



Hiroshima Office for Asia and the Pacific (HOAP)

Series on
Sea and Human Security

“Towards a comprehensive security for seas and oceans”



© Hiroshima Prefecture

14-19 October 2007
Hiroshima, Japan

Financial support provided by the Hiroshima Prefectural Government



Executive Summary

October 2007

Acknowledgements

UNITAR would like to express its deepest gratitude to:

The Hiroshima Prefectural Government, for its support to the Series since 2002;

Hiroshima University, the University of Tokyo, Partnerships in Environmental Management for the Seas in East Asia (PEMSEA), the Ocean Policy Research Foundation and the International Ocean Institute (IOI) for unstinting support;

and

The City of Hiroshima, the 6th Regional Coast Guard Headquarters, Hiroshima Prefecture Fisheries and Ocean Technology Center and Hiroshima City Central Wholesale Market for the inspiring study tours;

Our special thanks go to the resource persons and participants who contributed their time and expertise so graciously to the workshop, and finally to the many friends of UNITAR in Japan and around the world whose cooperation has made this Series possible.



Introduction

The UNITAR Hiroshima Series on Sea and Human Security began in 2002 with the *International Conference on Sea and Human Security*.¹ From the start, the Series aimed at addressing different dimensions of human security that pertain to the seas and oceans, incorporating their economic, political, environmental and nutritional ramifications. Four annual workshops thus far conducted in Hiroshima, Japan were designed to provide in-depth and intensive training for experts and policy makers working for the protection and sustainable use of marine resources. The first workshop² focused on the tradeoff between conservation and resource use, while the second³ and third⁴ discussed mainly food security.

For the fourth workshop, a broader conceptual approach was adopted with a view to addressing the increasing global scope of *human security*, which now incorporates aspects of economic and environmental security as well as political security. In order to move towards the development of a *comprehensive security* for the seas and oceans, the 2007 workshop focused, inter alia, on the following topics:

- Ocean governance, global and national ocean policy;
- Oceans and climate change;
- Marine biodiversity and food security;
- Coastal zone management, including demographic aspects;
- Training and education, employment and empowerment.

2007 Training Workshop

The 2007 Training Workshop benefited from the network created since 2002 and from the continued intellectual involvement of various partners and resource persons who were involved in previous conferences and workshops. Prior to the event, the faculty⁵ of resource persons began discussing various matters related to the substantive content and methodology of the workshop. Former participants (UNITAR alumni) assisted in the process of identification of suitable candidates.

The workshop was attended by a total of 45 participants, resource persons and observers, representing some 22 countries from the Asia-Pacific region.

The workshop employed four main training methodologies:

- 1) Interactive presentations and lectures;
- 2) Study tours and debriefings;
- 3) Working group sessions;

¹ International Conference: “Sea and Human Security”

http://www.unitar.org/hiroshima/Pilot_Phase/IntConfSHS.htm

²Hiroshima, Japan, July 2004. http://www.unitar.org/hiroshima/programmes/shs04/shs04_report.html

³ Hiroshima, Japan, September 2005. <http://www.unitar.org/hiroshima/programmes/shs05/index.htm>

⁴ Hiroshima, Japan, October 2006. <http://www.unitar.org/hiroshima/programmes/shs06/>

⁵ Gunnar Kullenberg, Chua Thia-Eng, Yasuwo Fukuyo, Toshio Yamagata, Masahiro Yamao and Masako Otsuka.

4) Specific UNITAR methodologies.

1) **Interactive presentations and lectures**, systematically followed by Q and A sessions, consisted of the following:

- **Taiji HOTTA, Hiroshima University** provided a cultural briefing to the participants at an introductory session organised upon their arrival. Dr. Hotta introduced common attitudes held by Japanese people and frequently noticed by foreign visitors to Japan. He explained some meanings and origins of these attitudes, commonly rooted in the country's historical, religious, ideological and philosophical settings.
- **Nassrine AZIMI, UNITAR Hiroshima Office** officially opened the first formal session of the workshop on Monday, 15 October. She explained that UNITAR's Series on Sea and Human Security articulates interrelations among various issues pertaining to the seas and oceans and attempts to highlight conceptual links between them. The Series is also designed to promote the practical implementation of identified best practices in participants' home countries. The topic is highly pertinent to Japan which is dependent on the sea for many of its key resources, and the Hiroshima and Seto Inland Sea region has many rich case studies which can provide valuable learning for all. Ms. Azimi concluded her remarks by quoting Elisabeth Mann Borgese – "... the environment in general (not only the sea), both natural and social, is an extended mirror of man's soul."
- **Akira NINOMIYA, Vice-President of Hiroshima University** welcomed the participants and resource persons. He explained that Hiroshima University is counted as one of the top 10 universities in Japan and among the top three in terms of student satisfaction. It has over 18,000 students, researchers and other collaborators from across the industrial and business communities. He remarked that the University is very happy to cooperate with an international organisation like UNITAR as this contributes to the realisation of its international aspirations.
- **Gunnar KULLENBERG, Professor Emeritus, University of Copenhagen**, in his keynote lecture on *International Security and the Ocean – diversity and integration*, introduced the idea of the 'Hiroshima Initiative', a conceptual framework that is aimed at developing a comprehensive security for the seas and oceans (see page 10 below). He stated that in the contemporary world it is essential to include economic, ecological and social aspects in concepts of peace and security, in order to reduce the threats facing humans and to ensure their overall welfare. Ocean governance identifies avenues by which this comprehensive security may be achieved, and efforts directed towards this end should be both multifaceted and multidimensional. Horizontal and vertical participation of multiple stakeholders should be encouraged and education systems are crucial for this purpose. He emphasised that in the 1960's Arvid Pardo stated that the oceans need to be considered as a whole. Despite this insight, the international community has failed thus far to take significant steps on a global level. This situation represents a vital challenge for our generation.
- **CHUA Thia-Eng, PEMSEA**, in his lecture on *Integrated Coastal Management (ICM)*, at first posed the key question "Can we work together?" Participants come to Hiroshima representing various disciplines all related to human activities in the coastal, terrestrial and marine environments, but a major challenge lies in identifying means by which these different actors can effectively coordinate their activities. ICM represents a natural and environmental resource management framework that employs an integrative, holistic approach and an interactive planning process in order to address the complex management issues associated with coastal areas. Dr. Chua explained the process-oriented approach developed by PEMSEA which focuses on concerted action for governance and sustainable development; this approach follows a specific ICM model which incorporates the standardization code of the ISO system. He stressed that within ocean governance, policy development, institutional arrangements and legal systems all play important roles, and that capacity building and public awareness are important in all of them. Participants asked questions regarding the financial resources allocated to ICM (i.e. percentage of GDP allocated to it), the impact of climate change, and issues relating to population, health and housing within ICM.



Gunnar Kullenberg



Chua Thia-Eng



Yasuwo Fukuyo



Hiroshi Terashima

- In his lecture *Seafood security and sound environment* **Yasuwo FUKUYO, University of Tokyo**, highlighted the issues of marine food security (safety and supply) and environmental protection, which are important for sustainable development but difficult to achieve together. Examining the case of the Seto Inland Sea, he explained that the relationship between the rapid growth of aquaculture and the occurrence of red tides has become clearly apparent in recent years; this has been confirmed by other cases that have occurred in South-East Asia. Marine food security demands quality, quantity, sustainability and assurance of the marine food supply. However, these factors sometimes represent contradictory needs; for example: minimizing environmental impact while ensuring sustainability; ensuring a constant supply of food while avoiding public health problems (contamination) etc. Ecosystem changes caused by the influx of invasive species transported in ship ballast water were also presented. Dr. Fukuyo emphasised that the current priority is to consider how these contradictory but necessary activities can be managed effectively. He concluded his lecture by delivering a message from the scientific community – if one concentrates only on science, that scientific study will die. Questions from the participants focused on ballast water management and the introduction of a possible tax (price) system to be paid by consumers to ensure safe food.
- Hiroshi TERASHIMA, Ocean Policy Research Foundation (OPRF) – Japan**, presented *The Tokyo Declaration on Securing the Oceans* and *The Japanese Basic Ocean Law*. Mr. Terashima first introduced the Declaration on Securing the Oceans, an initiative undertaken by OPRF. Following three years of consultations, the Declaration has placed good governance as the centrepiece of developing a comprehensive security for the oceans and has created mechanisms for cross-sectoral and research-based ocean governance. He then described the new Japanese Basic Ocean Law which was adopted this year (2007). Japan is a maritime nation with half of its population (around 63 million people) residing in coastal areas: the adoption of the Ocean Law represents a rather tardy response to the passing of UNCLOS in 1982, this being due to the vertical structure of governmental functions and a lack of initiative. The new law incorporates leading principles such as the common heritage of mankind, the rights of future generations, integrated management strategies as well as sustainable development; it also creates a Headquarters for Comprehensive Ocean Policy within the Cabinet which is headed by the Prime Minister. The participants posed questions regarding the sectoral and inter-sectoral approach of the new Law, the identification of responsibility amongst government bodies, questions of territorial claims and how to enhance awareness among political entities.
- The lecture *Oceans and Climate Change* by **Toshio YAMAGATA, University of Tokyo**, examined significant marine phenomena which have lead to natural disasters. These phenomena occur in the world's oceans and influence climate and atmospheric conditions, which in their turn influence harvests and finally society at large. In Asia, the El Niño, La Niña (ENSO), El Niño Modoki and Indian Ocean Dipole (IOD) are examples of such phenomena, and their increased occurrence in recent years is a possible indicator of climate change. Dr. Yamagata explained the mechanisms that create these phenomena and their increasingly global impact. He stressed that to help protect vulnerable ecosystems and to help facilitate sustainable development, it is important to establish a wide-ranging climate prediction system and an information delivery system. He stated that the role of the scientist is to deliver accurate information to middle-level governmental officials as they are often in a position to take effective action. Questions from the participants focused on the use of information being made available by Dr. Yamagata's team, the flow and process of governance in major international instruments such as the Intergovernmental Oceanographic Commission, ocean governance and the use of climatic information for fisheries activities.



Toshio Yamagata



Masahiro Yamao



Masako Otsuka



Panel Session

- **Local Governance of Fisheries Resources and the Role of Local Governments** by **Masahiro YAMAOK, Hiroshima University**. In this lecture Dr. Yamao first defined community-based resource management (CBRM) and voluntary-based control of common property resources (CPRs), and then presented a number of case studies. Japanese CBFM is managed by local fisheries' cooperative associations which interact with Prefectural authorities and Area Fisheries Coordinating Committees. They play a fundamental role in coastal resource management, the creation and enforcement of local legislation and implementation of policy. Dr. Yamao stressed that successful CBRM cases have come about as the result of a harmonious combination of level of participation, sustainable resource management, specifically targeted activities and legal support from coastal communities. In Asian countries, local government has the opportunity to play an important and increased role in the promotion of CBRM. This requires a management plan that should be established within communities which is rooted in the local institutional, legal and livelihood contexts. Participants asked questions about the sustainability of local management projects, alternative livelihoods, empowerment and awareness building, as well as the relationship with other coastal activities such as tourism and urbanization.
- **Integrated Coastal Management – Japan Case**, by **Masako OTSUKA, IOI Japan**. Ms. Otsuka reviewed the concept of ICM as it addresses both vertical (global, national to local levels) and horizontal (stakeholders from different sectors) integration. She noted that integration can also occur geographically (from inland areas to rivers and oceans) and historically (knowledge of the past and principles of precaution). She then presented several Japanese cases of successful ICM projects, including the “forest for fish” project at Kesen Numa, set-net fishing in Himi, the revitalization project of Tokyo Bay and eco-tourism on Bonin Island. Participants then discussed issues such as the implication of particular religions on coastal management, conflict between national authorities and communities, the impact of tourism, the role of women in fisheries and fisheries benefit-sharing in society.
- A **Panel Session** involving five resource persons was held to discuss the cross-cutting theme, **Training and Education, Employment and Empowerment**. Firstly, the five panellists presented elements considered as priority. **Gunnar Kullenberg** stated that empowerment of people represented protection for people and for the oceans. Priorities should be carefully determined by means of identifying appropriate educational requirements for both children and adults, even including senior officials. He held that income generated from marine resources could be utilized for training and empowerment. **Masahiro Yamao** stated that the establishment of a workable legal framework to promote education and empowerment was essential. An integrated approach implying the diversification of income sources should be enhanced in order to provide alternative livelihoods for people and communities. **Yasuwo Fukuyo** stated that with regard to marine science, the capacity to generate reliable data and the capacity to analyse that data accurately should be developed. **Masako Otsuka** stressed the need to diversify educational disciplines by involving more societal groups, including politicians and government officials. **Chua Thia-Eng** argued that vertical learning should be complemented by horizontal skill training. The creation of peer communities, targeting appropriate groups for training and strengthening the capacities of local governments to use money effectively are also important. Following these interventions, the participants were invited to discuss the topic. **Cristina Lim (Philippines)** expressed the view how demand-driven training for local coastal managers would be useful. **Pham Hong Nga (Vietnam)** stated that capacity building in itself is not sufficient – it should be complemented by on the job or part-time training. **Panitnard Taladon (Thailand)** stressed the importance of practical and needs-based training. **Le Le Thein (Myanmar)** stated that environmental management training at the decision-makers' level would be beneficial. **Monyneath Vann (Cambodia)** suggested the division of

training to appropriate administrative levels, including national and provincial levels, and the creation of a steering committee. He stated that specific demonstration sites are also effective as they provide opportunities for learning by doing and income incentives for local people. **Nguyen Huu Ninh (Vietnam)** proposed the strategic use of political and international programmes and awareness building for governing administrations, citing the example of the BBC in Vietnam. **Toala Molea (Solomon Islands)** suggested the utilization of specific international mechanisms such as the Global Environmental Facility (GEF).

2) Study tours provided additional learning opportunities to the participants.

A study tour for all participants was held on 17 October to the **6th Regional Coast Guard Headquarters** and the **Hiroshima Prefecture Fisheries and Ocean Technology Center**; an additional optional study was held during the early morning of 18 October to the **Hiroshima City Central Wholesale Market**.

Following an introductory session given on the evening of 16 October, **Tadao ANDO, Professor Emeritus, Hiroshima University** and UNITAR staff guided the participants on the study tours where they had the opportunity to observe aspects of the overall management of the marine environment of the Seto Inland Sea and the research and commercial sides of the marine industry in Hiroshima Prefecture.



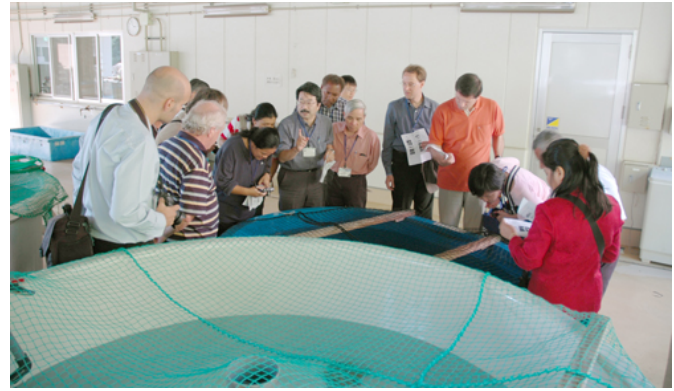
At the 6th Regional Coast Guard Headquarters, participants received an explanation of the organisation's activities and facilities from the Chief of the Environmental Disaster Prevention Division **Kiyotaka NOMA**. Various questions relating to its operational structure, and regulation and enforcement policies were posed. Guided by Coast Guard staff, participants then visited the nearby harbour where they received explanations on board its research ship *Kurashima* and inside its tidal observation station.

At the Hiroshima Prefecture Fisheries and Ocean Technology Center, following a brief welcome address from Director Takayuki Mekuchi, participants received the following presentations:

- **Fisheries in Hiroshima Prefecture – The role of the Fisheries and Ocean Technology Centre.** Head of the Oyster Research Division **Satoru AKASHIGE** described a number of the current trends in the fishing industry of the Seto Inland Sea which have seen a decline in the overall number of fisheries and the size of catches among many fish species, and an increase in the average age of fishers. He described the structure and principal activities of the Center which is focused on providing technological and administrative support to fishers and conducting research in the areas of protection of the marine environment, oyster culture and aquaculture.
- **The history, current state and future of oyster cultivation in Hiroshima.** Leading Research Technician **Yasushi HIRATA** presented an overview of the development of oyster culture in Hiroshima Prefecture since the mid-16th century until the present day. He explained that 60% of Japanese oyster production now comes from the Hiroshima region and that yields had been steadily increasing until the early 1990s when a series of shocks caused by red tides and typhoons led to a decline in production. The Center has been closely working with government agencies and private companies that are cultivating oysters in order to ensure the development and spread of new methods of cultivation.

The presentations were followed by a guided tour of the Center's facilities and its adjacent experimental oyster beds during which participants asked various questions to the staff.

A debriefing of the visits to the Coast Guard and the Fisheries Center was held in the Center's lecture room. Led by **Yasuwo Fukuyo**, participants were asked to discuss in groups their impressions of the two sites and to report back in plenary. This debriefing represented one element of UNITAR Hiroshima's specific training methodology the 'After-Action-Review' (AAR), whereby an attempt is made to transform what has been seen, heard and experienced into tangible learning. The following section lists some of the key points raised during this session:



Points raised by participants following the study tour

Regarding the 6th Regional Coast Guard Headquarters:

- The role of the Japan Coast Guard (JCG) is to protect the Japanese Exclusive Economic Zone and coastal assets, and to protect against smugglers and other criminals;
- Similar to the coast guards of other countries; it is apparently making good progress in cleaning up Hiroshima Bay;
- The public awareness campaign launched for cleaning up the environment is going well;
- JCG personnel were professional and answered all questions posed during the visit;
- It is conducting monitoring for tsunami and other damage emanating from the sea using a well organised data collection system;
- JCG does not have authority to prosecute offenders, but passes them on to the police;
- The monitoring, data analysis and dissemination of data being done by the JCG are important;
- There seems good collaboration with other partners;
- Hiroshima Bay is being used for many purposes including shipbuilding and the navy; what methods are being used for integrated coastal management (ICM)?

Regarding the Hiroshima Prefecture Fisheries and Ocean Technology Centre:

- The facilities are impressive with an excellent data collection system;
- It was a wonderful experience, equipment was state of the art and research for production was clearly relevant to that being carrying out in other countries;
- The Center was transparent, the guides were friendly and willing to share information;
- The seagrass facilities were interesting but the plant itself is not a foodstuff, so maybe not a priority in developing countries;
- Important information should be provided in English;
- What new technology or methods are being utilized in order to improve water quality?
- In light of decreasing fish stocks as well as numbers of Japanese fishermen, what is predicted to happen in the next 10 years?
- For future workshops, would a visit to a local university be possible to see what related research activities are underway there?

A majority of the participants and resource persons elected to join the optional study tour to the Hiroshima City Central Wholesale Market. Arriving at 4:30 am in time to observe the auction of marine produce, they were guided by the Director of the Business Affairs Division **Shusaku NAKAHARA** and Assistant-Director **Hirotohi YOSHIHARA**. Participants observed the auction of fish caught both in the Seto Inland Sea region and from further afield, and were shown examples of whole tuna and salmon imported from countries as far away as New Zealand and Turkey. They were then shown methods of processing both live and frozen fish, and walked through the commercial zone where fish purchased at the auction were being sold to retailers.



In addition, a further study tour was organised to the **Hiroshima Peace Memorial Museum and Peace Park** (on 15 October). Due to its location opposite the A-Bomb Dome, a World Heritage Site, UNITAR HOAP was able to provide workshop participants with the opportunity to learn about the tragic history of Hiroshima. Participants were guided through the Peace Park and given a lecture on its history and significance by **Nassrine Azimi** and then visited the Museum.



3) **The practical exercise** represented a vital element of the workshop, which employed case-study analysis carried out in working teams. Four teams were formed, each assisted by a resource person. Teams were given approximately one day to formulate a policy/project document for a given real (existing) site or case and to then present it in plenary. A variety of learning and training methodologies including 'Peer Review' were adapted by UNITAR and included in this exercise.

Enhancing fish stock through sea grass bed management

Resource Person (RP) Yasuwo Fukuyo
Ouk, Vibol (Cambodia)
Tang, Cheng (China)
Yuan, Xinhua (China)
Supangat, Agus (Indonesia)
Kajonwattanakul, Sumana (Thailand)
Taladon, Panitnard (Thailand)



Proposed New Airport in Pulau Tioman

RP Chua Thia-Eng and Tadao Ando
Pei, Xiangbin (China)
Pradhan, Ajay (India)
Saxena, Alok (India)
Zulhasni (Indonesia)
Wong, Fai Hung (Malaysia)
Lim, Cristina (Philippines)

Climate change and coastal environment

RP Swadhin Kumar Behera
Shahifar, Reza (Iran)
Tussin, Abd Malik (Malaysia)
Perez, Rosa (Philippines)
Nguyen Huu, Ninh (Vietnam)
Le Dinh, Mau (Vietnam)
Pham, Hong Nga (Vietnam)



Ocean Governance and comprehensive security

RP Gunnar Kullenberg and Masahiro Yamao
Vann, Monyneath (Cambodia)
Dirhamsyah, Dirham (Indonesia)
Dass, Christopher (Malaysia)
Thein, Le Le (Myanmar)
Molea, Toala (Solomon Islands)
Onoora, Phungthong (Thailand)

(4) After Action Review

As the training institute of the United Nations, UNITAR attaches primary importance to the development of training methodologies which facilitate the acquisition of ready to use knowledge in a limited time (less than one week) among its participants, who are commonly mid to high level government officials. Various methodologies are thus applied, including After-Action-Review (AAR) and Peer Review, refined at each of its training sessions.

An After-Action-Review (AAR), was conducted after each lecture. The format of an AAR varies according to context, but it is commonly a rendition presented by a designated 'rapporteur' (a volunteer from among the participants) of the lectures of the previous day.



Workshop evaluation and next steps

Following the presentation of the practical team exercises (in Power Point form), and commentary received from the panel of resource persons on the project documents created, the next steps were explained by UNITAR. The workshop concluded with the submission of evaluation forms and presentation of certificates.

A summary of the evaluations submitted by the participants is attached to the present document. Almost all of the participants found the workshop useful in light of their professional responsibilities. The presentations of the resource persons were considered to be the most valuable part of the workshop. Hiroshima as a training location and as a centre for peace was deeply appreciated. Warm thanks were expressed to the workshop supporters such as Hiroshima Prefecture and Hiroshima University.

There are at least three significant outputs of the 2007 training workshop:

- Training modules containing all of the presentations and documents to be made available on the UNITAR Hiroshima website and on a CD-ROM distributed to all participants;
- Case studies prepared by the four working teams: 1. Enhancing fish stocks through seagrass bed management; 2. Proposed new airport in Pulau Tioman; 3. Climate change and the coastal environment; 4. Ocean governance and comprehensive security.
- Future trainers identified and partnership requirements shared through guidelines prepared by UNITAR.

UNITAR and its network of experts will provide assistance to those participants planning to conduct national or sub-regional level training activities.

It has been agreed that the Series will continue in 2008 and UNITAR will work with its network of experts to identify the appropriate focus and modality for the next session. The 2008 regional workshop for Asia and the Pacific is tentatively scheduled for autumn 2008 in Hiroshima, Japan.

The Hiroshima Initiative - focusing on capacity development, training and research actions with horizontal linkages.

The Hiroshima Initiative
Towards a comprehensive security for seas and oceans

Taking Peace as meaning "The condition in which people can fulfill their various desires as human beings"^[1] and "Human security to protect the vital core of all human lives in ways that enhance human freedoms and human fulfilment"^[2].

Flowing from the above, comprehensive security can then be understood as the means or the guarantee for the condition of peace. Comprehensive security can thus be defined as prevention of armed conflict and fulfilment of basic human needs.

Achieving human security includes not just protecting people but also empowering them to fend for themselves. Fulfillment of basic human needs include - with reference to our theme- securing food, water, the environment, health, and protection of the environment and ecosystems, coastal areas development, protection or adaptation against climate change, implementing ocean governance, education and empowerment. These points or subject areas are to be addressed in the presentations of resource persons and the subsequent Working Groups.

Comprehensive security is achieved through a combination of governance and specific actions, inclusive of socio-economic initiatives. Sustainable Development includes three components: socio-economic development, conservation of the environment, and peace and security.

[1] Tokyo Declaration on Securing the Oceans
 [2] Commission on Human Security

On the basis of the presentations, discussions and working group deliberations, the workshop identified the following outline of areas for action in the coming period:

- Training of trainers for ICM implementation;
- Interrelations between habitats, ecosystems and human food security;
- Awareness building about and use of forecasting techniques for climate variability and change;
- Awareness building about climate change in schools;
- Strategies for disaster management and risk reduction;
- Use of combined integrated environmental and socio-economic impact assessments;
- Cross-cutting theme: the creation of awareness of ocean governance and implementation among professionals and the public;
- Cross-cutting theme: the applicability and use of insurance mechanisms in the context of the protection of ecosystem services.





Summary of Evaluations from Participants

The following is a brief summary of the responses submitted by participants to the evaluation questionnaire. An attempt has been made to synthesize the responses into key points in order to have a clear understanding of the analysis, impressions and suggestions of the participants for future improvements.

Format of evaluation: written questionnaire, anonymity guaranteed; total number of evaluations: **24**.

1. Workshop Content

- Nearly all participants (23 out of 24) reported that the workshop was useful in light of their professional responsibilities; the ways that it was useful were as follows:
 - Listening to presentations, participating in discussions; integrating many related themes that pertain to the seas and oceans (21%);
 - Learning about important marine issues and best practices in other parts of the Asia-Pacific region (17%);
 - Learning about new/specific topics such as climate change adaptation and integrated coastal management (ICM) (13%);
 - Working in a multidisciplinary and multicultural environment that promotes international communication and cooperation (13%).
- The participants found the following workshop activities ‘the most valuable’: 42% identified the presentations made by the Resource Persons; 25% mentioned the group exercise and 17% the Study Tours.
- 54% reported that they considered none of the activities to be ‘least valuable’; 8% noted that some presentations were hard to follow for non-experts. Other individual responses mentioned the following aspects: the group exercise, country presentations, unfocused Q&A sessions and the tight time schedule.
- 86% considered the workshop’s structure, content, Resource Persons and other participants to be either very good or excellent.
- The workshop's timing and duration was considered to be appropriate by 58%; 33% reported that they would have preferred to have additional time. 71% reported that the material provided for the workshop was sufficient.
- A variety of topics were suggested by the participants to complement and develop the workshop in future:
 - Marine biodiversity
 - Environmental Impact Assessment (EIA)
 - Regional resource management agreements and regulations
 - Adaptation to the effects of climate change
 - Management of deep sea protected areas
 - Civil society / NGO involvement in the conservation of resources
 - Comparison of Japanese marine legal framework with that of other Asian countries
 - Japan’s response to extreme events such as typhoons or tsunamis
 - Operational coordination and on board activities of the Japan Coast Guard

- Hydrographic pattern of marine areas
- Island ecology
- Management of shipping and ports

2. Study Tours

The reaction to the visit to the Hiroshima Peace Memorial Park and Museum was almost universally positive, with participants reporting how it was a highly meaningful experience which should be given to other visitors to the city. Many were visibly moved by the suffering of the A-bomb victims and paid tribute to the strength and resilience of Hiroshima people for recreating their city as a centre for world peace.

Regarding the visit to the 6th Regional Coast Guard Headquarters, 58%⁶ expressed positive opinions; they highlighted the warm welcome received from the staff, the detailed explanations given and the well-organised and equipped data distribution system. 8% stated that they gained important information from hearing about the Japanese example which could be applied in their own countries; they expressed the wish to see more of the Coast Guard's activities, especially with regard to operational management.

For the Fisheries Ocean Technology Center, participants were impressed by the high-tech facilities (17%) the welcoming, well-trained staff (13%) and the integrated system of research and technology development (8%). Other comments mentioned that the Center was clearly making a positive contribution to the protection of the marine environment of the Seto Inland Sea through seagrass cultivation and other activities at the same time as addressing the economic needs of fishers. Questions were raised about how the Center was trying to address the issue of improving overall water quality and whether there were options for future collaboration with the Center.

75% of the participants took the option to visit the Hiroshima Central Wholesale Market. All reported that it had been a worthwhile experience. Participants drew attention to the systematic management of the marine products section (17%), the clean environment of the auction and retail areas (17%) and the good service the Market was clearly providing for the fisheries sector (6%).

3. Organisation

Participants' opinions about the organisation of the workshop were very positive with 90% viewing it as either very good or excellent.

Participants listed the following problems they had encountered during the workshop:

- Limited time for making country presentations and for preparing group presentations
- Difficulty in understanding some presentations due to pronunciation or speed of English used
- A lack of available computers
- Concern for the return journey and/or the ticket reimbursement procedure
- The lump sum of 20,000 yen was insufficient to cover sundry expenses.

4. Workshop venue – Hiroshima and environs

Participants expressed highly positive opinions about Hiroshima, drawing attention to the kind, friendly people who provided warm hospitality (30%) and the clean, attractive and safe environment of the city (25%); one participant felt that Hiroshima was the perfect location for this workshop.

With regard to the hotel and workshop venue, 63% said the facilities were either good or very good. 17% felt that the hotel was too far from the venue while 13% appreciated the distance as it provided an opportunity for exercise.

⁶ Not all participants commented on the specific locations visited during the tours.

5. General comments

Many tributes were paid to the expertise and helpfulness of the Resource Persons throughout the workshop. Also the efforts made by UNITAR staff were widely commended. Participants made various suggestions regarding improvements for future workshops:

- UNITAR should create a training programme focusing on marine law and policy as it pertains to environmental issues;
- It is necessary to organise in-country workshops in future using former UNITAR participants as trainers;
- The management of deep sea marine protected areas should be addressed;
- An environmental lawyer should be included as a Resource Person;
- If the 'Hiroshima Initiative' is launched, the group exercises should form a part of it;
- Maintaining the network established at this workshop is most important;
- More information should be given beforehand to those participants who will make country presentations;
- Expectations for the group exercises should be set more clearly at the start and more avenues for creativity should be given;
- Working groups should receive the topics prior to the workshop;
- Requests were made for collaboration with the Fisheries and Ocean Technology Center;
- Dinner arrangements should be left to participants.

Overall impressions from reading evaluations

The evaluations were on the whole highly positive except for difficulties which some participants experienced with the tight time schedule, technical explanations of some presentations and travel arrangements. Almost all participants reported that the workshop was relevant to their professional responsibilities and valuable in terms of deepening their understanding of various issues relating to the security of the marine environment. The study tours and group exercises were generally considered to provide valuable opportunities for learning and the exchanging of views.

Participants of the workshop



Hiroko Nakayama, Geneva
James Short & Enrique Blanco, Hiroshima⁷
October 2007

⁷ The authors wish to express their gratitude to all their colleagues at HOAP, in particular Kaori Okabe, Sergei Shaposhnikov, Atsushi Yasui, Berin McKenzie and Noelle Volin without whose contribution this workshop would not have been possible.