the maritime industry and to create harmony for safer shipping and cleaner oceans.

- Effective mechanisms for regional cooperation.
- Creation of a regional maritime security agency to prevent seaborne terrorist attacks, drug trafficking, arms and people smuggling, and territory violations, including the use of regional maritime aviation patrols for more effective control.
- Piracy needs to be addressed in a hard way through regional cooperation and intelligence sharing.



- A collective stance on maritime security initiatives to ensure freedom of navigation and the free flow of sea trade in a secure maritime environment.
- Exploration of investment opportunities in the region.
- Regional approach to respond to environmental disasters.
- Coordinated efforts to resolve international/regional conflicts and shipping policies to be reviewed to facilitate regional common interests and mutual trade.
- Enhance maritime awareness in the region in order to promote private sector participation.
- Capacity building in all spheres of the shipping industry, especially in human resource development, and cadet exchange programs with regional maritime academies. Sharing of information and experiences in MET.
- Pakistan Marine Academy needs support for simulators and training equipment.
- The "Sasakawa Medal" needs to be introduced in the Pakistan Marine Academy for cadets securing high marks in the nautical and engineering curriculum, including OJT in Japan.
- Regional cooperation and investment in fisheries.



Presentation on the Maritime Affairs (Sri Lanka Fellows)

New Project: Hambantota Port Construction

Y.A. Tilak Deepthi Kumara Jayasinghe (Sri Lanka 1997)

Significance of the Project

The Hambantota Port has a long history. Hambantota means the port for *hamban*. *Hamban* is the name of a type of sailing vessel. *Tota* means a port. It is also believed that *hamban* was derived from the Chinese word *sampan*, which means vessel in Chinese. This port has been used by the Dutch in the 18th century and by the British, as a naval port, in the 19th century.

Development of trade demands another new port in the region as Colombo is reaching its maximum capacity. Hambantota Port is situated in the southern tip of Sri Lanka, strategically very close to the main sea route between East Asia and Europe.

- strategic location of the port will play a crucial role for managing logistics and the supply chain for manufacturers and distributors
- weather conditions,
- natural depth along the coast line,
- cost effectiveness of building an internal port rather than a seaport,
- over 2000 hectares available.

These are among the main considerations for selecting Hambantota as a new port.

Objectives of the Project

The Port of Hambantota is planned as a service and industrial port. Hambantota Port will be operated under a "free port" concept

There are plans for oil refineries and power plants along with the port development. The port will also have a berth for conventional cargo, break-bulk, cement, ro-ro terminals, etc. Bunkering will also be a main feature of Hambantota Port.

Accordingly, the following business ventures have been identified by the Sri Lanka Ports Authority for the implementation of phase I of the Hambantota Port Project:

- 1. cement grinding plant
- 2. cement bagging plant
- 3. fertilizer bagging plants 2 Nos
- 4. vehicle assembling plant
- 5. warehousing complex
- 6. operation of LPG plant
- 7. operation of RO-RO terminals
- 8. ship repair facilities
- 9. operation of non-containerized cargo terminals
- 10. any other services.



Design Parameters of the Port

The proposed port is planned to have two breakwater arms on the seaside to ensure safe navigation and the safety of the basin and quay walls.

The Hambantota Port Development Project will be constructed to handle 100,000 DWT vessels. The width of the approach channel is 210 meters and the depth will be 16 meters. The turning circle is 600 meters. The port will also have a service vessel berth of 105 meters, an oil terminal berth of 310 meters and a quay wall (general cargo) of 600 meters. The depth of the basin is 16 meters.

Construction Details and the Completion of Phase 1

Main activities related to Port Construction Phase 1

- break water construction
- basing and approach channel excavation (dredging and dry excavation)
- quay wall construction.

Contractor M/s China Harbour Engineering Company & Sinohydro Corporation as a joint venture Under the supervision of the engineering team of SLPA.

As per the approved scheduled, it is planned to complete the construction work of Phase 1 by April 2011. Presented by Y.A.T.D.K. Jayasinghe

Port of Hambantota Project



Main Parameters of Phase 1

•	approach channel width	210 m
•	approach channel depth	16 m
•	turning circle	600 m
•	quay length(general cargo)	600 m
•	service quay	105 m
•	oil quay	310 m
	depth of basin	16 m
•	project duration (months)	39



Hambantota Port Project Design of Phase 1



Port of Hambantota Project Construction in Dry Conditions



Once Phase 1 is completed





Presentation on the Maritime Affairs (Sri Lanka Fellows)

Major Maritime Issues in Sri Lanka

Sarath Kumara Mathurana Gedara (Sri Lanka 2007)

End of the Terrorist Problem

The terrorist problem that paralyzed the country's economy and society and that caused economic development to slow, including in the maritime sector, for thirty years ended in May 2009.

Opening of North Port Access Channel

As a result of improvement in security conditions in the country, the government has taken the necessary measures to open the north port access channel. Now, delays in berthing ships have decreased and the availability of berths has increased.

Implementation of New Computer Systems

New Navis Express and SPARCS systems have been implemented for ship and yard planning in the port of Colombo. This has increased the productivity of container handling and could facilitate other customer services, such as EDI and TDR uploading.

Construction of Cargo Village

Providing all logistics services in one place is the main objective of this project. This project still has not commenced and is in the feasibility stage. Other important objectives of this project are reduced congestion in the port operational area and in Colombo.

Port Development Projects

The Colombo South Harbour Development Project and construction of Hambantota Port are major maritimerelated projects in the country.



Aerial view of future Colombo Port



Colombo South Harbour Development Project

- Located west of the present southwest breakwater
- Approximately 600 hectares
- 4 terminals
- each over 1,200 m long
- Accommodates 3 alongside berths
- Depths of 18 m and provision to deepen to 23 m
- Channel width 560 m
- Channel depth 20 m
- Harbour basin depth 18 m
- 600 m turning circle

Funding

Stage 01
Infrastructure facilities
Public funds: U.S. \$300 million
Stage 02
Other terminal facilities
U.S. \$700 million (private sector participation)

Engineer

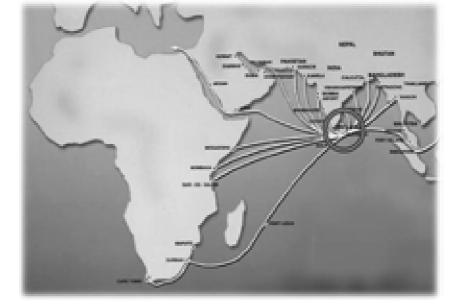
Scott Wilson Ltd. - UK

Contractor

Hyundai Engineering & Construction Company, Korea

Reference: www.slpa.lk

Location of Sri Lanka





Latitude 5 55'N to 9 50'N

Longitude 79 42'E to 81 52'E

Port of Hambantota Project

Main Objectives

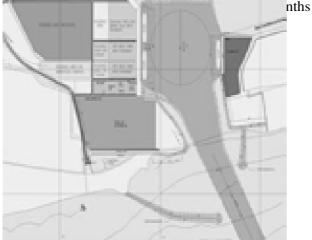
Use as a service and industrial port (bunker supply, shipbuilding and repairs, export processing zones, cool stores, and distribution centers)

Importance of the port according to the location in the region

Main Parameters of Phase 1

Contractor M/s China Harbour Engineering Company & Sinohydro Corporation (joint venture) Under the supervision of engineering team of SLPA

	approach channel width	210 m
	approach channel depth	16 m
	turning circle	600 m
	quay length (general cargo)	600 m
	service quay	105 m
	oil quay	310 m
	depth of basin	16 m
_	and a second sec	nth



Map of Hambantota Port



A scene from the construction site



Hambantota Port (after construction)



OPRF Session

"Ideal Network Structure for the Sasakawa Fellows"
Shinichi Ichikawa
(Coordinator, "Friends of WMU, Japan" Secretariat, OPRF)

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Ideal Network Structure for the Sasakawa Fellows

Shinichi Ichikawa (Coordinator, "Friends of WMU, Japan" Secretariat, OPRF) "Ideal Network Structure of the Sasakawa Fellows"

1. Introduction

To nurture future leaders in the ocean-related fields, the Ocean Policy Research Foundation is supporting the provision of the WMU Sasakawa Fellowship Program to the World Maritime University and is responsible for the management and administration of the program.

Also, the Friends of WMU, Japan Secretariat, provides various activities that support the construction of an effective network among Sasakawa Fellows.

Here is the ideal structure for the future network for the Fellows as well as an explanation of our goals.

2. The Secretariat's Role

The tasks handled by the Secretariat are divided into two basic categories:

- 1) Selection of Sasakawa Fellowship recipients and provision of scholarship funds to WMU.
- 2) Follow-up activities for Sasakawa Scholarship Graduates (called Sasakawa Fellows) and the construction of their network.

The construction of the fellows' network will be the main focus this time, since this is what the Network Meeting is for. The methods we use for expanding the network are divided into four categories:

- 1) Administration of the Sasakawa Fellows' directory
- 2) Periodic updates of the Friends of WMU, Japan Website
- 3) Publishing and sending the Friends of WMU, Japan Newsletter
- 4) Promotion of communication among WMU Sasakawa Fellows

These four main categories will be described one by one as follows:

First, talking about the administration of the Sasakawa Fellows' directory, this is very important and very hard work. Even within Japan, it is sometimes rather difficult to find the contact address of old friends. As you can imagine, it is much more difficult to do the same thing regarding friends overseas.

Today, many Sasakawa fellows are working at governmental organizations in their countries, and most of them are subject to periodic transfer. Under these circumstances, the Secretariat is always forced to chase up information on the new places of work.

The number of students who have received Sasakawa scholarships from 1988 to now, including the 27 current students in the class of 2010, is 424 from 53 countries. Therefore, needless to say, it is vital to update the fellows' contact addresses. If each fellow consciously notifies the Secretariat immediately about updates, it would be very helpful for us.





Although this would be ideal, things are not that easy. Then how should we cope with such a laborious job? In fact, at the Secretariat, we set up our own Website where we have published the Sasakawa Fellows' Directory. This contains all of the Sasakawa Fellows (including current students), who can access and browse it by inputting their IDs and passwords. Furthermore, in case of changes of places of work and addresses, they can update the information by themselves. However, this is not good enough, so we would like to discuss with you how to cope with the fellows' updates in this meeting, and we hope to get some good and useful ideas.

The second method for expanding the network is using the Website. In today's technology-oriented society, the PC is an essential tool for establishing and developing our network. We try to update our Website once a month, and around 300 people a month access it. However, even though we have a Website, of course we need to update it periodically to increase the number of users. It is, however, not so easy to collect the necessary details for even monthly updates. In addition, our staff at the Secretariat handle all the relevant work, including design, photo editing, layout and updates. In spite of this, we are striving to make our Website an attractive one that can be easily visited by Sasakawa Fellows as well as people who are interested in the WMU Sasakawa Fellowship Program.

So, we would like to discuss how to gather contributions continually, and how to make our Website more attractive. At the same time, PC usage varies between countries and regions, so we would like to have a report about the current Internet situation in each country during this network meeting so that we could discuss it more specifically and carefully.

Third, in order to develop the Sasakawa Fellows' network, we edit, issue and deliver the Friends of WMU, Japan Newsletter four times a year, in June, September, December and March. We just released No. 29 last month, and we expect that all of you have received it. Although this newsletter is basically directed at Sasakawa Fellows, it is distributed to interested people at WMU as well as those who are concerned with maritime affairs



throughout the world. We publish approximately 1,000 copies each time. We receive contributions once in a while, but we are particularly happy when we receive a report stating that Sasakawa Fellows from different countries are reuniting and associating with each other at international conferences or seminars. Contributing articles to our newsletter is always appreciated, but unfortunately, at the Secretariat we have to look for voluntary contributions; therefore, at this meeting, please talk about methods to get contributions from fellows at regular intervals.

Again, through this newsletter, we hope many fellows will receive recent information about their old friends and their activities. We place a great deal of importance on this newsletter as a method of enhancing the Sasakawa Fellows' network. Ms. Susan Jackson, who is here today, is a member of the editorial staff and we really appreciate her regular assistance. Thank you.

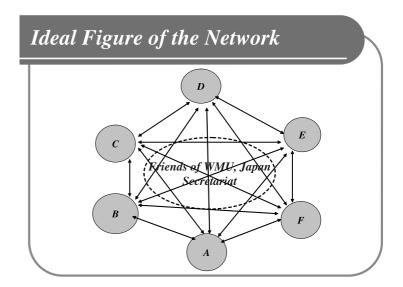
The last method to enhance the Sasakawa Fellows' network is to promote communication among Sasakawa Fellows. Administration of the Directory is the starting point for the network. The Website is one way to enhance the network using modern technology. The newsletter is another way to enhance the network by delivering printed materials. However, the network in itself is a form of exchange between people, and the opportunity to meet and talk, even for a short while, is essential for this exchange.

The Chairman of The Nippon Foundation, Dr. Yohei Sasakawa, and all other people related to our foundation, including staff at the Secretariat, endeavor to directly communicate with the fellows. The Network Meeting held in Bangkok in February 2007 as well as this Network Meeting in the South Asian Region are part of our efforts to promote exchange among the fellows.

Chairman Sasakawa is involved in various projects globally. In spite of his tight schedule, he manages to meet Sasakawa Fellows in countries that he visits. In addition, recently there have been increasing numbers of Sasakawa Fellows visiting Japan to participate in forums or international conferences, and many take the opportunity to visit Chairman Sasakawa. Mr. Eisuke Kudo, of our foundation, as well as staff members at the Secretariat also actively communicate with the fellows by email, letter, fax, and telephone. When we travel on business, we contact the fellows in advance and meet them in their countries. These efforts will promote exchanges between the fellows and lead to a basis for the enhancement of the network.

3. Conclusion and Prospects

Let me conclude by saying that since common problems are piling up in the modern maritime world, cooperation transcending national borders is becoming more and more important. It is the challenge as well as the goal of the Secretariat to realize a network where Sasakawa Fellows can maintain close contact, share information, knowledge and know-how obtained at WMU. They can then be active, based on relations that transcend national borders or





institutions, and work together as necessary to solve common problems. In order to construct and enhance the network, continual steady effort is required. Therefore, there will be no end to this effort so long as the number of the fellows keeps increasing. We, however, hope that the network of Sasakawa Fellows will evolve from the current status of bilateral relations with the Secretariat into one where the fellows are active in the world while surrounding the Secretariat.

This applies not only to WMU Sasakawa Fellows but also to all WMU graduates. Individual graduate's cooperation with each other as well as with WMU and the Secretariat is essential in order to effectively maintain the network. The network, which we wish to realize, is friendly, interactive, cooperative, and sustainable. That is the reason why I chose as the title of this presentation "The world is a family." We are confident that this network will be of use to you, no matter where you are.





"WMU:Moving Ahead into the Next Decade " Ms. Susan Jackson (Associate Registrar, WMU)



WMU: Moving Ahead into the Next Decade



Susan Jackson (Associate Registrar, WMU) " WMU: Moving Ahead into the Next Decade "

The Foundations

WMU was created through an agreement in 1982 between the Government of Sweden and the International Maritime Organization and Sweden in 1982. The rationale was simple: Back in the 1970s and 1980s, nearly all developing countries with a coastline had trained maritime technical personnel drawn from the seagoing professions—notably master mariners and chief engineers. But they had not received the benefit of postgraduate education in maritime affairs, nor professional training in teaching or designing study programmes. Given this situation, it was difficult for many developing countries to build a modern maritime infrastructure to support their economic development through foreign trade.

This gap between the capabilities of the developed and the developing economies grew as the shipping industry became increasingly sophisticated and technologically advanced. In the early 1980s, IMO, with the support of the United Nations Development Programme (UNDP), had tried to fill this gap by recruiting specialists from developed countries and making their services available to developing countries for short-term missions. This technical cooperation initiative was, however, of limited benefit. The specialists did their best within the limited time available to them, but were not able to achieve lasting results. The programme also had an extremely high cost—around U.S. \$2.5 million each year.

The decision was therefore taken by IMO that a far more cost-effective approach would be to build national competencies by delivering a programme of postgraduate study for mid-level and senior managers, who would return to their home countries fully conversant with IMO policies, conventions, and operational guidelines, and confident of being able to implement them.

WMU was therefore established as a postgraduate university, offering only postgraduate professional degrees. Today, it has moved beyond its initial remit to offer Ph.D. as well as M.Sc. degrees, M.Sc. degree programmes taught in China as well as in Sweden, and has students specialising in topics across the maritime field, including safety, security, management, environment protection, education, policy, governance, and law. The development of the university over the last $2^{1}/_{2}$ decades is now accelerating, under new governance and management systems.

Changes to the M.Sc. in Malmö, 2010 Onwards

The M.Sc. in Maritime Affairs in Malmö will have a fresh new look from the intake of 2010. It will be shorter, sharper, and much more modern, in line with comparable master's degree programmes worldwide.



WMU constantly keeps the *content* of the degree programme under review. The more professionally based a degree programme, the more important it is to ensure that its content provides the best possible match with the demands of the market. However, last year, a major review of the *structure* of the programme was undertaken; the review considered the WMU programme in terms of its quality, its comparability, and its market relevance, and the review team took into account the views of students, applicants, their employers, and sponsors. One theme recurred: the programme was considered too long.

So, from the intake of 2010, the standard M.Sc. programme will now be completed in 14 rather than 17 months, while maintaining the current credit load. The streamlining has been secured by better planning and reduced downtime, with a marked reduction in the vacation periods. At the same time, other important changes were introduced; the first or foundation semester has been extended from 5 credits to 8 credits, and the accelerated programme has grown from 9 months to 11 months. These changes enhance the quality of the WMU programme for students, providing more contact hours where they are most needed. The field study programme has also been improved, resulting in a shorter, more intensive and more useful field study component. The donor field studies, such as you enjoyed in Japan, would of course be unchanged.

These changes have also produced a new academic calendar. Each class will now enrol in October each year, while the ESSP will start in early July. The accelerated programme will start in the following January, and the class as a whole will graduate in early December. The same six specialisations will be offered in 2010: Maritime Safety & Environmental Administration, Maritime Law & Policy, Marine Environmental & Ocean Management, Port Management, Shipping Management and Maritime Education & Training.

Academic Portfolio Review

The university is now moving on to consider and assess the *content* of the academic programmes offered, within the university's educational focus on teaching/mentoring, research/scholarship, and outreach/engagement with a purpose to build global capacity on behalf of the maritime community.

The specialisations offered in Malmö will be reviewed to ensure they offer the best possible match for the needs of applicants and their employers. The two programmes taught in China—the M.Sc. in International Transport & Logistics at Shanghai, and the M.Sc. in Maritime Safety & Environmental Management at Dalian—are reviewed annually by WMU's External Examiners and appear to be working well. All the students enrolled in the China programmes are self-funded or employer funded, and the income from these programmes provides an important revenue stream for WMU. Despite the global recession, their enrolment figures remain strong. Also to be re-assessed will be the two Ph.D. programmes, the LL.M. offered with Lund University and the Postgraduate Diploma in Marine Insurance, which is offered by distance learning.

Emphasising Research

Although WMU's academic staff has always engaged in research, it has now taken on added importance for the university's future. Increasingly, universities are ranked worldwide on the basis of impact of their research, and their success in competition for research contracts. WMU has, over the years, won around 20 research projects,



primarily from the EU and IMO. The university has a range of areas of interest, from the effects of climate change on the future of shipping to maritime security and piracy, from port state control to engine-room simulators. This is providing a firm foundation for development, and—very importantly—is already feeding into and enhancing the M.Sc. programme.

Since research was identified as a key priority during the Faculty Retreat in September, two new EU research projects (ADOPTMAN and IMPACT) have been won, two Ph.D. students have enrolled within the Baltic Masters programme, and new research groups such as MaRiSa (Maritime Risk & Safety) have formed. The university has recently advertised up to four academic posts, and a strong research record, in publication, supervision of doctoral students, and winning research grants, will be a key factor when assessing applications. WMU's goal is to carry out the research that helps determine the future directions of the maritime industry.

Governance

Following a strategic review in 2007, the university has undergone a very thorough re-appraisal, with the remit of ensuring that its governance—set in place in 1983—is revised to make it fit for purpose in the decades ahead. A working group, led by the Chairman of IMO Council, Mr. Johan Franson, established a set of recommendations which have now been implemented. Certain of these could be set in place by the university management team, or by the Board of Governors. Others were more far-reaching, particularly the need for a leaner, fitter pair of governing bodies and the necessity of establishing a sustainable funding model for WMU, and these were referred to IMO Council and IMO Assembly.

IMO Assembly, at its 26th session in early December 2009, adopted a resolution to update and revise the university's charter, thus providing a more flexible and responsive governance system. The new charter will take effect on 1 January, 2010. The board of governors will now consist of no more than 30 appointed members, and members will have specific personal responsibility for raising funds to ensure the university's continuing effective operation. The new charter has also replaced the old Executive Council with a new 11-member executive board, which will have a chairman appointed by the secretary-general. The executive board will coordinate the governance of the university. The new charter marks the end of almost three years of continuous review and assessment, which was set in motion to ensure that WMU's governance and management provisions are able to meet the emerging demands which will be placed on the university by the maritime sector in the next decade.

The assembly also adopted the draft resolution on WMU's funding, which charges the secretary-general and the IMO secretariat with finding a model for the sustainable funding for WMU in the future. The university is keenly aware that the immense generosity of foundations—especially The Nippon Foundation and the Ocean Policy Research Foundation—and governments, especially the Government of Sweden, is the basis of our existence; but we know the costs must be more widely and equably spread, to other donors and to users.

Strategic Plan and Growth

The university is in the process of finalizing a strategic plan. The vision is for the faculty to grow by a factor of



around 2.5–3 during the next decade, with accompanied appropriate growth in support staff and students. Part of the funding for this growth in academic staff is anticipated from engagement in research projects, which will have to be matched by income from other sources. The strategic planning process, which includes a drafting revision vision statement, is now reaching its final stages, and will be available early in 2010.

The planned growth in size of the university makes new premises a matter of urgency. The current building is both too small and too outdated, and has particular problems in areas such as wireless networking, the cafeteria and classroom space and facilities. WMU has begun a dialogue with the Mayor of Malmo about new premises for WMU, and significant progress has been made. We very much hope that new premises will be confirmed soon, and that we will be able to move in 2012.

Conclusion

WMU is clearly moving forward into a new and exciting phase of its development. The last 26 years have provided the firm foundations, but the university must continue to evolve in order to remain relevant to a fast-changing industry. There will certainly be challenges ahead, but the university has set in place the tools and techniques to face them head on.

Susan Jackson Associate Registrar 22 December, 2009





- I. Discussion Report on Recent Sasakawa Fellows' Activities
- II. Reports on Fellows' Activities in Each Country



Sasakawa Fellow's Recent Activities and Updating Fellows' List (Session 1)

Prepared by:

G.A. Talagala Mohammad Ashraf Zafar Khalid Mahmud (Sri Lanka 1992) (Pakistan 1994) (Bangladesh 2007)

Preamble:

Although different types of fellowship programs are available for various fields, the Sasakawa Fellowship Program has unique dimensions due to its follow-up activities. This follow-up is nowadays developed as a network. The WMU Sasakawa Fellowship is like a family which is spread all over the world. The foundation of this network was laid down by the generous contributions from the late Ryoichi Sasakawa-san for talented candidates from developing countries to enhance their knowledge through the WMU M.Sc. degree. Here we will describe the recent activities of the fellows, the network in each country, and finally future plans to spread globally.

Past Activities:

In December 1993, a most attractive step was taken by OPRF (formerly SOF) by giving opportunities to WMU Sasakawa Fellows to visit Japan to meet and greet the late Ryoichi Sasakawa-san to convey their gratitude and thank him in person. Moreover Sasakawa Fellows were provided the opportunity to visit various maritime operations to enhance their knowledge and experience about the contribution of Japan to the maritime sector.

Recent Activities:

In July 2001, one international network seminar was arranged by OPRF (formerly SOF) in Tokyo where all Sasakawa Fellows and prominent experts in the maritime field were invited to exchange ideas and take the necessary steps to advance maritime safety and protection of the environment. In February 2007, OPRF held a WMU Sasakawa Fellows Network Meeting in the Southeast Asian Region in Thailand. In that meeting, the members adopted an action plan to fulfill the objectives of the WMU Sasakawa Fellow's Network and future expansion. For continuity, this network meeting was arranged.

Agenda of this meeting:

WMU Sasakawa Fellows' Recent Activities and Updating Fellows' List.

Report from South Asian Countries:

Bangladesh: At present Bangladesh has 21 fellows. Out of these, 17 fellows are working in country, the four others are abroad. All of the fellows are working in different maritime organizations and have posts in government service as well as in the private sector. The nature of their jobs allow many of the fellows to meet, sometimes every month.



India: In India presently 10 fellows are working in Mumbai, Delhi and Calcutta. Most of them are related to maritime activities such as Maritime Administration, the Indian Shipping Corporation, Port Authorities, the Indian Coast Guard and private shipping companies.

Japan: Most of the fellows are working in Tokyo, which gives them the opportunity to meet on different occasions, such as welcoming receptions, year end or New Year's parties and also welcoming WMU Sasakawa Fellows on their visits to Japan.

Maldives: Last but not least, two fellows are in Maldives. One of them is serving in Maldives Ports Limited. The other fellow is now on study leave for a Ph.D. course.

Pakistan: At present, Pakistan WMU Sasakawa Fellows number 13. Most of them are working in various government offices as well as in private maritime operations.

Sri Lanka: At present, there are 10 fellows, working in the ports, shipping corporations and other companies.

Recommendation

There was extensive discussion during the session about strengthening the network by appointing two fellows in each country as (1) a focal point and (2) a country representative.

The focal point would ensure that each fellow updates his/her personal information, such as contact information.



Reports on Fellows' Activities in Each Country

Recent Sasakawa Fellows' Activities in



Out of 20 fellows, as per our records, two (Mr. Mohammad Sabrul Islam; 2003, and Mr. Shah Md. Mainuddin; 2004) are residing outside of Bangladesh at the moment.

Recent Sasakawa Fellows' Activities in



The Coast Guard officers meet regularly and discuss various issues, which include the formation of an Indian chapter of the Sasakawa Fellows. It is heartening to note that all four Coast Guard Sasakawa Fellows have graduated with distinction from WMU on different years and three of them have obtained the Chancellors Award for meritorious performance.

The academic research activities undertaken at WMU and the details of the dissertation work undertaken by each of the Sasakawa Fellows are discussed so as to implement certain recommendations made in the dissertations.

India has a large geographical boundary compared with other South Asian countries. This is probably one of the reasons for no activity. Fellows are spread all over the country, so no initiatives may be possible due to the lack of personal contact.

I am proud to be the youngest member, as per my year of graduation (2009) but not my age, of the small tenmember (WMU graduates) Sasakawa family in India. However, I am sorry to mention that we really need to develop more bonding among our family members. I was surprised on 10th November, 2009 when I asked Mr. Vijay Handa, the first Indian Sasakawa Fellow, who lives within 2 km of my house in Mumbai, about our network in India. Although we have a *WMU-India Chapter* and our yearly get-together is held on our campus (Maritime Training Institute of The Shipping Corporation of India Ltd.) in Mumbai, but what about a Sasakawa network? "Probably not" is the answer. It is worth mentioning that in the last two years WMU students (MLP) are coming to India (Mumbai) as a part of their field study and they visit our head office (SCI) and the Maritime Training Institute (MTI) for one day each. That is the time we, as the *WMU-India Chapter*, have gotten together along with the MLP students to develop some interaction with Indian WMU graduates. Now, being the first SCI family member to become a Sasakawa Fellow and to be stationed in Mumbai, I really feel that I can do a little more to develop our Sasakawa network. In the 21st century, the Indian maritime sector is growing faster than many other countries in the world and definitely within all South Asian Countries. And now that all Indian Sasakawa Fellows are working in the maritime sector, there probably is a real opportunity waiting for us.



Recent Sasakawa Fellows' Activities in



Tomonori Okamura (2002)

WMU Sasakawa Fellows in Japan have a lot of opportunities to see each other because:

- Many fellows work in Tokyo.
- We have many chances to go to OPRF headquarters.
- Our latest email addresses are distributed to everyone.

Regularly, the following events are held:

- 1. Welcome receptions: The Japan Field Study Trip for WMU Sasakawa Fellowship Students.
- 2. Year End/New Year's party for WMU Sasakawa Japanese Fellows (to celebrate recent graduates and to cheer on new WMU enrollees).

In addition,

3. Welcome meetings for WMU Sasakawa Fellows visiting Japan are also held.

These announcements/messages—as well as all the replies—are sent by email to all Sasakawa Fellows, so it is easy for us to exchange the latest news about ourselves.

Recent Sasakawa Fellows' Activities in



I (Mr. H. Naeem; 2003) am also the focal point for the Modern Port Management Training Program of the UNCTAD.

My friend, Mr. Ahmed Shihan, is now studying for a Ph.D. in New Zealand.

Recent Sasakawa Fellows' Activities in



It was at the seminar (WMU Japan Sasakawa Fellows Forum, July 2001, Tokyo) where the idea of setting up country cells for Sasakawa Fellows to network and work together was discussed. I <u>appreciate</u> that it is immensely important as it provides continuous contact and gives the impression of a family for WMU Japan/Sasakawa fellows, and it provides a strong bond among all those concerned.



I must admit and do regret that the person who was put in charge of the Pakistan cell did not take a genuine interest in it, and I, who took keen interest in all the activities of Sasakawa Fellows, was let down and disappointed by my colleagues in Pakistan. Today, most of the WMU Sasakawa Fellows in Pakistan who attended the July 2001 international seminar in Tokyo have either left or retired from government service or have scattered, expect one who is still serving in the government as the Chief Nautical Surveyor in the Directorate of Ports and Shipping. At this time, a new generation of WMU Sasakawa fellows in Pakistan has come up who are more enthusiastic about continuing relationships. I do hope that the regional meeting in Colombo will provide a fresh opportunity for Pakistani WMU fellows to renew the bond that has faded away due to some individuals' lack of interest.

Recent Sasakawa Fellows' Activities in



We were able to successfully organize all the past Sasakawa events that were held in Sri Lanka for each visit by Dr. Sasakawa, Mr. Kudo and Mr. Tanaka, and all pre-arrangements were done methodically to fulfill our responsibilities for regional network meetings/conferences. Furthermore, we wish to state here that all Sasakawa Fellows in Sri Lanka are capable enough to take over any task that we are assigned for the needs of the region, if we are provided sponsorship by the Sasakawa organization. Four of the nine Sri Lankan Sasakawa Fellows are out of the country and one has regrettably passed away. Only four members are currently in the country.





- I. Discussion Report on Mutual Communication via the Internet
- **II.** Reports on Mutual Communication via the Internet in Each Country



Report on Mutual Communication via the Internet (Session 2)

Prepared by:

Tomonori Okamura Y.A. Tilak Deepthi Kumara Jayasinghe Asghar Ali Abu Hena Mohammad Mamun (Japan 2002) (Sli Lanka 1997) (Pakistan 2006) (Bangladesh 2000)

Report from Each Country

We have discussed issues such as the availability of PCs, connectivity, speed of the Internet, costs involved and frequency of using email and the Internet. We found that PCs are available for almost all participants from countries in the South Asian region in their offices, and most of them have them at home as well. Generally, participants are using MS Windows XP and also some are using newer versions like Vista.

Only a few participants do not have a dedicated Internet connection for personal use. However, they can get access to the Internet through a common facility available in their departments. Slower connections created problems for quickly downloading large files, such as photos and figures.

Daily use of email has become a habit for the participants.

Most of the participants have the ability to communicate through SMS. It was also discussed that there is an extra cost in some countries for SMS communication.

Discussion and Recommendations

The panel was unanimous in their view that a lot of efforts and investment has been made by the OPRF in creating and maintaining the OPRF and the Friends of WMU, Japan Websites. The Website is quite helpful in promoting networking and mutual communication. It is source of inspiration for all the Sasakawa Fellows and is the prime means for enhancing the network system. However, further improvements, as recommended below, can be made to update the Webpages and make the site more user friendly.

The current homepage of the OPRF Website is in Japanese, so that is difficult to download in many of the South Asian countries. The homepage can have the option of two languages, i.e. either English or Japanese. Then those wishing to use the English language can read the Website in English.

Also, on the Friends of WMU, Japan Website, Japanese characters appearing on various pages can be reduced/ removed. This will increase the speed of surfing. It should be edited only on an English version PC to prevent two-byte characters from appearing on the screen. We need to see and compare why the IMO Website is easy to surf while Friends of WMU, Japan Website is slow.

The size of one page needs to be reduced so there is no need to scroll down too much. Also right/left scrolling is not easy. Webpages having multiple photos should be thumbnails, making them quick to download and easy to read. When someone is interested in a picture, he/she can click on it and enlarge it for downloading.



Links to the most-visited pages should appear on every page, as is done on the BBC Website.

Links/buttons for the main menu and sub-menus appear on the right/left sides respectively. This is not very comfortable for low-resolution display users. The main menu should appear on top, while the sub-menu buttons should be on the right or left side, as is the case for the IMO Website.

Sky/clouds or other pictures appearing on every page should be removed to create more space for useful information.

WMU/OPRF logos should appear on the homepage to show the association between the two organizations.

For making the Website more user friendly, an automatic reminder by email of the user's ID would be very helpful, and the option for changing passwords by users is recommend for easy use.

Finally, we have confirmed that using updated fellow's information, such as e-mail address and phone numbers, will strengthen the network much more.

Conclusion

It was unanimously agreed that in order to enhance the Sasakawa Fellows network system, the use of Internet communication, as well as the frequent use of the OPRF and the Friends of WMU, Japan Website, has to be considerably enhanced. So, apart from direct communication from the secretariat to the individual fellows, the concept of focal points and/or country representatives should be established in every country where Sasakawa Fellows reside, so that two-way communication between the secretariat and the fellows, as well as among the fellows of different countries, is assured. It is also agreed that the Website have to be reconstructed as per the suggestions given by the participants during the discussion, which will ensure easy access to the Webpages and shall encourage fellows to more frequently access the OPRF and the Friends of WMU, Japan Websites.



Reports on Mutual Communication via the Internet in Each Country

Mutual Communication by Internet in





Personal communication over the Internet was not very common till now in Bangladesh. However, it is gradually gaining in popularity under the slogan, "Digital Bangladesh." But, the Internet service providers' services are not very fast yet. Moreover, the cost is not within the reach of all levels of the community. However, most Sasakawa Fellows have fairly fast connections and they communicate with computers via the Internet. Also, wide-scale use of cellular/mobile phones has made communication easier, in a wider area, and more useful and effective.

Given the all-out effort, we can say that within the next few years Bangladesh will achieve good progress in Internet communications. We are communicating almost everyday by email, Facebook, mobile phone and Skype. However, we, the current fellows, are communicating and responding much more than the previous fellows. Perhaps this is due to the fact that they had less interest in computers and the Internet.

Since high-speed data cables are available and hotspots are much more available now, the speed of communication has been increased and so the frequency of communication has been increased to as much as 50 times in a day. The most fruitful one is the MET family from WMU; we have developed a culture of sharing knowledge. As a result, we get solutions even from the international arena of maritime affairs. For example, I was searching for information for a manager regarding a maritime simulation centre and I sent questions by email! A number of friends, colleagues, and Sasakawa Fellows at home and abroad responded to me! That's was great for me. I achieved the goal and successfully prepared the development project.

A PC is still a luxury in this country. Many people do not have access to PCs and the Internet. In this context, government officials who are working in the metropolitan cities are fortunate enough to have PCs and Internet access. Using myself as an example, I would say as a government officer I have a PC and Internet access only at my office. I don't have a PC or Internet access at my home. After work, I don't have any facilities to use the Internet to communicate with friends and "dears and nears." If I want to do this, I have to do it during office time, i.e. from 9 am to 5 pm, but it is very difficult to spare time for personal business during office hours. Moreover, I have a dial-up connection in my office but the Internet speed is so slow that sometimes I lose patience. Though I have a desire to communicate with friends, the slow Internet speed prevents me from contacting them. Besides, there are some cyber cafes that have broadband connections. All cyber cafes are far away from my home. Occasionally I use a cyber cafe, even though it is expensive.



Mutual Communication by Internet in



The WMU Sasakawa Fellows in India generally communicate through telephone and emails. We try to get together whenever there is a visit by WMU students to India during their field trips or whenever a professor from WMU visits India. However, there is a limitation on Internet use while one is posted at sea. Although all the large Coast Guard ships are fitted with Inmarsat equipment for Internet access, personal use of the Internet through Inmarsat has been restricted and only operational communications are allowed from sea for security reasons. However, officers when posted ashore do have a PC and Internet connection at their workplace and at their residences, and the speed of the Internet connection (broadband) is increasing. The use of a BlackBerry is generally restricted in defense establishments, and Coast Guard officers do not carry BlackBerry devices for accessing emails via mobile phones. It was also found expensive to maintain a BlackBerry device due to the high initial investment and recurring costs.

The use of mobile phones in India has picked up dramatically in recent years. It has penetrated rural communities and is quickly turning into a hub. Communication using the Internet is also on the rise, especially among youths, but this is much less than mobile phones. However, the introduction of e–Seva into most Government offices is the order of the day. The Government of India encourages all public offices to make use of computers and the Internet to create a paperless office.

Mutual Communication by Internet in



In businesses: Many workers have their own PCs (including a Web browser and email software) on their desks and they are connected to the Internet (10 Mbps to 1 Gbps). At home: 90% of Japanese households have a PC and Internet access (Web and email) through gigabit Internet connections (see fig. 1). However, on-demand movie/Web TV (high-definition) services are still developing. Otherwise, mobile Internet (on mobile phones) is available. The service area is becoming widespread.

Mutual Communication by Internet in



The Internet is very commonly used in our work environment. It's available for all the managerial positions and for some of the supervisory staff during work hours. For some of the supervisory and lower-level staff, the Internet is available after official working hours, depending on the nature of their work. This is free of charge



and it's provided through the network of the company. The company has over 120 people who use computers for their work, and most of them have access to the Internet. This is about 60% of all the staff above supervisory level.

Mutual Communication by Internet in



Internet facilities in Pakistan, particularly in big cities like Karachi, are good, and Internet connections in the offices and at the residences of all Sasakawa Fellows are available. People do use Internet facilities for checking personal email messages, so up to now Sasakawa Fellows may not have been able to interact as required by the Sasakawa Fellows networking requirements and procedures.

It is unfortunate that due to the peculiar social setup and culture, we do not interact unless it becomes absolutely necessary to meet in person. However, this culture also helps us to meet each other at marriage parties/functions or funerals. Somehow on these occasions when people meet they discuss other people and this is how we come to know the whereabouts of each other, and our friends, and colleagues. A problem arises with respect to fellows above 40–50 years. These fellows are not very comfortable using computers or the Internet, even when they are easily available.

Secondly, as we all have access to each other on the phone, we resort to the Internet only for sharing files and photos. With respect to updating ourselves on The Nippon Foundation, Friends of WMU, Japan, and World Maritime University, the Internet and email are the best sources of information, used with ease and comfort.

With respect to frequency of Internet use, personnel with field jobs, like surveyors and inspectors, have less time available for computer use, while personnel working in offices and educational centers have computers with Internet connectivity on their desks.

One point that can be stressed is that small and multiple files should have preference over one large file when it comes to sharing information for the Sasakawa Fellows network. A problem that I face frequently is the hurdle created by Japanese language/fonts while downloading something from your recommended Web sites/ links. Though in my office and at home I have the latest computer hardware and software, my system will still hang on Web site/links having Japanese language/fonts. I suggest that the remedy for this problem lies with the French approach. They always give a link on the homepage to select the French or English language, and the write-up in the documents is always in both languages. I suggest you give a thought to this idea.

All Sasakawa fellows in Pakistan have easy access to Internet facilities. But on the contrary, Pakistani Sasakawa Fellows are not connected to each other through this facility for the following reasons:

1. There was a big gap (of about 8 years) between the last Sasakawa group (1988) and the recent group (2006).



- 2. Most of the Sasakawa Fellows were working together at the same place, i.e., Pakistan Marine Academy Karachi and they used to meet each other almost daily, so not much need was felt to interact through the Internet. However this daily meeting had nothing to do with any activity concerning Sasakawa Fellows.
- 3. A few old fellows died and most of the remaining ones have retired from active service. They are running private businesses or private maritime institutes.
- 4. Presently, these fellows are working at different places and have a negligible ability to access the Internet.

Proposal for Improving the Sasakawa Fellows' Internet connectivity

- 1. Someone should be given responsibility to arrange and activate the Sasakawa Fellow Pakistan Chapter and introduce some activities so that members are connected to each other.
- 2. If OPRF does not want to give responsibility to a particular fellow, some volunteers could be asked to do this.
- 3. Regular seminars, meetings, group discussions, etc., should be arranged and the same may be reported to OPRF.
- 4. Some sort of competition, such as essay writing, presentations, etc., should be arranged on different occasions like Japan Maritime Day, etc.
- 5. Japan culture centres/consulates may be requested to invite Sasakawa Fellows on different occasions so that everyone meets and shares ideas. Then maybe they could be interlinked by the Internet for sending pictures and other stuff of common interest.
- 6. Sasakawa Fellows should be involved in activities other than maritime-related issues, such as the humanitarian issues that Dr. Yohei Sasakawa is working on against different diseases and fighting against poverty in the world. They should be provided some funds to work on these natural calamities by arranging Sasakawa Fellow camps.
- 7. Different maritime-related problems should be raised by the OPRF on the Internet and Sasakawa Fellows should be asked for cooperative solutions. In that way, some activity could be generated to have Sasakawa Fellows work together.

Mutual Communication by Internet in



Mutual communication through the Internet among our members is minimal because of the lack of facilities, depending on the working environment.

My organization has allocated a separate PC for my office work without an Internet connection. Internet connections are only available to top-level managers in order to minimize the cost. Therefore mid-level managers are given the least opportunity. With the ongoing difficulties of providing PC facilities, we are facing the problem of updating maritime news.



Currently almost all of our fellows have the opportunity to use PCs and the Internet at their places of work. Most of them have PCs in their homes as well. But still they are reluctant to use the Internet in their homes because of the comparatively high rates for an Internet connection as well as a cultural problem. The cultural problem is that parents wouldn't be able to control their children from misusing the Internet. Although they can use filters to avoid misuse, they still are not aware how this is possible.

Currently there are many Internet service providers in our country, both public and private. But people are tending not to use the Internet for chatting and conferencing, for example, while they are on duty. The main reason for this situation is the lack of computerization for existing duties in their work. On the other hand, people are still not confident about computerization, as there are lot of infrastructure problems and legal issues. In this sense, more fellows striving to use PCs in their homes would improve mutual communication through the Internet.





- I. Discussion Report on the Friends of WMU, Japan Newsletter
- II. Reports on the Friends of WMU, Japan Newsletter in Each Country



DISCUSSION REPORT ON THE FRIENDS OF WMU, JAPAN NEWSLETTER (SESSION 3)

Prepared by:

Sudhir Kumar Sinha Hussain Naleem Yamuna Susari Wettasinghe (India 2005) (Maldives 2003) (Sri Lanka 1999)

1. INTRODUCTION

Session 3 was convened to deliberate on the Friends of WMU Newsletter. The objective was to examine the benefits and uses of the newsletter for the purpose of promoting the Sasakawa Fellows' network. The discussions focused on three main areas:

- (a) To ascertain whether a hard copy of the newsletter is really required or whether a soft copy is sufficient due to availability of Internet facilities in almost all the countries.
- (b) To confirm the postal system as well as the right addresses of the Sasakawa Fellows in order to reach them safely and quickly.
- (c) New ideas to improve the content of the newsletter and get sufficient materials from the fellows to be published.

The participants of the session were requested to deliberate on suggestions and recommendations to review and improve the newsletter as required by OPRF.

2. PROCEEDINGS OF SESSION 3

The session commenced by introduction of the chairman and members of the session followed by active participations by all the participants:

- (a) The hard copy of the newsletter remains a requirement along with soft copy posted on the OPRF Web site.
- (b) The postal services are satisfactory in the South Asian countries that are represented at this meeting.
- (c) The comments on the content requirements of the newsletter
 - (1) Special maritime activities taking place in a country could be reported.
 - (2) Any IMO meeting in the South Asian region should be highlighted in the newsletter.
 - (3) A special column to be published will give news about promotions, achievements, and special events, such as marriages, births, etc.
 - (4) A column to be published for seafarer's activities for the year 2010 as it has been declared by IMO as the Year of the Seafarer.
 - (5) The dissertation topics of Sasakawa Fellows as well as other WMU students to be highlighted in the newsletter because this will assist interested fellows, and also this could bring recognition as well as support for the students.



- (6) A questionnaire of one page to be sent by e-mail to all Sasakawa Fellows to assess the contents and to get suggestions for improvements every three years or as decided by the secretariat.
- (7) It was suggested and agreed to send one or two additional copies to higher officials in the maritime sector of each country as decided by the fellow members for that nation's benefit in general.

3. CONCLUSION

The Chairperson thanked all the fellow members of South Asian Region for their active participations and valuable comments including the officials of the OPRF and The Nippon Foundation and the sole representative of WMU, Malmo, Ms. Susan Jackson. Our special thanks to Mr. E. Kudo, special adviser to OPRF.



Reports on the Friends of WMU, Japan Newsletter in Each Country

Your personal opinions/comments towards developing the Newsletter in



It is essential that the WMU Sasakawa Fellows continue to exchange information and views for mutual benefit and development. The newsletter may be hoped to reach the status of a maritime journal where scientific and technical articles from WMU graduates and Sasakawa Fellows will enrich the entity and its wide-scale acceptability and recognition in the maritime field.

Most of the time, the newsletter contains information which is interesting to the fellows only. To make it more versatile (and especially to get the people in the fellows' families to read it too), the newsletter can include interesting maritime-related activities from Japan and around the world, as well as activities related to issues of public concern, like climate change and global warming, etc. Sometimes interesting stories on the Japanese lifestyle may also be included. Fellows from different countries may also contribute motivating stories and news items that others will be interested in reading. An award for the best contributor may also be introduced to encourage people to send their writings to the editor.

Just a small remark: If possible, the font size should be increased by one point. The first page is the "face," or we could call it the "map." Except for a few times, most of the newsletters have a group picture of different occasions, which are clear and attractive. If possible these group photos could be given priority.

If I can say something about the quality of the paper: it's really fantastic. The type size is also just right. Three columns or one column are also nice to match the writing. If it is possible to separate some regular sections, such as contemporary maritime issues, for the front or back covers, maritime safety or environment issues in a particular place, and very hot issues from the Sasakawa Fellows writings, then I believe that the newsletter will be able to maintain the same standard as it has today.

Last but not least is to motivate ourselves, the Sasakawa Fellows, for continually writing with visual instruments like pictures, sketches, and even the things from our daily lives. In this way, we can keep in touch.

Your personal opinions/comments towards developing the Newsletter in



This type of information creates more closeness among the Sasakawa Fellows. The Malmo update, the photographs of the graduation ceremony, the field trip information of the WMU Sasakawa Fellows always remind me of the beautiful days spent as a family at WMU and also in Japan during the field trip. All the credit



should go to the editorial team of the Friends of WMU, Japan Newsletter. I recommend that this trend should continue.

We all agree that most of us still love to read newspapers and magazines of all kinds. Could these be replaced by electronic versions? The advantages of newsletters can be seen from the WMU newsletter. Everyone, including myself, still enjoys reading it and gets to know the latest information on the latest developments, and it brings me back to WMU, Malmo.

In my opinion, it would be desirable to start as soon as possible. Space should be allotted in the newsletter to different regions of the Friends of WMU, Japan so that all can be suitably represented.

We, the Friends of WMU, Japan, shall have a platform to express our thoughts and ideas by making use of this newsletter. Each member can know where his/her friends are and what they are doing right now. Hence, I am of the firm opinion that the Friends of WMU, Japan Newsletter should continue to be developed.

I sincerely believe that our newsletter, Friends of WMU, Japan, is a perfect blend to fulfill the expectations, not only of WMU Sasakawa Fellows but also of a wide range of readers working in the maritime field.

Though it can be accessed on the Internet, I sincerely believe that a hard copy in the library of any maritime training institute will have a different impact. So, if a few copies are sent to our Indian Sasakawa Fellows, including myself, who can circulate them, it would be really great. Although the newsletter has a global vision, I feel that at least once a year a special focus on each of the South Asian countries would encourage the fellows and stimulate the network within the country and beyond. One or two pages can be dedicated to each country, turn by turn, and it will be the responsibility of fellows of that country to contribute to that special issue with articles on maritime issues concerning that country. It will definitely increase networking between the fellows, and probably regional attention and co-operation can greatly help to resolve issues.

As 2010 has been declared the Year of the Seafarer by IMO, being a seafarer, I think that it will be very interesting and appropriate if every issue in 2010 has some information about our previous WMU Sasakawa Fellows who have given the best part of their lives to working at sea, including their photographs, possibly with their family members, and a few lines of writing. I do believe that it will be a great tribute to all seafarers when shipping really needs such a gesture. By doing so, our newsletter will also exhibit our commitment to the shipping industry, in which almost all Sasakawa Fellows are involved today, and whom OPRF has nurtured in the past to make them shipping experts for today.

Your personal opinions/comments towards developing the Newsletter in



I might be a good idea to create a section called "Introduction of Hot Topics" from each country (on a rotating basis).



Your personal opinions/comments towards developing the Newsletter in



There are things that could be tried to improve and to make it more interesting. We should be continuing and improving contributions to the newsletter. In order to move further ahead, it would be exciting to read about maritime issues and news from different geographical areas. At the moment, the different maritime concerns for various countries are not very much available. So, it might be interesting and useful to have a "comments corner" on a selected maritime issue or news every month or every three months.

At the same time, a column that gives information on a particular country every month might be also of interest to all of the fellows. This could be on a pressing maritime issue or on developments in the maritime industry. Also, this could be on various other topics, such as maritime and port safety, security, maritime education and training, training on port management, regulations, the environment, etc.

Your personal opinions/comments towards developing the Newsletter in



Sasakawa Fellows must also be encouraged to write for the newsletter so that it is further improved. I am of the opinion that each WMU Sasakawa Fellow must contribute writing at least one article once a year to be eligible for future invitations in seminars or regional meetings.

The following points may be given consideration in respect to further improving the newsletter and making it more interesting for the readers:

- 1. A hard copy has much more weight (importance) than the soft copy available on the Website. With a hard copy, we can always share the news and updates with our family and friends in our leisure time and then discuss it. We can share it with new professionals and bosses in the offices by giving them a short look at it and allowing them to read it in their own time.
- 2. The soft copy on the Website can act as a substitute only if we lose the hard copy or we want to see archive copies. Also, new visitors to the Website can have a look at the previous issues of the newsletter.
- 3. Sections on family news, marriages and childbirths have given a soft touch to the newsletter and should continue, with good quality pictures.
- 4. Some of the fellows have now grown old and are enjoying retired life at home. We can create a small section for this category also, or maybe some random news about these people. One option can be the news of the offspring of our fellows joining the maritime industry in any capacity, as seafarers or shore managers.
- 5. We can provide one extra hard copy to the fellows to be distributed to libraries, offices and to newcomers to the industry in their respective countries.

The following are a few proposals to develop/improve the Friends of WMU, Japan Newsletter.



- 1. It's very small. Its size needs to be increased.
- 2. Instead of a monthly issue, if it is published weekly, it will be more appropriate that Sasakawa Fellow's current activities and current issues are available.
- 3. Each Sasakawa Fellow should be encouraged to write something for the newsletter.
- 4. Sasakawa Fellows from each country should be tasked to write about their country: an introduction, the customs, culture, traditions, problems, potential, maritime issues and problems, and any new developments, etc. This will enable other readers to know about many countries through the eyes of a Sasakawa Fellow. This will also be an instrument to have a true perspective about other countries.
- 5. Dr. Yohei Sasakawa's humanitarian activities should also be highlighted in addition to his maritime activities.
- 6. As it is the WMU Japan newsletter, it should contain more news about WMU, its progress, and new developments, etc.
- 7. Its circulation should be widespread, especially in the maritime industry, and for maritime institutes' libraries, etc.
- 8. Families of Sasakawa Fellows should also be involved by sparing some space for ladies and children to write or sketch pictures, etc. Although a few marriage photographs are published, this can still be improved.
- 9. Every six months or every year, a special edition should be published in a bigger size containing more quality stuff: news, essay competitions, poster competitions, maritime issues, OPRF activities, etc.
- 10. Each newsletter should have a brief introduction of any of the OPRF staff members, WMU staff members and Sasakawa Fellows.

Your personal opinions/comments towards developing the Newsletter in



If it is possible to devote one page to trends in the following areas, the newsletter will give us a snapshot of the current position of the maritime industry: economic development, shipbuilding, ports, the environment, safety standards, and maritime education.

Arrange a separate page for details of top level Sasakawa Fellows by considering their professions in order to get their support/information to overcome some worldwide maritime-related issues in their regions. Arrange a separate page for each country and information about one Sasakawa Fellow in each newsletter to share personal/family news.

The online system provides a better option for all to exchange our views and write while we are engaged in our regular duties. For that purpose, members should strive to work with their own computers during their spare time. At the same time, OPRF should provide support and assistance to fulfill their IT requirements. Moreover, OPRF could impose conditions in this connection in order to get the best out of the members concerning the newsletter.

It is also my opinion that it is important to have events to provide articles for the newsletter, as well. In this sense, it would be better if they could organize some events in their own countries or regions. But the cost and the time is the main issue of this proposal and it will require discussion among the members.

Conducting live online discussions based on maritime issues is another method for collecting ideas. But to start this type of discussion, it is important to have a proper computer system and Internet connection, as mentioned above.





- I. Discussion Report on the Methods to Enhance Sasakawa Fellows Network
- II. Reports on the Methods to Enhance Sasakawa Fellows Network in Each Country



Methods to Enhance the Sasakawa Fellows Network in the South Asian Region (Session 4)

Prepared by:	
lqbal Karim	(Bangladesh 1992)
Sarath Kumara Mathurana Gedara	(Sri Lanka 2007)
Mohammad Mahbub Morshed Chowdhury	(Bangladesh 2008)
Shantanu Paul	(India 2009)

Minutes of the Discussion

The suggestions submitted by the participating Sasakawa Fellows prior to attending the conference have been thoroughly reviewed and the following points were deliberated on during the session. Participants shared their encouraging experience regarding the benefits of maintaining good network activity within the region and beyond.

- ► All participants unanimously agreed that further enhancement of the network in their respective countries, as well as in the South Asian region, is imperative to develop more bonding among the Sasakawa Fellows and other WMU graduates for the benefit of all.
- ► For the above enhancement of the network in their respective countries, Sasakawa Fellows need to contribute more actively in all respects, including financial requirements as and when required.
- Each country to select two focal points (two Sasakawa Fellows) on a mutual consensus basis for a term of one year and this information is to be conveyed to the OPRF Secretariat within the next two months. Focal points will decide the nature of duties appropriate to their respective countries.
- The following temporary focal points for each country have been decided, to take the initial initiative: Mr. Iqbal Karim (Bangladesh), Mr. Sudhir Kumar Sinha (India), Mr. Hussain Naeem (Maldives), Mr. Mohammad Ashraf Zafar (Pakistan), Sarath Kumara Mathurana Gedara (Sri Lanka).
- ▶ It has been recommended by all participants that a regular visit (preferably once every two years) of an OPRF official to all South Asian countries will highly encourage Sasakawa Fellows and boost network activities.
- ► All Fellow have been asked to contribute articles related to maritime matters for the Friends of WMU newsletter.
- ► All Sasakawa Fellows were requested to write handwritten letters to Dr. Yohei Sasakawa regarding their achievements or important events in their life as a goodwill gesture for maintaining the relationship, as without his support our WMU dream would not have been realized.

The session ended with thanks to OPRF officials, the WMU representative and the representatives of the host country fellows.



Reports on the Methods to Enhance Sasakawa Fellows Network in Each Country

Methods to Enhance the "Sasakawa Fellows' Network" in



Under the guidance of The Nippon Foundation, and with their assistance, it is now possible to benefit ourselves to keep communicating and remain in continual contact for information of use. Apart from internal (within our own country) meetings, it is now possible to have regional meetings and forums where exchanges of experience and views are possible across the table.

(Regional Cooperation)

- It is therefore essential that regional cooperation is strengthened through the good offices of the Sasakawa Fellows, along with the WMU Friends. The Nippon Foundation, with the able help and guidance of Dr. Sasakawa, has been extending their helping hands to reach the goal of development in the maritime field and related sectors. We should welcome this opportunity and make the best of it.
- It has been seen that Sasakawa Fellows and WMU Fellows are holding responsible positions, and if utilized, it would be possible to strengthen regional cooperation.
- It is essential, if possible, to visit one another's place/country and exchange information and strengthened ties.
- It is necessary that Sasakawa Fellows under their own capacity should convene small-scale forums for exchange of information and experience, and to strengthen mutual ties.
- It may be recommended that Sasakawa Fellows individually should endeavour to invite each other, according to one's capacity and means, for meetings and then gradually expand the number of participants. This will enable us to enhance contact and cooperation for our mutual benefit without waiting for The Nippon Foundation to arrange large-scale meetings and forums every two to three years.

Sasakawa Fellows are scattered in different countries and again at different places and in different professions within a country. That is the biggest hurdle to making the fellows' bonds much stronger. However, meeting each other at regular intervals is definitely one way, though this may become too expensive to arrange.

In order to make the international network more active, we have to first concentrate on the national networks where the numbers of fellows are few. For instance, in Bangladesh we have at the moment 20 fellows and more will join in the years to come. In order to have the fellows keep in touch with each other, at least one conference a year may be arranged with one or two delegates from Japan. A nominal fund may be arranged from OPRF in this regard and also the fellows can contribute.

I hope that a one-day national conference will not cost too much. In the conferences, fellows will elect a small committee which will run the network for next year and so onwards. Once the national networks are in place, we can arrange regional network meetings on a bi-annual basis. Finally, a central conference in Japan every



five years may be arranged.

We, the fellows, are receiving periodic updates from OPRF's Ichikawa-san by mail. In this way, we communicate with each other. We can periodically learn about all types of activities. Thus, the process is expected to be continuous. Sometimes our friends may deviate from targets or the network, however there are some emergency preventive measures that we can develop, such as communicating with him and providing him with mental support so that he can overcome his problem and he will then join us again.

National, regional and international cooperation meetings are very effective at keeping the network alive. Hence the number of participants in networking meetings may be required to increase. However, it is also important to see that the active fellows participate more than the passive ones. Motivation through writing or a social affiliation could play an incomparable, vital role in developing the Sasakawa network.

To enhance the Sasakawa Fellows network, we can consider a country or a region as a unit which will have a club. The working committee of each club will be elected by the Sasakawa Fellows of each unit. This club will be financed by fellows' yearly contributions as well as an OPRF contribution. The working committee of each club will arrange seminars/workshops/discussions on current maritime issues in the country as well as in the region. This club will act as a think tank for maritime affairs of that particular country/region. OPRF will work as the central club of all local/regional clubs. There will be an annual conference and competition among the regional/local clubs.

Methods to Enhance the "Sasakawa Fellows' Network" in



The essential or basic framework should be that there should be national-level Sasakawa Fellows associations and they should try to meet at least once a year at a convenient place suitable for everyone. This meeting could be coupled with a forum. These activities should be uploaded to the Sasakawa Website so that any fellow will be able to see what is happening among the Sasakawa Fellows, then comes the regional-level meeting followed by the international-level meeting, which can be conducted by the Sasakawa Foundation in Japan, as it is the country which has brought everyone together. As well, I want to be reminded of Japanese culture and their endeavour to bring peace to the world through international relations, to promote maritime safety and environment protection, and finally to protect maritime transport and industry.

I recommend that instead of having a common forum for everyone, the Sasakawa Foundation can identify ex-Sasakawa Fellows and form them into groups which have particular strengths in some areas, say international maritime law, port infrastructure, marine environmental protection, etc. These specialist groups can contribute professional articles and post their comments on the discussion board or blogs in the Sasakawa Fellows Network. In fact, they can provide valuable comments on the committee meeting proceedings held at IMO.



Moreover, once every 3-5 years an international conference can also be held under the sponsorship of the Sasakawa Foundation and ex-Sasakawa Fellows can be invited to contribute specialized presentations on a particular subject in addition to other maritime specialists. In this way, a certain level of exposure to ex-Sasakawa Fellows is given, and they may contribute much more to the ideals established by The Nippon Foundation.

Nominate one of the Sasakawa Fellows as the nodal point of contact in a country. The nomination may be made by the OPRF chairman, Japan with the consent of all Sasakawa Fellows of that country or one person may be proposed by the Sasakawa Fellows of that country and then approved by the OPRF chairman.

A meeting or get-together may be arranged for all Sasakawa Fellows once a year in all the respective countries. This may be financed and monitored by the head office with the whole-hearted involvement of fellows.

A fund may be created in the name of the Sasakawa Fellows Network through mutual contributions of the fellows of that country. To start with, OPRF may donate initially so that other members can follow. New Sasakawa Fellows should contribute at WMU only before passing.

One day in a month may be fixed (e.g., the first Sunday of every month or so) with the consent of all fellows of that country to exchange his or her opinion on any subject of mutual interest. These may be viewed/coordinated by the OPRF committee.

The regional meeting, like this time, may not be possible every year, although they are very encouraging and effective. But organizing these at regular intervals will definitely improve our bonding. This type of meeting is only possible with the patronage of OPRF and The Nippon Foundation. However, within the countries Sasakawa Fellows can definitely become more united to effectively contribute in a holistic way toward various maritime issues affecting their countries and our region. In this regard, I strongly feel that when Indian Sasakawa Fellows are increasing at a faster rate and possibly will maintain this momentum due to their continued success at WMU and beyond, we can now possibly think of a *WMU Sasakawa Fellows India chapter*. Moral support from OPRF will be indispensable in our endeavour, which is something that I have been dreaming about since I returned from Malmo in October 2009.

As I mentioned in my two-minute introduction of Dr. Sasakawa when we (WMU-09) went to Japan in 2008, I have a great respect for him not only for his financial support for my WMU studies but also for his noble effort and generosity in social areas, especially the Sasakawa India Leprosy Foundation (SILF), which India really needs. Being an Indian citizen, like many others, I also dream of how to end this social stigma in our country. Now, when the maritime industry is seriously looking for talent, this is probably something we can really do as a token of our moral duty to our society as well as the maritime sector in the year 2010, which IMO has declared as the Year of the Seafarer. What I mean is that if we can form the WMU Sasakawa Fellows India chapter, and if we get the support of OPRF and The Nippon Foundation, we can sponsor one or two students whose parents have suffered from this disease to study engineering or navigation in India. As we know,



superstitions and social discrimination put these families in a very disadvantageous position to support any higher education for their children, which is becoming expensive in India. Probably now it is the right time for the maritime industry to tap into this talent pool, and we can really set an example.

This type of initiative will definitely inspire all Sasakawa Fellows, and in fact all of us can share the expenses, but a positive assurance of OPRF will possibly enhance networking activities, which may become beneficial to other facets of the maritime sector in India as well as in the South Asian region. I have a strong inclination for these activities and my full-hearted support will always be there in any similar kind of noble effort. It is not my intention to limit this activity to within India, but I sincerely believe that other country's fellows can also do something. Any initiative that can encourage people to join the shipping profession, which is most desired now, can really stimulate the Sasakawa Fellows Network within the country as well as within our region, and my full-hearted support will continue for that.

Methods to Enhance the "Sasakawa Fellows' Network" in



Tomonori Okamura (2002)

Select a representative of each country who will coordinate the activities of WMU Sasakawa Fellows in their countries. These representatives will serve as the contact for other representatives.

Methods to Enhance the "Sasakawa Fellows' Network" in



At present, I think that communication and the exchange of ideas within the network is not so common. I believe that this is because there is no agreed mechanism or understanding to practice this. As well, it is due to everyone's busy schedule. If a subject or an issue is open for comments and discussion, all interested fellows could pass on their opinions and professional input and thereby create a dialogue because sharing knowledge and experiences is important. As we are from different countries and different cultures and backgrounds, the common thing that we all have is our professional field of interest in a broader sense. The knowledge and expertise in maritime-related areas in different countries and different geographical areas will vary and the capacity of the fellows will also vary. So, to bridge the gap and to benefit from the vast sea of knowledge and experience, a mechanism or a system is required. With this interest and idea, and to improve our network, we could create a chat room or a chat forum so that when we are free or even when we are at work, we could discuss and share the knowledge and experiences we face in real time.



Methods to Enhance the "Sasakawa Fellows' Network" in



I feel that the new generation of WMU Sasakawa Fellows is more enthusiastic about taking an active part in the Sasakawa Fellowship Network. Therefore one of them must be nominated to be in charge of the Pakistan chapter. He or she will accomplish his/her duties as a coordinator using Internet skills. Of course, I shall try to fulfill my obligations as I feel heavily indebted to the Sasakawa Foundation and The Nippon Foundation for awarding me a fellowship and funding my study expenses at WMU.

We need to make the existing network more active and eventful for our existing members through the newsletter, email exchanges and events.

On a country level, we should never forget to invite other fellows to any official gathering, meeting or conference. The first priority should be given to our fellows who need technical expertise, a professional opinion, or visiting faculty or committee membership.

The private maritime industry and educational set-up is fast expanding in countries like Pakistan. We can expand our circle exponentially by awarding new Sasakawa Fellowships to private industry and educational institutes. Visits are much awaited by Japanese officers of the Friends of WMU, Japan to dormant areas, like Pakistan. Such a visit will give a boost to the network and will provide firsthand knowledge to the officers as well.

Recent changes/additions to the Website of the network are very positive and interesting. These things will bring good results in the near future.

The World Maritime University (WMU) has much weight with and a big mandate for promotion of Sasakawa Fellowships. I suggest fellows with distinguished achievements in their careers should be invited/sponsored to share their experiences with new fellows and graduates at the university.

- 1. In addition to the Japan visit by Sasakawa Fellows, one or two other countries of any fellow may also be visited every year. The expenditures should be borne by that particular country, except airfare.
- 2. Sasakawa Fellows should be informed about any international seminars if not invited by Fellows in whose country the seminar is being conducted (maybe one by one every time). Materials and speeches should be sent to all other Sasakawa Fellows so that they can benefit from the seminars and workshops.
- 3. OPRF may propose as topics international, regional and domestic maritime issues and vice versa, the Sasakawa Fellows should find/suggest solutions to these issues by consolidating the countrywide solutions and then publishing them, if appropriate.
- 4. Seminars, get-togethers and workshops should be arranged more frequently, and Sasakawa Fellows should be invited, as it is being done in Sri Lanka.
- 5. A few old graduates may be invited to the graduation ceremony at WMU every year so that the older ones can interact with the new graduates.
- 6. Some exchange programs within the Sasakawa Fellows' countries may be arranged especially for maritime training and safety issues. OPRF may arrange some funds to establish a Sasakawa Fellow



Chair in different country's maritime institutes, and then Sasakawa Fellows from other countries could be employed for at least six months. For example, if a Sasakawa Fellow Chair is established at Pakistan Marine Academy then a fellow from Sri Lanka or Bangladesh could be deployed there.

- Some sort of discussion forum, like Facebook, may be introduced on the Internet, for instance a "Sasakawa Fellow Book," and the maritime industry should be invited to be part of it, in addition to Sasakawa Fellows.
- 8. An online Ph.D. program should be introduced at WMU, supported by OPRF for Sasakawa Fellows. This will improve networking, enhance knowledge and improve inter-fellow connectivity.
- 9. Sasakawa Fellows Family network may be introduced so that if the families are involved a strong bond will be created between Sasakawa Fellows and their families.
- 10. Activities for humanitarian causes may be arranged in case of any disaster in any of the Sasakawa Fellows' countries, such as earthquakes, floods, internal displacement of people or any other calamity, and everyone should give their support for relief efforts.
- 11. Any of the OPRF staff members may visit Sasakawa Fellows in different countries every year to have a fair idea about the activities in that particular country.

Methods to Enhance the "Sasakawa Fellows' Network" in



Everybody requires extra knowledge or information to carry out their day-to-day activities at work. In addition, it is worth knowing about the issues and answers in work-related or favourite fields. Therefore, if we can implement a structure to gather, analyze, store, and access management information, eventually the individual potential of knowledge can be extended. I propose, if it is possible, to formulate research groups on different subjects and store their findings on the Web for access only for members. This will be useful for all of us. It could be a voluntary group, and having a goal to be achieved, communication and cooperation among the network members can be increased.

WMU Sasakawa Fellows are in different countries and different organizations. Many members are not aware of their details, such as current areas of work, previous areas of work, common interests, future research interests, etc. This type of information should be displayed on a Website. It should be like a collection of CVs. This will give fellows a better chance of connecting with the best person available.

Arrange financial support/loan facility to Sasakawa fellows to purchase a PC with an Internet connection.

The development of regional collaboration and conducting member get-togethers would benefit the Sasakawa Fellows Network. Most of the time, contact information for existing fellows disappears with their transfer to another place or position. Therefore, I would like to suggest that they join with their country's fellows in order to maintain contact information.



Closing Session

- I. Closing Words on behalf of WMU Ms. Susan Jackson (Associate Registrar of the World Maritime University)
- II. Closing Remarks Mr. Eisuke Kudo (Special Adviser of the Ocean Policy Research Foundation)



Closing words on behalf of WMU

Susan Jackson Associate Registrar, WMU

First of all, let me say how proud we at WMU are of all of you. You have demonstrated this week that as WMU alumni and Sasakawa Fellows, we have succeeded in our mission. You are all clearly consummate professionals, who are making a real difference in the maritime world every day.

You also embody the ethos of The Nippon Foundation: you are active members of a world network, a network that is international, multi-cultural and co-operative, one that demonstrates the values of the maritime sector, and one that transcends the divisions and conflicts that afflict the world today. You each embody the aims and values of The Nippon Foundation, its founder, Mr, Ryoichi Sasakawa and its President, Dr. Yohei Sasakawa — values that are shared by the UN and its specialised agencies. You are also all part of the WMU family and the Sasakawa Fellows' family — these bonds are not just professional but close and personal. When I return to WMU next week, I know I will be asked many enthusiastic questions about each of you!

For making this network meeting possible, and for strengthening these family bonds, I would like to express my deepest thanks to The Nippon Foundation and the OPRF. The university is immensely grateful, and on behalf WMU, I would like to thank Mr. Kudo and Mr. Ichikawa whose dedication and hard work has reunited us all here in Sri Lanka. Without the Foundations and their outstanding officers, this network meeting would have been impossible, as we all know so well. The Sasakawa Fellowships have educated an international corps of experts who make an essential contribution to the maritime sector, and so to the world economy.

But WMU is grateful to the Foundations not just for the fellowship support, but also for their unwavering moral backing, which endorses the value of our mission to the global community. I know that this meeting has inspired us all to greater networking activity, and I am certain that each of you will now return home and inspire others in your countries - colleagues, friends, family members will all benefit from your attendance at this meeting. And perhaps this inspiration is the most precious gift that the Foundations in Japan can offer the WMU Family as a whole.



Closing Remarks

Eisuke Kudo Special Adviser, Ocean Policy Research Foundation

As a closing address, I would like to give a speech in my own way.

This Sasakawa Fellows' Network Meeting in the South Asian Region was the second regional meeting. In February 2007, the first regional meeting, the Southeast Asian Region, was held in Bangkok, Thailand. At that time, Chairman Yohei Sasakawa simply asked me how come fellows from the South Asian region were not attending the meeting. His offhand remark actually made it possible to hold this second regional meeting in Colombo.

In fact, he is scheduled to visit to India at the end of this month, so we were trying to fit this meeting into his tight schedule, but it may not happen after all. However, I was told by Mr. Sasakawa to say hello and relay his hope that this meeting would be fruitful one for each one of you.

Today, I would like to express my gratitude for your ardent and animated discussions during this two and a half day meeting. We have been able to have such lively discussions because you have all followed the high-level education at the World Maritime University, and in addition, have built strong bonds of friendship and mutual trust among yourselves.

As I mentioned already, this is the second time the secretariat has held this sort of network meeting outside of Japan.

To be honest, during the early stages of preparation, I very much hesitated when faced with the question of who from each country to invite to this network meeting. However, when I take a look at the list of the participants, you all have very close relationships with the secretariat and you have been keeping in touch with Mr. Sasakawa, so I am very satisfied with the participants that we selected. When I saw the scene of a happy reunion of old friends from the same university on the first day, I felt the purpose of the WMU establishment has bloomed splendidly into flower.

I am very satisfied that mutual agreement on the next step has been formed at the end of the meeting, despite differences between the circumstances of each country and each participant. In the exchange of information on maritime affairs in each country during the meeting, I learned that you all, with hope and faith, have been struggling with nation building.



After returning to Japan, I am going to visit Mr. Sasakawa and bring the report which has just been made by all of you. The secretariat plans to publish the proceedings of this network meeting in a few months. Within this process, we might ask each one of you for a little more cooperation.

Even though the situation in the profits from motorboat racing has not yet recovered, the current related budget of the WMU program has been maintained. This was because the Sasakawa Fellows' activities are seen as remarkable. In that sense, I eagerly hope that you will continue sending Mr. Sasakawa a letter, as you have been in the past.

I would truly like to express my gratitude to all the group members who have created this very wellwritten report. Ms. Sue Jackson's participation in this network meeting gave us a sense of security and honored the Sasakawa Fellow Network. We really appreciate it. Thank you very much.

Last, but not least, I would like to express my gratitude to all the Sri Lanka Sasakawa Fellows. This network meeting would not have succeeded without their great cooperation. Thank you very much.

As a private affair, I retired as Executive Director last year, and I am now working for The Foundation as Special Adviser. I am happy to support your activities in a personal capacity even apart from OPRF.

In closing, I wish all of you here success in your careers and future activities.

Thank you for your kind attention.



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Appendix

I. Field Study Tour

Port of Colombo

Mohammad Mahbub Morshed Chowdhury (Bangladesh) - arranged by the Sri Lanka Sasakawa Fellows -

II. Chart of Maritime Authorities in Each Country

India	(Organizational structure of the Government of India)
Japan	(Maritime Administration and Institution)
Maldives	(Transport Sector of Maldives)
Pakistan	(Organogram of Sasakawa Fellows – Pakistan)
Sri Lanka	(Organization Chart of Sri Lanka Ports Authority)

III. List of Participants in the Network Meeting



Report on Field Trip Field Trip to the Port of Colombo

Mohammad Mahbub Morshed Chowdhury (Bangladesh, 2008)

The WMU Sasakawa Fellows Networking Meeting was held at the Hilton Hotel, Colombo, Sri Lanka from January 20th to 22nd, 2010. As a part of the networking meeting, a field trip to Colombo Port was organized by the Sri Lankan Fellows on 22nd January, 2010. The field trip started after a photo session in front of the Hilton Hotel, Colombo.

As Colombo Port is in a high security zone, our bus was stopped several times by the security forces on the way to the Colombo Port. Mr. Talagala and Mr. Sarath Kumara guided us and got security clearances. On the way, Mr. Kumara showed us the South Port Expansion Project site. Then we went to visit the pilots' station. On the way to the pilots' station, we had a glimpse of the South Asian Gateway Terminal, a private terminal at Colombo Port. We saw huge development works underway in the port. After passing a historic building that was built by the Dutch in 1932 as a prison, we at last reached Jaya Container Terminal (JCT).

Mr. Upul Jayathissa, Deputy Chief Manager (Marketing & BD) of the Sri Lanka Ports Authority warmly received us at the terminal building but we had to leave Mr. Talagala as he had some business in his office. However, in the lobby Mr. Upul described the various features of Colombo Port using a model that showed the layout. He answered all participants' questions with the patience of Job. Regarding the Colombo Port Expansion project in South Harbour, he told us that the phase I breakwater and three container terminals will be constructed in a 18–21m deep channel (two) comprising a basin of 285 ha. He also told us that the south terminal will contain three berths with a 1200-meter-long quay and 58 ha of backup facilities. After completion, these will be able to handle 2.4 million TEUs per year. The terminal will cost U.S. \$450 million, of which the Asian Development Bank (ADB) will finance U.S. \$300 million and the remainder will be financed by Sri Lanka Ports Authority. The terminal will be ready by the first quarter of 2012.

Mr. Upul guided us to the control tower of Jaya Container Terminal (JCT), and we would like to thank him for giving us the opportunity to see the operation of the control tower as well as the Container Terminal. JCT, which is operated by the Sri Lanka Ports Authority, has four container berths and two feeder berths having dredged depths of 12-15 meters for the 1,292-meter-long main berths and 350-meter feeder berths. In reply to a question of a participant regarding productivity, Mr. Upul said that on average 20 boxes per crane per hour is the standard at the JCT. He also said that three operators are assigned to a single crane and the terminal operates around the clock. He also described the real-time position of container tracking in the terminal using the NAVIS and EDI systems. Compliments and thanks from OPRF were given to Mr. Upul by Mr. Kudo for giving us his valuable time and patience.

After saying goodbye to Mr. Upul, we were guided on a short trip around the JCT by Mr. Kumara. We saw the



feeder berth and the main berth container handling operations in the JCT. Mr. Kumara described the operational system of the JCT, as he is one of the operational officers of JCT. Adjacent to JCT, we saw Colombo Dockyard where ships are repaired and a new building was going on. A barge-mounted power plant adjacent to Colombo Dockyard grabbed our attention for its giant features. On the way back to the Hilton Hotel, we saw cement storage and packaging, food grain silos, a coconut oil storage depot, warehouses and a crude oil pipeline going to a refinery. After many happy moments in the Colombo Port, the field trip ended with a vote of thanks to Mr. Kumara for his endless effort to make the trip successful.

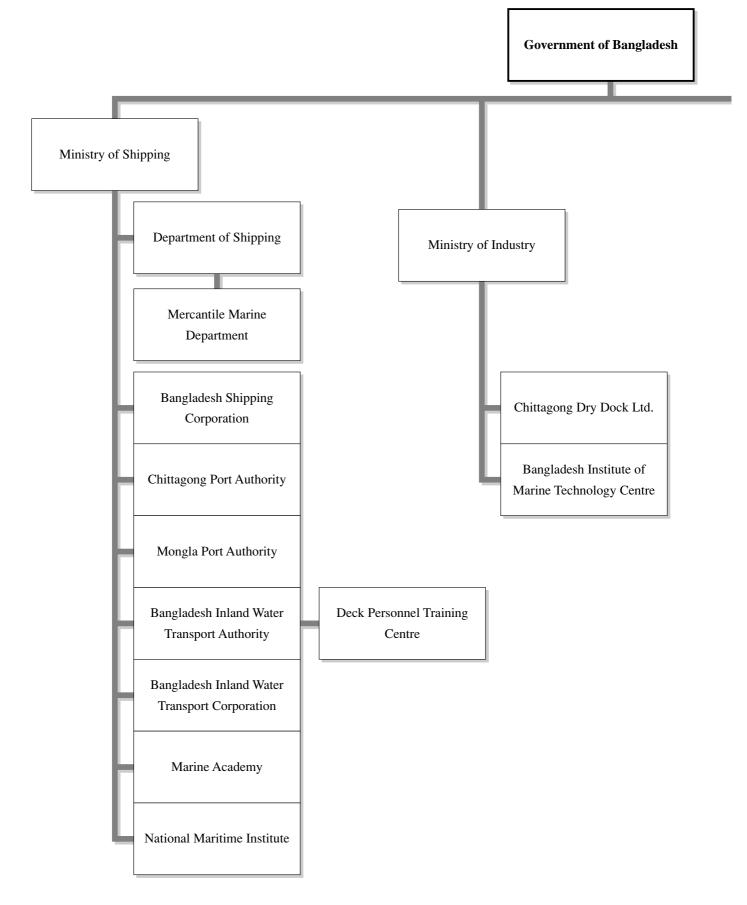


Chart of Maritime Authorities in Each Country

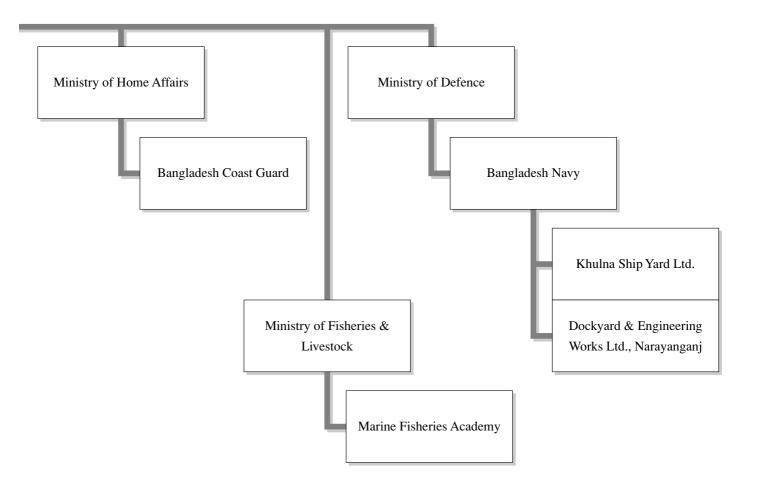


Bangladesh

(Maritime Related Government Organizations)



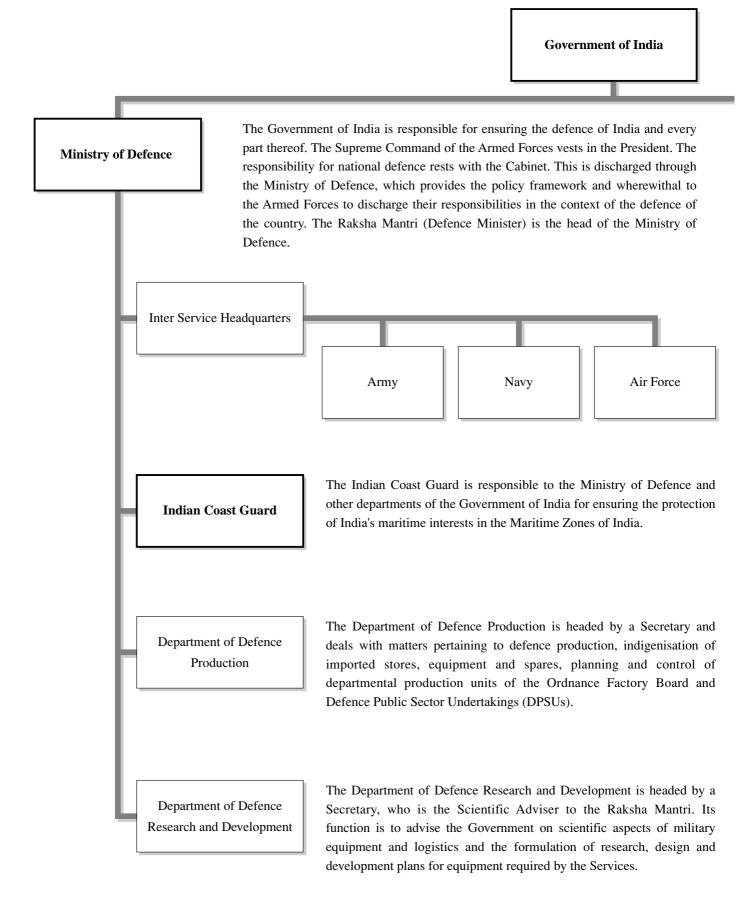




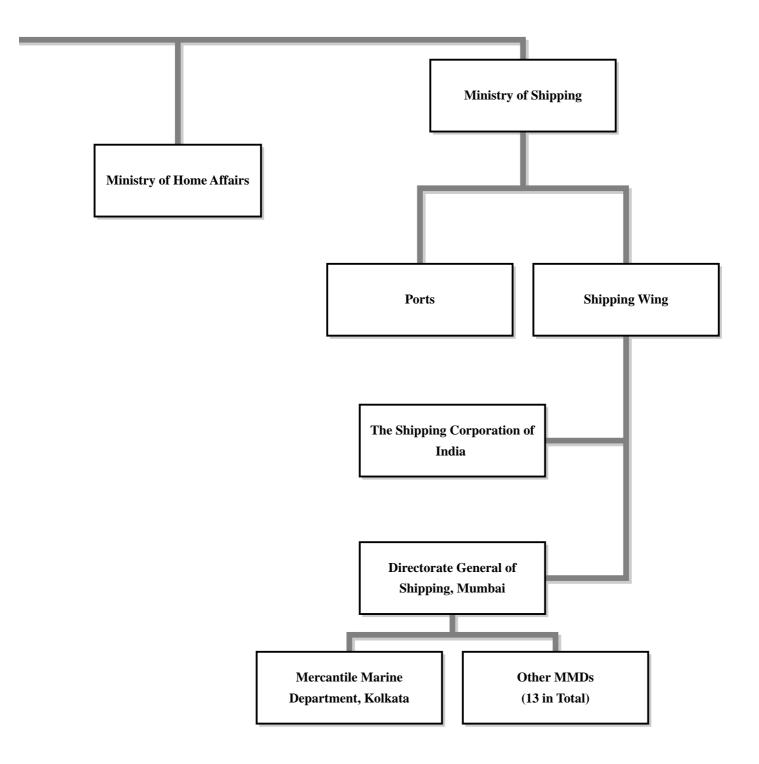


India

(Organizational structure of the Government of India)





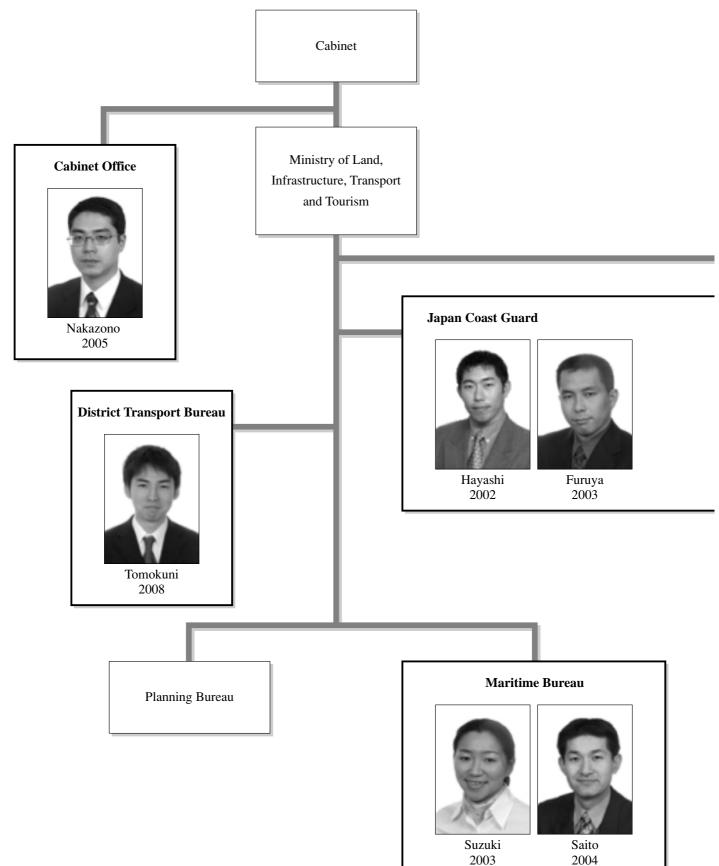


The government departments where Indian Sasakawa Fellows are working are shown in **bold type.**

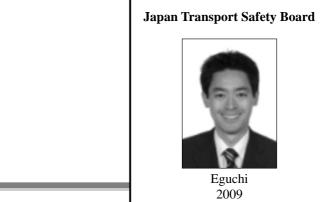


Japan

(Maritime Administration and Institution)













2006



Matsui

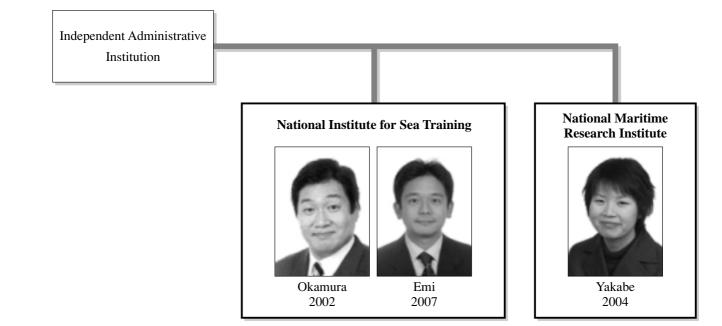
2007

Yokoi

2008



Okamoto 2009



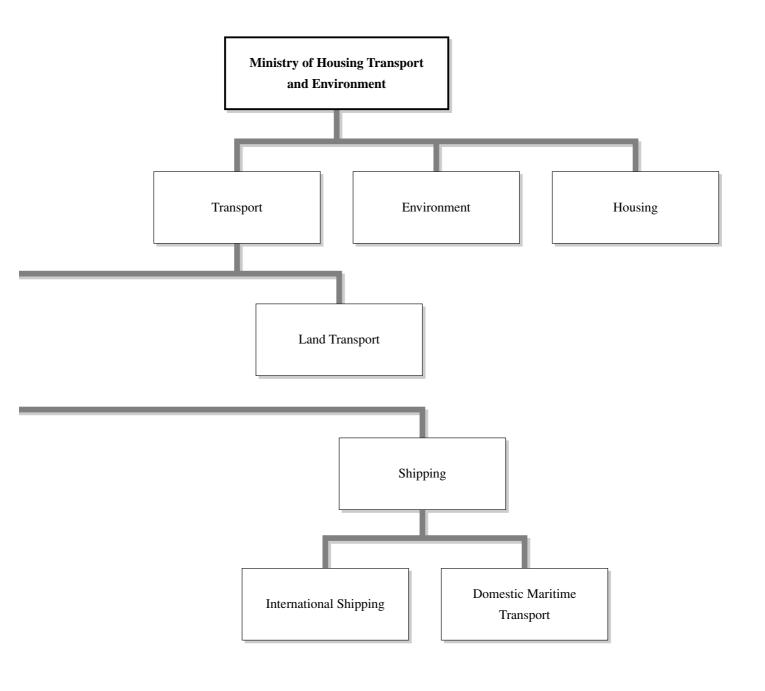


Maldives

(Transport Sector of Maldives)







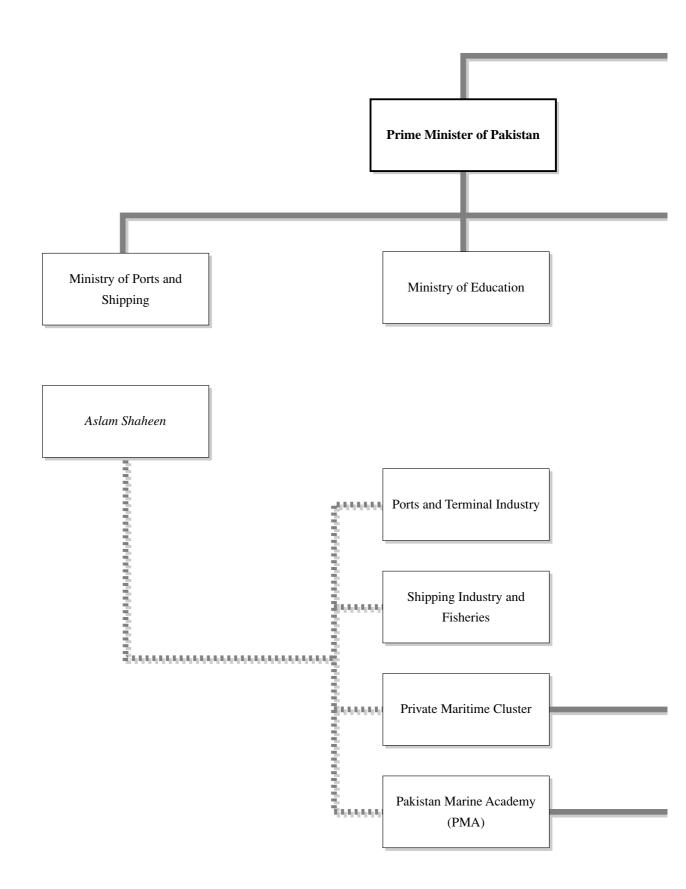


Head of Technical Division, Hussain Naeem (Maldives 2003)

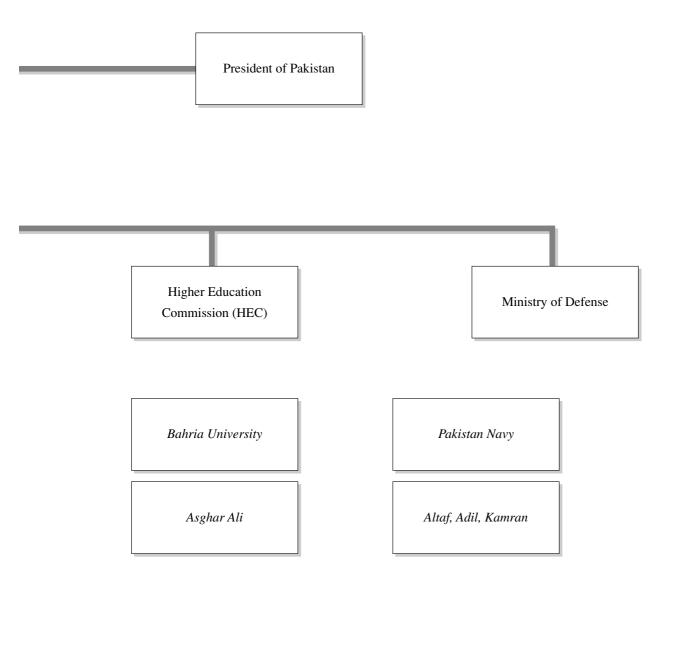


Pakistan

(Organogram of Sasakawa Fellows - Pakistan)







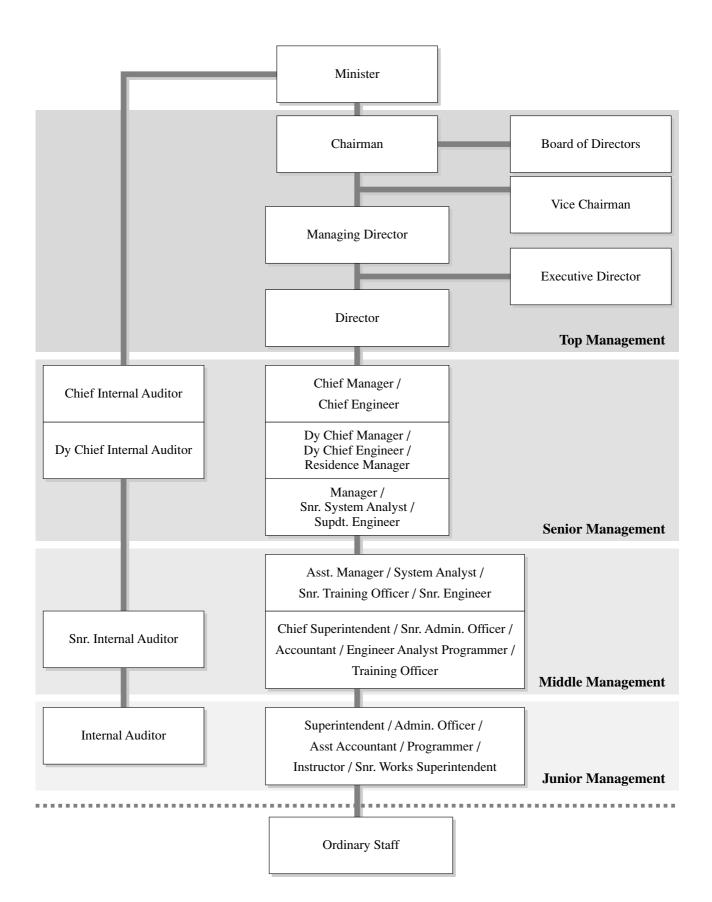
Ashraf Zafar, M Ilyas, P K Lodhi, Qazi Rehmat

Saleem Qasim, M Pervaiz



Sri Lanka

(Organization Chart of Sri Lanka Ports Authority)





There are five (05) directors:

- 01 Director HRD
- 02 Director Logistics/Establishment
- 03 Director Technical
- 04 Director Finance
- 05 Director Operations

Chief Managers coming under the Director (HRD) as follows

- 01 Chief Human Resources Manager
- 02 Chief Training Manager
- 03 Chief Welfare Manager
- 04 Chief Medical Officer

Chief Managers coming under the Director (Logistics/Establishment) as follows

- 01 Chief Manager (Logistics)
- 02 Chief Administrative Manager
- 03 Chief Security Manager

Chief Managers coming under the Director (Technical) as follows

- 01 Chief Manager (Information Systems)
- 02 Chief Engineer (Civil)
- 03 Chief Engineer (Electrical & Electronics)
- 04 Chief Engineer (Mechanical Plants)
- 05 Chief Engineer (Mechanical Works)
- 06 Chief Engineer (Marine)
- 07 Chief Engineer (Planning & Development)
- 08 Chief Engineer (Contracts & Design)
- 09 Chief Engineer (Southern Port Development)
- 10 Chief Manager (Supplies and Material Purchasing)

Chief Managers coming under the Director (Finance) as follows

01 Chief Finance Manager

Chief Managers coming under the Director (Operations) as follows

- 01 Chief Operations Manager
- 02 Chief Manager (Marketing and Business Development)
- 03 Harbour Master
- 04 Resident Managers of the Ports of Trincomalee and Galle



List of Participants in the Network Meeting

Country	Photo	Name	Year Graduation	Title/Department/Organization/ E-mail Address
		Mr. Iqbal KARIM	1992	General Manager Manufacturing and Projects-DF & Projects Berger Paints Bangladesh Ltd.
				ikarim@bergerbd.com
Bangladesh		Mr. Abu Hena Mohammad MAMUN	2000	General Manager (Operations Department), Designated Person Ashore (DPA), and Company Security Officer (CSO) Bangladesh Shipping Corporation
				bsc-srd@spnetctg.com
	G	Mr. Khalid MAHMUD	2007	Senior Education Officer Development Officer (Add. Ch.) Marine Academy, Ministry of Shipping Bangladesh Government
				khalid251@gmail.com
		Mr. Mahbub Morshed Mohammad CHOWDHURY	2008	Deputy Chief Planning Chittagong Port Authority
				mchy_2005@yahoo.com



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		Mr. Sudhir Kumar SINHA	2005	Deputy Chief Surveyor-cum- Sr. Deputy DG (Tech) Mercantile Marine Department, Ministry of Shipping, Govt. of India
				sudhir.sinha42@gmail.com
India		Mr. Shantanu PAUL	2009	Dean (Engineering Studies) The Shipping Corporation of India
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Japan		Mr. Tomonori OKAMURA	2002	Associate Professor National Institute for Sea Training
			2002	okam@db3.so-net.ne.jp
Maldives		Mr. Hussain NAEEM		Assistant Managing Director Maldives Ports Limited
			2003	naeem@maldport.com.mv
Pakistan	Bar	Mr. Mohammad Ashraf ZAFAR	1994	
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Country	Photo	Name	Year Graduation	Title/Department/Organization/ E-mail Address
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Sri Lanka		Mr. G.A. TALAGALA	1992	Chief Operations Manager, Operations Division Sri Lanka Ports Authority
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		Mr. Y.A. Tilak Deepthi Kumara JAYASINGHE	1997	Director Subodha International Pvt Ltd.
				tilakj@lycos.com
		Ms. Yumuna Susari WETTASINGHE	1999	Deputy Chartering Manager Ceylon Shipping Corporation Ltd.
				chartering@cscl.lk
	F	Mr. Sarath Kumara MATHURANA GEDARA	2007	Superintendent Sri Lanka Ports Authority
				mgskumara@gmail.com



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Country	Photo	Name	Title/Department/Organization/ E-mail Address
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OPRF Japan	<u>B</u>	Mr. Eiji Sakai	Chief Manager, International Affairs Team, Maritime Technology Department Ocean Policy Research Foundation
	ST B		e-sakai@sof.or.jp
	100-	Mr. Shinichi Ichikawa	Coordinator, "Friends of WMU, Japan" Secretariat International Affairs Team Maritime Technology Department
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ISBN 978-4-88404-239-4





