



**unitar**

United Nations Institute for Training and Research

## Training Series on Biodiversity

### BIODIVERSITY AND CLIMATE CHANGE Seventh Session



©Sergei Shaposhnikov

29 June – 4 July 2008  
Kushiro, Japan

## Executive Summary

### *Acknowledgements*

*UNITAR would like to express its deepest gratitude to:*

*The UNDP-Japan Partnership Fund for its financial support to the seventh session of the Series;*

*The Government of Japan, for its support to the Series since 1998;*

*The City of Kushiro and the Kushiro International Wetland Centre (KIWC), co-organisers of the Series;*

*The Secretariat of the Convention on Biodiversity and the Ramsar Convention Secretariat, UNITAR's main partners;*

*Hisashi Shinsho, a born teacher;*

*and*

*Beijing Forestry University; Kushiro Public University of Economics; Hokkaido University; Japan Agency for Marine-Earth Science and Technology, National Institute for Environmental Studies, Center for Global Environmental Research, Japan; and Seoul National University (by alphabetical order) which provided resource persons;*

*Akan Town Office and the people of Kushiro who provided inspiring study tours and cultural activities;*

*Our special thanks 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 was indispensable for the successful implementation of this workshop.*



## Introduction

The UNITAR Series on Biodiversity began in 1998 with financial support from the Government of Japan and cooperation from the City of Kushiro and the Kushiro International Wetland Centre (KIWC). The Series constitutes one of the six main programme pillars of the UNITAR Hiroshima Office (HO) as well as UNITAR's longest lasting and largest programme related to biological diversity. It aims to contribute towards national policy planning related to biodiversity conservation and management in the Asia-Pacific region. The Series now counts over 200 alumni. This is certainly one of the most important gains in the undertaking.<sup>1</sup>

Since its 2004 session, UNITAR and its Faculty have developed the Series with a three-dimensional approach:

- 1) a focus on water resources and wetland management, making best use of the workshop venue and of water, a vital tool for ecosystem management;
- 2) a focus on socio-policy aspects and the development of appropriate methodologies to enable participants to acquire applicable and ready-to-use knowledge;
- 3) utilization of lessons-learned and best practice approaches to enhance participants' own thinking as to how best to apply the ecosystem tools to their own contexts.

The Series utilizes the case studies of the workshop venue, Kushiro, which has the first Ramsar wetland in Japan - the Kushiro Wetland - and the most recent one, Lake Akan. The stories related to wildlife conservation in these places are also part and parcel of the overall learning process.

Climate change represents the most serious and imminent challenge confronting human society today. It is now considered as a question of human security by the UN and in other international discussions. The 2008 session was planned so as to coincide with this main topic of the G8 summit in Hokkaido (Japan) conducted during the same period, and thus was entitled *Biodiversity and Climate Change*, in the context of wetlands and water resources management.

The 2008 workshop was designed to achieve the following objectives:

- Support the participants sharing of scientific facts and policies related to biodiversity, wetlands and climate change;
- Equip the participants with analytical knowledge to understand and practically use sometimes overwhelming scientific data and documentation;
- Facilitate the exchange of ideas, leading to practical response plans (at national or regional policy levels) to climate change and especially for the purpose of protecting biodiversity;
- Strengthen the Kushiro/UNITAR network of experts in wetlands, biodiversity and climate change;
- Create a lasting forum for capacity-building and information exchange.

---

<sup>1</sup> See the Midterm Review of the Series conducted in 2007, after 6 sessions in Kushiro.



*Hisashi Shinsho*



*Nassrine Azimi*



*Takekazu Uehara*



*Yukie Arai*

## 2008 Workshop

The 2008 Workshop once again benefited from the return of partners and resource persons involved in previous workshops. Since the conclusion of the 2006 Workshop<sup>2</sup> and the subsequent national session in Dehradun, India in 2007,<sup>3</sup> the resource persons were involved in discussions relating to the review of past workshops and content development of future workshops. The network of UNITAR-Kushiro Alumni created since 1998, now numbering over 200, assisted in the information dissemination and application process. This led to the largest number to date of high-level applications (over 180) and the high level of both the Faculty and participants.

The workshop was attended by some 35 participants and resource persons, accompanied by 18 observers and staff, from 27 countries in Asia, Europe, Africa and North America.

The workshop employed four main training methodologies:

- 1) Interactive presentations and lectures;
- 2) Study tours and debriefings;
- 3) Practical exercises;
- 4) Sessions on specific training methodologies (UNITAR “Training of Trainers” (ToT) Initiative and Training Methodologies).

### 1) Presentations and lectures

- **Introductory Comments by *Hisashi SHINSHO*** (KIWC)

At the welcome dinner hosted by UNITAR, Mr. Shinsho made a brief presentation of Hokkaido’s nature and the nature conservation efforts made by local people. First the characteristics of Hokkaido’s climate and wildlife were presented. Wild red crown (crested) cranes are the pride of the people of Hokkaido. A local movement has led to the designation of the Kushiro wetland first as a Ramsar site and then as a national park. These then paved the way for a change in conception – wetlands were considered before as a mosquito’s paradise, but now they are a major eco-tourism spot for Kushiro and Eastern Hokkaido.

- **Opening remarks from *Nassrine AZIMI*** (UNITAR Hiroshima Office). Ms. Azimi informed the participants that 2008 was the 10<sup>th</sup> anniversary of the UNITAR Series in Kushiro and would focus on climate change. Today we are confronted by irrevocable scientific knowledge on climate change. Since the first international conferences on climate change, little in actually reducing CO<sub>2</sub> emissions has been achieved, notwithstanding endless rounds of talks. In Europe, air flights are still cheaper than trains. Steven Hawking referred to the idea of colonies for human species on Mars, claiming that man would ultimately destroy his habitat. However the Earth is irreplaceable. We have to convince our governments and put in place concrete actions. Kushiro has an experience in such movements. She hoped that all would learn from Kushiro’s lessons.

---

<sup>2</sup> <http://www.unitar.org/hiroshima/programmes/kushiro06/index.htm>

<sup>3</sup> <http://www.unitar.org/hiroshima/programmes/biodiversity07/ExecutiveSummary-Mountain&ForestEcosystemsWS.pdf>



*Mizuho Yokoi*



*Jobaid Kabir*



*David Coates*



*Lei Guangchun*

- **Opening remarks from Yukie ARAI** (Ministry of Foreign Affairs of Japan). Ms. Arai thanked UNITAR and the partners for having organized the Series since 1998. This year a G8 meeting took place in Toyako, Hokkaido, to discuss among other items the impact of climate change on the ecosystem. The Prime Minister of Japan Yasuo Fukuda is stressing the importance of reducing CO2 emissions by 50% by 2050. She hoped that the present workshop would support developing countries in Asia in their policy making. Japan is a strong supporter of UNITAR and its Hiroshima Office as it recognizes the importance of the Institute's activities. Kushiro is a leading city in Japan in environmental protection. Ms. Arai wished the participants a fruitful week.
- **Opening remarks from Mizuho YOKOI** (UNDP Tokyo Office). Ms. Yokoi represented UNDP which funded the workshop through its UNDP-Japan Partnership Fund. She noted that the timing of the workshop was opportune as it was placed one week ahead of the G8 summit and other related activities happening in many places in Japan. Climate change presents one of the greatest challenges today. However we all have to start tackling the problem at daily levels along with at institutional, local and international levels. Kushiro has played a key role in leading community-based nature protection in Japan. Ms. Yokoi hoped that the participants would learn a lot from Kushiro and make use of this in their home countries.
- **Introduction to Climate Change by Jobaid KABIR** (URS Corporation, Inc). The presentation consisted of three key questions: what is climate change and why it is happening; what impact it will have on ecosystems and water resources; and how we are going to manage this crisis. The mechanism of the warming and its consequences were discussed. The frequency of extreme weather conditions will increase, and ecosystem and species will directly suffer from change. Dr. Kabir then presented a set of action items for managers and policy makers. Water and ecosystem resources should be managed differently in the future, in flood control, water supply and in coastal areas and wetlands. Water management is key to climate change adaptation.
- **Water, wetlands, biodiversity and climate change by David COATES** (Secretariat Convention on Biological Diversity). Dr. Coates informed the participants that the traditional thinking of "conservation of biodiversity because it is nice" does not work well for most circumstances – particularly where development and poverty reduction are the primary issues. Attention to biodiversity conservation has shifted in recent years towards linking biodiversity and human development, and towards recognizing the role of biodiversity in the delivery of ecosystem services. Ecosystem services related to benefits for people and are therefore the arguments that politicians and decision-makers are more likely to pay attention to. Valuation of services provided by wetlands and trade-off between multiple interests - for example water use, development and conservation – are the key issues. In the second part of his presentation, Dr. Coates reported the outcomes of the Expert Meeting on Wetlands, Water, Biodiversity and Climate Change of March 2007. The main impact of climate change is on water, and so, on wetlands and its biodiversity. CBD, Ramsar and UNFCCC already recognize the ecosystem services that wetlands and its biodiversity play in mitigating of and adaptation to climate change. We now need to implement action. Dr. Coates encouraged participants' actions to tackle climate change utilizing the ecosystem services of wetlands. There are a number of very important ones – for example wetlands play a critical role in sustaining water supplies, regulating floods and protecting communities from severe weather events in circumstances where we shall experience more extreme and frequent droughts and floods. Wetlands need to be used better as a response option to climate change.



*Kim Seong-il*



*Satoshi Kobayashi*



*Yoshiki Yamagata*



*Swadhin Behera*

- **Wetlands and its ecosystem functions, by *LEI Guangchun*** (Beijing Forestry University). Dr. Lei further developed the ecosystem functions provided by wetlands. We are currently utilizing 120% of what the wetlands could provide to the society. Wetlands contain most degraded ecosystems. The problem is the failure to link ecosystem to human well being. His case studies demonstrated the subtle relation between industrial development, nature conservation and natural disaster (Yangze River); mangrove forests having served as a life shelter against tsunami; trade-off between agriculture and fishery (Aral Sea); trade-off between reclamation necessity, wildlife and fishermen's livelihood (Korean Saemangeun). Trade-off issues are present in every country and every local community. Dr. Lei concluded his presentation by providing hints for policy makers to assess the ecosystem services in order to achieve a better trade-off between development and conservation.
- **Climate change and biodiversity conservation policy in Korea by *Kim Seong-il*** (Seoul National University). Dr. Kim first presented the beautiful ecology of Korea. Since the last two decades, however, the country has witnessed loss of forests and tidal flat areas, and the loss of biodiversity has been doubled. Due to climate change, the air temperature has increased by 1.5°, and sea water by 1.3°, which are above the world level. This has caused the sea level rise and changed the water cycles. The country needs to develop a knowledge process to enhance scientific research and stakeholder-based decision-making mechanisms. Notwithstanding the existence of laws and regulations related to nature conservation and protected areas, it is still difficult to set national adaptation policy. Only 1% of the total national budget of \$1.6 billion has been allocated for the adaptation programmes, only 2% for the Ministry of Environment, 1% for education programmes. Participants asked questions about priority/relation between adaptation and mitigation projects.
- **Reports from the Asian Wetland Symposium by *Satoshi KOBAYASHI*** (Kushiro Public University of Economics). Professor Kobayashi introduced the Asian Wetland Symposium to the participants. The Symposium, since 1992, has been involving multiple stakeholders including national and local governments, NGOs, scientists and indigenous people. It has also feeding knowledge into the Conference of Parties of the Ramsar Convention. At the 4<sup>th</sup> session conducted in Vietnam, 10 action items have been adopted. In relation to the climate change, it has been recognized that by the end of the century, it would consist the dominant direct driver for ecosystem loss. The important of wetlands and wildlife in climate change mitigation has also been highlighted.
- **Possible interlinkages between climate change (post-Kyoto) and ecosystem regimes by *Yoshiki YAMAGATA*** (National Institute for Environmental Studies, Center for Global Environmental Research). Industry discharges 6.3 metric tons (GtC) of carbon per year while deforestation contributes 1.6 GtC. Deforestation is mainly due to human disturbance and land use change and has seen a rapid increase especially in tropical Asia in the last 30 years. Reducing deforestation therefore contributes to both combating climate change and preserving biodiversity. Reduction of deforestation has not been included in the Kyoto Protocol, and given its importance (20% of the total emission), this should be seriously considered. Dr. Yamatata then demonstrated the Global Forest Carbon Monitoring System, an advanced land observation system, being launched from this year. He concluded that linking the global mapping system to land use change and climate change is most useful, especially in the coming 10 years.



- **Introduction to climate variability and change for understanding their roles related to biodiversity by Swadhin K. BEHERA** (Japan Agency for Marine-Earth Science and Technology). Climate change is a global issue beyond national boundaries while climate variability could be of national interests. Dr. Behera explained the mechanisms of climate variability such as El Niño and the Indian Ocean Dipole which are lead by ocean dynamics. Understanding their mechanisms will help in the prediction of temperature and precipitation changes. Climate change occurs due to the imbalance of earth's energy balance. By warming the oceans, climate change provokes climate variability. Dr. Behera concluded his presentation by outlining different social impacts of forecasts. The participants asked questions about the availability of prediction and data.
- **Wetland conservation in the Kushiro and Akan areas by Satoshi KOBAYASHI.** Eastern Hokkaido has seven national parks (NP), the Kushiro Wetland and Akan Lake are two of them. The National Park Law was adopted in Japan in 1931. Akan Lake was designated as a NP in 1934 and the Kushiro Wetland in 1987. Dr. Kobayashi presented interesting case studies related to wetlands and national parks. Nature protection in Japan at community levels started at Oze when a "Union to Protect Oze" composed of nature-loving artists, writers and researchers made a strong appeal to the central and local government to abort a dam project. The same NGO group developed conservation actions in other places in Japan including the Akan area. Lake Akkeshi is known for its oyster culture, Akan Lake is enjoying its own specialty, lake lobsters – however this species is an invasive one harming the ecosystem.

## 2) Study tours to the two Ramsar Sites, Kushiro Wetland and Lake Akan, were organized.

After a comprehensive introduction to the study tour, **Mr. Hisashi SHINSHO, Mr. Yoshikatsu KIKUCHI and the full KIWC staff** guided the participants to the magnificent Akan Lake, one of the most recent Ramsar sites in Japan.

The participants enjoyed a walk from the Akan Lake Eco-Museum Centre through Bokke (a natural hot spring path) to Akan Lake and the surrounding forests. Mr. Shinsho explained the methods of tree monitoring and species protection in the region.

At the Akan View Hotel, the participants conducted an intensive debriefing session. They discussed what had been observed and learned during the field trip, answering three questions previously provided by the moderator. Notes from the debriefing are included further below in this summary.

After dinner, the participants visited a village of Ainu, Japan's indigenous people (just recognized in June 2008). They have an inherent culture based on cohabitation with nature.

The second day of the study tour started with a canoe ride at Toro Lake. The measurement of spring water was explained. It was revealed that the daily volume of the spring water was equivalent to the average water amount used monthly by a household. The participants also met with the member of a fishermen's association promoting nature conservation and eco-tourism.

The participants had another field trip debriefing at the Toro Lake Eco-Museum Centre. After a visit to the Hosooka View Point which provided a panoramic view of the wetland, the participants returned to Kushiro City.

The study tours were followed by **debriefings**, lead by **Dr. Jobaid KABIR** after the 1<sup>st</sup> day **and Dr. KIM Seong-il** after the 2<sup>nd</sup> day. The participants were given a set of questions prior to the study visits, and held group discussions afterwards. Written below are some of the lessons learned by the participants from the study tours. These debriefings form 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.





1st Day: Akan Lake Eco-Museum Centre, Bokke (natural hot springs) and Akan Lake

Questions:

- 1) Impact of climate change on Kushiro/Akan areas;
- 2) Local management;
- 3) Biodiversity of wetlands.

Questions	Team I	Team II	Team III	Team IV
Climate change	Less cloudy days; More storms affect forests; Water is becoming warmer, negatively affecting marimo.	No impact observed; No information available on the status of biodiversity in past or present; Impact on plants may be observed in the future.	No impact observed; Pine trees, aconitum species and <i>Rauvolfia serpentina</i> may disappear.	History-heritage, variation-storm.
Local management	Intensive government support; Strong community involvement; Efficient PA system.	Three major management practices were observed: 1. community involvement in management; 2. adaptation management in practice; 3. zonation.	Territory is well kept, buffer zone is maintained, monitoring is in good shape and watershed is managed.	Strong involvement; Internal consultation meetings; Ecotourism as a source of benefits for locals and sustainable management.
Biodiversity	Mixed forests and various species were observed.	More attention should be paid to plants and protection against deer; Increase biodiversity.	Boundaries between hot and cold springs; Kushiro's height; Marimo; Core zone should be richer in biodiversity; Depth of the lake.	Low biodiversity was observed: birds, marimo, lichens and insects.

Summary:

- Good government support
- Community involvement
- Buffer zone is well maintained
- More attention to plants required
- Protection of watershed
- Good marimo conservation
- Good ecotourism service
- Core zone should be richer in biodiversity



2<sup>nd</sup> Day: Canoe ride at Toro Lake, the Toro Lake Eco-Museum Centre, Kushiro Wetland Hosooka View Point

Questions:

- 1) Eco-tourism;
- 2) Education;
- 3) Funding.

Questions	Team I	Team II	Team III	Team IV
Eco-tourism	Important for local people; Can improve local economy; Provide a scientific contribution and a wise use of resources.	Effective cooperation was observed; Security and safety conscious.	Well managed; Incentive from ecotourism.	Safety; Documentation/ knowledge management system; Integral ecosystem; Organized ecotourism in action.
Education	Habitat for wildlife; Food for both wildlife and community.	The cooperatives are responsible for conservation; Not over populated (no villages); Management system is very efficient and community-cooperatives joint management was identified.	Opportunity to enjoy environment and learn about environment conservation.	Opportunity to understand the importance of nature conservation for humanity.
Funding	State budget; Cooperation with private companies; Optimisation of fisherman cooperation; Self financing, selling products.	Expensive; Not duplicable elsewhere; Self sufficient.	Big corporations could be involved.	50% central government, 25% provincial, 25% local government; Internal fundraising; Bank sponsorships; Fiducial funds.

Summary:

- Hospitality of local community
- Improve local economy
- Scientific contribution
- Wise use
- Effective cooperation
- Well managed
- Safety
- Knowledge management
- Integral ecosystem
- Organized eco-tourism
- Responsive eco-tourism by the local community
- International symbols could be installed
- Enriched floral and fauna species

**3) The practical exercise** represented a vital element of the workshop, which employed case-study analysis that was carried out by working teams. Four (4) teams were formed, each assisted by a resource person. Teams were given approximately one day to formulate 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 the exercise.

**1) Ruorgai Plateau Marshes (China)**

Mariano Roy Duya  
Fatma Güngör  
Tiep Ha Van  
Fitri Nurfatriani  
Kamal Rai  
Sadegh Sadeghi Zadegan

RP: Lei Guangchun  
Data Provider: Xiaoyun Zhang



**2) Gulf of Mannar Marine Biosphere Reserve (India)**

Julius Ibukun Agboola  
Ranjith Punyawardena Batugedara Vidanelage  
Ferdousi Begum  
Bansok Ros  
Wilfredo Uy

RP: David Coates  
Data Provider: Sivakumar Kuppusamy



**3) The Yanami Shicchi Wetland (Japan)**

Muthukumarasamy Arunachalam  
Mohammad Naim Eqrar  
Hong Su Yeon  
Wanlop Preechamart  
Sita Shahi Bam

RP: Hisashi Shinsho  
Data Provider: Tomoko Ichikawa



**4) Khazar Reserve (Turkmenistan)**

Ahmad Khan  
Yasin Koiçü  
Huu Thien Nguyen  
Paul Ouedraogo  
Jnanendra Rath  
Harban Singh Tara Singh

RP: Swadhin K. Behera  
Data Provider: Shirin Karryeva



Participants made a 20 minute presentation per team, which was evaluated by a panel of resource persons on the following points:

- Presentation style;
- Is the problem well defined?
- Does the project address the problem?
- Is it feasible?
- Does it address climate change?
- Are outcomes well defined?
- Question and answer section (well managed)?

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

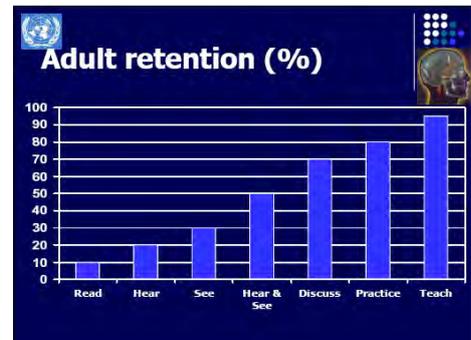
Throughout the workshop, special sessions were organized to share UNITAR’s experiences in improving training methodologies and Training of Trainers (ToT). **Dr. Jobaid KABIR** delivered two lectures on training methodologies and ToT.

The first lecture related to the principles and methodologies of adult learning as compared to education for children. He discussed topics relating to the functioning of the adult mind and the creation of learning incentives and also demonstrated specific tools and methods that have been designed to improve learning.

The second session was devoted to training plan development. Various issues were discussed relating to specific developmental steps: from the identification of needs to the setting of objectives, wrap up and the evaluation process.

Two (out of three) returning Alumni (from the 2006 session) gave their comments on the training activities conducted in their country.

As the training institute of the United Nations, UNITAR gives primary importance to the development of training methodologies which will 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 and refined at each of its training sessions. These include After-Action-Review (AAR) and Peer Review.



Teaching is the best method for learning



After-Action-Review session



Learning is most enhanced by peer-review



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

The workshop was concluded by the lead resource person, **Dr. David COATES**, and the next steps were explained by **Ms. Hiroko NAKAYAMA** (UNITAR).

Following the conclusion of the workshop, each participant was requested to fill in an evaluation form. A summary of the evaluations submitted by the participants is attached to the present document. The City of Kushiro with two world-famous wetlands was considered a most appropriate site for biodiversity training. The excellent cultural demonstrations organized by the people of Kushiro were deeply appreciated and recognized as an important aspect of international cultural exchange.

100% of participants found the workshop useful in light of their professional responsibilities. The focus of the workshop, biodiversity and climate change, was deemed most timely. Participants found exchange with resource persons and participants through practical exercises and other discussion opportunities most valuable. Study visits and lectures were also reported as valuable. Reflecting the high calibre of the participants, even highly technical presentations were quite well understood.

There are at least three significant outputs of the 2008 workshop:

- Training modules containing all of the presentations and documents to be made available on the UNITAR Hiroshima website;
- Case studies prepared by the four working teams;
- Future trainers/training interests identified and partnership requirements shared through guidelines prepared by UNITAR.

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

In order to stabilize the Series, the Faculty as well as UNITAR, KIWC, CBD and the Ramsar Convention Secretariat will continue evaluation and planning for the future.

## **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.*

### **Length of workshop, structure and resource persons**

- The participants' comments were divided into two in relation to the duration of the workshop. While 13 of them said that the duration was appropriate, 9 mentioned that the workshop was too tight;
- The structure of the workshop was considered to be good to excellent (84%).

### **Workshop Content**

- All (100%) of the participants reported that the workshop was useful in light of their professional responsibilities and noted that it has deepened their understanding of various aspects of biodiversity and climate change;
- Of all the topics, 65% (17 participants) of the participants noted that the practical exercises were the most useful and valuable; followed by 35% (9 comments) mentioning the study visits; 5 participants (14%) mentioned that the lectures were the most valuable parts of the workshop. Most of the participants expressed that the interaction with resource persons and other participants was the main gain from the workshop;
- Material provided at the workshop was considered as sufficient and appropriate.

### **Suggestions for improving content, resource persons and structure**

- Possibility to make lectures more interactive;
- Making the workshop a little longer, by 2-3 days;
- Making this kind of workshop mandatory before submitting a nomination for Ramsar sites;
- More varied background of participants (NGO, GO and experts);
- Include more debriefing with local people.

### **Suggestions for additional topics**

- CO2 sequestration strategies;
- How to prepare projects for international organizations;
- Case studies relating to climate change;
- Training for countries most affected by climate change;
- Climate change in watersheds and wetlands management;
- Migration of birds and its relationships with climate change;
- Human dimensions of wetlands biodiversity conservation;
- Research tools and opportunities for climate change;
- Desertification;
- Strategies and activities related to wetlands and climate change;
- Possible mitigation, responses and adaptation to climate change;
- Payment mechanism of reduced emission from deforestation and degradation;
- Biodiversity gap analysis at a global level;
- Coordination and cooperation;
- Impact of climate change;
- Remote sensing and GIS;
- Mountain and wetland biodiversity;
- Culture, bio-culture.

### **Cultural Briefing and cultural activities**

- All the participants stated having found the briefing useful (96%);
- 77% of the participants found the cultural activities very useful and an enjoyable experience.

### **Preparations and Administration**

Overall excellent comments from all the participants in terms of organisational arrangements (96%).

### Difficulties reported:

- different ways of speaking English;
- little time to see Japan's culture;
- more discussion time for presentations;
- internet connection and international telephone;
- work in the evening was a bit hard;
- food was mainly Japanese, better diverse with European style;
- lack of understanding of the region;
- communication with the hotel and local people;
- it is not good to differentiate the travel funds coverage.
- very tight time schedule;
- communication with my family, since there is no information from the organizer regarding the cell phone using in Japan;
- some participants too dominating – could have asked some questions in prevention so as not to disrupt the spirit of interesting discussions;
- alter region during the plenary session;
- short time given for answering questions.

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

The evaluations were very positive, except for some difficulties with time organization and travel arrangements. Participants reported that the workshop was valuable in the following fields:

- broadened scope of reasoning;
- enabled the appreciation of the need for science-policy linkage;
- better understanding of participatory and team approach;
- better understanding of wetland ecosystems and their mitigation effect;
- understanding of the seriousness of climate change, its basic concepts and brainstorming with other participants;
- it will help my responsibility to be in charge of three environmental conventions;
- it will help my work of teaching and wetland conservation;
- it allowed a look at climate change from different angles;
- it will help in my research work;
- excellent content, calibre of presentations, networking with experts;
- useful to take decisions on research and submitting policy options to the managers;
- debates realized at different (national, international) levels;
- it will help me in teaching and training programmes;
- made me realize the need to understand legal and policy aspects to tackle problems, and the need to work both at grass root and government levels;

Hiroko Nakayama, Sergei Shaposhnikov and Atsushi Yasui\*  
Geneva and Hiroshima  
August 2008

---

\* The authors wish to express their gratitude to all their colleagues at HO, in particular Kaori Okabe, Dina Hanggraini and Berin McKenzie as well as administrative staff at UNITAR's Headquarters in Geneva, without whose contribution this workshop would not have been possible.



Workshop participants in front of the Akan Lake Eco-Museum Centre