



Hiroshima Office for Asia and the Pacific (HOAP)

Series on  
Sea and Human Security

Workshop on Food Security



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**Executive Summary**  
*October 2006*

***Acknowledgements***

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

*Hiroshima University, the City University of Hong Kong and the University of Tokyo, its main partners;*

*and*

*The City of Hiroshima, Kure City Central Wholesale Market and Hiroshima Prefecture Fisheries and Marine Technology Centre for the inspiring study tours;*

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## Introduction

The Series on Sea and Human Security is one of the six main programme pillars of the UNITAR Hiroshima Office for Asia and the Pacific (HOAP). The Series addresses different dimensions of human security pertaining to the seas and oceans, incorporating their economic, food, health, environmental, community and political ramifications. Following the holding of an *International Conference on Sea and Human Security* (2002),<sup>1</sup> a three-year series was launched in 2004 to provide in-depth training workshops for experts and practitioners working for the protection and sustainable use of the seas' resources. The *first workshop*<sup>2</sup> focused on the tradeoff between conservation and use, while the *second*<sup>3</sup> discussed food security, including a sustainable food supply and food safety. To conclude the first three year Series, the 2006 workshop further developed the discussion on marine food security.

The Series itself addresses the question of marine food security in terms of two main aspects: i) marine food supply as a means of poverty/hunger reduction and as a source of income; and ii) access to safe and nutritious food. However, the overall question incorporates wider dimensions and a variety of sectors due to the fact that the causes of food insecurity not only concern scientific but also social factors including economic policies, population growth and coastal and marine environment protection. To tackle these issues, the workshop focused on the following topics:

- Human security relating to marine food resources;
- Food security and capture fisheries;
- Marine culture and the coastal environment;
- Threats to food security;
- Environmental risk assessment;
- The distribution of benefits from marine food resources;
- National policy development for a sustainable food supply – an essential question for policy makers.

## 2006 Training Workshop

The 2006 Training Workshop benefited from the network created since 2002 and from the return of partners and resource persons involved in previous workshops. A few weeks prior to the event, resource persons discussed matters relating to the mechanics and substantive content of the workshop; former participants (UNITAR alumni) also assisted in the process of selection of suitable candidates.

The workshop was attended by 40 participants, resource persons and staff, representing some 20 countries from the Asia-Pacific region.

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<sup>1</sup> International Conference: "Sea and Human Security"

[http://www.unitar.org/hiroshima/Pilot\\_Phase/IntConfSHS.htm](http://www.unitar.org/hiroshima/Pilot_Phase/IntConfSHS.htm)

<sup>2</sup> Hiroshima, Japan, July 2004. [http://www.unitar.org/hiroshima/programmes/shs04/shs04\\_report.html](http://www.unitar.org/hiroshima/programmes/shs04/shs04_report.html)

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

The workshop employed four main training methodologies:

- 1) Interactive presentations and lectures;
- 2) Study tours and debriefings;
- 3) Practical exercise;
- 4) Sessions on specific training methodologies.

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

- **Taiji HOTTA, Hiroshima University** provided a cultural briefing to the participants at an introductory session organized upon their arrival. Dr. Hotta introduced four traditional ideologies that strongly influence Japanese behaviour and human interaction: Buddhism, Confucianism, Taoism and Shintoism. He presented common attitudes held by Japanese people which are often noted by foreigners. He explained the meanings and implications of these attitudes, which are often rooted in the four ideologies.
- In her opening remarks, **Nassrine AZIMI, UNITAR Hiroshima Office** referred to the expanding meaning of the term 'food security'. Knowledge currently available could only be meaningful if it is applied to appropriate practice by different stakeholders. Ms. Azimi invited the participants representing different disciplines to discuss policy aspects relating to this issue. The role of scientists in today's world, especially the necessity for them to tackle uncertainties, was also stressed.
- **Tadao ANDO, Hiroshima University** noted that Hiroshima University, in cooperation with the City University of Hong Kong and the University of Tokyo, represented a key partner of the Series through the participation of four of its experts who come from different faculties. Professor Ando stated that for the first time the President of the university was expected to welcome the participants in person at the public session co-organized by UNITAR and Hiroshima University.
- **Capture fisheries: global outlook and strategies for ensuring food security. Rudolf WU, City University of Hong Kong** first presented important facts relating to marine fishery resources and food security: fish provide over 20% of the world's protein; global consumption of fish is expected to increase from 16 kg today to 23 kg per capita in the coming 25 years; the adverse effects of over-fishing on our seas are greater than those caused by pollution. The consequences of fishing down the food web were also discussed. Dr. Wu argued that small scale fishing could be economically more efficient, generate more jobs and ultimately be more sustainable than large scale industrial fishing. The presentation was concluded by discussion of a case study of Hong Kong and strategies towards a sustainable fish supply. The participants discussed the most efficient ways to achieve sustainability. Upon consideration that politics come first, it was noted that management could be better designed at the parliamentary and governmental levels than upon the open sea.



Tadao Ando



Rudolf Wu



Yasuwo  
Fukuyo



Doris Au



Masahiro  
Yamao



Takanori  
Ohashi



Izumi Yano

- **Seafood sustainability and sound environment – both are necessary for development but it’s hard to get them together.** Yasuwo FUKUYO, University of Tokyo observed the trade-off between the need to increase sea food production and the necessity to preserve the environment – both of which are important aspects of food security. Taking the case of aquaculture, Dr. Fukuyo analysed the possibility of minimizing environmental change (chemical, physical and biological) while pursuing sound food production. In the second half of his presentation, Dr. Fukuyo described the threats presented by invasive species which cause major environmental change. He concluded by saying that although each country has its own priorities – aquaculture, environment, tourism etc. – one should always keep in mind the above trade off and also keep oneself updated on findings relating to invasive species. Participants’ questions focused on the efficiency of and preference for large scale and smaller scale aquaculture, and institutional mechanisms which can achieve environmental preservation while developing aquaculture.
- **Community-based coastal resource management for food sustainability – lessons gained from the Japanese experience.** Masahiro YAMAOKA, Hiroshima University presented community-based coastal resource management (CBCRM) which has been practiced widely by fishery cooperative associations (FCAs) across Japan. FCAs act at the local level through the reception of governmental licences and fishing rights. New types of fisheries management organisations (FMOs) were also presented. The components of CBCRM were analysed and the functions and aspects of the Japanese model were compared to those in other Asian countries. Japanese fisheries are suffering from the import of fishery products from overseas and a gradual decrease in the number of fishers. The country has consistently adapted its traditional system to face new challenges and it is expected that Japanese CBCRM will further evolve to tackle future hurdles. Participants asked questions about the nature of Japanese CBCRM and its decision making and decentralization process. Overall, its role in terms of environmental management is still deemed to be insufficient.
- **Mariculture: global outlook and strategies towards sustainability.** Doris AU, City University of Hong Kong, stated that aquaculture production has provided an important food source to compensate for the decline of capture fishery resources in the last two decades, and its contribution to global fisheries has increased from 3.9% in 1970 to 29% in 2001. Aquaculture is mostly practiced in Asia, with China contributing 60% of the world’s aquaculture production. In the coming 50 years, the population in developing countries is expected to increase by about 3-4 billion people and therefore the role of aquaculture in combating hunger and improving livelihoods would become even more important. Dr. Au discussed different types of aquaculture and current problems confronting the development and sustainability of aquaculture, including supply of larvae, fish feed formulation and environmental impact. Dr. Au concluded her presentation by introducing specific solutions to the above problems, including the concept of carrying capacity and integrated marine culture. Participants then discussed successful and unsuccessful cases of integrated culture experiments.



- **The state of fisheries and aquaculture in Japan.** Takanori OHASHI, Fisheries Agency of Japan, described the trends in Japanese fisheries in an overall global context. Japanese fisheries are generally in decline due to the downsizing of fish stocks due to overexploitation and the aging of fishers. A recent Resource Recovery Plan (RRP) for capture fisheries and ground improvement programmes for aquaculture as well as their outcomes and consequences were presented. Participants asked questions regarding the reallocation of stocks and resource enhancement programmes. Regarding the possibility of the conversion of fishers into aquaculture specialists, Mr. Ohashi answered that the most successful aquaculturists come from agriculture and not from fisheries.
- **The economics of marine products distribution: a case of Japan.** Izumi YANO, Hiroshima University reported that the Japanese fish market deals with 11 million tons of marine products per year, with half the volume taken up by imported products. Distribution channels as well as the multi-stage wholesale market system were explained. To a large extent, the Japanese wholesale system contributes to food security within the country as it ensures quick, fair and open pricing and transaction, which are prerequisites for Japanese consumers who demand fresh marine products. However, due to the behaviour of supermarkets (economies of scale), trading through wholesale auctions is generally declining. Fisheries in the Seto Inland Sea region are small scale and of many varieties. Therefore having wholesale markets in the landing area (WMLA) and other direct markets in the locality is important. Participants asked questions about logistics and quality control at different stages of the distribution process, as well as about the income of fishers and their families.
- **Major threats to global seafood security: Chemical contaminants and water borne pathogens.** This topic was presented jointly by Rudolf WU and Doris AU. Heavy metals exist in our food as they occur naturally in the environment. Guidelines for heavy metal regulation vary according to country. Synthetic organic chemicals are highly toxic, persistent and can be bio-accumulated. Due to the fact that the intake of organic chemicals is to some extent unavoidable and the adverse effects vary depending on the quantity consumed, a risk management approach is necessary. Water borne pathogens (such as hepatitis A) can be found in many major urban food markets and pose a significant threat to public health. They pointed out the inadequacies in current sanitary practices, standards and regulations. Testing for pathogens and contaminants in seafood is highly costly so a preventive system is required. Participants discussed preventive measures including institutional arrangements and monitoring. The political side of the problem, issues relating to prioritization, the ethics of trade, self-regulation by industry and transparency of national policy, was also discussed.
- **Threats to global food security: Harmful algal blooms, microbial and chemical agents.** Yasuwo FUKUYO reported that harmful algal blooms are related to chemical and physical environmental change (see above – presentation by Yasuwo Fukuyo), and can be caused by either “red-tide” algae or toxin producing algae. The occurrence of red tides is closely related to aquacultural activities. In coastal zones red tides may have large negative impacts, causing mass mortality in caged fish. The contamination of marine products by toxic algae may also cause death in humans. Dr. Fukuyo concluded his presentation by asking the following questions to participants: what is the trade off between aquaculture development and risk of red tide?; can we eat fish affected by a red tide if they are not poisonous? Participants discussed possible projects to counteract red tides.





- **Environmental risk assessment – a tool for sustainable development?** Rudolf WU stated that in an environmental sense, risk represents a combination of exposure to a substance and its level of toxicity/hazardousness. Risk assessment therefore is a process that evaluates both the severity of adverse consequences (hazard) and the probability of its occurrence. Steps of risk assessment and ways to deal with uncertainty were explained: once a level of risk has been assessed, one can consider the acceptability of that risk. Finally, risk management and risk reduction measures were discussed, taking ciguatera in Hong Kong as a case in point. Participants asked questions about risks to particular communities (fishers etc.)

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

**A study tour to the Kure City Central Wholesale Market and the Hiroshima Prefecture Fisheries and Marine Technology Centre** was an important addition to the workshop. After an introductory session given previous day, **Tadao ANDO** guided the participants to these sites, where they had the opportunity to observe aspects of both the commercial and research sides of the marine industry in Hiroshima Prefecture.

At the Kure City Central Wholesale Market, participants received an explanation of the site's facilities and commercial activities from Executive Director **Hikomichi OSHIMA**. They viewed the auction area, fish storage tanks, sea water pumping station, refrigeration and fish descaling facilities. Participants asked various questions about the management policies of the market and the distribution process that brought marine produce from fishers in the Seto Inland Sea to consumers in Hiroshima Prefecture and other parts of Japan.

At the Hiroshima Prefecture Fisheries and Marine Technology Centre, following a brief welcome address from Director Kazutoshi Maruyama, participants received the following presentations:

- **Fisheries in Hiroshima Prefecture – The role of the Fisheries and Marine Technology Centre** Deputy Director **Takayuki MEKUCHI** described some of the current trends in the fishing industry 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 then described the structure and principal activities of the Centre which is focused on providing technological and administrative support to fishers and conducting research in the areas of the marine environment, oyster culture and aquaculture.
- **The history, current state and future of oyster cultivation in Hiroshima**  
Head of the Oyster Research Division **Satoru AKASHIGE** presented an overview of the development of oyster culture in Hiroshima Prefecture since the mid-16th century. He reported that 60% of national 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 Centre 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 walking tour of the facilities of the Centre and its adjacent experimental oyster beds during which participants had the opportunity to ask questions to the staff.

The visit to the Fisheries Centre was followed by a debriefing session held at the traditional Toda Honten

Japanese restaurant. Led by **Yasuwo FUKUYO**, participants were asked to discuss in groups what their impressions were of the two sites they had seen and then to report them to the other groups. This debriefing formed part of UNITAR Hiroshima's specific training methodology, the "After-Action-Review (AAR)", which is an attempt to transform what has been seen, heard and experienced into tangible learning. The following section lists some of the points raised in this session:

### Points raised by participants after the study tour

With regard to the Kure City Central Wholesale Market:

- It was very clean and hygienic with well organized operating mechanisms of buying/selling, storage and distribution;
- It was appropriately located and made good use of available space;
- The storage tanks were well prepared for the oxidization of water and waste water disposal;
- Naturally caught fish were treated differently to culture fish;
- The staff appeared proud of the market and their own responsibilities within it;
- There is a possible need to increase the market's capacity and renovate buildings;
- The growth of large supermarkets is apparently complicating the buying/selling system;
- Unfortunately participants were not able to observe the auctioneering process.

With regard to the Hiroshima Prefecture Fisheries Marine Technology Centre:

- It has a comprehensive integrated system using advanced automated technology which requires few staff;
- The hatchery and water flow system is well organised, providing a good nurturing environment for marine organisms;
- The Centre has three well-structured divisions focusing on aquaculture, oyster production and the provision of seedlings;
- Research within the Centre is following/responding to the activities of local fishers;
- The staff are very committed to the centre;
- The Centre is unfortunately only offering training to local people (and not to international trainees);
- Possible questions exist with regard to the Centre's responsiveness to the demands of local producers and consumers: if it is not well organised, will its usefulness decrease?

#### Other comments

- Kure Market is managed by Kure City and is growing older, possibly lacking capacity. The Fisheries Centre is managed by the Prefecture and is increasing in size;
- There is a need to consider issues of value for money: the running costs of the Fisheries Centre are 50 million yen/year. Is this expense justifiable?

In addition, two further study tours were organized. The first was a visit to the **Hiroshima Peace Memorial Museum and Peace Park** (2 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 by Nassrine AZIMI, they received a lecture from the Vice-Director of the Peace Museum **Kazuhiko TAKANO** and then visited the museum themselves.

The second tour was organized to Hiroshima's second World Heritage Site **Miyajima Island and the Itsukushima Shinto Shrine** (on 6 October). Participants were able to view the shrine which represents the interrelation of humanity and nature, culture and the sea.

**3) The practical exercise** represented a vital element of the workshop, which employed case-study analysis carried out by 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.

#### **Thai Abalone Cultivation**

Resource Person (RP) Doris Au  
Monton Ganmanee (Thailand)  
Yii Siang Hii (Malaysia)  
Yin Yin Moe (Myanmar)  
Vansereyvuth Sao (Cambodia)  
Julita Ungson (Philippines)



#### **Bicol Region Trans-boundary Coastal Area Management**

RP Rudolf Wu  
Ruby Mendones (Philippines)  
Christian Ramofafia (Solomon Islands)  
Tri Agung Rooswiadji (Indonesia)  
Hina Saeed Baig (Pakistan)  
Dewi Syahidah (Indonesia)

#### **Peam Krasaop Sanctuary Participative Management of Mangrove Resources**

RP Masahiro Yamao  
Don Ananda Athukoralage (Sri Lanka)  
Nong Kim (Cambodia)  
Thi Thanh Thuy Nguyen (Vietnam)  
Mr. Jnanendra Rath (India)  
Zaha Waheed (Maldives)



#### **National Food Security Strategy in Vietnam: A case of seafood safety**

RP Yasuwo Fukuyo  
Ram Bhujel (Nepal)  
Rujarek Bumrasarinpai (Thailand)  
Annie Christianus (Malaysia)  
Miguel Fortes (Philippines)  
Dao Viet Ha (Vietnam)  
Rassul Mohammadrezaei (Iran)

#### (4) UNITAR “Training of Trainers” (ToT) Initiative and Training Methodologies

As the training institute of the United Nations, UNITAR gives 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, which are refined at each of its training sessions.

On the right is an example of an AAR submitted by one of the participants during the workshop. The format of an AAR varies according to context. This AAR was presented by a designated “rapporteur” (a volunteer from among the participants) on the lectures of the previous day.



#### UNITAR Roundtable

##### “Outlook on sustainable food security from our oceans – a perspective from the Seto Inland Sea”

In the framework of the training workshop and its regular roundtables,<sup>7</sup> UNITAR and Hiroshima University organised a panel discussion session open to the public at the Hiroshima Peace Memorial Hall (on 4 October evening). Four speakers – resource persons and participants of the workshop – were invited as panellists and **Tadao ANDO** moderated the panel.

**Taizo MUTA**, President of Hiroshima University welcomed the participants and drew attention to the important fact that many international activities conducted by UNITAR are open to the public. He stressed that there is a growing necessity for us all to think about food security, especially since the World Food Summit that was held in 1996. He stressed that to think about the seas – the birthplace of life – is essential for both scientists and practitioners but also the simplest questions that one may ask oneself regarding the nature of the seas are also important as well.

**Nassrine AZIMI** noted that international gatherings of experts are oxygen to breathe for all – both participants of the workshop, members of international organisations, academics and the general public. It is the first time that UNITAR has co-organised one of its roundtables with Hiroshima University as part of their overall cooperation agreement.

The four speakers presented their views on marine food security from the perspective of their own field of specialisation: **Rudolf WU** spoke about the negative impacts of over-fishing; **Yasuwo FUKUYO** explained the trade off between the need to increase food production through aquaculture and the necessity to control major environmental change; **Julita UNGSON** reported the application of Japanese style stock enhancement methodologies to Philippines’ sea urchin farming; **Masahiro YAMAO** posed questions relating to the establishment of “responsible fisheries” in the context of a globalising world and in the context of Japanese cultural trends and consumer behaviour.

<sup>7</sup> In addition to its training work, the UNITAR Hiroshima Office periodically holds roundtables to present the views of internationally renowned speakers, experts and key figures in the fields of politics, economics, sciences and the arts.



The roundtable was attended by some 80 people, and questions from Hiroshima citizens focused on topics such as the impact of global warming on fisheries and the general level of pricing of marine products in the Seto Inland Sea region. The information note as well as press coverage of the roundtable is attached to the present summary.

### **Workshop evaluation and next steps**

After the presentation of the practical team exercises (in Power Point form), and the commentary from the panel of resource persons on the project documents created, the next steps were explained by Nassrine Azimi. 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. All of the participants found the workshop useful in light of their professional responsibilities. Interactions with other experts through practical exercises and discussions were considered to be the most valuable part of the workshop. Hiroshima as a training site 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 2006 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;
- 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 renew its term in 2007 and UNITAR will work with its network of experts to identify the appropriate focus and modality for the new cycle. The 2007 regional workshop for Asia and the Pacific is tentatively scheduled for September 2007 in Hiroshima, Japan.



### **Summary of Evaluations from Participants**

*The following is a brief summary of the responses submitted by participants to our 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.*

#### **1. Workshop Content**

- All participants (100%) reported that the workshop was useful in the light of their professional responsibilities.
- The participants found the following workshop activities the most valuable: 47% (10 participants) mentioned the practical exercise, 24% (5 participants) the lectures given by the resource persons and 19% (4 participants) having the opportunity to interact with other experts in the field.
- 62% (13 participants) reported that they considered none of the activities to be “least valuable”; 19% (4 participants) noted that some lectures which focused solely on information exchange were seen as least (or less) valuable.
- 95% of participants considered the workshop’s structure, content, resource persons and other participants to be either very good or excellent.
- The workshop's timing was considered to be appropriate by 47% (10 participants); 24% (5) reported that they would have preferred to have additional time. 76% (16) reported that the material provided for the workshop was sufficient.
- A variety of topics were suggested by the participants which could complement and develop the workshop in future – see below.
- 67% (14) reported that they would be either interested or very interested in collaborating with UNITAR in its future activities.

#### **Suggestions for additional topics**

- Examining the concept of ‘food security’ – institutional perceptions;
- Project development for marine food security;
- Environmental security;
- The role of women in seafood security;
- Ecosystem dynamics;
- Local food security: fisheries and aquaculture management in poor communities;
- Marine biodiversity;
- Influence of marine toxins on seafood security;
- Legislation on food security and safety in Japan and other countries;
- Strategic planning (with input from UN/FAO staff and/or academic experts);
- Sustainable eco-tourism;
- Management of marine protected areas;
- Phytosanitary standards and quality controls.

## **2. Cultural Briefing**

90% of the participants (19) found the cultural briefing either useful or very useful in terms of explaining some of the fundamental elements of Japanese society; 19% (4) expressly wished that there had been more time allotted for this, possibly with the inclusion of a slideshow explaining Japanese customs. Two participants observed that this kind of briefing represented an essential element for international workshops.

## **3. Study Tours**

The reaction to the visit to the Hiroshima Peace Memorial Park was universally positive with all participants reporting how it was a highly meaningful experience. A number of participants expressed sympathy for the suffering of the A-bomb victims; others paid tribute to the strength and resilience of the people of Hiroshima in the post-war period and also expressed their intention to pass on a message of peace to the people in their own country.

Regarding the Kure City Central Wholesale Market, 80% (17) of participants expressed the view that the visit was either interesting or very interesting; they drew attention to its efficient management and marketing system and general level of cleanliness. 38% (8) said that they would have liked to witness the market in action when the auction was underway.

For the Fisheries Marine Technology Centre, participants expressed similarly positive opinions, drawing attention to the Centre's efficient mechanized system (5), its research and development activities (3) and the openness of the staff (2). One participant stated how valuable these visits were when one considers that seeing a place with one's own eyes once is often more meaningful than hearing about it 100 times.

## **4. Organisation**

Participants' opinions about the organisation of the workshop were universally positive with 100% viewing it as either very good or excellent.

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

- Limited time: both in terms of actual workshop sessions and private time (10 comments);
- Language barrier; road signs in English were requested (2);
- Handouts were sometimes hard to read; colour handouts with two slides per page were requested (1);
- Difficulties were experienced viewing the screen at times (1).

## **5. Workshop venue – Hiroshima and environs**

Participants expressed highly positive opinions about Hiroshima, drawing attention to the following features: a beautiful city (9 participants); an ideal location for this series (5); rich historical heritage (4); friendly, helpful people (4); a safe and secure environment (3).

Regarding the hotel, 86% (18) said that it was either good or very good; 3 participants appreciated the distance between the hotel and the office which provided an opportunity for exercise. 2 participants levelled criticism at the hotel's lack of computer facilities.

## **6. General comments**

Much tribute was paid to the helpfulness of UNITAR staff and the leadership provided by Professor Ando and Director Azimi. Support received from Hiroshima University and Hiroshima Prefecture was also highly commended.

Participants made various suggestions regarding improvements for future workshops:

- Necessary to simplify complicated ticketing/reimbursement procedure;
- Increase the overall time allotted to the workshop, perhaps by 1-2 days;
- Additional reading material and a reference list is required prior to the workshop;

- Need for pre-workshop interaction, especially between resource persons;
- Extend the scope of the lectures delivered by RPs who have expertise more directly applicable to the realities in Asian developing countries;
- Include at least one RP from an Asian developing country to facilitate information exchange about good practice;
- Tailor lecture content more closely to the background of participants;
- Allow more time for Q&A sessions in order to facilitate more personal interaction;
- Allow time for field work at Kure Market and FMTeC ;
- Practical activities such as the AARs and debriefings were useful but require more structure;
- Sessions should finish earlier in the day;
- Data provider for the practical exercise should be notified earlier to allow more preparation time;
- Pass on UNITAR documentation for distribution, especially the forthcoming work programme;
- Workshop alumni should be invited to a future meeting in order to discuss progress.

### **Overall impressions from reading evaluations**

The evaluations were on the whole very positive, except for difficulties which some participants experienced with time organisation, reimbursement and travel arrangements. All participants reported that the workshop was relevant to their professional responsibilities and valuable in terms of deepening their understanding of various aspects of marine food security. The study visits and group discussions were generally considered to provide good opportunities for learning and the exchanging of views.



**Participants of the Workshop**

Hiroko Nakayama, Geneva  
James Short, Hiroshima  
October 2006\*

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