

## SESSION REPORT

## TITLE OF THE SESSION

FT5.19 Collaborative approach among international agencies for effective flood management-International Flood Initiative (IFI)-

### **SESSION CONVENERS**

International Centre for Water Hazard and Risk Management (ICHARM), Public Works Research Institute (PWRI) United Nations Educational, Scientific and Cultural Organization (UNESCO) World Meteorological Organization (WMO) United Nations International Strategy for Disaster Reduction (UN-ISDR) United Nations University (UNU-EHS) International Association of Hydrologic Science (IAHS) International Association of Hydraulic Engineering and Research (IAHR)

#### **KEYNOTE SPEAKERS**

Mr. K. Matsuura, Director General, UNESCO

Mr. M. Jarraud, Secretary General, WMO

Prof. H. van Ginkel USG, Rector ,UNU

Prof. K. Takeuchi, Director of ICHARM, PWRI

Dr. S. Briceno, Director, UN-ISDR

Mr. A. Tyagi, Director of Water Resources Division, WMO

Dr. K. N. N. Thein, IHP coordinator, UNESCO-IHP

Mr. K. Miyake, (MLIT)

Prof. J. Bogardi (UNU)

Dr. A. Askew, Secretary General, IAHS

#### Prof. N. Tamai, Vice President, IAHR

Mr. S. Tanaka, Team Leader, ICHARM

### CONVENORS GENERAL REMARKS ABOUT THE SESSION

The objective of the session has been to promote international cooperative activities for integrated flood risk management among various UN agencies and related intergovernmental and scientific organizations participating in the International Flood Initiative (IFI). Main contributors included I-CHARM, UNESCO, WMO, UN-ISDR, UNU-EHS, IAHS, and IAHR

The International Flood Initiative (IFI) was officially launched during the World Conference on Disaster Reduction WCDR (January 2005) in Kobe, Japan, as a joint UNESCO/WMO effort based on the respective role each organization plays in mitigating the consequences of natural disasters. The initiative is expected to help meet the Millennium Development Goals, and the objectives of the UN International Decade for Action "Water for Life 2005-2015" and the UN Decade on Education for Sustainable Development (UNDESD).

The objective of IFI is to develop the capacity of each country to better understand and handle hazards, vulnerabilities and benefits involved with floods by applying the following principles:

- Living with floods: learning to handle the unavoidable adverse flood effects.
- Equity: the fair treatment of all affected parties, stakeholders and future generations.
- Empowered participation: flood management is integral to social development.
- Inter-disciplinarity and trans-sectorality: enhancing knowledge systems for all flood related activities.
- International and regional cooperation: knowledge exchange and cooperation for trans-boundary watershed management.
- 1. Mr. K. Matsuura, Director General, UNESCO: There is a pressing need to develop advanced risk management on water hazards in order to secure human life and ensure sustainable socio-economic development and increase efficiency in poverty alleviation. The vision of the International Flood Initiative (IFI) is to create wellinformed and adequately prepared communities that would form a flood-proof society living consciously and harmoniously with floods. The vision of the IFI is to create well-informed and adequately prepared communities that would form a floodproof society living consciously and harmoniously with floods.

- 2. Mr. M. Jarraud, Secretary General, WMO: Practices to flood management have largely been applied through isolated sectoral approaches. There is a lack of understanding of interdependent impacts of development activities on magnitudes of flood hazards. To overcome these shortcomings incorporating risk management principles that recognize flood management as an integral part of water resource management in coordinated efforts are needed. IFI will mobilize resources and networks of the UN system, NGOs, private sector and the insurance industry in order to assist communities and governments in developing culturally sensitive flood management strategies thereby targeting sustainable development.
- 3. Prof. H. van Ginkel USG, Rector, UNU: UN cannot replace governments; it is rather a catalyst to the governments and international organization for better governance. Organizations of joint forces within UN system to combat this challenge, IFI is a good example of the UN coordinated response and partnership. IFI strategy must reflect our orientation to respond to flood disaster management challenges within a global framework.
- 4. Prof. K. Takeuchi, Director of ICHARM, PWRI: The goal of ICHARM is to be the world Center of Excellence to provide and assist implementation of best practicable strategies to localities, nations, regions and the globe to manage the risk of water related hazards including flood, drought, land slide, debris flow and water contamination. The main guiding principals are Localism and Alliance. Localism is to be need-driven rather then supply driven and Alliance with all the related organizations and initiatives worldwide.

#### **KEY MESSAGES**

- 5. Dr. Andras (UNESCO): Hydrological data in some countries are still classified especially which have direct impact on downstream communities. While daily or average data might be still closed there is a clear willingness among risk sharing countries to share extreme data. Remote sensing will help fill the gap and hopefully to open the data the future. IAHS is working to improve the network of hydrologic data. For ungauged basin, where data are spares and scares, the hydrological sciences are responsible to provide better prediction results having minimum set of data (in addition to the use of remote sensing data).Living with nature requires to also adopting an ecosystem approach along the human side approach.
- 6. Dr. Briceño (ISDR): Risk assessment, including flood hazard map, needs to be based on solid scientific knowledge and good statistics. ICHARM is to take the leading roles for implementing the Hyogo Framework for Action (HFA) in the area of water-related disasters with partner agencies such as UNESCO, WMO, UNU, and others.
- 7. Mr. Tyagi (WMO): Flood damages are increasing over the years, but there is still a big gap in knowledge of the real figures. Integrated flood management is the first building block of IFI. The Objectives of IFI are to ensure Sustainable development (balancing development needs and flood risks); Maximising benefits (ensure livelihood security and poverty alleviation thereby reducing vulnerability); Minimising

loss of life and Environmental preservation. The holistic approach of flood management as intended within IFI although difficult to implement, due to lack of coordination, can be achieved with putting in place appropriate legal frameworks and the right institutions.

- 8. Dr. Thein (UNESCO-IHP): Being intimately aware of the significant achievements that have been made in flood management in recent years and also of existing opportunities to elaborate practical solutions to the above-mentioned context, UNESCO and WMO in close collaboration with the United Nations University (UNU), the International Strategy for Disaster Reduction (ISDR), and the International Association of Hydrological Sciences (IAHS) launched the International Flood Initiative in 2005 in Kobe, Japan. Other UN agencies dealing with various facets of flood management will also be invited to join the Initiative. The International Centre for Water Hazard and Risk Management (ICHARM) hosted by the Public Works Research Institute (PWRI) in Tsukuba, Japan, was endorsed as the global facility and Secretariat, responsible for the IFI at UNESCO's 33rd session of its General Conference.
- 9. Prof. Bogardi, UNU: The concept of human security encapsulates not only the physical security of individuals or groups of individuals, but also the state of their livelihoods and basic freedoms. To achieve human security means to have both freedom from fear and freedom from want. One way to capture human security is through vulnerability analysis of communities exposed to given hazards. UNU-EHS is developing a vulnerability assessment framework that allows capturing different dimensions of vulnerability: social, economic, environmental, and also investigates exposure and coping capacities of communities.
- 10. Dr. Askew (IAHS): It is important that relevant research projects in flood all issue continue and, where possible are strengthened, and that the results of such research are tested and applied in practice. Research is called for to increase what we know about the hazards themselves; to identify and quantify the vulnerability of society to the hazards concerned; to improve our ability to estimate the long-term probability of disasters of all types; to make our short-term forecasts more precise and accurate and our response systems more effective.
- 11. Prof. TAMAI (IAHR): Awareness gradually spreads among citizens and government officers that traditional structural means of flood control are not always cost effective in both hydrodynamic and environmental point of views. Social needs severely altered natural conditions of flood plains. Thus future discussions within IFI should be guided by the concept of natural disturbances and continuity of a river basin.
- 12. Participants' voice: IFI should bring the players from all different sectors as to identify the local needs and the gaps at the local communities and map the activities of all the groups under a needs driven management plan for IFI to move forward. Do not over use vulnerability as it conduct a negative message; the study of vulnerability should be associated with the resiliency of the communities. Living with nature requires to also adopting an ecosystem approach along the human side approach.

## LOCAL ACTION PRESENTED DURING THE SESSION

- LA Mr. TANAKA, ICHARM: Capacity Building of Flood Hazard Mapping ICHARM/JICA Flood Hazard Mapping training course is a five-year program initiated in 2004 where the 2<sup>nd</sup> year's training course was conducted in December 2005. Sixteen trainees from 8 countries from Asia including member countries of the Typhoon Committee participated in the training course. Leading professors in the field of hazard assessment, analysis and mapping as well as international wisdom gave specialized lectures including GIS. The other important content of the training course is the field work called "town watching". Town watching uses existing flood hazard maps of the field as a starting base for filed investigation. By the end of the town watching, trainees got responsive imagination of flood issues and understand what is important and worth considering when producing flood hazard maps. In addition to the training course, ICHARM has a follow up system of training to proceed flood hazard mapping activities in developing countries. Using this system, problems on flood hazard mapping and/or risk management will be collected and fed into ICHARM research activities.
- LA Mr. K. Miyake, Ministry of Land, Infrastructure and Transport (MLIT): Tools for Consensus Building for Comprehensive Flood Loss Prevention Measures In Japan, one of the serious problems to cope with flood hazard is a rapid urbanization, which not only makes the hydrograph sharp by increasing the runoff ratio and decreasing the time of concentration but also increases the vulnerability of the region by population growth and property concentration in flood prone area. For each targeted river basin, comprehensive flood disaster prevention measures council is formed, which is consisted of the representatives of the regional development bureau of MLIT, river related departments and the urban, housing and land department of the prefectural and municipal governments concerned, to discuss the implementation scenario of the comprehensive measures for the river basin. The Council studies and selects concrete measures appropriate to the characteristics of the particular basin and make up a basin improvement plan. In the presentation, the outline of comprehensive flood loss prevention measures in Japan was briefly introduced including the consensus building procedure.

# **ORIENTATIONS FOR ACTION**

International Flood Initiative (IFI) is to be a platform for each participating organization to coordinate the activities for effective flood management over the world. Multiplier effect would be expected through promoting possible mutual collaboration among the participants.

