

5. The United Nations World Conference on Disaster Reduction (WCDR)

5-1. Outline of the WCDR

The United Nations World Conference on Disaster Reduction (WCDR) was held from January 18 to 22, 2005 in Kobe, Hyogo, Japan. The Conference had almost 4,000 participants from 168 states, and provided a unique opportunity to promote a strategic and systematic approach to reduction of vulnerabilities and risks to hazards. It underscored the need for, and identified ways of, building the resilience of nations and communities to disaster. The Conference adopted the “Hyogo Framework for Action: 2005-2015” as a guiding framework for the next decade on disaster reduction.

The Asian Disaster Reduction Center (ADRC) participated in the WCDR, and organized an International Symposium, a Public Forum, several parallel sessions, poster sessions and an exhibition.

5-2. Thematic Sessions

The Thematic Sessions discussed the five themes identified as the priority areas of work for the next ten years through the review of the Yokohama Strategy and Plan for Action (The five themes were; 1. Governance: institutional and policy frameworks for risk reduction, 2. risk identification, assessment, monitoring and early warning, 3. knowledge, innovation and education: to build a culture of safety and resilience, 4. reducing the underlying risk factors, and 5. preparedness for effective response).

In response to the tsunami event in the Indian Ocean, a special technical session was held to support the enhancement of tsunami warning systems in the Indian Ocean by sharing experiences from Pacific countries.

The ADRC participated actively in sessions; Post-disaster Recovery, Risk Communication, Data for Evidence-based Policy Making, Reducing Risk through Effective Use of Earth Observations and Promotion of Tsunami Disaster Mitigation in the Indian Ocean.

5-2-1. Post-disaster recovery: Lessons learnt, challenges and future options

1) Date

January 19, 2005

2) Organisers

- Government of Japan (including Hyogo Prefecture)
- UNDP (United Nations Development Programme)
- Inter-Agency Secretariat of the ISDR (International Strategy for Disaster Reduction)
- UN/OCHA (United Nations Office for the Coordination of Humanitarian Affairs)
- ADRC (Asian Disaster Reduction Center)

3) Purpose of the session

To identify challenges experienced in post-disaster recovery and to recommend future options including the concept of International Recovery Platform as a means of addressing these challenges.

4) Session Agenda

1. Presentation of Case Studies

- “Developing a system for international cooperation in reconstruction”
Mr. Tomio Saito, Vice Governor, Hyogo Prefectural Government, Japan
- “Post-Disaster Recovery: Learning from the Past”
Ms. Margaret Arnold, Program Manager, Hazard Management Unit, World Bank
- “Comparative Study on Recovery & Reconstruction: Challenges and Way Forward”
Mr. Anil Kkumar Sinha, Senior Technical Advisor, Asian Disaster Reduction Center (ADRC)
- “2001 El Salvador Earthquake”
Mr. Alfredo Lazarte-Hoyle, Director, a.i., In Focus Programme on Crisis Response and Reconstruction (IFP/CRISIS), ILO
- “Tsunami Disaster in Sri Lanka on 26th December, 2004”
Mr. Nihal Rupasinghe, Additional General Manager, Central Engineering Consultancy Bureau, Construction Division, Sri Lanka
- “Indian Ocean Tsunami – Key Challenges in Recovery Planning”
Mr. Praveen Pardeshi, Senior Adviser, International Strategy for Disaster Reduction (ISDR) Secretariat

2. Presentation by the Chair

“Synthesis of key challenges identified in the case studies”

Prof. Ian Davis, Disaster Management Center, Cranfield University

3. Future options to support post disaster recovery with risk reduction
 - “Concept of International Platform for Recovery and Reconstruction”
Mr. Satoru Nishikawa, Director for Disaster Preparedness, the Cabinet Office,
Government of Japan
 - Presentation by UNDP, ISDR and OCHA
Mr. Andrew Maskrey, Chief, Disaster Reduction Unit, Bureau for Crisis
Prevention and Recovery, UNDP
4. Feedback from the floor
5. Concluding remarks

5) Outcome of the session

1. Challenges and problems in post-disaster recovery
 - Lack of effective institutions and systems for recovery, including exchange of best practices and experiences
 - Considering socio-cultural, economic and political structures in developing recovery programs
 - Recovery and reconstruction without rebuilding risks
 - Lack of division of roles and responsibilities between different international actors in recovery
 - Lack of agreed methodology for recovery needs assessment
 - Limited capacities of national and local governments to plan and manage recovery
 - Problems in transferring past experiences to new disaster situations in cross-cultural settings
 2. Suggested targets and indicators to measure accomplishments
 - International recovery platform developed as a means for international collaboration and cooperation in recovery and reconstruction
 - Electronic forum for receiving feedback on the development of the international platform
 - Arrangements for coordination and assessments of recovery and reconstruction works
 - Capacity-building activities, including training, within UN agencies, country teams and governments
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Fig. 5-2-1-1 Presenters of the session

5-2-2. Risk Communication Session

1) Purpose

Proper recognition of risks and active participation by the public in disaster risk management are imperative aspects for reducing the negative impact of natural disasters. Risk communication is an effective measure for promoting public awareness and action. However, the effective risk communication is still under development and has not become a common practice. The session examined the current situation and problems in the world, and discussed future development of successful risk communication.

2) Date

January 20, 2005

3) Organizers

- European Commission/Joint Research Centre (EC/JRC)
- United Nations University (UNU)
- Asian Disaster Reduction Center (ADRC)

4) Partners

Australian Bureau of Meteorology, Government of Japan, United Nations Development Programme (UNDP), United Nations Economic and Social Commission for Asia and the Pacific (UN/ESCAP), United Nations Educational Scientific and Cultural Organization (UNESCO), World Meteorological Organization (WMO), RANET, Japan International Cooperation Agency (JICA), and General Insurance Association of Japan

5) Session Agenda

1. Introduction to the session : Mr. Gerald Vollmer, EC/JRC
 2. Introduction of Best Practices - Tools for effective risk communication -
 - RANET : Dissemination and Communication of Environmental Information for Rural and Remote Community Development: Dr. Linda Anderson-Berry, Bureau of Meteorology, Australia
 - Town Watching for Disaster Reduction for Effective and Successful Risk
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Communication: Prof. Dr. Yujiro Ogawa, ADRC

- Learning from Experiences in Communicating Risks: Mr. Manu Gupta, Sustainable Environment & Ecological Development Society (SEEDS)

3. Panel Discussion: Toward effective risk communication

Panelists:

- Dr. Linda Anderson-Berry, Bureau of Meteorology, Australia
 - Prof. Dr. Slobodan P. Simonovic, the University of Western Ontario, Canada
 - Dr. Dusan Sakulski, UNU
 - Dr. Colin Depradine, Caribbean Institute for Meteorology and Hydrology, Barbados
 - Mr. Muhammad Saidur Rahman, Bangladesh Disaster Preparedness Centre (BDPC),
4. Session wrap-up, conclusions and recommendations

6) Conclusion



Fig. 5-2-2-1 Snapshot of the Panel Discussion

The discussions highlighted some challenges in risk communications:

- communicating risks through demonstrations in countries with large
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populations

- communicating technology, risk concepts and terminologies to the local community vis-a-vis local language or dialect
- involvement of the local media in risk communication
- harnessing indigenous knowledge and methods for risk communication at local community level
- dynamic nature of risk perception, and its variability with personal experiences of hazards and timeliness of forecast
- sustaining people's interest in risk reduction
- training disaster management professionals to better communicate risks to the public

The following points were recognized as key elements for successful risk communication:

- addressing the diversity of cultures to which risk is communicated
 - cooperation and networking among stakeholders at all levels
 - application of good practices and lessons learnt from past experiences
 - hazard mapping as a means for enhancing local understanding of risk
 - indicators of effectiveness of risk communication at community level
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5-2-3. Data For Evidence-Based Policy Making

1) Purpose

- Exchange of practices and lessons learned in improvement of ongoing efforts of risk identification and assessment at both the national and global levels
- Presentation of the Disaster Data Consortium

2) Date

January 20, 2005

3) Organizers

- United Nations Development programme (UNDP)
- ISDR Working Group 3 partners (ADRC, OCHA ReliefWeb, CRED, GDIN, MunichRe)
- National Society for Earthquake Technology of Nepal (NSET)

4) Session Agenda

1. Introduction to the session : Chair: Craig Duncan (ReliefWeb)
2. Presentations
 - Presentation on national disaster databases: Kamal Kishore (UNDP) and Amod Mani Dixit (NSET)
 - Case of Nepal. Global disaster databases: Debarati Guha Sapir (CRED) and Thomas Loster (MunichRe)
 - Presentation on the GLIDE number system enabling the linking of national and global databases: Masaru Arakida (ADRC)
 - Presentation on the results of ISDR Working Group 3 study on coverage of Disaster data: Maxx Dilley (IRI, Columbia University)
3. Commentary
Larry W. Roeder (GDIN)
4. Discussion and wrap-up
Chair: Craig Duncan (ReliefWeb)

5) Conclusion

- Evidence-based policy making stems from a value chain of sequential elements: data (carrier of information), information (meaning within a context), knowledge
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(understanding relationships) and wisdom (judgment and experience).

- Capturing and organizing content (data, information, and knowledge) about the social, economic, and environmental impacts of disasters is essential to demonstrate the cost effectiveness of disaster reduction to policymakers.
 - Sharing and disseminating disaster content among providers and users around the world will increase awareness of issues, diversity of inputs, participation in disaster decision making, and policy development.
 - Integrating and mobilizing disaster content will enable analysis, synthesis, and understanding of evolving and increasingly complex disaster-related issues.
 - Developing and implementing infrastructures, processes, organizations, and human interfaces, such as a Global Unique Disaster Identifier, a Disaster Risk Management Assessment Program, and a Global Disaster Information Marketplace will substantially enhance and facilitate evidence-based policy making in the 21st century.
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5-2-4. Reducing Risk Through Effective Use of Earth Observations

1) Purpose

Earth observations provide critical information to inform planners and decision makers at all levels (local to international) and through all stages (mitigation through preparedness, response and recovery) of disaster management. Advances in Earth observation technologies (both in situ and remote sensing), along with developments in computing and data communications, have yielded highly sophisticated tools to identify, monitor, assess, and model hazards that may lead to disasters. The purpose of this session was to provide practical guidance to governments worldwide on how to enhance their risk reduction and disaster management efforts through more effective use of Earth observations.

This session reviewed lessons learned from user and data provider perspectives and identified recommendations for future improvement. Topics addressed included findings from regional workshops; collaborative efforts to improve the use of space-based Earth observations in disaster reduction; and UN-based and ad hoc intergovernmental programs to provide comprehensive, coordinated and sustained Earth observations for disaster reduction and other high priority socioeconomic benefit areas.

2) Date

January 21, 2005

3) Organizers

- Japan Aerospace Exploration Agency (JAXA/Japan)
- United Nations Institute for Training and Research (UNITAR)
- National Oceanic and Atmospheric Administration (NOAA/USA)

4) Session Agenda

1. GEOSS: Intergovernmental Planning to Provide Earth Observations to Benefit Society
Tetsuhisa Shirakawa, Deputy Minister, Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan
 2. Lessons Learned from Building an Integrated Earth Observation System
Kenneth Davidson, WMO World Climate Program, Director, retired
 3. United Nations Facilitating Global Access to Earth Observation System
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4. From Rapid Mapping to Capacity Building

Alain Retiere (UNOSAT) Co-author: Jerome Bequignon (ESA)

5. Making Space-Based Technologies Available to Developing Countries for Improved Risk Reduction and Disaster Management

Sergio Camacho, Director, UN Office for Outer Space Affairs, Co-authors: Harald Mehl (DLR/Germany), Jean-Luc Bessis (CNES/France)

6. The Contribution of Earth Observation to Disaster Risk Reduction Findings from Current Activities

Phillippe Bally (ESA) Co-author: Marc Paganini (ESA, IGOS GEO hazards)

7. Risk Reduction at the Local Level: User Perspectives on the Use of EO

Sadrach Zeledon (Major, Matagalpa, Nicaragua)

8. Improving Asia Regional Network for Disaster Management

Yoji Furuhashi, JAXA/Japan

5) Conclusion

1. Earth observation information is critical for all phases of disaster management from early warning, to emergency response, and to mitigation/prevention efforts.
 2. Comprehensive, coordinated and sustained observations are the keys for realizing full socio-economic benefits from Earth observations.
 3. To be truly useful, Earth observation data must be successfully incorporated into information products that meet clearly identified end-user requirements.
 4. Capacity development and knowledge building are essential. Importance of building capacities from the global level to the local level.
 5. No agency or entity can meet all requirements alone. We must work together through coordinated efforts of various international and regional organizations to seek common solutions for common problems.
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5-2-5. Promotion of Tsunami Disaster Mitigation in the Indian Ocean

1) Purpose

A devastating earthquake occurred off-shore of Sumatra Island on December 26, 2004 and the following tsunami caused unprecedented damage in the Indian Ocean countries. The international community was shocked by this event, and a special session was held at the United Nations World Conference on Disaster Reduction.

This special session was initiated by the Government of Japan and chaired by Mr. Koichi Nagasaka, Executive Director of the Japan Meteorological Agency (JMA), and was opened with remarks by Mr. Koichiro Matsuura, Director-General of UNESCO, followed by the key-note speech by Dr. Laura Kong, Director of International Tsunami Information Center (ITIC). The existing tsunami early warning systems in the Pacific Ocean were presented by Mr. Charles McCreery, Director of Pacific Tsunami Warning Center (PTWC) and Mr. Noritake Nishide, Director of JMA. The current situation was then reported by the representatives of tsunami affected countries. The ADRC contributed to the session as a commentator based on the immediate field survey in these countries. In addition, a panel discussion was held with Dr. Kenji Satake of the Active Fault Research Institute as the coordinator to develop an international strategy for response to the tsunami disaster.

2) Date

January 19, 2005

3) Organizers

- Japan Meteorological Agency (JMA), Government of Japan
- Cabinet Office of Japan (CAO), Government of Japan
- Ministry of Land, Infrastructure and Transport (MLIT), Government of Japan
- Asian Disaster Reduction Center (ADRC)
- United Nations Educational, Scientific and Cultural Organization / Intergovernmental Oceanographic Commission (UNESCO/IOC)

4) Session Agenda

1. Opening Address: Mr. Koichiro Matsuura, Director General of UNESCO
 2. Keynote Speech: Dr. Laura Kong, Director, International Tsunami Information Center
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(ITIC)

The international coordination functions of the ITSU among member countries in the Pacific Ocean, including the role of the ITIC, and the major activities which the ITSU has developed.

3. Session 1

(1) Roles and operations of Tsunami Warning System in the Pacific

Dr. Charles McCreery, Director, Pacific Tsunami Warning Center (PTWC), U.S.A.

Mr. Noritake Nishide, Director, Administration Division, Seismological and Volcanological Department, Japan meteorological Agency (JMA)

(2) Report from the Indian Ocean region

Indonesia, Thailand, India, Sri Lanka, and Maldives

Comments from Mr. Akihiro Teranishi, Senior researcher, ADRC

Mr. Tsukasa Shimogouchi, Director, Disaster Management Division, Fire and Disaster Management Agency, Japan

4. Session2 (Panel Discussion)

Possible actions for establishment and operation of a tsunami early warning system

Coordinator: Dr. Kenji Satake, Chair, Tsunami Commission, International Union of Geodesy and Geophysics (IUGG)

Panelists: Dr. Laura Kong (ITIC), Dr. Charles McCreery (PTWC), Dr. Geoff Love (Australia), Dr. P. J. Prih Harjadi (Indonesia), Dr. Maryam Golnaraghi (WMO), Professor Fumihiko Imamura (Tohoku University, Mr. Shuhei Kazusa (Cabinet Office of Japan), and Mr. Noritake Nishide (JMA)

5. Closing Remarks by Chair

Summary and Closure of the session

5) Conclusion

Participants agreed through the discussion of the session as follows;

- (1) A tsunami early warning system (TEWS) should be established under the responsibility of each country
 - (2) Experiences in the Pacific is useful on the establishment of the TEWS
 - (3) The TEWS includes risk awareness, technical observation, easy-to-understand warnings to the public and raising public awareness
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- (4) Support to the Indian Ocean Countries by the international community regarding the above mentioned

The time schedule of the implementation was agreed as follows;

- (1) Urgent Actions (in the upcoming 6 months)
- (2) Introduction of an interim warning system (from 6 months to 2-3 years)
- (3) Full Operation (after 2-3 years and beyond)

The conclusions of the session were reported to the international plenary session on January 20, 2005 for incorporation into the report “Statement of the special session - risk reduction towards the safer future –”.