

Summary Report

Asian Conference on Disaster Reduction 2006 (ACDR 2006)

**“Towards the Realization of the Strategic Goals of the
Hyogo Framework for Action (HFA) 2005-2015”**

March 15-17, 2006

Seoul, Republic of KOREA

Organized by:

Government of the Republic of Korea

Government of Japan

United Nations Inter-Agency Secretariat of the International Strategy for
Disaster Reduction (UN/ISDR)

World Meteorological Organization (WMO)

United Nations Office for the Coordination of Humanitarian Affairs (UN/
OCHA)

United Nations Development Programme (UNDP)

National Emergency Management Agency (NEMA), Republic of Korea

Asian Disaster Reduction Center (ADRC)

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Conference Summary

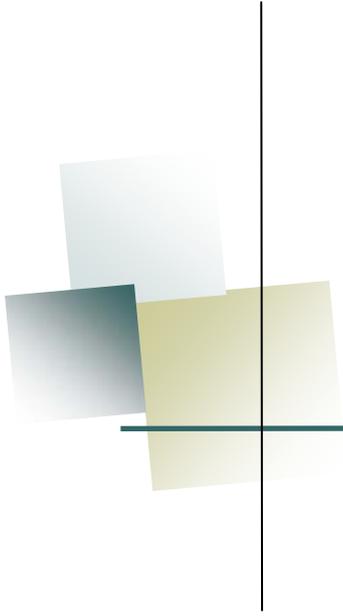
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Acknowledgement

The organizers of the Asian Conference on Disaster Reduction 2006 wish to express sincere gratitude to all the delegates, representatives of organizations and individuals who participated in the Conference and provided substantive contribution to the deliberations.



Overview

Introduction

The Asian Conference on Disaster Reduction (ACDR) 2006 was held from 15 to 17 March 2006 in Seoul, Republic of Korea. The Conference was organized by the Government of Republic of Korea, Government of Japan, United Nations Inter-Agency Secretariat of the International Strategy for Disaster Reduction (UN/ISDR), World Meteorological Organization (WMO), United Nations Office for the Coordination of Humanitarian Affairs (UN/OCHA), United Nations Development Programme (UNDP), and Asian Disaster Reduction Center (ADRC). It was participated by 146 people including high dignitaries and officials from Republic of Korea and twenty-four other countries, mainly from Asia, along with representatives of UN and international organizations, media, and NGOs.



BACKGROUND PAPER

1. Introduction

1.1 Composing the most disaster-prone region of the world and home to more than a third of the world's population, Asian countries suffer severe disasters every year. The increasing vulnerability of peoples in Asia is largely related to demographic conditions, technological and socio-economic changes, expanding urbanization, increasing settlement in high risk environments, and growing poverty, among other conditions. The recurrence of disasters and the prevalence of disaster risks present an enormous development challenge to all countries in Asia today. The detrimental impact of disasters seriously negates socio-economic gains of countries and puts human development at great risk. Disasters exacerbate poverty, destroy social infrastructures, degrade the environment, and cause political instability. Moreover, they deplete already scarce resources for humanitarian and development assistance. Thus, unabated disaster occurrences make sustainable development goals even more elusive. Yet, as these realities prevail, the world has further witnessed in 2004-2005 enormous human sufferings and large-scale devastations caused by the Indian Ocean Tsunami and the South Asia Earthquake.

1.2 In retrospect, the world community has been addressing the continuing concerns over disaster trends since the UN World Conference on Natural Disaster Reduction held in Yokohama, Japan in 1994 on the occasion of the mid-term review of the International Decade for Natural Disaster Reduction 1990-1999. The conference adopted the Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation and its Plan of Action, which served as the international blue print for disaster reduction. However, despite this and the unrelenting efforts by local, national, regional and international actors, disasters continued to affect an increasing number of people and exacted even

larger economic losses. In 2001, the UN General Assembly endorsed the review of the Yokohama Strategy (A/RES/56/195). The review aimed at identifying gaps and means of implementation towards charting the course of action of the international community for the next decade.

1.3 In 2005, the UN World Conference on Disaster Reduction (WCDR) was held in Kobe, Hyogo, Japan, from 18 to 22 January. The WCDR marked the conclusion of the review of the Yokohama Strategy and its Plan of Action. The specific gaps and challenges identified in the review of the Yokohama Strategy were (a) governance: organizational, legal and policy frameworks; (b) risk identification, assessment monitoring and early warning; (c) knowledge management and education; (d) reducing underlying risk factors; and (e) preparedness for effective response and recovery. Moreover, the WCDR resolved to pursue the substantial reduction of disaster losses, in lives and in the social, economic, and environmental assets of communities and countries for the next ten years. The WCDR adopted the Hyogo Framework for Action 2005-2015 (HFA): Building the Resilience of Nations and Communities to Disasters, which provides a clear and authoritative framework for pursuing disaster risk reduction and builds on other relevant multilateral frameworks and declarations. The framework provides for a set of priorities for various stakeholders of disaster risk reduction for the decade. (See 3.2 and Annex A: Hyogo Framework for Action.)

1.4 Following up on the WCDR, the Asian Conference on Disaster Reduction was convened in Beijing, China, on 27-29 September 2005. It aimed to consolidate political support, commitment and action for the implementation of the HFA in the Asian region. (See Annex C: The Beijing Action Plan)

1.5 With these developments, countries in the Asian region are encouraged to introduce relevant and responsive initiatives and strengthen existing efforts in line with the accomplishment of the priorities for action of the HFA. Effectively, Asian countries are expected to facilitate the implementation of the HFA in the region, while international and regional organizations shall further support this process.

2. Disaster Reduction Activities in Asia towards the WCDR

2.1 Since the UN World Conference on Natural Disaster Reduction held in Yokohama in 1994, the international community has undertaken increasing efforts to implement disaster reduction. The Yokohama Conference had also furthered international cooperation in this area and the Plan of Action adopted by participants had presented specific benchmarks and attainable objectives. In this context, countries in all regions have been working towards understanding the importance of disaster risk and vulnerability reduction and creating means and measures to counter the impact of natural and other hazards.

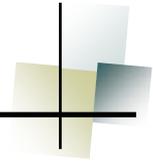
2.2 In pursuit of the Yokohama Strategy in Asia and with the heightened awareness for disaster reduction following the Great Hanshin-Awaji Earthquake, the Asian Natural Disaster Reduction Conference, a ministerial-level meeting of Asian countries, was held in Kobe, Hyogo, Japan in 1995. It adopted the Kobe Declaration on Natural Disaster Reduction which included an agreement to consider the creation of a "system which has the functions of a disaster reduction center for the Asian region". The series of meetings that followed led to an agreement among 20 Asian countries to establish a center that would serve as the secretariat of the "system" forged during the Asian Disaster Reduction Cooperation

Promotion Meeting held on 16-17 June 1997.

2.3 In this regard, the Asian Disaster Reduction Center (ADRC) was established on 30 July 1998 in Kobe, Hyogo, Japan. It was mandated to facilitate the exchange of disaster reduction experts from countries and international bodies, to accumulate and provide disaster reduction information, and to undertake research in international cooperation in disaster reduction. Upon establishment, ADRC was comprised of 22 member Asian countries, and four advisor countries from outside Asia, and ADPC as an observer organization. Later, more countries had joined as members: Armenia in August 2000, Kyrgyz, in July 2002 and Pakistan in July 2005. ADRC now consists of 25 member countries.

2.4 Furthermore, at the global level, the UN General Assembly in 1999 launched the UN International Strategy for Disaster Reduction (UN ISDR) to sustain the initiatives and gains of the UN International Decade for Natural Disaster Reduction (1990-1999). It builds on the lessons from IDNDR, the experience of the Yokohama Strategy, and the Geneva Mandate of 1999. The ISDR reflects a major conceptual shift from the traditional emphasis on disaster response to disaster reduction, and thus seeks to promote a "culture of prevention". The approach reflected in the ISDR is premised on an appreciation of the fact that the loss of life and destruction resulting from disasters are not inevitable and can be mitigated by reducing the vulnerability of communities to natural hazards. It recognizes that natural hazards in themselves do not inevitably lead to disasters, but disasters result from the impact of natural hazards on vulnerable social systems. In other words, natural disasters can be prevented through conscious human action designed to reduce vulnerability.

2.5 Since its launch, the ISDR has worked to shift the primary focus and emphasis from hazards and their physical consequences to



emphasize more the processes involved in incorporating physical and socio-economic dimensions of vulnerability into the wider understanding, assessment and management of disaster risks. This highlights the importance of integrating disaster risk reduction into the broader context of sustainable development and related environmental considerations. In this regard, the ISDR provides a global framework for action with the objective of reducing human, social, economic and environmental losses due to natural hazards and related technological and environmental phenomena. It aims at building disaster resilient communities by promoting increased awareness on the importance of disaster reduction as an integral component of sustainable development.

2.6 In January 2000, through resolution 54/219, the General Assembly established two mechanisms for the implementation of ISDR; the Inter-Agency Secretariat and the Inter-Agency Task Force on Disaster Reduction. This was reconfirmed in resolution 56/195 in December 2001. The General Assembly also called upon governments to establish national platforms or focal points for disaster reduction, and to strengthen them where they already exist, with a multisectoral and interdisciplinary approach.

2.7 In order to accelerate the adoption of ISDR strategies in Asia, the Asian Disaster Reduction Center (ADRC) and the UN OCHA Asian Disaster Response Unit in Kobe, Hyogo, Japan, in cooperation with key stakeholders in the region, have initiated a series of consultations in 2001-2003. The meetings focused on how reducing disaster risks and responding to disasters could be accomplished more efficiently and more effectively together. The outcome of the discussions was a common understanding of the need to mainstream disaster risk management in all development activities and to set the agenda for a more coherent and proactive disaster management approach that addresses the underlying causes of disaster risks and the vulnerability of communities

in Asian countries. To address adequately these needs, the key stakeholders in Asia have agreed to promote the Total Disaster Risk Management Approach or TDRM, as a holistic strategy for more effective disaster risk reduction and response in the region. As a regional strategy, it vigorously promotes disaster risk reduction and response through the implementation of disaster risk management and the promotion of multidisciplinary and inter-sectoral cooperation and collaboration among stakeholders.

2.8 The development and adoption of the TDRM approach was the major course of action at the Consultative Meeting on Regional Cooperation in Disasters held in Kathmandu, Nepal, in July 2001. The concept was presented to various stakeholders in the region, including disaster management practitioners, academicians, and NGOs. Its first formal introduction was to official delegates of Asian governments in the Asian Conference on Disaster Reduction held in New Delhi, India, in January 2002, and to delegates of Asian NGOs in a workshop on networking held in Kobe, Hyogo, Japan, in February 2002. Afterwards, TDRM was shared to important regional organizations in a consultative meeting held in Bangkok, Thailand, in June 2002, and to government officials of Asian countries in a workshop held in Kobe, Hyogo, Japan, in August 2002.

2.9 As disaster risks and vulnerabilities increase with flawed development activities and the prevalence of extreme climate events, it has become urgent to promote multi-disciplinary and inter-sectoral partnerships at all levels which TDRM advocates for. It has become also essential to build consensus on the need for international cooperation for disaster reduction and to determine the relative positioning of this cooperation within the general schemes of current international cooperation and development policies. In this regard, the Asian Conference on Disaster Reduction 2003 was held on 15-17 January 2003

in Kobe, Hyogo, Japan. The conference aimed: (a) to understand the achievements and challenges in disaster reductions in Asia, (b) to develop the paradigm of regional and international cooperation, and (c) to build disaster reduction capacity and propose guidelines to improve it for the Asian region, as a contribution to the review of the Yokohama Strategy and Plan of Action for a Safer World.

2.10 In this conference, the following key issues emerged from the discussions as major concerns and challenges in the Asian region: (a) Urban vulnerability and disasters, (b) Adaptation to climate change, (c) Multi-disciplinary and inter-sectoral cooperation to address emerging challenges, (d) Enhancement of information management capacity.

2.11 While the Asian Conference on Disaster Reduction 2003 identified that the above four areas require strengthening, the question remains: How could achieve these objectives be achieved. In order to do so, it was necessary to identify concrete measures and actions responding to general objectives that were compatible with current international strategies and programs. This latter aspect was important to ensure that local and national undertakings were in consonance with internationally shared goals.

2.12 The Asian Conference on Disaster Reduction 2004 held on 4-6 February 2004 in Siem Reap, Cambodia, emphasized that the important challenges today concern finding effective ways to translate disaster risk reduction concepts into practice, mainstreaming disaster risk reduction into national development plans and policies, institutionalizing disaster risk reduction programs at the community level, and filling in any existing gaps in the disaster reduction cycle. Concrete measures, tools and mechanisms need to be improved to achieve this aim. Conceptual frameworks need to yield specific programs of action focused on people

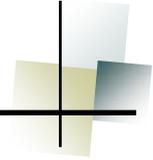
and the actual needs of the communities.

2.13 In response to the emerging issues, concerns and challenges, the conference agreed that the following actions were important: (a) Comprehensive review of national disaster management situation; (b) Evolution of national policies for disaster reduction; (c) Investment in disaster reduction; (d) Communication and information management, and (e) Enhancement of partnerships.

3. WCDR and the Adoption of the HFA 2005-2015

3.1 The UN World Conference on Disaster Reduction (WCDR) held on 18-22 January 2005 in Kobe, Hyogo, Japan, represents a landmark in worldwide understanding and commitment to implement a disaster risk reduction agenda. Governments, regional and UN and other international organizations, local authorities, NGOs and experts, as well as international financial institutions, reviewed the progress, shared good practices and experiences in the various fields of disaster risk reduction. The WCDR successfully channeled the heightened interest created by the devastating earthquake and tsunami disaster in the Indian Ocean on 26 December 2004 into concrete commitment to disaster risk reduction. This commitment was captured in the Hyogo Declaration and the HFA adopted at the WCDR. It provides for a quantum leap in building capacities to reduce disaster losses as part of development and humanitarian strategies. (See AnnexA: Hyogo Framework for Action, ANNEX B: Hyogo Declaration).

3.2 Specifically, the WCDR presented and adopted the following five priorities for action: (a) Ensure that disaster risk reduction is a national and local priority with strong institutional basis for implementation; (b) Identify, assess and monitor disaster risks and enhance early



warning; (c) Use knowledge, innovation and education to build a culture of safety and resilience at all levels; (d) Reduce underlying risk factors; and (e) Strengthen disaster preparedness for effective response at all levels.

4. Significant Progress and Remaining Challenges in Disaster Reduction in Asia after the WCDR

4.1 The Asian Conference on Disaster Reduction (Beijing Conference) was convened in Beijing, China on 27-29 September 2005. It was organized to enhance regional cooperation in the implementation of the HFA. As a first step towards reducing disaster risk and attaining sustainable development, Asian countries are encouraged to proceed in accordance with the HFA to achieve tangible results of a set of time-bound activities which are of immediate concern to all Asian countries in their pursuit of poverty reduction and sustainable development. (See Annex C: The Beijing Action Plan)

4.2 Some Asian countries have been moving towards developing national platforms for disaster risk reduction and implementing strategies and programs in accordance with the HFA. These include India, Indonesia, Sri Lanka, which have introduced steps towards the strengthening of their respective national disaster management systems and passage of legislation and laws for more effective disaster risk reduction.

4.3 National governments are encouraged to formulate their respective strategic national action plans for disaster risk reduction according to their established national priorities for the implementation of the HFA and to put in place a national mechanism for periodic review of the implementation of the plan. Through the advocacy and facilitation of UN/ISDR and the support to governments of UN Country Teams, this mechanism should set in motion a process for the

development of a commonly agreed set of indicators for measuring the progress achieved at local, national, and regional levels.

4.4 Moreover, in Asia, ADRC has been playing a leading role for enhancing national initiative and capacity for the implementation of the HFA in the Asian countries through the various supportive efforts. These include the assistance for establishing a Tsunami Early Warning System in the Indian Ocean and the activities for fostering communities capabilities for disaster reduction in the context of Total Disaster Risk Management.

4.5 In addition to ADRC, there have been a number of other regional mechanisms and capacities available to support and facilitate disaster risk reduction and response at the national and community level. To implement the HFA, these existing mechanisms should be further strengthened, including expanding their service fields and cooperation among such mechanisms should be further developed. In these processes, national governments are encouraged to work closely with relevant international organizations, development, technical assistance and funding agencies, and to avail of the experience and opportunities presented by other existing mechanisms.

4.6 The ISDR Asia Partnership for Disaster Reduction (IAP) was launched at the Asian Conference on Disaster Reduction 2004, and has evolved a valuable collaboration among member organizations. The members of the IAP are UNDP, UNESCAP, UN/ISDR UN/OCHA, (UN inter-agency partners for DRR) and two regional organizations, ADPC and ADRC. The members of IAP recently met in Bangkok on 5 August 2005 to review and redefine its role, to identify priority areas for action that will enable the partnership to contribute to the implementation of the HFA. The role of the partnership was to: (1) promote disaster risk reduction throughout the region by conducting strategic initiatives in target countries and sub-regions in partnership with other entities as

required by each specific case; (2) develop a forum for discussion, experience sharing and information exchange to allow dialogue and strengthen the individual characteristics for the partners and as a group; and (3) ensure that the recommendations in the HFA are adapted to meet the priority requirements of each country in the Asia-Pacific Region.

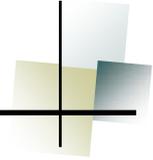
4.7 More recently, on the recommendation of the WCDR and in support of HFA, the International Recovery Platform (IRP) was launched in May 2005 in Kobe, Hyogo, Japan, with Japan's support to address the emerging gaps and constraints in post-disaster recovery. Through collaboration and cooperation among key UN Agencies (UNDP, ISDR, OCHA and ILO), ADRC and other stakeholders like the World Bank and the IFRC, the IRP intends to develop mechanisms, tools and guidelines for efficient and effective recovery process in disaster affected countries. As one of the initial projects, the IRP Secretariat, or the "Kobe Hub", is currently building a database for good practices and lessons observed from past disasters and recovery experiences. This initiative is part of the development of a cross-disaster knowledge management kit in support of better and more effective post-disaster recovery interventions. Similarly, a "Geneva Hub" is focused on initiatives to enhance recovery operations, while another, "Turin Hub", is coordinating capacity building related activities.

4.8 In view of the enormous recovery requirements following the Indian Ocean Tsunami, the UNDP/BCPR has launched its Regional Program on Capacity Building for Sustainable Recovery and Risk Reduction in Tsunami Affected Countries. This is a regional project on capacity building in post-tsunami recovery, which has disaster reduction components supportive of the HFA. Its planned outcomes are: (a) improved information

management systems of post-tsunami recovery and disaster reduction efforts; (b) learning tools and initiatives available to the region for building post disaster recovery and disaster risk management capacity; and (c) enhanced effectiveness and coherence of multi-hazard, end-to-end early warning systems at the local level.

4.9 Over the years, WMO a specialized technical agency of the United Nations, through the coordinated network of the National Meteorological and Hydrological Services, has worked to develop the global operational infrastructure for observing, detecting, research and forecasting of the weather-, water- and climate-related hazards in support of national early warning systems. With a deep commitment to fostering partnerships for advancing the HFA particularly related to the second HFA high priority area (i.e., identifying, assessing and monitoring risks and enhancing early warnings), WMO, through its crosscutting Natural Disaster prevention and Mitigation Programme has developed a multi-hazard strategic plan. Through a coordinated approach of its ten scientific and technical Programmes and strategic partnerships, WMO is working to promote the critical benefits of early warning systems as an integral part of the national disaster risk management policies and improving and expanding capacities for hazard early warnings, developed and issued by NMHSs, in support of disaster risk reduction activities in the countries.

4.10 UN/OCHA has also been vigorously supporting capacity building programs for strengthening national and regional preparedness for effective disaster response. It has also facilitated the capacity enhancement of UN Country Teams for contingency planning and coordination of phased interventions for disaster reduction and response at the country level.



5. Asian Conference on Disaster Reduction 2006 (Republic of Korea)

5.1 The Asian Conference on Disaster Reduction 2006: Towards the Realization of the Strategic Goals of the Hyogo Framework for Action (HFA) 2005-2015 is hosted by the Government of Republic of Korea and jointly organized by the Governments of the Republic of Korea and Japan, the Asian Disaster Reduction Center (ADRC), the Inter-Agency Secretariat of the International Strategy for Disaster Reduction (UN/ISDR), the World Meteorological Organization (WMO), the United Nations Development Program (UNDP) and the United Nations Office for the Coordination of Humanitarian Affairs (UN/OCHA). It is slated to be held in March 2006 in Seoul, Republic of Korea, about a year after the WCDR and six months after the Beijing Conference.

5.2 For its aims, the ACDR 2006 shall review the current status of the implementation of the strategic goals and priorities for action in accordance with the HFA, with a view to ensuring sustainable social and economic development in the Asian region. The ACDR 2006 shall also provide the participants the opportunity to be exposed to relevant guidelines and tools to assist in the implementation of disaster risk reduction activities in the context of the HFA.

5.3 The expected outcomes of the ACDR 2006 include: (a) Enhanced awareness of the participants on the priorities for action of the HFA, as they are expected to facilitate the implementation of the HFA in their respective countries; (b) Identification by the participants of the impediments in their respective countries and their concrete and practical measures for the successful implementation of the HFA; (c) Defining national strategies and support mechanisms for HFA implementation; (d) Defining coordination requirements and priority actions for HFA implementation in specific Asian countries and

appreciation of the Strategic National Action Plan (SNAP) (to be introduced by UN/ISDR) as an important support mechanism; and (e) Enhanced cooperation and collaboration among governments, the United Nations system, other international and regional organizations, NGOs and other stakeholders towards ensuring smooth implementation of the HFA.

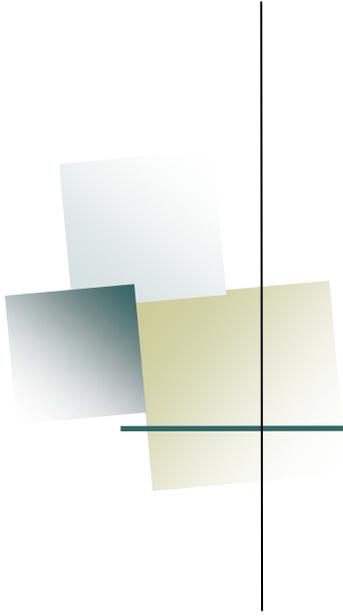
5.4 Additionally, the participants are expected to recognize and consider themes related to the emerging roles of women and their empowerment in disaster risk reduction.

ANNEXES

A The Hyogo Framework for Action (HFA)

B The Hyogo Declaration

C The Beijing Action Plan



Opening Ceremony



Opening Remarks by Mr. Won-Kyong Moon
 Administrator, National Emergency Management Agency (NEMA)
 Republic of Korea



Congratulatory Address by Mr. Kakazu Chiken
 Senior Vice Minister, Cabinet Office, Japan



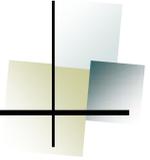
Delivery of a message from Mr. Michael Jarraud,
 WMO Secretary General by Ms. Haleh Kootval,
 Chief of the Public Weather Services and
 Applications Programme Department



Keynote Speech by Mr. Salvano Briceno,
 Director, UN/ISDR



Keynote Speech by Mr. Masayuki Kitamoto,
 Executive Director, ADRC



◆ Opening Remarks

ACDR 2006 officially began with the opening remarks of **Administrator Won-Kyong Moon of the National Emergency Management Agency (NEMA) of the Republic of Korea**, the host country. Administrator Moon welcomed the participants with expressed appreciation for the attendance. He cited the work of the ADRC in promoting discussions and information sharing as well as international cooperation and coordination in disaster risk reduction. He also cited the importance of the conference as it aims to review the progress made by countries in line with the implementation of the Hyogo Framework of Action. Mr. Moon conveyed his sympathy to the victims of the Indian Ocean Tsunami and expressed hope that through the unified strength of countries and the guidance of the HFA, the problem of disasters could eventually be overcome and the vision of a safer global village is attainable.

◆ Congratulatory Addresses

On behalf of the **Government of Japan, Honorable Senior Vice Minister Chiken Kakazu**, congratulated and gratefully appreciated the Government of the Republic of Korea, as host, and the Asian Disaster Reduction Center, the United Nations Inter-Agency Secretariat of the ISDR, and the World Meteorological Organization, as co-organizers. Citing recent disaster events, the Minister underscored the importance of each country's work on disaster risk reduction, particularly in reducing social vulnerabilities to natural hazards, towards building a sustainable and safe society. He considered the conference as an important opportunity for the HFA to be implemented in every country. Lastly, Minister Kakazu conveyed the value of disaster risk reduction as an appropriate area for international cooperation and the value of this conference in

helping the participating countries improve their respective capacities through shared and applied information and technical knowledge.

Ms. Haleh Kootval, chief of the Public Weather Services and Applications Programme Department delivered **a message from Mr. Michael Jarraud, WMO Secretary General**. The message affirmed that the development and integration of risk knowledge and early warning systems as an integral component of disaster risk management activities could reduce considerably the loss of human life and socio-economic damages caused by natural hazards. Thus, established and improved early warning systems and the application of relevant and available technologies could prevent natural hazards from translating into disasters. WMO, it was stated, is deeply committed to advancing the HFA, particularly the second priority area of identifying, assessing and monitoring disaster risks and enhancing early warning systems. WMO promotes the establishment of multi-hazard early warning systems, the strengthening of linkages among national and local authorities and early warning agencies, and strategic partnerships at international and regional levels along this HFA priority area for action.

Opening Remarks

Mr. Moon Won-Kyong

Administrator, National Emergency Management Agency, Republic of Korea

Your excellencies, distinguished delegates, ladies and gentlemen.

Good morning,

I am Moon Won-Kyong, Administrator of the National Emergency Management Agency of the Republic of Korea. I would like to express my deepest appreciation for your attendance, and I warmly welcome all the participants and guests.

ADRC has been working enthusiastically through discussions and information sharing to make solutions to establish a safer global village from disasters. With the active support of our member countries, we could establish IRP to make international cooperation and coordination in disaster response and reconstruction. I believe that we can step forward to the base of worldwide disaster response network when we gather our strength to mitigate disasters.

Today, we are here again to bear the fruits of our hope that we have brought up together.

The Asian Conference on Disaster Reduction 2006 now officially begins one year after the WCDR last year in Kobe, aiming to review the progress made, identify challenges, and promote the implementation of disaster risk reduction in the context of the Hyogo Framework for Action with a view to ensuring sustainable social and economic development in the Asian region.

Today, it is our pleasure to have many experts such as policy makers and academics from member and advisory countries of ADRC, delegates from international organizations including UN/ISDR and WMO, and NGOs. Through this three-day conference in Seoul, various presentations and concentrated discussions on the topics of disaster reduction are expected.

Before our sorrow from the tremendous damage by Tsunami on the Indian Ocean rim has been relieved, many Asian countries were again hit by large scale disasters. I would like to extend my heartfelt sorrow and sympathy to the victims of disasters.

I believe that disasters should be overcome with our unified strength. It is the pride of ADRC as an open regional community that member countries are actively leading and participating in the disaster reduction activities.

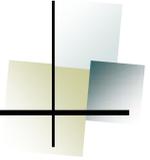
I would sincerely hope that the discussion on the two major themes, "Review of the current status of the implementation of the disaster risk reduction" and "Towards the provision of relevant guidelines and tools to assist the implementation of disaster risk reduction in the context of the Hyogo Framework for Action in the Asian region" bring forth fruitful results to lead the 'construction of a safer global village from disaster damages'.

Distinguished delegates, ladies and gentlemen,

I would like to wish this conference will be able to add meaningful values and effectiveness to the on-going activities based on closer collaboration between our member countries.

Finally, I sincerely hope that this conference will create additional momentum for building more effective disaster management system as we move to the next stage.

Thank you for your kind attention.



Congratulatory Address

Mr. Chiken Kakazu
Senior Vice-Minister of Cabinet Office, Japan

Mr. Moon Won Kyong, Administrator of National Emergency Management Agency, the Republic of Korea,

Mr. Salvano Briceno, Director of United Nations Inter-Agency Secretariat of the International Strategy for Disaster Reduction

Distinguished representatives of countries and participants,

I am greatly honored to address my sincere congratulations on this occasion of the Asian Conference on Disaster Reduction 2006 with such a large attendance of representatives from member countries of the Asian Disaster Reduction Center, international organizations, and others. I would also like to express my deepest appreciation for their dedicated efforts to the Government of the Republic of Korea, as the host country, as well as the Conference organizers including Asian Disaster Reduction Center, United Nations Inter-Agency Secretariat of the International Strategy for Disaster Reduction, and World Meteorological Organization.

More than one hundred thousand people fell victim to the Indian Ocean Tsunami occurred in December 2004. Thereafter, a number of natural disasters all around the world, such as Hurricane Katrina in the United States, a massive earthquake in South Asia, landslides in Indonesia and the Philippines have claimed precious lives and properties. We must live with risk of natural threats. However, by reducing social vulnerability toward natural disasters, we will be able to reduce the damages. In order to protect the people's lives, health and property, and to build a sustainable and safe society, each country needs to make proactive efforts for disaster reduction, occasionally, in collaboration with international organizations and other countries.

I understand that this Conference is aimed at ensuring follow-up activities of the implementation of the Hyogo Framework for Action (HFA), which was adopted at the United Nations World Conference on Disaster Reduction held in Kobe, Hyogo, Japan in January 2005, and it will review the current status of the countries and share effective ideas and methods for further promotion of the implementation of HFA. I believe this is a very important opportunity for the Hyogo Framework for Action (HFA) to be implemented in each country, and greatly expect your active and frank discussion in the sessions.

I think that disaster reduction, as an administrative domain, is a very suitable area for international cooperation because it aims at a universal goal of protecting people's lives, and it stems from natural disasters. When one country prepares for future disasters or takes measures for disaster mitigation at normal time, it can improve its capacity for disaster risk management effectively by making utilization of other countries' information and know-how, and international organizations' frameworks. I hope the Conference, as well as efforts by international organizations including Asian Disaster Reduction Center may serve as help for each country's implementation.

Finally, I would like to express my deepest respects and gratitude to you, who address the day-to-day challenges of natural disasters. I would like to conclude my remark by wishing discussions and information shared in this Asian Conference on Disaster Reduction 2006 will be effectively utilized in your activities, your efforts will make further progress, and disaster damage will be reduced in the Asian region.

Thank you.

Congratulatory Statement

Michel Jarraud
Secretary-General, World Meteorological organization

Distinguished Delegates, Your Excellencies, Ladies and Gentlemen,

On behalf of the World Meteorological Organization(WMO), I wish to express our appreciation for the opportunity to address the Asian Conference on Disaster Reduction(ACDR).WMO is grateful to the Government and people of Republic of Korea for hosting this Conference, as well as for their hospitality and commitment to disaster reduction. I also would like to extend our deep appreciation to Asian Disaster Reduction Centre for organizing and to the Government of Japan for supporting this Conference.

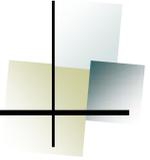
Every year, disasters caused by a wide range of hazards impact many communities around the world, leading to loss of human lives, destruction of social and economic infrastructure, and degradation of the already fragile ecosystems. About 90% of these disasters are of hydro-meteorological origin. When disasters occur, they significantly set back national development in terms of health, food security, and socio-economic growth by years, if not decades. This effect is especially severe on the less developing countries who suffer the greater relative losses in terms of the Gross Domestic Product (GDP).

Recent statistics by the Centre for Research on the Epidemiology of Disasters (CRED, University of Louvain, 2004) indicate that during the decade 1994-2003, more than 255 million people were affected on average by natural disasters each year. During the same period, disasters claimed nearly 600,000 lives and economic cost of over 250 billion USD. Some of these episodes are quite fresh in our minds, such as the tragic Indian Ocean Tsunami of 26 December 2004 and the destructive mudslides that occurred in the eastern Philippines just a few weeks ago.

During the Second World Conference on Disaster Reduction (Kobe, Hyogo, Japan, 18-22 January 2005), 168 countries adopted the Hyogo Framework for Action 2005-2015 and identified five high priority areas of action for disaster risk reduction. Furthermore, the Hyogo Framework for Action stresses that disaster risk management must be addressed with an integrated and multi-hazard approach.

Following the Second World Conference on Disaster Reduction, at the 2005 United Nations World Summit (New York, September 2005), Governments requested the establishment of worldwide early warning systems for all natural hazards, building on existing national and regional capacities to complement broader disaster preparedness and mitigation initiatives.

Actions can indeed be taken to reduce considerably the loss of life and socio-economic damages caused by natural hazards, through the development and integration of risk knowledge and early warning systems (EWS) as an integral component of disaster risk management activities. Over the last decades, while the loss of life and economic damage figures have been quite high, it is most important to stress that they would have been much higher without all the pre-disaster efforts made and, particularly, without the existing early warning systems. Therefore, all the relevant technologies, expertise, capacities and experiences that were available have permitted us to prevent many other natural hazards from becoming natural disasters. With a deep commitment to advancing Hyogo Framework for Action, WMO is taking actions regarding the second high priority area, namely "identifying, assessing and monitoring disaster risks and enhancing early warnings" as an integral component of disaster risk management.



A fundamental precondition for national disaster preparedness is the availability of well-functioning “end-to-end” early warning systems, in order to deliver accurate information in a timely manner to the authorities, risk managers and the population at risk.

National Meteorological and Hydrological Services are organizations that operate 24 hours a day, 365 days a year and are responsible for the issuance of around-the-clock early warnings for a wide range of hazards such as tornadoes, tropical cyclones, storm surges, floods, droughts, heat waves and severe storms. Currently, nearly 60 National Meteorological and Hydrological Services in the world also have their governments’ mandate to provide seismic and/or tsunami early warnings. However, the capabilities and resources of the National Meteorological and Hydrological Services significantly vary from country to country. By designating appropriate resources to these organizations and strengthening their link to the risk management authorities, we can be even more effective and save more lives.

Through its internationally coordinated network of National Meteorological and Hydrological Services (NMHSs) of its 187 Members, 10 International Programmes, three Global Meteorological Centers and 40 Regional Specialized Meteorological Centres, the World Meteorological organization (WMO) has developed a global operational systems for observing, monitoring, detecting, forecasting and providing operational early warnings for weather-, climate- and water-related hazards. These efforts have led to significant progress in different aspects of EWS, although many major challenges still remain ahead.

It is essential that EWS can be made available for all hazards, while ensuring operational efficiency, cost effectiveness and sustainability of these systems over extensive periods of time. Since development and sustainability of hazard-specific EWS can be both costly and resource intensive, a multi-hazard approach is often the best available option, by building on the existing EWS technical and organizational capacities and by combining the infrastructures of various partners, through positive synergies.

However, a number of challenges on the legislative, financial, organizational, technical, operational, training and capacity building aspects of EWS still remain to be met, before we can ensure that they will indeed be implemented as an integral part of disaster risk reduction strategies within a multi-hazard framework. These challenges have to be defined and prioritized, and clear follow-up actions will need to be identified and implemented, through close strategic partnerships at international, regional and national levels. Following this Conference, WMO in close partnerships with several other agencies will convene a two-day multi-disciplinary Expert’s Symposium on “Multi-Hazard Early Warning Systems for Integrated Disaster Risk Management”, to be held at WMO Headquarters in Geneva from 23-24 May 2006. WMO’s Symposium will convene nearly 80 multi-disciplinary experts and representatives, to recommend concrete actions and to focus on solutions for the establishment of multi-hazard EWS in all countries, especially in those with least resources.

With a deep commitment to disaster Prevention and Mitigation, WMO’s fourteenth Congress in May 2003 established its Natural Disaster Prevention and Mitigation Programme as a major cross cutting Programme with the goals to:

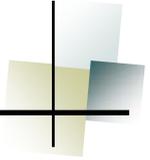
1. Promote and facilitate disaster preventive and mitigation strategies
2. Enhance disaster prevention and mitigation capacities through better integration of WMO’s scientific and technical capabilities, particularly related to hydro-meteorological hazard assessment and early warnings, in the disaster risk management decision process,
3. Strengthen the capacities of National Meteorological and Hydrological Services as a critical component for national disaster reduction, particularly in the developing countries
4. Strengthen partnerships between our scientific and technical communities with disaster risk management to bridge the gap between technical and decision-making aspects of disaster risk management.

To this end, WMO has developed a strategic plan involving:

- 1) Implement concrete regional and country level projects based on systematic prioritisation of regional gaps and needs related to capacity building for hazard analysis and mapping and multi-hazard approach to early warning systems for Integrated Disaster Management. Furthermore, a programme is being developed for strengthening capacities of National Meteorological and Hydrological Services in support of post-disaster Emergency Response activities.
- 2) Education, training and public outreach of NMHSs and their stakeholders, namely Authorities, disaster risk management agencies, Media,
- 3) Documenting of good practices and enhanced information sharing
- 4) Advocacy
- 5) Coordinated fund-raising to support the regional and country projects

WMO Members will benefit from these activities through enhanced deliverables and services of their National Meteorological and Hydrological Services of their countries. The implementation of this plan involves effective coordination among WMO's programmes and strategic partnerships with other Members of the International Strategy for Disaster Reduction system such as ISDR, OCHA, IFRC, UNDP, and the Asian Disaster Reduction Centre that complement our activities in disaster risk management. Within this context, an outstanding opportunity to develop partnerships among key agencies at national and regional levels for advancing the HFA in Asia will be provided through this important Conference.

Your Excellencies, Ladies and Gentlemen, before closing, I wish thank you again for your attention. Your presence here is a testimony to your deep commitment to the area of disaster risk reduction. Let us work together towards a safer world and prevent the occurrence of these tragic disasters in the future.



Keynote Speeches

In his keynote address, **Mr. Salvano Briceno, director of UN/ISDR**, expounded on the efforts of the ISDR on the implementation of the HFA. With ISDR at the cornerstone, Director Briceno cited the leadership role of the UN/ISDR in strengthening operational and implementation systems at country and local levels. He cited the need for a coordinated, result-based system and developing the ISDR system as a showcase of the UN Reform. He also cited the essential leadership role of governments and national stakeholders, along with the support role of the UN system, international and regional organizations and NGOs. Looking forward, Mr. Briceno explained the developments toward the establishment of the Global Platform for Disaster Risk Reduction (GP/DRR), its component activities and timelines, citing this current conference as an important input to the consultation process. Moreover, Mr. Briceno explained the current priorities of ISDR with respect to HFA and recent progress made in various regions. Lastly, he reported on the progress of the evaluation and strengthening of early warning systems in the countries affected by the Indian Ocean Tsunami. Dovetailing the address, the newly produced ISDR film, *Everybody's Business*, was shown. It conveyed the message that disaster risk reduction is everybody's concern and must be considered in making personal decision everyday.

In his keynote address, **Mr. Masayuki Kitamoto, executive director of ADRC**, expressed his sincere gratitude on behalf of ADRC to all the participants, to the Government of the Republic of Korea as host, and to UN/ISDR, WMO, UN/OCHA, and UNDP for their collaboration. He cited the enormity of the disaster problem in Asia, the many impediments to sustainable development, and the importance of disaster risk management in overcoming these problems and in realizing

sustainable development. With reference to the World Conference on Disaster Reduction held last year and the HFA priorities for action, Mr. Kitamoto reported on the various initiatives and activities pursued by ADRC to accomplish the said priorities. These included the promotion of the TDRM Approach to Asian countries, the development of the Community-based Hazard Mapping as a tool for multi-stakeholder cooperation in disaster risk reduction, the assistance to countries concerned in establishing the tsunami early warning system in the Indian Ocean, and the establishment of the database of post disaster recovery good practices under the International Recovery Platform.



Plenary Session



Brief Explanation by Mr. Joseph Chung,
Senior Regional Officer, ISDR Asia Pacific



Presentation by Mr. Praveen Pardeshi,
Senior Advisor, UN/ISDR



Group Discussion
(Group B)



Group Discussion
(Group E)



Part I “Current Status”

Theme: Review of the current status of the implementation of the Disaster Risk Reduction (DRR) in the context of the Hyogo Framework for Action (HFA) for the countries in the Asian region.

Chair: Prof. Won-Cheol Cho, School of Civil and Environmental Engineering, Yonsei University, Seoul, Republic of Korea

Rapporteur: Mr. Emmanuel de Guzman, Consultant, ADRC

◆ Introduction to Part I

Part I of the conference convened with **Prof. Won-Cheol Cho of the Yonsei University-School of Civil and Environmental Engineering**, presiding as chair. **Mr. Briceno** and **Mr. Joseph Chung Senior Regional Officer, ISDR Asia-Pacific Region** briefly gave an overview of the HFA and challenges for implementation. Mr. Hajime Nakano of ADRC explained the mechanics of the group discussions on the Review of the Current Status of HFA Implementation.

◆ Getting Started: Implementing the Hyogo Framework for Action (HFA)

Mr. Praveen Pardeshi, Senior Advisor, UN/ISDR, presented “Guide for States on How to Implement Disaster Risk Reduction in the Context of the Hyogo Framework for Action”. He explained the rationale and nature of the guidelines as well as its intended users. As a practical tool, the guidelines is intended to support national efforts in implementing HFA and to used by senior government officials, local government authorities, advocates and professionals at the country level. Moreover, Mr. Pardeshi presented the structure of the guidelines and the underlying principles. The guidelines are set to be posted on the ISDR website in October this year and contributions to the formulation process are welcome.

◆ Group Discussions (5 groups)

Participants divided into five groups, each comprised of country delegates and discussed the current status, impediments and problems encountered for implementation of HFA under the following themes:

- Ensuring disaster risk reduction (DRR) is a national and a local priority with a strong institutional basis for implementation (HFA Priority area #1)
- Enhancing disaster risk information, early warning system, effective risk communication, and public education for DRR (HFA Priority area #2 & #3)
- Strengthening national and local capacities for vulnerability & risk reduction, disaster mitigation, response, and recovery (HFA Priority area #4 & #5)

Following the group discussions, representatives of five groups presented the result of the discussion to the plenary. In general terms, the following are the major points or issues cited concerning (1) implementation status, (2) impediments; and (3) proposed solutions:

(1) Implementation Status

THEME 1: Ensuring DRR is a national and local

priority

- Establishment of organization and effective disaster risk management and coordination mechanisms (beyond response and relief)
- Process underway for legislative framework, policy and road map development for DRR
- Movement towards comprehensive, integrated, holistic, end-to-end approach; multi-dimensional, multi-sectoral, multi-hazard strategies

THEME 2: Enhancing disaster risk information communication, early warning and public education

- Integration of DRM into school curricula
- Increasing public and consumer awareness and education on risks and safe environments
- Partnerships in hazard mapping and risk assessments
- Applying available technologies for local early warning systems
- Improving warning dissemination to public through media
- Implementing disaster risk management planning at community level

THEME 3 Strengthening national and local capacity for vulnerability and risk reduction

- Integration of DRR into poverty reduction, livelihood and community development
- Establishment of national institute for disaster risk management, training centers, and HRD programs
- Increased involvement of corporate sector in DRR
- Town planning for disaster risk reduction
- Development of risk reduction guidelines, codes and standards

- Contingency planning and emergency fund allocations
- Multilateral arrangements for emergency response

(2) Impediments & Issues

- Lack of laws, policy, and appreciation of DRR concept as a new concept
- How to integrate DRR into development, a pervading issue.
- How to further decrease casualties and damages (from tsunamis and earthquakes)
- How to accomplish seismic retrofitting involving the private sector and the general public
- How to broaden and enhance involvement of all in DRR, including community groups, parent-teacher associations, and business groups, among others
- Limitations in receiving external assistance
- How can we sensitize and motivate sectors and groups, including banks, politicians to support DRR and resource mobilization.
- How to improve the science of forecasting
- Use of traditional knowledge
- Accuracy, timeliness, and adequacy of disaster risk information and disaster impact information

(3) Proposed Solutions

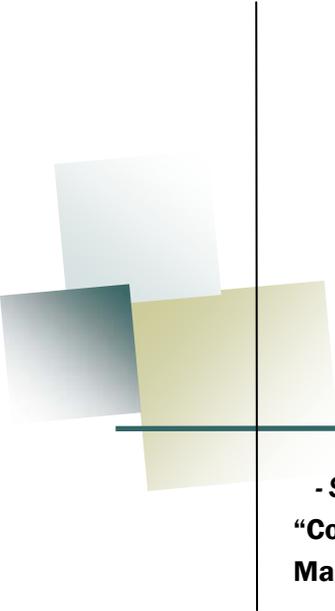
- Enhance awareness, motivation and involvement of various sectors and groups in DRR, especially those previously uninvolved
- Strengthen national structures, empower local governments, enhance coordination systems
- Donor commitment and institutional support for integration of DRR in socio-economic



- development
- Review building codes and structural standards
 - Enactment of modern, relevant laws, policies, codes, standards, guidelines
 - National budget allocation for DRR
 - Involve NGOs
 - Nationwide movement for DRR actions encouraging self, mutual, and collective help
- Continue and sustain cooperation and partnerships, especially in information, knowledge, experience and expertise sharing
 - Promote women involvement in DRR
 - Promote education and training, especially for policy makers and practitioners
 - Sustain dialogues and interactions through regular forums, meetings and exercises

Group List

Group	Country	Presenter	Title/Organization
A	Mongolia	Mr. Ganbold Totokh	Deputy chief of NEMA
	Tajikistan	Mr. Radzhabov Abdurakhim	First Deputy Minister/Ministry of Emergency Situations and Civil Defense
	Uzbekistan	Mr. Komilov Abbas Akmal ugli	The Chief of the Center/Center of the monitoring and forecasting Emergency Situations/Ministry of Emergency Situations
	Armenia	Dr. Alvaro Shavarsh Antonyan	President/Armenian National Survey for Seismic Protection
	Kazakhstan	Mr. Nurakhmet Bizhanov	First Vice-Minister for Emergency Situations /Ministry for Emergency Situations
	Kyrgyz	Ms. Berbaeva Chinara	Leading Specialist/International Relation Department/Ministry of Emergency Situations
B	Republic of Korea	Dr. Park Dug Keun	Senior Researcher/National Institute for Disaster Prevention /NEMA
	Viet Nam	Mr. Bui Quang Huy	Government Officer/Dept. of Dike Management and Flood Control (DDFSC)/Ministry of Agriculture and Rural Development
	China	WFO	Dr. Wong Ming-Chung
	China		Mr. Bang Zhong Wang
	Bangladesh		Mr. MD. Akram Hossain
		Director/Bangladesh Meteorological Department	
C	China	Dr. Yuan Yi	Disaster Information Management/Disaster Information Department, National Disaster Reduction Center
	Indonesia	Mr. Siswanto Budi Prasodjo	Head of Man Made Disaster Management Division/Beurau for Mitigation/BAKORNAS PB
	Lao PDR	Mr. Phetsavang Sounnalath	Director/ National Disaster Management Office, Ministry of Labour and Social Welfare
	Thailand	Mr. Suporn Ratananakin	Director/Research and International Cooperation Bureau/Department of Disaster Prevention and Mitigation
	Malaysia	Mr. Che Moin bin Umar	Director/Crisis and Disaster Management Directorate/National Security Division/Prime Minister's Department
	Philippines	MS. Crispina B. Abat	Office of Civil Defense, National Disaster Coordinating Council
D	Singapore	Mr. Tong Hong Haey	Officer Commanding Sengkang Fire Station/Singapore Civil Defense Force
	Sri Lanka	Mr. Nimal Dharmasiri Hettiarachchi	Director/NDMC, Ministry of Disaster Relief Services
	Bangladesh	Mr. Ehsan UI Fattah	Additional Secretary/Ministry of Food & Disaster Management
	Nepal	Mr. Siswanto Budi Prasodjo	Chief District Officer/Ministry of Home Affairs
E	India	Mr. Rajiv Kumar	Director/National Disaster Management Division/Ministry of Home Affairs
	Japan	Mr. Satoru Nishikawa	Director for Disaster Preparedness, Cabinet Office
	Cambodia	Mr. Sovann Ross	Disaster Management Advisor/National Committee for Disaster Management
	Russia	Ms. Svetlana Leonidovna Bandurkina	Senior expert/Department for International Cooperation/EMERCOM
	Myanmar	Mr. THAN Oo	Director General/Relief and Resettlement Dept./Ministry of Social, Welfare, Relief and Resettlement



Session Summary

Public Forum

- Special Session by the Republic of Korea in cooperation with WMO -
**“Collaboration between Hydro-meteorological and Disaster
Management sectors in disaster reduction”**



Opening Remarks by Mr. Won-Kyong Moon, Administrator,
National Emergency Management Agency, Republic of Korea



Presentation by Mr. Satoru Nishikawa,
Director for Disaster Preparedness,
Cabinet Office, Japan



Presentation by Mr. Geun-Young Kim,
Associate Professor, Department of Urban
Planning and Architecture, Kangnam University



Panel Discussion



Panel Discussion



Public Forum

Special Session by the Republic of Korea in cooperation with WMO

Theme: Collaboration between Hydro-meteorological and Disaster Management sectors in disaster reduction

Moderator: Dr. Dugkeun Park, Senior Researcher, National Institute for Disaster Prevention, NEMA

[Panel Discussion]

Chair: Dr. M.C. Wong, Assistant Director, Hong Kong Observatory

Rapporteur: Ms. Haleh Kootval, Chief, Public Weather Services, Applications Programme Department, WMO

◆ Opening Remarks

The Forum was opened by the opening remarks by **Mr. Won-Kyong Moon, Administrator, National Emergency Management Agency, Republic of Korea** and **Ms. Haleh Kootval, WMO**. Officials of the government and media representatives of the Republic of Korea participated in the Forum in addition to the participants from ADRC member countries.

◆ Video Presentation

A video "Safe Korea, Active NEMA" to introduce the activities of NEMA, Republic of Korea were shown to the participants. Disaster situation in the Republic of Korea and NEMA's continuous efforts for reducing the damages were introduced.

◆ Introductory Presentation

Mr. Toshiyuki Sato, Director-General, International Planning & Broadcasting Department, NHK (Japan Broadcasting Corporation) presented "The Role of Broadcasters in and for the time of Natural Disasters". He explained about a special workshop organized after the Indian Ocean Tsunami for Asian broadcasters to review what kind of information they were able to acquire at the time of Tsunamis

and how they reacted. Through the workshop, scarce knowledge of the nature of the tsunami or lack of the funds and basic contingency plans to cope with natural disasters heavily contributed to the huge numbers of casualties. He introduced NHK sent an expert to several international meetings to convey the important role of broadcasters in reducing casualties and economic damage derived from natural disasters and as the efforts at the second stage, they started working with individual broadcaster to make plans and manuals in preparation for possible natural disasters. Finally he concluded by citing broadcasters have much to do to minimize the damage from natural disasters.

◆ Joint Thematic Presentations

Joint presentations by the National Meteorological-Hydrological Services and Disaster Risk Management representatives from Japan and the Republic of Korea were provided for introducing the importance of the strong linkage of the both agencies for the effective disaster risk management.

Mr. Satoru Nishikawa, Director for Disaster Preparedness, Cabinet Office, Japan briefly introduced the natural disaster situation and disaster management system in Japan at the

beginning of his presentation. Then, he explained about collaboration efforts between Met. Services and Disaster Management Authorities in Japan by giving examples of flood forecasting services and sediment disaster alert systems. In addition, he cited the importance of the collaboration among the agencies for quick response by Government in emergencies by giving a case of response to Typhoon Nabi in September 2005 as a good practice for the coordination.

Mr. Geun-Young Kim, Associate Professor, Department of Urban Planning and Architecture, Kangnam University, and Dr. Jun-Hee Lee, Deputy Director, Earthquake Planning Division, Korea Meteorological Administration, made joint presentation as the representatives of the Government of the Republic of Korea. Mr. Geun-Young Kim explained briefly about natural disasters and disaster risk management system in the Republic of Korea. He introduced the National Disaster Management System (NDMS), newly developing scientific and systematic national disaster management information system for effective response to disasters. Dr. Jun-Hee Lee explained the disaster information system to provide accurate warning against floods, earthquakes and Tsunamis. While, he cited there are more to be considered for the effective information sharing among related agencies for disaster reduction.

◆ Panel Discussion

The session was chaired by **Dr. M. C. Wong, Assistant Director, Hong Kong Observatory** and composed of 12 panelists from 7 countries. The experts exchanged views and shared experience in the collaboration between National Meteorological and Hydrological Services (NMHSs) and Disaster Management sectors in disaster reduction.

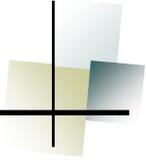
Of the 7 countries' representatives, only a few had legislations clearly defining the role of NMHSs in disaster risk management. All regarded NMHSs

indispensable part of the disaster risk management community. Collaboration and coordination at the national level between the two sectors went very well but disparities were observed at local levels. Advances in communication technologies had greatly helped in the timely dissemination of products and services from NMHSs to the disaster management authorities, but again difficulties were experienced in getting the message through to the local communities in some countries.

The panel recognized the dual nature of disaster risk management, namely, the science side and the human aspect and recommended that reaching-out programmes should be integrated into disaster risk management. The panel reckoned the importance of participative governance networking in managing disaster risks. It was further recommended that efforts should be expanded to ensure better understanding of warning by disaster managers, especially at the local level. Effective mechanisms would include face-to-face contacts, meetings, seminars, joint training sessions, web-based educational modules, drills and exercises.

To enhance the public knowledge on natural hazards and their impacts, the panel found the following are effective: pamphlets, booklets, public lectures, exhibitions and specific websites focused on children. The panel agreed that the media had an essential role in helping to reach out to the community, especially, in raising the public's awareness.

The panel encouraged collaboration between neighboring countries to promote cross-boundary sharing of disaster and warning information. Finally, the panel pledged all to join hands and work together to build a disaster-free Asia.



Panelists and 5 Key Questions of the Panel Discussion

Panelists:

[Bangladesh]

Mr. Ehsna Ul Fattah, Additional Secretary, Ministry of Food and Disaster Management
Mr. MD. Abram Hossain, Director, Bangladesh Meteorological Department

[Indonesia]

Ms. Sriworo Budiati Harijono, Director General of BMG (Meteorological & Geophysical Agency)

[Japan]

Mr. Satoru Nishikawa, Director for Disaster Preparedness, Cabinet Office

[Republic of Korea]

Mr. Heung-Soo Cheong, President, Korean Disaster Information Association
Dr. Byong-Lyol Lee, Deputy Director, International Cooperation Division, Korea Meteorological Administration

[Mongolia]

Mr. Badral Tuvshin, Director of Strategic Planning and International Relations Department, National Emergency Management Agency
Dr. Damdin Dagvadorj, National Agency for Meteorology, Hydrology and Environment Monitoring of Mongolia

[Sri Lanka]

Mr. Nimal Dharmasiri Hettiarachchi, Director, Ministry of Disaster Relief Services, National Disaster Management Center (NDMC), Ministry of Disaster Relief Services, Sri Lanka
Mr. Porakara Mudiyansele Jyatilaka Banda, Director, Department of Meteorology

[Thailand]

Mr. Suporn Ratananakin, Director, Research and International Cooperation Bureau, Department of Disaster Prevention and Mitigation, Ministry of Interior
Mr. Suparek Tansriratanawong, Director-General, Thai Meteorological Department

5 Key Questions:

1. In your country, do you have clear legislation and regulatory framework requiring close collaboration between the NMHSs and the disaster risk management authorities? If yes, how useful such a framework has proved to be?
2. To what extent the NMHSs and the disaster risk management community collaborate to identify the needs for products and services of the Meteorological Service in support of the disaster preparedness and response activities in your country. What joint mechanisms do you propose to ensure that the products and services of the NMHSs meet the needs of the disaster risk management authorities.
3. To what extent the disaster risk managers in your country rely on the hazard monitoring and warning products and services provided by the NMHSs. Through what channels these products and services are provided from the NMHSs to the disaster risk managers? What are the challenges in utilization of the technical information? What joint mechanisms do you propose to ensure that warnings are better understood and utilized by the disaster risk managers in the country? (e.g., joint training among forecaster and emergency managers, educational modules on hazards and their impacts, etc)?
4. What role can the NMHSs play in enhancing the disaster risk management authorities and the general public's knowledge on hydro-meteorological hazards and their impacts?
5. What are the extent of coordination between the NMHSs and the disaster risk management authorities in your country at the national to local levels. In your opinion how can the coordination be improved and what should it achieve for preparedness, response and recovery phases?



Session Summary

Part II - Towards the Future: Commitments and Innovation

“Towards the provision of relevant guidelines and tools to assist the implementation of Disaster Risk Reduction (DRR) in the context of the Hyogo Framework for Action (HFA) in the Asian region”



Part II "Towards the Future: Commitments and Innovation"



Country Presentation



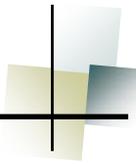
Presentation & Discussion 1



Presentation & Discussion 2



Presentation & Discussion 3



Part II “Towards the Future: Commitments and Innovation”

Theme: Theme: Towards the provision of relevant guidelines and tools to assist the implementation of Disaster Risk Reduction (DRR) in the context of the Hyogo Framework for Action (HFA) in the Asian region.

Introduction to Part II & Presentations of proposed process design for development of Strategic National Action Plan for Countries in Asia and Pacific Regions (SNAP)

Chair: Mr. Kamal Kishore, Regional Disaster Reduction Advisor, UNDP/BCPR

Rapporteur: Mr. Amod Dixit, Executive Director, National Society for Earthquake Technology-Nepal (NSET)

◆ Introductory Presentation

Mr. Joseph Chung, Senior Regional Officer, UN/ISDR Asia and Pacific made an introductory presentation on ISDR’s perspectives and Strategic National Action Plan (SNAP) for Disaster Risk Reduction (DRR) to implement the Hyogo Framework for Action (HFA) in Asia. He explained that it is important to promote HFA with relevant and achievable actions and in this regard, SNAP for DRR would be adoptable in Asia since it is designed for Asian countries based on available experiences. He concluded by citing crucial aspects to promote SNAP in Asia are as (1) Identification of a nodal agency for DRM, (2) Convening multi-stakeholder consultations, and (3) Development of a roadmap/national framework for DRM.

◆ Country Presentations on the implementation of SNAP

[Bangladesh]

Mr. Ehsanul Haque Fattah, Additional Secretary, Ministry of Food & Disaster Management, Bangladesh and **Dr. Aslam Alam, Training & Awareness Raising Specialist & Deputy Team Leader, Comprehensive Disaster Management Programme, United Nations Office of Project Services (UNOPS), Bangladesh** presented the

current status of the implementation of SNAP in Bangladesh as follows:

- ▶ Identification of a nodal agency for DRM
 - Ministry of Disaster Management, Relief and Food is the executing agency for a Comprehensive Disaster Management Program (CDMP)
- ▶ Convening multi-stakeholder consultations
 - The 1971 cyclone, and the 1988 flood and other disasters forced government and people to embark upon a new concept on Disaster risk management. From that time Bangladesh started many initiatives including those recommended by HFA.
 - Steps taken seriously, comprehensive DM formulated, implementation started April 2004
 - Bangladesh started implementing HFA even before HFA – now aligning program with HFA
 - MOFDA’s Mission: to bring a paradigm shift to a culture of prevention, mindset change
- ▶ Development of a roadmap/national framework for DRM
 - CDMP: 5 focus areas, several components, several implementing partners: PPPDU, DMB, BCD&FS, DOE, FAO/DAE
 - Identification and/or mobilization of financial

resources for a national risk reduction agenda

- ▶ Systematic engagement of national – international stakeholders
 - CDMP has an advocacy advisory group and emphasizes partnership & networking of all leaders in Bangladesh involved.

[Philippines]

Ms. Crispina Abat, Chief, Planning Division, Office of Civil Defense, Philippines introduced the progress of SNAP in Philippines as follows:

- ▶ Identification of a nodal agency for DRM
 - National Disaster Coordinating Council (NDCC) is the national node for DRR
- ▶ Development of a roadmap/national framework for DRM
 - Comprehensive DM plan includes mitigation, preparedness, response and rehabilitation
 - Formalization of Institutional and Legislative Systems (ILS) for Disaster Risk Management: PD 1566, Sec 1: Declaration of basic principles that guides all aspects of DRR
- ▶ Challenges
 - DRR needs to be integrated into formal education curricula at all levels
 - Capacity building needs especial focus
 - Need to consolidate the gains of NDCC and others
 - The proposed DRM Act should be completed and endorsed.
 - Integrate DRR in strategic planning
 - Further course need to be charted for achieving Programs and financial sustainability
 - Need a focus on Structural mitigation

[Vietnam]

Mr. Nguyen Sy Nuoi, Deputy Director, Department of Dike Management and Flood

Control (DDFSC), Ministry of Agriculture and Rural Development, Vietnam explained as shown below:

- ▶ Identification of a nodal agency for DRM
 - Central Committee for Flood and Storm Control (CCFSC)
 - National Committee for Search and Rescue (NCSR)
 -
- ▶ Convening multi-stakeholder consultations
 - SNAP of Vietnam considers Flood, flash flood, and Typhoon
- ▶ Development of a roadmap/national framework for DRM
 - Red River Delta: Radical reduction has identified short, medium, and long-term priorities
 - South Viet: living with flood
- ▶ Lessons
 - DRR is a national /local priority
 - Multi-sectoral CCFSC
 - Government-Donor-NGO partnership
 - 2006-10 National Plan assigns priority to DRR
 - DRR is also priority in SED of MARD
 - Substantial allotment of resources from the government for DRR, etc.

Mr. Kamal Kishore, Regional Disaster Reduction Advisor, UNDP/BCPR, chairperson of this session pointed out the common issues in three presentations as follows:

- The need for rapid development of Human Resources is a priority for most countries
- Most countries face the challenges of formalizing partnership among government agencies, NGOs, academia, donors,
- The experience of Vietnam in formalizing partnership among donors, NGO and government is an excellent replicable good example



- There is an urgent need to Change in mind-set
- DRR a recognized priority by all. There is the need to ensure that DRR efforts do not compete with ongoing development efforts
- Improving policy and legal environment is an urgent priority in most countries of Asia, especially the developing countries
- More robust hazard and risk reduction programs should be formulated and implemented to meet the challenges set forth by the HFA.

Presentation & Discussion 1 “Disaster Risk Reduction for Sustainable Development”

Themes: (1) Mainstreaming DRR into government policies, social and economic development
(2) Promotion of information/knowledge sharing, networking, and partnerships

Chair: Mr. Kamal Kishore, Regional Disaster Reduction Advisor, UNDP/BCPR

Rapporteur: Mr. Amod Dixit, Executive Director, NSET

Ms. Tine Ramstad, Regional Programme Officer, UN/ISDR Central Asia made a presentation titled “Mainstreaming of DRR into national development policies, plans and programs.” She stressed the importance of adjustment of HFA to local condition, involvement of multi-stakeholders in national platforms, and benchmark and measurement of achievements. Mainstreaming is not easy and understanding the goal may be difficult for many actors, however, HFA allows every stakeholder to find oneself in one of the categories of action. Possible challenges in mainstreaming as she mentioned were;

- National Adjustments, and continuous efforts are required
- Roles and responsibilities should be assigned to all
- National Platforms need to be made
- National Lead is essential
- Fundamentals of National Platform should include
- Multisectoral approach
- Key ministries, private sector, NGO, Media should be involved
- HFA expresses Shared roles/responsibilities
- Allows all to influence development of policies and /legislations

- Coordinated mechanism
- Implementation
- Matrix of priorities needs to be defined.

Mr. Shingo Kochi, Researcher, ADRC introduced “ADRC Member Country Profiles” and “TDRM-Good Practices” booklets both of which were edited and compiled by ADRC, aiming to propose guidelines and tools to assist disaster risk reduction in the context of the HFA in the Asian Region. The first issue of “ADRC Member Country Profiles” booklet covers information on disaster risk reduction from the 25 ADRC member countries. Those are (1) Natural hazards likely to affect the country, and recent major disasters, (2) Disaster Management system, (3) Disaster management plan, (4) Budget size on national level, (5) Progress and Situations of the Hyogo Framework for Action (HFA), and (6) Projects on disaster reduction headed by the Ministry in the last 2 years, as well as (7) Counterpart of ADRC

Along with the introduction of “ADRC Member Country Profiles”, Mr. Kochi also recapped the importance of TDRM (Total Disaster Risk Management) concept. In order to ensure the effective application of the TDRM approach, it is essential to learn lessons from the good practices

around us both nationally as well as internationally. Given this, ADRC published "TDRM Good Practice" the first edition and the supplement version. The first issue has 28 Good Practices in 15 Asian countries, while the supplement version has 12 Good Practices in 7 Asian countries. Through further information/knowledge sharing, networking, and partnership, he expected that those ADRC ADRC publications "Country Profiles" and "TDRM: Good Practices" are tools to promote the implementation of HFA.

Dr. Hiroyuki Kameda, Visiting Researcher, Earthquake Disaster Mitigation Research Center, National Research Institute for Earthquake Science and Disaster Prevention (EDM-NIED), outlined the project "Disaster Reduction Hyperbase" which is a web-based facility disseminating disaster reduction technologies to support nations for HFA implementation. He mentioned that the successful network and process requires intergovernmental consultation (expensive), and community action (e.g. mangrooving in Vietnam, etc.) – first identified

by the EqTap project as Green belt technology.

Mr. Kazuya Kaku, Advisor to the Director, Japan Aerospace Exploration Agency (JAXA) presented his presentation on "Sentinel-Asia Project for establishing Disaster Management Support System in Asia-Pacific Region." The project is the first step for disaster management support system to be carried out in 2006-2007 and aims to utilize earth observation satellite data (ALOS<JAXA>, MODIS<NASA>, etc.) for disaster management. It will be promoted through Internet-based, disaster-related information distribution backbone, cooperation with Digital Asia Project, capacity building activities by AIT and JAXA, and best-efforts & voluntary initiative by participating agencies/organizations.

Following the introduction of JAXA's project, **Mr. Masaru Arakida, ADRC** talked the details of the ALOX Rapid Response System and presented as example how a high-tech method can be used for DRR.

Presentation & Discussion 2 "Enhancement of Preparedness, Response & Recovery"

Themes: (1) Enhancement of early warning mechanism
(2) Strengthening disaster preparedness for effective response
(3) Guidelines and tools for effective post disaster recovery

Chair: Mr. Terje Skavdal, Head, UN/OCHA Bangkok

Rapporteur: Mr. Deepesh Sinha, National Emergency Response Coordinator, All India Disaster Mitigation Institute (AIDMI)

<Early Warning System>

Ms. Haleh Kootval, Chief, Public Weather Services, Applications Programme Department, WMO delivered the presentation titled "Role of World Meteorological Organization and National Meteorological and Hydrological Services in Advancing the Hyogo Framework for Action 2005-2015," in order to enhance effective disaster risk management through multi-hazard approach for

early warning of weather, water and climate. She emphasized that early warning systems must operate continuously, transparent, timely, integrated and flexible way to cover other hazards. There are key challenges in terms of legislative, organizational, financial, technical & operational, capacity building & training, and cultural aspects. WMO will support in disaster preparedness and mitigation efforts by enhancing capacities,



establishing strategic partnerships and information sharing and resource mobilization.

Then, making a presentation on “Enhancement of Preparedness and Response,” **Mr. John McHarris, Adviser, Disaster Preparedness and Response, World Food Programme (WFP), Bangladesh** highlighted WFP and partner activities that contribute to the EPR within the context of the HFA, especially in Bangladesh. He said that EPR requires broad and inclusive partnerships with emphasis on coordination and the focus must be on identify, assess and monitor disaster risks and enhance early warning and strengthen disaster preparedness at all levels. He put emphasis on the 1) Integration of EPR with larger DRR strategy of Comprehensive Disaster Management Programme, 2) National government’s leading role in the implementation of DRR and HFA to greatest extent possible, 3) Capacity building for GOB and partners at all levels, making sure that capacity building efforts from multiple organization are well coordinated and contribute to larger coherent comprehensive DRR national plans and implementation.

<Response and Recovery Process>

Mr. Kamal Kishore, Regional Disaster Reduction Advisor, UNDP/BCPR underlined the importance of

- 1) Focusing on most vulnerable,
- 2) Restoring capacities by rebuilding livelihoods,
- 3) Engaging other stakeholders like private sector,
- 4) Ensuring independent and self-efficiency,
- 5) Transparency and accountability in coordination, and
- 6) Reducing disaster risk.

Then, early recovery can be simplified in augmenting relief efforts, by supporting spontaneous recovery efforts of the affected people, laying the foundation for long-term recovery and ensuring risk reduction. He pointed out some

issues like clear definition of Early Recovery, Relief v/s Recovery during immediate days of disaster, Surging capacity at local, national and regional level, and development and practice of good information management tools, as major challenges for effective recovery.

Mr. Praveen Pardeshi, Senior Adviser, UN/ISDR’s presentation focused on identification of opportunities to mainstream risk reduction through needs assessment methodology. In order to achieve this, he stressed the needs of 1) Linkage of humanitarian relief and development phase during methodology and documentation of practices for Governance sector assessments, 2) Establishment of predefined roles as per comparative advantages including risk mitigation needs and strengthening capacities, and 3) Ownership among stakeholders with data collection, assessing indicators and monitoring. He added key challenges, such as local government and community participation, Disaster Risk Reduction as part of Recovery Plans and Information sharing with large number of stakeholders.

Introducing the experience of livelihood recovery programme in Sri Lanka, **Ms. Claudia Coenjaerts, Senior Socio Economic Reintegration Specialist, International Labor Organization (ILO)** explained “Jobs for recovery,” which can be the cement for better preparedness and disaster risk reduction. The programme consists of 3 phased approaches: 1) Safety nets: Preparedness for continuity of work and livelihoods after disasters, 2) Temporary job creation: Use of Cash Transfer and similar financial instruments to revive work, especially of women early on, and 3) Local Economic Recovery: Ways of investing in local labour markets – construction, housing, etc. – for recovery. To ensure sustainable response & recovery, she emphasized the great importance to build local as well as national capacity consistently and to facilitate coordinated and sustainable approach to livelihood and employment.

Dr. Anil K. Sinha, Programme Advisor, International Recovery Platform (IRP) gave the participants a profile of IRP as an institutional mechanism to address recovery in pursuance of HFA. He underscored the need to ensure that disaster risks should not be rebuilt in the process of recovery and to ensure better and effective coordination among large number of actors/players in a post disaster situation. To achieve these,

following challenges should be confronted; 1) recognition of the various dilemmas (speed v/s safety) and striking a balance, 2) recognition of various actors crucial for post disaster recovery and building a linkage between them for overall better synergy, and 3) Ensuring consortium from emergency and relief phase to recovery phase towards DRR for sustainable development.

Presentation & Discussion 3 “For Safer Communities”

Themes: (1) Capacity development for DRR at all levels
(2) Building of a People-based Culture of Prevention
Chair: Dr. Jemilah Mahmood, President, MERCY Malaysia
Rapporteur: Ms. Takhmina R. Turaeva, Advocacy Focal Point, UN/ISDR

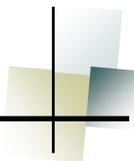
Chair, **Dr. Jemilah Mahmood, President, MERCY Malaysia** greeted all the participants of the conference and introduced the topic and the aim of the discussion along with the presenters. Dr. Mahmood underlined the significance of the role of community participation and capacity development in realization of the priorities for action of Hyogo Framework for Action. She indicated that capacity development and community participation are cross cutting issues in promoting the five priorities for action of HFA (specific focus of priority three and five).

Dr. Puji Pujiono's presentation theme “Preparedness and Response for Safer Communities: From TDRM, HFA and HR” concentrated on the **OCHA's** interest, mandate and role in TDRM approach, focusing on the importance of adopting the TDRM throughout the disaster cycle as well as its relevance for local communities. Also, Dr. Pujiono emphasized the vitality of effective coordination, stating that “International assistance could become a disaster in itself if not coordinated properly”. Lastly, the presentation focused on the effective response and preparedness issues (priority area #5 of HFA),

mentioning the role and function of UNDAC missions to other countries.

Second speaker, **Dr. Shoichi Ando** presented “**UNCRD** Programs on Community Based Disaster Management” in this session. Dr. Ando highlighted major disasters occurred since 1970 worldwide and the damages they caused in numbers of deaths. He described UNCRD's major tasks and aims, which directed into enhancing the capacity of local people and governments with various partners for making communities safer, underlining the fact that some groups of population are even more vulnerable to disasters than others. Furthermore, Dr. Ando explained the concept and importance of global Earthquake Safety Initiative (GESI) project with 41 cities worldwide as well as provided information on the UNCRD's new planned programs for the year 2005-2006, part of which is “Anti-seismic Building Code Dissemination (ABCD)” project and its challenges.

Next presentation was by **Mr. Akihiro Teranishi, ADRC** on “Education for Disaster Preparedness in Primary Schools” project in Thailand and its main activities, which included development of tsunami



education materials for schoolchildren, thus, integrating disaster education in school curriculum as well as creating a teachers' guide for building teachers capacity. Mr. Teranishi acknowledged the fact that "knowing is not enough", but being able to effectively educate, i.e. methodologies and interactive methods of teaching are crucially important. He pointed out that one of the most important features of the project, the applicability of the information materials for other countries; however translation, replacement of pictures and photos would be needed.

Finally, **Dr. Amod Dixit** delivered a "NSET for Earthquake safer communities" presentation. It is aimed at capacity building for disaster risk reduction at all levels and building of people-based culture of prevention. Therefore, Dr. Dixit' indicated "training programs for all" as a major concept for capacity building, i.e. educating children and training teachers, technicians and self-builders (masons) as well as policy/decision makers therefore, building a culture of prevention. In addition, Dr. Dixit emphasized the challenges of the project, underlying the fact that "knowledge is not adequately available to the vulnerable" and that "larger part of the population are usually not involved in disaster risk management". He also pointed out that created awareness brings demand increase for capacity building and for specialized NGO's in DRM.

After the last speaker, Dr. Mahmood summarized all the mentioned above concerns and challenges in implementing projects towards realization of HFA priority actions #3 and #5. She pointed out the importance of education in schools stating: "Educate children and they will educate families". Then, the chair opened the floor for questions, comments and recommendations. In general terms, the following are the major points discussed:

- Contingency Planning of UNOCHA: Safer Communities vs. Early Warning Systems;
 - Anti-Seismic Safe Building Codes provision and dissemination;
 - Posting Tsunami Teachers Guideline on the Internet;
 - Enhancing the role of Mass and Media: engaging media more diligently in disaster risk reduction.
-
- - Procedures to follow for inviting UNDAC mission to a country for assessment of emergency preparedness, etc.;



speakers

ABSTRACT

“Country Profiles” and “TDRM-Good Practices-”

Shingo Kochi

Researcher, Asian Disaster Reduction Center (ADRC), Japan

Both “ADRC Member Country Profiles” and “TDRM-Good Practices” booklets were edited and compiled by Asian Disaster Reduction Center (ADRC) on the occasion of the Asian Conference on Disaster Reduction 2006 in Seoul, Republic of Korea, aiming to propose guidelines and tools to assist disaster risk reduction in the context of the HFA in the Asian Region.

The first issue of “ADRC Member Country Profiles” booklet includes the following information from the 25 ADRC member countries*:

- 1-1. Natural hazards likely to affect the country
- 1-2. Recent major disasters
 - (1) Description of recent major disasters and response activities
 - (2) Activities for recovery and reconstruction after major disasters
2. Disaster Management system
 - (1) Administrative system
 - (2) Legal system, legal framework
 - (3) Structure of disaster management
 - (4) Priority on disaster risk management
3. Disaster management plan
 - (1) Sort of plan
 - (2) Legal basis
 - (3) Date of creation of the plan
 - (4) Content
4. Budget size on national level
5. Progress and Situations of the Hyogo Framework for Action (HFA)
6. Projects on disaster reduction headed by the Ministry in the last 2 years.
7. Counterpart of ADRC

Total Disaster Risk Management (TDRM)

Along with the introduction of “ADRC Member Country Profiles”, the presenter will also recap the importance of TDRM (Total Disaster Risk Management) concept.

ADRC, in cooperation with UN-OCHA (Kobe) and other organizations/countries, has developed Total Disaster Risk Management (TDRM) as an effective and strategic approach for disaster reduction, based on many years' experiences of coping with disasters in the world and Asia in particular.



The conceptualization of TDRM centers around two crucial principles. They are "involvement of all organizations and individuals" and "implementation during all phases of disaster," i.e. prevention/mitigation, preparedness, response and rehabilitation/reconstruction. Since damage stems from numerous hazards and develops from unexpected weak point, holistic approach which covers relevant stakeholders and all phases, TDRM, is quite essential in disaster risk management.

The implementation of TDRM in disaster risk management can be illustrated as follows: Risk identification and risk assessment with a strong initiative are expected as a first step to recognize possible damage induced by hazards and its influence on the society. Based on the assessment, a policy specifying target risk to manage, e.g. kind of disaster, area to be protected, is invented and a plan to take effective countermeasures is formulated. The important thing in this process is to review the risk identification and assessment constantly in order to take proper countermeasures against the frequent transformation of environment, geographic features, social structures, and locality.

Countermeasures for the disaster risk management consists of four items, i.e. risk avoidance, risk reduction, risk transfer and risk retention. Among these items, Risk Reduction would be the pillar of the countermeasures. Risk reduction measures against earthquakes are, for example, aseismic design, retrofitting of buildings and housings and development of early warning system, emergency drill by relevant organizations and general public. As is commonly known, disaster risk management demands a certain amount of cost. However, it must be much less than the one to recover and/or reconstruct an affected area.

The five fundamental strategies for TDRM approach are considered as follows: (1) collaboration among stakeholders, (2) coordination mechanism, (3) public awareness and support, (4) information sharing, (5) investment for disaster reduction.

Good Practices towards TDRM

In order to ensure the effective application of the TDRM approach, it is essential to learn lessons from the good practices around us both nationally as well as internationally.

Highlighting such practices are vital for making decisions that involve prime decision makers including politicians, financial administrators, planners in the national coordinating body in every country to emphasize the "culture of prevention" for disaster reduction and sustainable development of the society. The presenter will describe the rational and process of publishing "TDRM Good Practice" the first edition and the supplement version.

ABSTRACT

"Disaster Reduction Hyperbase" Project: International Framework for Development of Disaster Reduction Technology List on Implementation Strategies

Hiroyuki Kameda

Visiting Researcher, NIED, Japan / Professor Emeritus, Kyoto University / DRH Project Leader

A project entitled International Framework for Development of Disaster Reduction Technology List on Implementation Strategies, was conducted in the period of April 2005 - March 2006. Its ultimate goal is to establish a web-based facility disseminating disaster reduction technologies under implementation strategies. It has been named "Disaster Reduction Hyperbase" by the participants in the project. The project (DRH Project) was sponsored by the Japanese government under the funding mechanism of MEXT's Special Coordination Fund. The project was operated under close collaboration with UN-ISDR Secretariat and other international agencies as well as experts from various regions of the world.

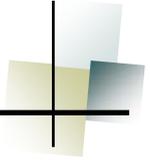
The project has been designed on the basis of several background efforts to pursue implementation oriented technologies and transferable indigenous knowledge that are deemed truly useful for disaster reduction. These efforts include:

- EqTAP project (Earthquake and Tsunami Disaster Mitigation For the Asia-Pacific Region): (April 1999 - March 2004) / APEC framework
- UN World Conference on Disaster Reduction, Hyogo-Kobe, January 2005
- Hyogo Framework for Action (HFA) 2005-2015 / Japanese government's proposal "Portfolios for Disaster Reduction: sharing information"
- "Disaster Reduction Technology List on Implementation Strategies" - a Japan's pilot project as a basis for internationalization (submitted to the UN-WCDR)

The objective of the DRH Project 2005 was to establish an international framework as a basis for conceptual developments and actual production of the Disaster Reduction Hyperbase in the years to follow. For this purpose, three regional meetings (CMM: core member meeting / Geneva (Europe/Africa), Kathmandu (Asia/Pacific), Costa Rica (Americas)) and an International Workshop (CMM-Final: Tsukuba) were held. In the CMM-Final (27-28 February 2006), the following resolution was agreed.

1. Development of the Disaster Reduction Hyperbase (DRH) is a significant contribution to reducing vulnerabilities and enhancing integrated disaster risk management.
2. DRH will be an open and interactive database of implementation technologies, will provide a forum for facilitating collation, testing, dissemination of mitigation models, and will link with relevant initiatives.
3. Within a scheme of coordination, development and information nodes, participants will mobilize resources (organizational, fundraising, and in-kind) for contributing to successful achievement of the DRH Mission.
4. DRH development activities contribute to the implementation of the Hyogo Framework for Action 2005-2015 adopted in the UN-World Conference on Disaster Reduction, January 2005
5. We will meet in 2007 to continue further development of DRH

The presentation will include rationale, activities and action plans of the project. It is intended to facilitate discussion in the session by introducing an example of actual actions.



ABSTRACT

Sentinel-Asia Project
for establishing the Disaster Management Support System in the Asia-Pacific Region

Kazuya Kaku
JAXA Satellite Applications Center

The 'Asia-Pacific Space Agency Forum – APRSAF' was established in 1993, in response to the declaration adopted by the Asia-Pacific International Space Year Conference (APIC) in 1992, to enhance the development of each country's space program and to exchange views toward future cooperation in space activities in the Asia-Pacific region. APRSAF was originally designed to provide opportunities for regional space agencies and associated governmental bodies to exchange technical views, opinions and information on national space programs and space resources.

APRSAF is now moving to a more proactive regional caucus, developing a range of specific projects that show clear regional benefit, and pragmatically implementing these on a 'best-efforts' basis by member countries.

One of these, "Disaster Management Support System in Asia-Pacific Region (DMSS) " for

- Construction life-first society by IT & Space technology
- Improvement speed and accuracy for disaster preparedness and early warning
- Minimizing victims and social economic losses

was discussed and a stepwise approach for implementation was proposed by JAXA, where:

- STEP1: Establishment of Sentinel Asia (SA) (2006 - 2007)
- STEP2: Combines Earth Observation and Satellite Communication Systems (2008 - 2009)
- STEP3: Establishment of a comprehensive DMSS (2010-)

Up to ten countries in the region and their respective space agencies now operate satellite-data reception facilities, some of which also have their own earth observing spacecraft, or are planning to launch new systems in the near future. These agencies have traditionally provided satellite imagery after disasters to their own relevant country agencies, and in some cases posted it on their own websites.

"Sentinel Asia", the first step of DMSS, was initiated in Feb. of 2006 aiming to expand such efforts and make such data available to all countries and many more peoples in the region by delivering more quickly via the internet as easy-to-interpret disaster-related information. This information could be delivered through the 'world-wide-web', even outside national borders, in 'real-time' or 'near real-time', and used as early-warning, or as post-disaster information by various countries and relevant end-user agencies.



from ILO, UNEP, Habitat in the WB sector teams

- Two needs assessment sector teams set up : one in Jakarta to work with National Planning Agency and at Aceh level , to work with provincial planning agency and with local stakeholders
- Problems of integrating two sets of Sectoral Plans
- Lesson Learnt : no established system of developing locally owned recovery plans, with participation of local communities and elected local governments , which could then be assimilated into a national Recovery Framework
- Three stages of Needs Assessments : Initial Damage Assessment for CGI, 19 January, Bappenas led over al Reconstruction Blueprint and now the detailed process of district and village level participation driven plans to take up owner driven housing, local services , education, livelihoods aset reconstruction
- Providing dedicated experts to work with Planning Agency from the beginning was valuable

Use of Customised Transition Results Matrix

- Transitional Results Matrix (TRM), which had just been completed would
 - (a) allow development of key actions, outputs, and results for political, security, economic, and social priorities in a simple time framework;
 - (b) clarify and manage expectations (donors, leadership, population) by indicating the timing and helping prioritization;
 - (c) identify in advance sectoral linkages;
 - (d) highlight and address activities lagging behind.
- It is also a planning, coordination, and management tool that the national and international stakeholders can use to better prioritize actions necessary for successful recovery.
- Lesson learnt : Due to absence of linkages with Bupatis and Kecamatans in drawing up sector and geographically identified micro plans, it has taken long time to convert the Blue print into actionable and monitorable programmes and activities

Gaps: local Government and Community participation

- Restricted access,
- National and provincial Govt over whelmed by Relief commitments , time constraint on CGI meeting on 19 January
- Local District Governments decimated by Tsunami, taken over by the Military, hence no ownership at the level of Bupati
- Limited possibilities of community and Local stake holder consultations
- Problems of integrating the decentralised plans with conceptual over all sectoral plans being developed at Jakarta

Whether Disaster risk reduction included in Recovery Plans

Design stage

Institutional Issues :

- Though Opportunity to focus national and local efforts from Tsunami to multi hazard vulnerability reduction arose , excessive priority to physical rebuilding: NA Assessment methodology can factor Risk reduction
- Opportunity for Institutional restructuring and strengthening :BAKORNAS combines response and risk reduction
- Opportunity to strengthen decentralized DRM capacities at distt. level to synchronize with

Decentralisation: NA methodology to develop decentralised assessment and plan process in which local district administration can interface

- Need for the NA to be evolved out of National and local government experiences and adapted to local budgeting processes

What difference IRP: Development of Recovery needs Assessment methodology

- Agreed Methodology for needs Assessment with pre agreed roles as per comparative advantage for IA to work together
- Pre identified national and international experts, trained in advance, with Tsunami experience, to strengthen UN , NGO and government (Planning Dept) assessment and Recovery Planning Capacity
- Recovery planning team trained through IRP, on likely scenarios
- Risk reduction, zone planning templates for likely disaster and preplanned Recovery scenarios prepared in advance used for early recovery assessments,
- Apply Do no Harm Conflict sensitive principles
- Apply best practice on owner driven shelter construction, people centered early warning



ABSTRACT

Enhancing preparedness and response for recovery

Claudia Coenjaerts

International Labour Organization (ILO)

Jobs for recovery are an important key to for better preparedness and disaster risk reduction. Building on a case study of how livelihood recovery was approached as part of the recovery process after the Tsunami hit the coast of Sri Lanka, the conclusion is that pro active measures are needed that empower people to be economically resilient. This will avoid that physical hazards turn into humanitarian disasters and can even be an opportunity to build back better through a decent work approach. An integrated livelihood recovery programme has 3 main components and is introduced in a phased manner; it consists of social safety nets, temporary job creation and local economic recovery. To ensure sustainable responses, it is of key importance to build local as well as national capacity consistently.

The importance of building partnerships among the international community cannot be over emphasized if scarce resources are to be used effectively and sustainable results are to be produced quickly. The ILO, with its key mandate in employment creation through decent work, has and is further developing its partnerships with agencies having a similar mandate as well as being a player within emerging mechanisms that aim to improve overall coordination and impact of programmes and policies. The most important partnerships in this context include those with FAO, in the Early Recovery Cluster and as a member of the International Recovery Platform.

ABSTRACT

INTERNATIONAL RECOVERY PLATFORM

As

A mechanism for knowledge networking, sharing and partnership for better and effective recovery

Anil K Sinha

Programme Advisor, IRP, Kobe

In the World Conference on Disaster Reduction (WCDR) held in Kobe 2005, the governments around the world committed themselves to take action to reduce disaster risk, and adopted a guideline to reduce vulnerabilities to natural hazards, called Hyogo Framework for Action (HFA). The Hyogo Framework assists the efforts of nations and communities to become more resilient to, and cope better with the hazards that threaten their decades of hard earned development gains.

On the recommendation of the WCDR and as a follow up of the HFA, the International Recovery Platform (IRP) was launched in May 2005 in Kobe, Hyogo, Japan, with the support and encouragement from government of Japan and collaboration of many international agencies. The main goal of IRP is to function as an international repository of knowledge and as a networking mechanism so as to address the emerging gaps and constraints in the process of post-disaster recovery witnessed in most parts of the world.

It has been observed in the current context that post-disaster recovery often leads to rebuilding of risks which in the first place led to the very disaster being addressed. Further, in view of the large number of actors and players, support to recovery by various organizations is often not coordinated well, which in turn leads to duplication of efforts and failure to factor in risk reduction.

With collaboration and cooperation among key UN agencies (UNDP, ISDR, ILO and OCHA), ADRC and other stake holders like the World Bank and the IFRC, and most importantly the national government of the member states, the IRP intends to develop knowledge bank in terms of mechanisms, tools and guidelines to help affected countries embark on efficient and effective recovery processes. In order to achieve this IRP focuses on three interrelated components through three hubs namely;

- 1) Advocacy and Knowledge Management from Kobe,
- 2) Training and Capacity Development from Turin in Italy and
- 3) Enhanced Recovery Operations from Geneva.

As one of the important initial activities, the 'Kobe hub' is currently developing a database of good practices and lessons learned from past disasters and recovery experiences. This initiative is part of the development of a cross-disaster knowledge management kit in support of better and effective post disaster recovery interventions.

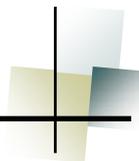
The 'Turin hub' is coordinating training and capacity development activities, starting with disaster prone countries in the Latin American region and the 'Geneva hub' is focusing on specific activities to enhance the recovery operations by way of developing methodologies for damage, needs and capacities assessment in the wake of a disaster.



Collaboration is at the heart of the Hyogo Framework: disasters can affect everyone and are therefore everybody's business. Disaster risk reduction should be a part of decision making at every level – national, regional and local including the community level: how people live their daily lives, how people farm, where and how people build their homes, schools and health centers and how people plan their cities. In this context, IRP will seek to work closely with the existing networks of regional and national organizations and especially the member countries. The national governments are encouraged to work closely with relevant international organizations and other agencies to contribute their experiences and strengthen this process for more effective and better recovery.

It is proposed that the book which is expected to come out shortly as a part of the Knowledge Management kit will be translated in various languages with the help of the member countries/states to facilitate its wider dissemination and use by various players, actors and stakeholders, including the communities.

HFA call for use of knowledge, innovation and education to build a culture of safety and resilience at all levels, by reducing the underlying risk factors. It is hoped that the above collaboration and cooperation through this Asian Conference on Disaster Reduction 2006 in Seoul, under the leadership of Asian Disaster Reduction Center, will help in achieving these objectives and help the societies move towards sustainable development.



ABSTRACT

UNCRD Programs on Community Based Disaster Management

Shoichi Ando

Coordinator of Disaster Management Planning Hyogo Office
United Nations Centre for Regional Development (UNCRD)

The Disaster Management Planning Program of UNCRD dates back to 1985. Its research and training projects aimed to support governments, NGOs, and academic institutions in creating partnerships with communities in developing countries for disaster management planning. The goals were to improve the capacity of communities to develop and implement disaster management plans, and to enhance public awareness of natural hazards.

The UNCRD Disaster Management Planning Hyogo Office (hereafter, called Hyogo Office) was established in April 1999 in Kobe city, where the 1995 Great Hanshin-Awaji Earthquake claimed the lives more than 6,000 people. The Hyogo Office focuses on disaster management initiatives through multilateral collaboration at an international level while utilizing the Hyogo Framework for Action, adopted at the UN World Conference on Disaster Reduction (WCDR) in Kobe in 2005 in order to establish disaster prevention as an essential component of sustainable development.

Hyogo Office carries out various projects, for example as follows, for disaster reduction, integrating where appropriate the reconstruction process in Hyogo and other disaster-affected areas in the world.

Urbanization and Community Based Disaster Management (CBDM)

The UNCRD Hyogo Trust Fund Project (HTF) undertakes action research on urbanization and community-based disaster management in Asia, in particular highly populated areas and quickly urbanizing settlements. The UNCRD Hyogo initiative aims to contribute to a substantial reduction of disaster losses of lives and social, economic and environmental assets of target communities and countries by 2015. Taking into account international and national disaster management policies at the macro level and subsequent actions at community level, the following objectives of the research are undertaken by HTF:

- To explain and demonstrate in practice the concept of living safely in the urban community;
- To enhance international and regional cooperation in the field of CBDM;
- To incorporate disaster management into development planning through community empowerment and good governance and so forth

Thereupon, UNCRD Hyogo Office implements field research, organizes community meetings, and disseminates findings, targeting Indonesia, Sri Lanka, Thailand, Nepal, and Bangladesh.



Fig. Community based approach for dissemination and application of disaster management plans

Reducing Vulnerability of School Children to Earthquake (School Safety project)

The UNCRD is implementing a two-year project on “Reducing Vulnerability of School Children to Earthquakes” in Asia-Pacific region under project execution by UN Department of Economic and Social Affairs (UN-DESA) funded by the Human Security Fund of UN-OCHA since April, 2005. The project aims to ensure that school children living in seismic regions have earthquake safe schools and that local communities build capacities to cope with earthquake disasters. The project includes retrofitting of some school buildings in a participatory way with the involvement of local communities, local governments and resource institutions, trainings on safer construction practices to technicians, and disaster education in school and communities. These activities are carried out in Fiji Islands, India, Indonesia and Uzbekistan as demonstration cases which will be disseminated throughout the respective geographical regions through regional and international workshops.

The projects includes seismic vulnerability analysis of about 10 selected schools in a project city of each country and retrofitting of some of them which cover prominent construction typology in the region. Moreover, the project includes development and wide distribution of educational booklets, posters and guidebook on teachers training and students’ drills for earthquake disaster preparedness and response. The project also develops an interactive educational tool for simple seismic risk assessment of buildings aiming to motivate households for planning seismic upgrading of their houses. Regional and international workshops on school seismic safety are planned to disseminate the success and lessons of project cities to a wider region.

Anti-seismic Building Code Dissemination (ABCD) project as the first phase of the Housing Earthquake Safety Initiative (HESI) (tentative plan)

Most developing countries have established building control systems, mainly aiming to prevent social and economic losses caused by disasters, accidents and urban problems. However, the system seldom functions effectively, because capacity building of local officials, ability of building experts, social awareness and availability of the system itself are not sufficient for implementation.

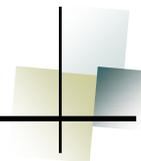
In order to achieve the “Hyogo Framework for Action”, adopted in 2005 at the UN-WCDR in Kobe, the UNCRD is planning a three-year program titled “Housing Earthquake Safety Initiative (HESI)”. And for the first year of the HESI program, “Anti-seismic Building Code Dissemination (ABCD) project” is proposed to identify the recognition gaps among stakeholders, including governments, academic institutions, NGOs and communities.

Reference:

Recent Publications of UNCRD Hyogo Office

- 2003 -Sustainability in Grass-roots Initiatives: Focus on community based disaster management (CBDM)
- Guidelines for earthquake resistant design, construction, and retrofitting of buildings in Afghanistan
- From Disaster to Community Development: The Kobe experience (Kizuna)
- Patanka Navjivan Yojna (PNY, India): Towards sustainable community recovery
- Proceedings of ACTAHEAD International Workshop: CBDM concept to reality
- Proceedings of International Workshop 2003: An earthquake-safer world in the 21st century III
- 2004 -Proceedings of International Symposium: Community legacy in disaster management, 7 Feb. 2004
- Proceedings of UNU-UNCRD Thai Regional Workshop: Ensuring flood security, 28-30 July, 2004
- 2005 -Sustainable Community Based Disaster Management (CBDM) Practices in Asia, - A User’s Guide -
- UNCRD Tapestry: Defining the past and building the future of CBDM
- UNCRD Digest: CBDM activities abridged 2002-2005
- Proceedings of UNCRD at UN-WCDR 2005: Activities of UNCRD during UN-WCDR, 18-21 Jan. 2005

Those publications can be download at; <http://www.hyogo.uncrd.or.jp/publication/index.html>



ABSTRACT

Education for Disaster Preparedness in Primary School in Thailand

Akihiro Teranishi, Senior Researcher
Asian Disaster Reduction Center (ADRC)

School education is one of the key elements in long-term disaster risk reduction strategies as it is clearly revealed by the awareness survey conducted by Asian Disaster Reduction Center (ADRC) in some tsunami affected countries. (See http://www.adrc.or.jp/publications/Srilanka_survey/en/Index.html)

During the planning workshop on Public Awareness and Education held in Bangkok, 7-8 September 2005, organized by UN/ISDR, relevant organizations discussed the concrete projects to be carried out immediately. As a result of the meeting, it was reached to a consensus that ADRC carry out the “Education for Disaster Preparedness in Primary School Project” to be supported by UN/ISDR and UNESCO/IOC.

The project aims to (1) strengthen disaster preparedness in primary school, (2) build teachers capacity on disaster education and (3) disseminate the correct knowledge about tsunami to the school children and their families. The main activities are defined as follows; (1) compiling and analyzing existing tsunami educational materials, (2) developing a side-reader for students as well as a teachers’ guide consulted by both experts of disaster management and education, and improved them through the pilot classes, and (3) conducting a seminar to explain the teaching know-how about tsunami disaster and its preparedness.

The main feature of the project is a development of the teacher’s guide. Tsunami disaster education requires teachers with the broader range of knowledge, from geography to individual preparedness. Therefore, it has been aspired by school teachers to describe the key issues they have to teach their students as well as the teaching know-how about tsunami disaster. Furthermore, the structure and contents of materials are based on the analysis of many existing textbooks and consultation by experts, they have become more sophisticated and generalized enough to replicate in other countries with the minor revision by tailoring to the target countries such as pictures and photos. This project is still going on and author will present the activities which have already been carried out so far and the plan of next step.



Closing Session



Summary of the Conference
by Mr. Ki-Sung Bang, Director-General of
Headquarters of Recovery and Relief, NEMA,
Government of the Republic of Korea



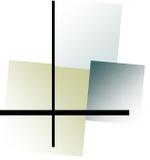
Closing Remarks delivered by Mr. Joseph Chung,
Senior Regional Officer,
UN/ISDR Asia and Pacific



Closing Remarks by Mr. Fumio Takeda, Deputy
Director-General for Disaster Management,



Closing by Mr. Won-Kyong Moon, Administrator,
National Emergency Management Agency,
Government of the Republic of Korea



Closing Session

◆ Summary of Conference

To conclude the Conference, the Summary of the Conference was read out by **Mr. Ki-Sung Bang, Director-General of Headquarters of Recovery and Relief, NEMA, Government of the Republic of Korea**

◆ Closing Remarks

In closing, message from **Mr. Salvano Briceno, Director, UN/ISDR** was delivered by Mr. Joseph Chung, Senior Regional Officer, UN/ISDR Asia and Pacific.

Following the message, **Mr. Fumio Takeda, Deputy Director-General for Disaster Management, Cabinet Office of Japan** extended his congratulations on the success of the Conference and his expectation for further promotion of the HFA implementation based on the discussion during the 3-days Conference.

Finally, **Mr. Won-Kyong Moon, Administrator, National Emergency Management Agency, Government of the Republic of Korea** praised the Conference for promoting the HFA and expressed his gratitude to all the participants and people involved for the successful conclusion of the Conference.

Conference Summary

The Asian Conference on Disaster Reduction (ACDR) 2006 took place in Seoul, Republic of Korea on 15 to 17 March 2006. The focus was kept on the implementation of the outcome of the World Conference on Disaster Reduction (WCDR), Japan 2005: Hyogo Framework for Action 2005 – 2015: Building the Resilience of Nations and Communities to Disasters (HFA).

146 participants comprising dignitaries from the Republic of Korea and Japan, government officials of 25 countries, representatives of UN and international organisations, NGOs, and the civil society participated in the conference. The current implementation status of disaster risk reduction initiatives in Asia was reviewed and innovative strategies, guidelines and tools in support of the implementation of the HFA were presented and discussed during the conference.

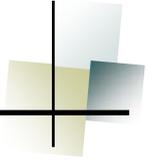
The ACDR 2006 was hosted by the Government of the Republic of Korea in partnership with the Government of Japan, the United Nations Inter-Agency Secretariat of the International Strategy for Disaster Reduction (UN/ISDR), the World Meteorological Organization (WMO), the United Nations Office for the Coordination of Humanitarian Affairs (UN/OCHA), the United Nations Development Programme (UNDP), and the Asian Disaster Reduction Center (ADRC).

The unstinted support of the National Emergency Management Agency (NEMA) of the Republic of Korea, through Administrator, Mr. Won-Kyong Moon, the Asian Disaster Reduction Center (ADRC), through Executive Director, Mr. Masayuki Kitamoto, was largely responsible for the success of the conference. The Honorable Senior Vice-Minister Chiken Kakazu delivered a congratulatory message at the opening ceremony on behalf of the Government of Japan.

The presentations and discussions demonstrated significant progress in implementing the HFA at the country and regional levels. However, much remains to be done in realizing the goal of resilient nations and communities. Therefore, it was decided to pursue, among others, the following course of action to achieve the strategic goals of the HFA.

1. Support the implementation of the HFA priorities for actions

The conference identified impediments to the implementation of the 5 priorities for action of the HFA and proposed strategies to overcome these. The participants of the ACDR 2006 expressed collective support and commitment for the implementation of the HFA at the country level. The participants emphasized the urgent need to translate the HFA into local languages to overcome the language barrier.



2. Develop a strategic national action plan to implement the HFA.

The participants recognized the impediments and constraints to disaster risk reduction in their respective countries and the need to adopt concrete and practical measures for successful implementation of the HFA. These measures should include development of appropriate and effective disaster risk reduction mechanisms, tools and guidelines for implementing the HFA, including organizational development, strategic policy and planning, partnerships among stakeholders and capacity development. The Guidelines for Implementing the Hyogo Framework “Getting Started” developed by the ISDR secretariat will assist the countries and other stakeholders in taking practical steps to implement the HFA.

3. Promote a comprehensive, integrated and holistic approach to disaster risk reduction through the following strategies:

- a) Mainstreaming disaster risk reduction in development and promoting multisectoral cooperation among stakeholders

The participants acknowledged the importance of mainstreaming disaster risk reduction in development and promoting collaboration among all stakeholders in order to achieve disaster risk reduction goals. These stakeholders include key government ministries, NGOs, UN and international organizations, donors, private sector, media, academia and research institutions, local governments, and community organizations. It was agreed to promote this to integrate disaster risk reduction in national development plans, programmes and strategies. A matrix to identify critical inputs in terms of budget, institutional resources and multisectoral partnerships was considered as a useful tool for mapping the process of mainstreaming disaster risk reduction at national level. The Total Disaster Risk Management (TDRM) approach developed in consultation with key stakeholders was articulated as a means of supporting the implementation of the HFA.

- b) Integration of disaster risk reduction in all phases of the disaster risk management

The participants recognized the importance of integrating disaster risk reduction in development activities and in all phases of the disaster risk management cycle. They recognized the need for constantly strengthening disaster response and response preparedness as well as the reform currently going on among humanitarian stakeholders, and the critical role of UN/OCHA in this field. They also appreciated the efforts of the International Recovery Platform (IRP) to promote risk reduction in post disaster recovery efforts. The overarching Early Recovery principles presented by UNDP, Post Disaster Needs Assessment Methodologies by UN/ISDR, Vulnerability Assessment Mapping presented by WFP, and post disaster livelihood strategies by ILO were taken note of as valuable instruments for reducing risk in disaster response and recovery strategies.

c) Enhancing early warning systems and efficient sharing of disaster risk information

The participants noted the importance of timely disaster risk information and multi-hazard early warning systems for protecting the lives and livelihoods of populations at risk. The mapping of hazards and vulnerabilities with tools and promoting public awareness were considered important interventions in support of the HFA at national and local levels. The participants were informed of the commitment of WMO to the HFA, in particular, the priority area 2. In this context, WMO's efforts to support the activities of the national meteorological and hydrological services to ensure a better understanding of hazard risks, warnings of hazards and the enhancement of public knowledge on natural hazards and their impacts were fully acknowledged by participants. Development of Disaster Reduction Hyperbase offers an opportunity to systematically disseminate mitigation technology to governments and practitioners. Application of indigenous knowledge, science and technology was considered crucial for effective disaster prevention.

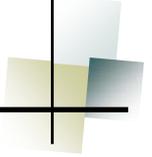
d) Crosscutting Issues

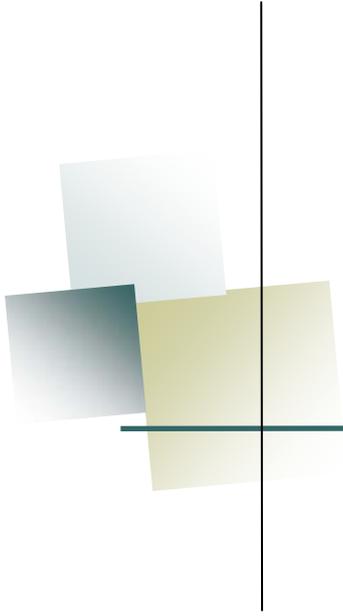
Gender sensitive policies, community participation and involvement of NGOs throughout the cycle were considered as critical for success of disaster reduction.

4. Conclusion

The participants reaffirmed their commitment to implement disaster reduction policies in order to achieve the goals of the HFA.

The ACDR 2006 recommended to continue the momentum through mutual exchange and sharing of country experiences and to review the progress of the implementation of the HFA priorities with respect to benchmarks.





Annexes

[Annex 1]

Agenda

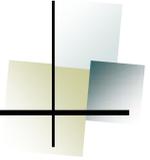
Day 1: March 15 (Wed.), 2006

Opening Session

- 10:30 - 10:40 Opening Remarks by Mr. Won-Kyong Moon, Administrator, National Emergency Management Agency, Republic of Korea
- 10:40 – 11:00 Congratulatory Address
Mr. Chiken Kakazu, Senior Vice-Minister, Japan
Message from Mr. Michel Jarraud, Secretary-General, WMO delivered by Ms. Haleh Kootval, Chief, Public Weather Services, Applications Programme Department
- 11:00 – 11:40 Keynote Speeches
Mr. Salvano Briceno, Director, UN/ISDR
Mr. Masayuki Kitamoto, Executive Director, ADRC
- 11:40 – 12:00 Commemorative Photo

Part I “Current Status”

- Theme: Review of the current status of the implementation of the Disaster Risk Reduction (DRR) in the context of the Hyogo Framework for Action (HFA) for the countries in the Asian region.
- Chair: Prof. Won-Cheol Cho, School of Civil and Environmental Engineering, Yonsei University, Seoul, Republic of Korea
- Rapporteur: Mr. Emmanuel de Guzman, Consultant, ADRC
- 13:30 – 13:40 Introduction to Part I by the Chair
- 13:40 - 13:55 Getting Started: Implementing the Hyogo Framework for Action (HFA)
Mr. Praveen Pardeshi, Senior Adviser, UN/ISDR
- 13:55 - 14:10 Explanation on the Group Discussion by Mr. Hajime Nakano, Senior Researcher, ADRC
- 14:10 - 16:00 Group Discussions (5 groups)
- Ensuring disaster risk reduction (DRR) is a national and a local priority with a strong institutional basis for implementation (HFA Priority area #1)
- Enhancing disaster risk information, early warning system, effective risk communication, and public education for DRR (HFA Priority area #2 & #3)
- Strengthening national and local capacities for vulnerability & risk reduction, disaster mitigation, response, and recovery (HFA Priority area #4 & #5)
*Participants are to discuss the current status of implementation, impediments and problems encountered, and the proposed solutions in each country.
Chairs: to be selected from the participants
Rapporteurs: to be selected from the participants
- 16:30 – 18:00 Plenary Session
- 19:00 - 21:00 Welcome Reception by Host Country, Republic of Korea



Day 2: March 16 (Thurs.), 2006

Public Forum: Special Session by the Republic of Korea in cooperation with WMO

- Moderator: Dr. Dugkeun Park, Senior Researcher, National Institute for Disaster Prevention, NEMA
- Theme: Collaboration between Hydro-meteorological and Disaster Management sectors in disaster reduction
- 09:00 – 09:10 Opening Remarks
Mr. Won-Kyong Moon, Administrator, National Emergency Management Agency, Republic of Korea
Message from WMO delivered by Ms. Haleh Kootval
- 09:10 – 09:20 Introduction of NEMA, Republic of Korea
Video Presentation: "Safe Korea, Active NEMA"
- 09:20 – 09:40 Introductory Presentation by Mr. Toshiyuki Sato, Director-General, International Planning & Broadcasting Department, NHK (Japan Broadcasting Corporation)
- 09:40 - 10:20 2 Joint Thematic Presentations
[Japan]
Mr. Satoru Nishikawa, Director for Disaster Preparedness, Cabinet Office, Japan
[Republic of Korea]
Mr. Geun-Young Kim, Associate Professor, Department of Urban Planning and Architecture, Kangnam University, Republic of Korea
Dr. Jun-Hee Lee, Deputy Director, Earthquake Planning Division, Korea Meteorological Administration, Republic of Korea
- 10:35 – 12:10 Panel Discussion
Chair: Dr. M.C. Wong, Assistant Director, Hong Kong Observatory
Rapporteur: Ms. Haleh Kootval, Chief, Public Weather Services, Applications Programme Department, WMO
Panelists
[Bangladesh]
Mr. Ehsna Ul Fattah, Additional Secretary, Ministry of Food and Disaster Management
Mr. MD. Abram Hossain, Director, Bangladesh Meteorological Department
[Indonesia]
Ms. Sriworo Budiati Harijono, Director General of BMG (Meteorological & Geophysical Agency)
[Japan]
Mr. Satoru Nishikawa, Director for Disaster Preparedness, Cabinet Office
[Republic of Korea]
Mr. Heung-Soo Cheong, President, Korean Disaster Information Association
Dr. Byong-Lyol Lee, Deputy Director, International Cooperation Division, Korea Meteorological Administration
[Mongolia]
Mr. Badral Tuvshin, Director of Strategic Planning and International Relations Department, National Emergency Management Agency
Dr. Damdin Dagvadorj, National Agency for Meteorology, Hydrology and Environment Monitoring of Mongolia
[Sri Lanka]

Mr. Nimal Dharmasiri Hettiarachchi, Director, Ministry of Disaster Relief Services, National Disaster Management Center (NDMC), Ministry of Disaster Relief Services, Sri Lanka

Mr. Porakara Mudiyansele Jayatilaka Banda, Director, Department of Meteorology [Thailand]

Mr. Suporn Ratananakin, Director, Research and International Cooperation Bureau, Department of Disaster Prevention and Mitigation, Ministry of Interior

Mr. Suparek Tansiratanawong, Director-General, Thai Meteorological Department

Part II "Towards the Future: Commitments and Innovation"

Theme: Towards the provision of relevant guidelines and tools to assist the implementation of Disaster Risk Reduction (DRR) in the context of the Hyogo Framework for Action (HFA) in the Asian region.

Program:

13:30 – 13:45 Summary of Day 1 by Mr. Emmanuel de Guzman, Consultant, ADRC

13:45 – 14:30 **Introduction to Part II & Presentations of proposed process design for development of Strategic National Action Plan for Countries in Asia and Pacific Regions (SNAP)**

Chair: Mr. Kamal Kishore, Regional Disaster Reduction Advisor, UNDP/BCPR

Rapporteur: Mr. Amod Dixit, Executive Director, National Society for Earthquake Technology-Nepal (NSET)

Presentations:

Mr. Joseph Chung, Senior Regional Officer, UN/ISDR Asia

Mr. Ehsanul Haque Fattah, Additional Secretary, Ministry of Food & Disaster Management, Bangladesh & Dr. Aslam Alam, Training & Awareness Raising Specialist & Deputy Team Leader, Comprehensive Disaster Management Programme, United Nations Office of Project Services (UNOPS), Bangladesh

Ms. Crispina Abat, Chief, Planning Division, Office of Civil Defense, Philippines

Mr. Nguyen Sy Nuoi, Deputy Director, Department of Dike Management and Flood Control (DDFSC), Ministry of Agriculture and Rural Development, Vietnam

14:30 – 15:45 **Presentation & Discussion 1 "Disaster Risk Reduction for Sustainable Development"**

(1) Mainstreaming DRR into government policies, social and economic development

(2) Promotion of information/knowledge sharing, networking, and partnerships

Chair: Mr. Kamal Kishore, Regional Disaster Reduction Advisor, UNDP/BCPR

Rapporteur: Mr. Amod Dixit, Executive Director, NSET

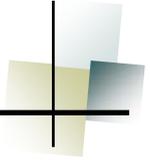
Presentations:

Ms. Tine Ramstad, Regional Programme Officer, UN/ISDR Central Asia

Mr. Shingo Kochi, Researcher, ADRC

Dr. Hiroyuki Kameda, Visiting Researcher, Earthquake Disaster Mitigation Research Center, National Research Institute for Earthquake Science and Disaster Prevention (EDM-NIED)

Mr. Kazuya Kaku, Advisor to the Director, Japan Aerospace Exploration



Agency (JAXA)

- 16:15 – 17:45 **Presentation & Discussion 2 “Enhancement of Preparedness, Response & Recovery”**
 (1) Enhancement of early warning mechanism
 (2) Strengthening disaster preparedness for effective response
 (3) Guidelines and tools for effective post disaster recovery
 Chair: Mr. Terje Skavdal, Head, UN/OCHA Bangkok
 Rapporteur: Mr. Deepesh Sinha, National Emergency Response Coordinator, All India Disaster Mitigation Institute (AIDMI)
 Presentations:
 Mr. Kamal Kishore, Regional Disaster Reduction Advisor, UNDP/BCPR
 Ms. Haleh Kootval, Chief, Public Weather Services, Applications Programme Department, WMO
 Mr. John McHarris, Adviser, Disaster Preparedness and Response, World Food Programme (WFP), Bangladesh
 Mr. Praveen Pardeshi, Senior Adviser, UN/ISDR
 Ms. Claudia Coenjaerts, Senior Socio Economic Reintegration Specialist, International Labor Organization (ILO)
 Mr. Anil K. Sinha, Programme Advisor, International Recovery Platform (IRP)
- 19:00 - 21:00 Reception hosted by UN/ISDR, Government of Japan, and ADRC

Day 3: March 17 (Fri.), 2006

- 08:30 - 08:45 Summary of Day 2 (Rapporteurs of Day 2)
 08:45 –10:15 **Presentation & Discussion 3 “For Safer Communities”**
 (1) Capacity development for DRR at all levels
 (2) Building of a People-based Culture of Prevention
 Chair: Dr. Jemilah Mahmood, President, MERCY Malaysia
 Rapporteur: Ms. Takhmina R. Turaeva, Advocacy Focal Point, UN/ISDR
 Presentations:
 Dr. Shoichi Ando, Coordinator, Disaster Management Planning Hyogo Office, United Nations Center for Regional Development (UNCRD)
 Dr. Pujiono, Regional Disaster Response Advisor, UN/OCHA Kobe
 Mr. Akihiro Teranishi, Senior Researcher, ADRC
 Mr. Amod Dixit, Executive Director, NSET

Closing Session

- 10:45 – 11:15 Summary of Conference by Mr. Ki-Sung Bang, Director-General, Headquarters of Recovery and Relief, National Emergency Management Agency, Government of the Republic of Korea
 11:15 – 11:45 Closing Remarks:
 Message from Mr. Salvano Briceno, Director, UN/ISDR delivered by Mr. Joseph Chung, Senior Regional Officer, UN/ISDR Asia
 Mr. Fumio Takeda, Deputy Director-General for Disaster Management, Cabinet Office of Japan
 Mr. Won-Kyong Moon, Administrator, National Emergency Management

[Annex 2]

Hyogo Declaration

We, delegates to the World Conference on Disaster Reduction, have gathered from 18 to 22 January 2005 in Kobe City of Japan's Hyogo Prefecture, which has demonstrated a remarkable recovery from the Great Hanshin-Awaji Earthquake of 17 January 1995.

We express our sincere condolences and sympathy to, and solidarity with, the people and communities adversely affected by disasters, particularly those devastated by the unprecedented earthquake and tsunami disaster in the Indian Ocean on 26 December 2004. We commend the efforts made by them, their Governments and the international community to respond to and overcome this tragedy. In response to the Special Leaders' Meeting of the Association of South-East Asian Nations on the Aftermath of Earthquake and Tsunami, held in Jakarta on 6 January 2005, we commit ourselves to assisting them, including with respect to appropriate measures pertinent to disaster reduction. We also believe that lessons learned from this disaster are relevant to other regions. In this connection, a special session on the recent earthquake and tsunami disaster, convened at the World Conference to review that disaster from a risk reduction perspective, delivered the Common Statement of the Special Session on Indian Ocean Disaster: Risk Reduction for a Safer Future as its outcome.

We recognize that the international community has accumulated much experience with disaster risk reduction through the International Decade for Natural Disaster Reduction and the succeeding International Strategy for Disaster Reduction. In particular, by taking concrete measures in line with the Yokohama Strategy and Plan of Action for a Safer World, we have learned much, including about gaps and challenges since the 1994 Yokohama Conference. Nevertheless, we are deeply concerned that communities continue to experience excessive losses of precious human lives and valuable property as well as serious injuries and major displacements due to various disasters worldwide.

We are convinced that disasters seriously undermine the results of development investments in a very short time, and therefore, remain a major impediment to sustainable development and poverty eradication. We are also cognizant that development investments that fail to appropriately consider disaster risks could increase vulnerability. Coping with and reducing disasters so as to enable and strengthen nations' sustainable development is, therefore, one of the most critical challenges facing the international community.

We are determined to reduce disaster losses of lives and other social, economic and environmental assets worldwide, mindful of the importance of international cooperation, solidarity and partnership, as well as good governance at all levels. We reaffirm the vital role of the United Nations system in disaster risk reduction.

Thus, we declare the following:

We will build upon relevant international commitments and frameworks, as well as internationally agreed development goals, including those contained in the Millennium Declaration, to strengthen global disaster reduction activities for the twenty-first century. Disasters have a tremendous detrimental impact on efforts at all levels to eradicate global poverty; the impact of disasters remains a significant challenge to sustainable development.

We recognize the intrinsic relationship between disaster reduction, sustainable development and poverty eradication, among others, and the importance of involving all stakeholders, including governments, regional and international organizations and financial institutions, civil society, including non-governmental organizations and volunteers, the private sector and the scientific community. We therefore welcome all the relevant events that took place and contributions made in the course of the



Conference and its preparatory process.

We recognize as well that a culture of disaster prevention and resilience, and associated pre-disaster strategies, which are sound investments, must be fostered at all levels, ranging from the individual to the international levels. Human societies have to live with the risk of hazards posed by nature. However, we are far from powerless to prepare for and mitigate the impact of disasters. We can and must alleviate the suffering from hazards by reducing the vulnerability of societies. We can and must further build the resilience of nations and communities to disasters through people-centered early warning systems, risks assessments, education and other proactive, integrated, multi-hazard, and multi-sectoral approaches and activities in the context of the disaster reduction cycle, which consists of prevention, preparedness, and emergency response, as well as recovery and rehabilitation. Disaster risks, hazards, and their impacts pose a threat, but appropriate response to these can and should lead to actions to reduce risks and vulnerabilities in the future.

We affirm that States have the primary responsibility to protect the people and property on their territory from hazards, and thus, it is vital to give high priority to disaster risk reduction in national policy, consistent with their capacities and the resources available to them. We concur that strengthening community level capacities to reduce disaster risk at the local level is especially needed, considering that appropriate disaster reduction measures at that level enable the communities and individuals to reduce significantly their vulnerability to hazards. Disasters remain a major threat to the survival, dignity, livelihood and security of peoples and communities, in particular the poor. Therefore there is an urgent need to enhance the capacity of disaster-prone developing countries in particular, the least developed countries and small island developing States, to reduce the impact of disasters, through strengthened national efforts and enhanced bilateral, regional and international cooperation, including through technical and financial assistance.

We, therefore, adopt, the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters with its expected outcome, strategic goals, and priorities for action, as well as implementation strategies and associated follow-up, as a guiding framework for the next decade on disaster reduction.

We believe that it is critically important that the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters be translated into concrete actions at all levels and that achievements are followed up through the International Strategy for Disaster Reduction, in order to reduce disaster risks and vulnerabilities. We also recognize the need to develop indicators to track progress on disaster risk reduction activities as appropriate to particular circumstances and capacities as part of the effort to realize the expected outcome and strategic goals set in the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters. We underscore the importance of strengthening cooperative and synergistic interactions among various stakeholders and promoting voluntary partnerships for disaster reduction. We also resolve to further develop information sharing mechanisms on programmes, initiatives, best practices, lessons learnt and technologies in support of disaster risk reduction so that the international community can share the results of and benefits from these efforts.

We now call for action from all stakeholders, seeking the contributions of those with relevant specific competences and experiences, aware that the realization of the outcomes of the World Conference depends on our unceasing and tireless collective efforts, and a strong political will, as well as a shared responsibility and investment, to make the world safer from the risk of disasters within the next decade for the benefit of the present and future generations.

We express our most profound appreciation to the Government and people of Japan for hosting the World Conference on Disaster Reduction, and thank particularly the people of Hyogo Prefecture for their hospitality.

[Annex 3]

Hyogo Framework for Action 2005-2015:*
Building the Resilience of Nations and Communities to Disasters
(*Extract from the final report of the World Conference on Disaster Reduction (A/CONF.206/6))

I. Preamble

1. The World Conference on Disaster Reduction was held from 18 to 22 January 2005 in Kobe, Hyogo, Japan, and adopted the present Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (here after referred to as the "Framework for Action"). The Conference provided a unique opportunity to promote a strategic and systematic approach to reducing vulnerabilities¹ and risks to hazards.² It underscored the need for, and identified ways of, building the resilience of nations and communities to disasters.³

A. Challenges posed by disasters

2. Disaster loss is on the rise with grave consequences for the survival, dignity and livelihood of individuals, particularly the poor, and hard-won development gains. Disaster risk is increasingly of global concern and its impact and actions in one region can have an impact on risks in another, and vice versa. This, compounded by increasing vulnerabilities related to changing demographic, technological and socio-economic conditions, unplanned urbanization, development within high-risk zones, under-development, environmental degradation, climate variability, climate change, geological hazards, competition for scarce resources, and the impact of epidemics such as HIV/AIDS, points to a future where disasters could increasingly threaten the world's economy, and its population and the sustainable development of developing countries. In the past two decades, on average more than 200 million people have been affected every year by disasters.
3. Disaster risk arises when hazards interact with physical, social, economic and environmental vulnerabilities. Events of hydrometeorological origin constitute the large majority of disasters. Despite the growing understanding and acceptance of the importance of disaster risk reduction and increased disaster response capacities, disasters and in particular the management and reduction of risk continue to pose a global challenge.
4. There is now international acknowledgement that efforts to reduce disaster risks must be systematically integrated into policies, plans and programmes for sustainable development and poverty reduction, and supported through bilateral, regional and international cooperation, including partnerships. Sustainable development, poverty reduction, good governance and disaster risk reduction are mutually supportive objectives, and in order to meet the challenges ahead, accelerated efforts must be made to build the necessary capacities at the community and national levels to manage and reduce risk. Such an approach is to be recognized as an important element for the achievement of internationally agreed development goals, including those contained in the Millennium Declaration.
5. The importance of promoting disaster risk reduction efforts on the international and regional levels as well as the national and local levels has been recognized in the past few years in a number of key multilateral frameworks and declarations.⁴

B. The Yokohama Strategy: lessons learned and gaps identified

6. The Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation and its Plan of Action ("Yokohama Strategy"), adopted in 1994, provides landmark guidance on reducing disaster risk and the impacts of disasters.



7. The review of progress made in implementing the Yokohama Strategy⁵ identifies major challenges for the coming years in ensuring more systematic action to address disaster risks in the context of sustainable development and in building resilience through enhanced national and local capabilities to manage and reduce risk.
8. The review stresses the importance of disaster risk reduction being underpinned by a more pro-active approach to informing, motivating and involving people in all aspects of disaster risk reduction in their own local communities. It also highlights the scarcity of resources allocated specifically from development budgets for the realization of risk reduction objectives, either at the national or the regional level or through international cooperation and financial mechanisms, while noting the significant potential to better exploit existing resources and established practices for more effective disaster risk reduction.
9. Specific gaps and challenges are identified in the following five main areas:
 - (a) Governance: organizational, legal and policy frameworks;
 - (b) Risk identification, assessment, monitoring and early warning;
 - (c) Knowledge management and education;
 - (d) Reducing underlying risk factors;
 - (e) Preparedness for effective response and recovery.

These are the key areas for developing a relevant framework for action for the decade 2005-2015.

II. World Conference on Disaster Reduction: Objectives, expected outcome and strategic goals

A. Objectives

10. The World Conference on Disaster Reduction was convened by decision of the General Assembly, with five specific objectives:⁶
 - (a) To conclude and report on the review of the Yokohama Strategy and its Plan of Action, with a view to updating the guiding framework on disaster reduction for the twenty-first century;
 - (b) To identify specific activities aimed at ensuring the implementation of relevant provisions of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development on vulnerability, risk assessment and disaster management;
 - (c) To share good practices and lessons learned to further disaster reduction within the context of attaining sustainable development, and to identify gaps and challenges;
 - (d) To increase awareness of the importance of disaster reduction policies, thereby facilitating and promoting the implementation of those policies;
 - (e) To increase the reliability and availability of appropriate disaster-related information to the public and disaster management agencies in all regions, as set out in relevant provisions of the Johannesburg Plan of Implementation.

B. Expected outcome

11. Taking these objectives into account, and drawing on the conclusions of the review of the Yokohama Strategy, States and other actors participating at the World Conference on Disaster Reduction (hereinafter referred to as "the Conference") resolve to pursue the following expected outcome for the next 10 years:

The substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries.

The realization of this outcome will require the full commitment and involvement of all actors concerned, including governments, regional and international organizations, civil society including

volunteers, the private sector and the scientific community.

C. Strategic goals

12. To attain this expected outcome, the Conference resolves to adopt the following strategic goals:

- (a) The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction;
- (b) The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience⁷ to hazards;
- (c) The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

III. Priorities for action 2005-2015

A. General considerations

13. In determining appropriate action to achieve the expected outcome and strategic goals, the Conference reaffirms that the following general considerations will be taken into account:

- (a) The Principles contained in the Yokohama Strategy retain their full relevance in the current context, which is characterized by increasing commitment to disaster reduction;
- (b) Taking into account the importance of international cooperation and partnerships, each State has the primary responsibility for its own sustainable development and for taking effective measures to reduce disaster risk, including for the protection of people on its territory, infrastructure and other national assets from the impact of disasters. At the same time, in the context of increasing global interdependence, concerted international cooperation and an enabling international environment are required to stimulate and contribute to developing the knowledge, capacities and motivation needed for disaster risk reduction at all levels;
- (c) An integrated, multi-hazard approach to disaster risk reduction should be factored into policies, planning and programming related to sustainable development, relief, rehabilitation, and recovery activities in post-disaster and post-conflict situations in disaster-prone countries;⁸
- (d) A gender perspective should be integrated into all disaster risk management policies, plans and decision-making processes, including those related to risk assessment, early warning, information management, and education and training;⁹
- (e) Cultural diversity, age, and vulnerable groups should be taken into account when planning for disaster risk reduction, as appropriate;
- (f) Both communities and local authorities should be empowered to manage and reduce disaster risk by having access to the necessary information, resources and authority to implement actions for disaster risk reduction;
- (g) Disaster-prone developing countries, especially least developed countries and small island developing States, warrant particular attention in view of their higher vulnerability and risk levels, which often greatly exceed their capacity to respond to and recover from disasters;
- (h) There is a need to enhance international and regional cooperation and assistance in the field of disaster risk reduction through, inter alia:
 - (i) The transfer of knowledge, technology and expertise to enhance capacity building for disaster risk reduction
 - (j) The sharing of research findings, lessons learned and best practices



- (k) The compilation of information on disaster risk and impact for all scales of disasters in a way that can inform sustainable development and disaster risk reduction
- (l) Appropriate support in order to enhance governance for disaster risk reduction, for awareness-raising initiatives and for capacity-development measures at all levels, in order to improve the disaster resilience of developing countries
- (m) The full, speedy and effective implementation of the enhanced Heavily Indebted Poor Countries Initiative, taking into account the impact of disasters on the debt sustainability of countries eligible for this programme
- (n) Financial assistance to reduce existing risks and to avoid the generation of new risks
- (o) The promotion of a culture of prevention, including through the mobilization of adequate resources for disaster risk reduction, is an investment for the future with substantial returns. Risk assessment and early warning systems are essential investments that protect and save lives, property and livelihoods, contribute to the sustainability of development, and are far more cost-effective in strengthening coping mechanisms than is primary reliance on post-disaster response and recovery;
- (p) There is also a need for proactive measures, bearing in mind that the phases of relief, rehabilitation and reconstruction following a disaster are windows of opportunity for the rebuilding of livelihoods and for the planning and reconstruction of physical and socio-economic structures, in a way that will build community resilience and reduce vulnerability to future disaster risks;
- (q) Disaster risk reduction is a cross-cutting issue in the context of sustainable development and therefore an important element for the achievement of internationally agreed development goals, including those contained in the Millennium Declaration. In addition, every effort should be made to use humanitarian assistance in such a way that risks and future vulnerabilities will be lessened as much as possible.

B. Priorities for action

14. Drawing on the conclusions of the review of the Yokohama Strategy, and on the basis of deliberations at the World Conference on Disaster Reduction and especially the agreed expected outcome and strategic goals, the Conference has adopted the following five priorities for action:
1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.
 2. Identify, assess and monitor disaster risks and enhance early warning.
 3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels.
 4. Reduce the underlying risk factors.
 5. Strengthen disaster preparedness for effective response at all levels.
15. In their approach to disaster risk reduction, States, regional and international organizations and other actors concerned should take into consideration the key activities listed under each of these five priorities and should implement them, as appropriate, to their own circumstances and capacities.

1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation

16. Countries that develop policy, legislative and institutional frameworks for disaster risk reduction and

that are able to develop and track progress through specific and measurable indicators have greater capacity to manage risks and to achieve widespread consensus for, engagement in and compliance with disaster risk reduction measures across all sectors of society.

Key activities:

(i) National institutional and legislative frameworks

- (a) Support the creation and strengthening of national integrated disaster risk reduction mechanisms, such as multi sectoral national platforms,¹⁰ with designated responsibilities at the national through to the local levels to facilitate coordination across sectors. National platforms should also facilitate coordination across sectors, including by maintaining a broad based dialogue at national and regional levels for promoting awareness among the relevant sectors.
- (b) Integrate risk reduction, as appropriate, into development policies and planning at all levels of government, including in poverty reduction strategies and sectors and multi sector policies and plans.
- (c) Adopt, or modify where necessary, legislation to support disaster risk reduction, including regulations and mechanisms that encourage compliance and that promote incentives for undertaking risk reduction and mitigation activities.
- (d) Recognize the importance and specificity of local risk patterns and trends, decentralize responsibilities and resources for disaster risk reduction to relevant subnational or local authorities, as appropriate.

(ii) Resources

- (e) Assess existing human resource capacities for disaster risk reduction at all levels and develop capacity-building plans and programmes for meeting ongoing and future requirements.
- (f) Allocate resources for the development and the implementation of disaster risk management policies, programmes, laws and regulations on disaster risk reduction in all relevant sectors and authorities at all levels of administrative and budgets on the basis of clearly prioritized actions.
- (g) Governments should demonstrate the strong political determination required to promote and integrate disaster risk reduction into development programming.

(iii) Community participation

- (f) Promote community participation in disaster risk reduction through the adoption of specific policies, the promotion of networking, the strategic management of volunteer resources, the attribution of roles and responsibilities, and the delegation and provision of the necessary authority and resources.

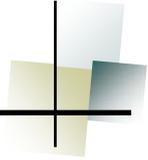
2. Identify, assess and monitor disaster risks and enhance early warning

17. The starting point for reducing disaster risk and for promoting a culture of disaster resilience lies in the knowledge of the hazards and the physical, social, economic and environmental vulnerabilities to disasters that most societies face, and of the ways in which hazards and vulnerabilities are changing in the short and long term, followed by action taken on the basis of that knowledge.

Key activities:

(i) National and local risk assessments

- (a) Develop, update periodically and widely disseminate risk maps and related information to decision-makers, the general public and communities at risk¹¹ in an appropriate format.
- (b) Develop systems of indicators of disaster risk and vulnerability at national and sub-national



scales that will enable decision-makers to assess the impact of disasters¹² on social, economic and environmental conditions and disseminate the results to decisionmakers, the public and populations at risk.

- (c) Record, analyse, summarize and disseminate statistical information on disaster occurrence, impacts and losses, on a regular bases through international, regional, national and local mechanisms.

(ii) Early warning

- (a) Develop early warning systems that are people centered, in particular systems whose warnings are timely and understandable to those at risk, which take into account the demographic, gender, cultural and livelihood characteristics of the target audiences, including guidance on how to act upon warnings, and that support effective operations by disaster managers and other decision makers.
- (b) Establish, periodically review, and maintain information systems as part of early warning systems with a view to ensuring that rapid and coordinated action is taken in cases of alert/emergency.
- (c) Establish institutional capacities to ensure that early warning systems are well integrated into governmental policy and decision-making processes and emergency management systems at both the national and the local levels, and are subject to regular system testing and performance assessments.
- (d) Implement the outcome of the Second International Conference on Early Warning held in Bonn, Germany, in 2003,¹³ including through the strengthening of coordination and cooperation among all relevant sectors and actors in the early warning chain in order to achieve fully effective early warning systems.
- (e) Implement the outcome of the Mauritius Strategy for the further implementation of the Barbados Programme of Action for the sustainable development of small island developing States, including by establishing and strengthening effective early warning systems as well as other mitigation and response measures.

(iii) Capacity

- (a) Support the development and sustainability of the infrastructure and scientific, technological, technical and institutional capacities needed to research, observe, analyse, map and where possible forecast natural and related hazards, vulnerabilities and disaster impacts.
- (b) Support the development and improvement of relevant databases and the promotion of full and open exchange and dissemination of data for assessment, monitoring and early warning purposes, as appropriate, at international, regional, national and local levels.
- (c) Support the improvement of scientific and technical methods and capacities for risk assessment, monitoring and early warning, through research, partnerships, training and technical capacity- building. Promote the application of in situ and space-based earth observations, space technologies, remote sensing, geographic information systems, hazard modelling and prediction, weather and climate modelling and forecasting, communication tools and studies of the costs and benefits of risk assessment and early warning.
- (d) Establish and strengthen the capacity to record, analyze, summarize, disseminate, and exchange statistical information and data on hazards mapping, disaster risks, impacts, and losses; support the development of common methodologies for risk assessment and monitoring.

(iv) Regional and emerging risks

- (a) Compile and standardize, as appropriate, statistical information and data on regional disaster risks, impacts and losses.
- (b) Cooperate regionally and internationally, as appropriate, to assess and monitor regional and trans-boundary hazards, and exchange information and provide early warnings through appropriate arrangements, such as, inter alia, those relating to the management of river basins.

- (c) Research, analyse and report on long-term changes and emerging issues that might increase vulnerabilities and risks or the capacity of authorities and communities to respond to disasters.

3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels.

18. Disasters can be substantially reduced if people are well informed and motivated towards a culture of disaster prevention and resilience, which in turn requires the collection, compilation and dissemination of relevant knowledge and information on hazards, vulnerabilities and capacities.

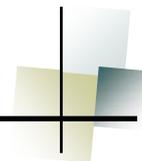
Key activities:

(i) Information management and exchange

- (a) Provide easily understandable information on disaster risks and protection options, especially to citizens in high-risk areas, to encourage and enable people to take action to reduce risks and build resilience. The information should incorporate relevant traditional and indigenous knowledge and culture heritage and be tailored to different target audiences, taking into account cultural and social factors.
- (b) Strengthen networks among disaster experts, managers and planners across sectors and between regions, and create or strengthen procedures for using available expertise when agencies and other important actors develop local risk reduction plans.
- (c) Promote and improve dialogue and cooperation among scientific communities and practitioners working on disaster risk reduction, and encourage partnerships among stakeholders, including those working on the socioeconomic dimensions of disaster risk reduction.
- (d) Promote the use, application and affordability of recent information, communication and space-based technologies and related services, as well as earth observations, to support disaster risk reduction, particularly for training and for the sharing and dissemination of information among different categories of users.
- (e) In the medium term, develop local, national, regional and international userfriendly directories, inventories and national information-sharing systems and services for the exchange of information on good practices, cost-effective and easy-to-use disaster risk reduction technologies, and lessons learned on policies, plans and measures for disaster risk reduction.
- (f) Institutions dealing with urban development should provide information to the public on disaster reduction options prior to constructions, land purchase or land sale.
- (g) Update and widely disseminate international standard terminology related to disaster risk reduction, at least in all official United Nations languages, for use in programme and institutional development, operations, research, training curricula and public information programmes.

(ii) Education and training

- (h) Promote the inclusion of disaster risk reduction knowledge in relevant sections of school curricula at all levels and the use of other formal and informal channels to reach youth and children with information; promote the integration of disaster risk reduction as an intrinsic element of the United Nations Decade of Education for Sustainable Development (2005-2015).
- (i) Promote the implementation of local risk assessment and disaster preparedness programmes in schools and institutions of higher education.
- (j) Promote the implementation of programmes and activities in schools for learning how to minimize the effects of hazards.



- (k) Develop training and learning programmes in disaster risk reduction targeted at specific sectors (development planners, emergency managers, local government officials, etc.).
- (l) Promote community-based training initiatives, considering the role of volunteers, as appropriate, to enhance local capacities to mitigate and cope with disasters.
- (m) Ensure equal access to appropriate training and educational opportunities for women and vulnerable constituencies; promote gender and cultural sensitivity training as integral components of education and training for disaster risk reduction.

(iii) Research

- (n) Develop improved methods for predictive multi-risk assessments and socioeconomic cost-benefit analysis of risk reduction actions at all levels; incorporate these methods into decision-making processes at regional, national and local levels.
- (o) Strengthen the technical and scientific capacity to develop and apply methodologies, studies and models to assess vulnerabilities to and the impact of geological, weather, water and climate-related hazards, including the improvement of regional monitoring capacities and assessments. (iv) Public awareness
- (p) Promote the engagement of the media in order to stimulate a culture of disaster resilience and strong community involvement in sustained public education campaigns and public consultations at all levels of society.

4. Reduce the underlying risk factors

19. Disaster risks related to changing social, economic, environmental conditions and land use, and the impact of hazards associated with geological events, weather, water, climate variability and climate change, are addressed in sector development planning and programmes as well as in post-disaster situations.

Key activities:

(i) Environmental and natural resource management

- (a) Encourage the sustainable use and management of ecosystems, including through better land-use planning and development activities to reduce risk and vulnerabilities.
- (b) Implement integrated environmental and natural resource management approaches that incorporate disaster risk reduction, including structural and non-structural measures,¹⁴ such as integrated flood management and appropriate management of fragile ecosystems.
- (c) Promote the integration of risk reduction associated with existing climate variability and future climate change into strategies for the reduction of disaster risk and adaptation to climate change, which would include the clear identification of climate-related disaster risks, the design of specific risk reduction measures and an improved and routine use of climate risk information by planners, engineers and other decision-makers.

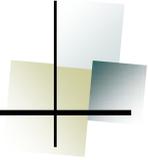
(ii) Social and economic development practices

- (d) Promote food security as an important factor in ensuring the resilience of communities to hazards, particularly in areas prone to drought, flood, cyclones and other hazards that can weaken agriculture-based livelihoods.
- (e) Integrate disaster risk reduction planning into the health sector; promote the goal of "hospitals safe from disaster" by ensuring that all new hospitals are built with a level of resilience that strengthens their capacity to remain functional in disaster situations and implement

mitigation measures to reinforce existing health facilities, particularly those providing primary health care.

- (f) Protect and strengthen critical public facilities and physical infrastructure, particularly schools, clinics, hospitals, water and power plants, communications and transport lifelines, disaster warning and management centres, and culturally important lands and structures through proper design, retrofitting and re-building, in order to render them adequately resilient to hazards.
 - (g) Strengthen the implementation of social safety-net mechanisms to assist the poor, the elderly and the disabled, and other populations affected by disasters. Enhance recovery schemes including psycho-social training programmes in order to mitigate the psychological damage of vulnerable populations, particularly children, in the aftermath of disasters.
 - (h) Incorporate disaster risk reduction measures into post-disaster recovery and rehabilitation processes¹⁵ and use opportunities during the recovery phase to develop capacities that reduce disaster risk in the long term, including through the sharing of expertise, knowledge and lessons learned.
 - (i) Endeavor to ensure, as appropriate, that programmes for displaced persons do not increase risk and vulnerability to hazards.
 - (j) Promote diversified income options for populations in high-risk areas to reduce their vulnerability to hazards, and ensure that their income and assets are not undermined by development policy and processes that increase their vulnerability to disasters.
 - (k) Promote the development of financial risk-sharing mechanisms, particularly insurance and reinsurance against disasters.
 - (l) Promote the establishment of public-private partnerships to better engage the private sector in disaster risk reduction activities; encourage the private sector to foster a culture of disaster prevention, putting greater emphasis on, and allocating resources to, predisaster activities such as risk assessments and early warning systems.
 - (m) Develop and promote alternative and innovative financial instruments for addressing disaster risk.
- (iii) Land-use planning and other technical measures
- (n) Incorporate disaster risk assessments into the urban planning and management of disaster-prone human settlements, in particular highly populated areas and quickly urbanizing settlements. The issues of informal or non-permanent housing and the location of housing in high-risk areas should be addressed as priorities, including in the framework of urban poverty reduction and slum-upgrading programmes.
 - (o) Mainstream disaster risk considerations into planning procedures for major infrastructure projects, including the criteria for design, approval and implementation of such projects and considerations based on social, economic and environmental impact assessments.
 - (p) Develop, upgrade and encourage the use of guidelines and monitoring tools for the reduction of disaster risk in the context of land-use policy and planning.
 - (q) Incorporate disaster risk assessment into rural development planning and management, in particular with regard to mountain and coastal flood plain areas, including through the identification of land zones that are available and safe for human settlement,
 - (r) Encourage the revision of existing or the development of new building codes, standards, rehabilitation and reconstruction practices at the national or local levels, as appropriate, with the aim of making them more applicable in the local context, particularly in informal and marginal human settlements, and reinforce the capacity to implement, monitor and enforce such codes, through a consensus-based approach, with a view to fostering disaster-resistant structures.

5. Strengthen disaster preparedness for effective response at all levels



20. At times of disaster, impacts and losses can be substantially reduced if authorities, individuals and communities in hazard-prone areas are well prepared and ready to act and are equipped with the knowledge and capacities for effective disaster management.

Key activities:

- (a) Strengthen policy, technical and institutional capacities in regional, national and local disaster management, including those related to technology, training, and human and material resources.
- (b) Promote and support dialogue, exchange of information and coordination among early warning, disaster risk reduction, disaster response, development and other relevant agencies and institutions at all levels, with the aim of fostering a holistic approach towards disaster risk reduction.
- (c) Strengthen and when necessary develop coordinated regional approaches, and create or upgrade regional policies, operational mechanisms, plans and communication systems to prepare for and ensure rapid and effective disaster response in situations that exceed national coping capacities.
- (d) Prepare or review and periodically update disaster preparedness and contingency plans and policies at all levels, with a particular focus on the most vulnerable areas and groups. Promote regular disaster preparedness exercises, including evacuation drills, with a view to ensuring rapid and effective disaster response and access to essential food and non-food relief supplies, as appropriate, to local needs.
- (e) Promote the establishment of emergency funds, where and as appropriate, to support response, recovery and preparedness measures.
- (f) Develop specific mechanisms to engage the active participation and ownership of relevant stakeholders, including communities, in disaster risk reduction, in particular building on the spirit of volunteerism.

IV. Implementation and follow-up

A. General considerations

21. The implementation of and follow-up to the strategic goals and priorities for action set out in this Framework for Action should be addressed by different stakeholders in a multi-sectoral approach, including the development sector. States and regional and international organizations, including the United Nations and international financial institutions, are called upon to integrate disaster risk reduction considerations into their sustainable development policy, planning and programming at all levels. Civil society, including volunteers and community-based organizations, the scientific community and the private sector are vital stakeholders in supporting the implementation of disaster risk reduction at all levels.
22. While each State has primary responsibility for its own economic and social development, an enabling international environment is vital to stimulate and contribute to developing the knowledge, capacities and motivation needed to build disaster resilient nations and communities. States and regional and international organizations should foster greater strategic coordination among the United Nations, other international organizations, including international financial institutions, regional bodies, donor agencies and nongovernmental organizations engaged in disaster risk reduction, based on a strengthened International Strategy for Disaster Reduction. In the coming years, consideration should be given to ensuring the implementation and strengthening of relevant international legal instruments related to disaster risk reduction.
23. States and regional and international organizations should also support the capacities of regional mechanisms and organizations to develop regional plans, policies and common practices, as

appropriate, in support of networking, advocacy, coordination, exchange of information and experience, scientific monitoring of hazards and vulnerability, and institutional capacity development and to deal with disaster risks.

24. All actors are encouraged to build multi-stakeholder partnerships, at all levels, as appropriate, and on a voluntary basis, to contribute to the implementation of this Framework for Action. States and other actors are also encouraged to promote the strengthening or establishment of national, regional and international volunteer corps, which can be made available to countries and to the international community to contribute to addressing vulnerability and reducing disaster risk.¹⁶
25. The Mauritius Strategy for the further implementation of the Barbados Programme of Action for Small Island Developing States underscores that small island developing States are located among the most vulnerable regions in the world in relation to the intensity and frequency of natural and environmental disasters and their increasing impact, and face disproportionately high economic, social and environmental consequences. Small island developing States have undertaken to strengthen their respective national frameworks for more effective disaster management and are committed, with the necessary support of the international community, to improve national disaster mitigation, preparedness and early warning capacity, increase public awareness about disaster reduction, stimulate interdisciplinary and inter-sectoral partnerships, mainstream risk management into their national planning process, address issues relating to insurance and reinsurance arrangements, and augment their capacity to predict and respond to emergency situations, including those affecting human settlements stemming from natural and environmental disasters.
26. In view of the particular vulnerabilities and insufficient capacities of least developed countries to respond to and recover from disasters, support is needed by the least developed countries as a matter of priority, in executing substantive programmes and relevant institutional mechanisms for the implementation of the Framework for Action, including through financial and technical assistance and for capacity building in disaster risk reduction as an effective and sustainable means to prevent and respond to disasters.
27. Disasters in Africa pose a major obstacle to the African continent's efforts to achieve sustainable development, especially in view of the region's insufficient capacities to predict, monitor, deal with and mitigate disasters. Reducing the vulnerability of the African people to hazards is a necessary element of poverty reduction strategies, including efforts to protect past development gains. Financial and technical assistance is needed to strengthen the capacities of African countries, including observation and early warning systems, assessments, prevention, preparedness, response and recovery.
28. The follow-up on the World Conference on Disaster Reduction will, as appropriate, be an integrated and coordinated part of the follow-up to other major conference in fields relevant to disaster risk reduction¹⁷. This should include specific reference to progress on disaster risk reduction taking, into account agreed development goals, including those found in the Millennium Declaration.
29. The implementation of this Framework for Action for the period 2005-2015 will be appropriately reviewed.

B. States

30. All States should endeavour to undertake the following tasks at the national and local levels, with a strong sense of ownership and in collaboration with civil society and other stakeholders, within the bounds of their financial, human and material capacities, and taking into account their domestic legal requirements and existing international instruments related to disaster risk reduction. States should



also contribute actively in the context of regional and international cooperation, in line with paragraphs 33 and 34.

- (a) Prepare and publish national baseline assessments of the status of disaster risk reduction, according to the capabilities, needs and policies of each State, and, as appropriate, share this information with concerned regional and international bodies;
- (b) Designate an appropriate national coordination mechanism for the implementation and follow up of this Framework for Action, and communicate the information to the secretariat of the International Strategy for Disaster Reduction;
- (c) Publish and periodically update a summary of national programmes for disaster risk reduction related to this Framework for Action, including on international cooperation;
- (d) Develop procedures for reviewing national progress against this Framework for Action, which should include systems for cost benefit analysis and ongoing monitoring and assessment of vulnerability and risk, in particular with regards to regions exposed to hydrometeorological and seismic hazards, as appropriate;
- (e) Include information on progress of disaster risk reduction in the reporting mechanisms of existing international and other frameworks concerning sustainable development, as appropriate;
- (f) Consider, as appropriate, acceding to, approving or ratifying relevant international legal instruments relating to disaster reduction, and, for State parties to those instruments, take measures for their effective implementation;¹⁸
- (g) Promote the integration of risk reduction associated with existing climate variability and future climate change into strategies for the reduction of disaster risk and adaptation to climate change; ensure that the management of risks associated with geological hazards, such as earthquakes and landslides, are fully taken into account in disaster risk reduction programmes.

C. Regional organizations and institutions

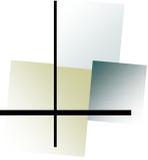
31. Regional organizations with a role related to disaster risk reduction are called upon to undertake the following tasks within their mandates, priorities and resources:
 - (a) Promote regional programmes, including programmes for technical cooperation, capacity development, the development of methodologies and standards for hazard and vulnerability monitoring and assessment, the sharing of information and effective mobilization of resources, in view of supporting national and regional efforts to achieve the objectives of this Framework for Action;
 - (b) Undertake and publish regional and sub-regional baseline assessments of the disaster risk reduction status, according to the needs identified and in line with their mandates;
 - (c) Coordinate and publish periodic reviews on progress in the region and on impediments and support needs, and assist countries, as requested, in the preparation of periodic national summaries of their programmes and progress;
 - (d) Establish or strengthen existing specialized regional collaborative centers, as appropriate, to undertake research, training, education and capacity building in the field of disaster risk reduction;
 - (e) Support the development of regional mechanisms and capacities for early warning to disasters, including for tsunami.¹⁹

D. International organizations

32. International organizations, including organizations of the United Nations system and international financial institutions, are called upon to undertake the following tasks within their mandates,

priorities and resources:

- (a) Engage fully in supporting and implementing the International Strategy for Disaster Reduction, and cooperate to advance integrated approaches to building disaster resilient nations and communities, by encouraging stronger linkages, coherence and integration of disaster risk reduction elements into the humanitarian and sustainable development fields as set out in this Framework for Action;
- (b) Strengthen the overall capacity of the United Nations system to assist disaster-prone developing countries in disaster risk reduction through appropriate means and coordination and define and implement appropriate measures for regular assessment of their progress towards the achievement of the goals and priorities set out in this Framework for Action, building on the International Strategy for Disaster Reduction;
- (c) Identify relevant actions to assist disaster-prone developing countries in the implementation of this Framework for Action; ensure that relevant actions are integrated, as appropriate, into each organization's own scientific, humanitarian and development sectors, policies, programmes and practices and that adequate funding is allocated for their implementation;
- (d) Assist disaster-prone developing countries to set up national strategies and plans of action and programmes for disaster risk reduction and to develop their institutional and technical capacities in the field of disaster risk reduction, as identified through the priorities in this Framework for Action;
- (e) Integrate actions in support of the implementation of this Framework into relevant coordination mechanisms such as the United Nations Development Group and the Inter-Agency Standing Committee (on humanitarian action), including at the national level and through the Resident Coordinator system and the United Nations Country teams. In addition, integrate disaster risk reduction considerations into development assistance frameworks, such as the Common Country Assessments, the United Nations Development Assistance Framework and poverty reduction strategies;
- (f) In close collaboration with existing networks and platforms, cooperate to support globally consistent data collection and forecasting on natural hazards, vulnerabilities and risks and disaster impacts at all scales. These initiatives should include the development of standards, the maintenance of databases, the development of indicators and indices, support to early warning systems, the full and open exchange of data and the use of in situ and remotely sensed observations;
- (g) Support States with the provision of appropriate, timely and well coordinated international relief assistance, upon request of affected countries, and in accordance with agreed guiding principles for emergency relief assistance and coordination arrangements.²⁰ Provide this assistance with a view to reducing risk and vulnerability, improving capacities and ensuring effective arrangements for international cooperation for urban search and rescue assistance.²¹ Ensure that arrangements for prompt international response to reach affected areas are being developed at national and local levels and that appropriate linkages to recovery efforts and risk reduction are strengthened;
- (h) Strengthen the international mechanisms with a view to supporting disaster stricken States in the transition phase towards sustainable physical, social and economic recovery and to reducing future risks. This should include support for risk reduction activities in post-disaster recovery and rehabilitation processes and sharing of good practices, knowledge and technical support with relevant countries, experts and United Nations organizations;
- (i) Strengthen and adapt the existing inter-agency disaster management training programme based on a shared, inter-agency strategic vision and framework for disaster risk management that encompasses risk reduction, preparedness, response and recovery.



E. The International Strategy for Disaster Reduction

33. The partners in the International Strategy for Disaster Reduction, in particular, the Inter-Agency Task Force on Disaster Reduction and its members, in collaboration with relevant national, regional, international and United Nations bodies and supported by the inter-agency secretariat for the International Strategy for Disaster Reduction, are requested to assist in implementing this Framework for Action as follows, subject to the decisions taken upon completion of the review process²² of the current mechanism and institutional arrangements:
- (a) Develop a matrix of roles and initiatives in support of follow-up to this Framework for Action, involving individual members of the Task Force and other international partners;
 - (b) Facilitate the coordination of effective and integrated action within the organizations of the United Nations system and among other relevant international and regional entities, in accordance with their respective mandates, to support the implementation of this Framework for Action, identify gaps in implementation and facilitate consultative processes to develop guidelines and policy tools for each priority area, with relevant national, regional and international expertise;
 - (c) Consult with relevant United Nations agencies and organizations, regional and multilateral organizations and technical and scientific institutions, as well as interested States and civil society, with the view to developing generic, realistic and measurable indicators, keeping in mind available resources of individual States. These indicators could assist States to assess their progress in the implementation of the Framework of Action. The indicators should be in conformity with the internationally agreed development goals, including those contained in the Millennium Declaration;

Once that first stage has been completed, States are encouraged to develop or refine indicators at the national level reflecting their individual disaster risk reduction priorities, drawing upon the generic indicators.

- (d) Ensure support to national platforms for disaster reduction, including through the clear articulation of their role and value added, as well as regional coordination, to support the different advocacy and policy needs and priorities set out in this Framework for Action, through coordinated regional facilities for disaster reduction, building on regional programmes and outreach advisors from relevant partners;
- (e) Coordinate with the secretariat of the Commission on Sustainable Development to ensure that relevant partnerships contributing to implementation of the Framework for Action are registered in its sustainable development partnership database;
- (f) Stimulate the exchange, compilation, analysis, summary and dissemination of best practices, lessons learned, available technologies and programmes, to support disaster risk reduction in its capacity as an international information clearinghouse; maintain a global information platform on disaster risk reduction and a web-based register "portfolio" of disaster risk reduction programmes and initiatives implemented by States and through regional and international partnerships;²³
- (g) Prepare periodic reviews on progress towards achieving the objectives and priorities of this Framework for Action, within the context of the process of integrated and coordinated follow-up and implementation of United Nations conferences and summits as mandated by the General Assembly,²⁴ and provide reports and summaries to the Assembly and other United Nations bodies, as requested or as appropriate, based on information from national platforms, regional and international organizations and other stakeholders, including on the follow-up to the implementation of the recommendations from the Second International Conference on Early Warning (2003).²⁵

F. Resource mobilization

34. States, within the bounds of their financial capabilities, regional and international organizations, through appropriate multilateral, regional and bilateral coordination mechanisms, should undertake the following tasks to mobilize the necessary resources to support implementation of this Framework for Action:
- (a) Mobilize the appropriate resources and capabilities of relevant national, regional and international bodies, including the United Nations system;
 - (b) Provide for and support, through bilateral and multilateral channels, the implementation of this Framework for Action in disaster-prone developing countries, including through financial and technical assistance, addressing debt sustainability, technology transfer on mutually agreed terms, and public-private partnerships, and encourage North-South and South-South cooperation;
 - (c) Mainstream disaster risk reduction measures appropriately into multilateral and bilateral development assistance programmes including those related to poverty reduction, natural resource management, urban development and adaptation to climate change;
 - (d) Provide adequate voluntary financial contributions to the United Nations Trust Fund for Disaster Reduction, in the effort to ensure the adequate support for the follow-up activities to this Framework for Action. Review the current usage and feasibility for the expansion of this fund, inter alia, to assist disaster-prone developing countries to set up national strategies for disaster risk reduction.
 - (e) Develop partnerships to implement schemes that spread out risks, reduce insurance premiums, expand insurance coverage and thereby increase financing for postdisaster reconstruction and rehabilitation, including through public and private partnerships, as appropriate. Promote an environment that encourages a culture of insurance in developing countries, as appropriate.

Annex

Some multilateral developments related to disaster risk reduction

Among the multi-lateral frameworks and declarations that are of relevance to this document there are the following:²⁶

- The International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States,²⁷ held in Mauritius in January 2005, calls for increased commitments to reducing the vulnerability of small island developing States, due to their limited capacity to respond to and recover from disasters.
- The Agenda for Humanitarian Action adopted by the International Conference of the Red Cross and Red Crescent in December 2003 includes a goal and actions to “reduce the risk and impact of disasters and improve preparedness and response mechanisms”.
- The Johannesburg Plan of Implementation of the World Summit on Sustainable Development,²⁸ held in 2002, paragraph 37 requests actions under the chapeau: “An integrated, multi-hazard, inclusive approach to address vulnerability, risk, assessment and disaster management, including prevention, mitigation, preparedness, response and recovery, is an essential element of a safer world in the 21st century”, supporting the International Strategy for Disaster Reduction as the first action. The theme of “vulnerability, risk reduction



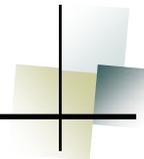
and disaster management” is included in the multi-year programme of work of the Commission on Sustainable Development in 2014-2015, and as a cross-cutting theme throughout the programme.

- The third Action Programme for Least Developed Countries,²⁹ adopted in 2001, requests action by development partners in view of giving priority attention to these countries in the substantive programme and institutional arrangements for the implementation of the International Strategy for Disaster Reduction.
- The Millennium Declaration³⁰ of September 2000, identified key objectives of “Protecting the vulnerable” and “Protecting our common environment”, which resolve to “intensify cooperation to reduce the number and effects of natural and man-made disasters”. A comprehensive review of the progress made in the fulfillment of all the commitments contained in the United Nations Millennium Declaration will be held in July 2005.³¹
- The International Strategy for Disaster Reduction was launched in 2000³² by the Economic and Social Council and the General Assembly as an inter-agency framework and mechanism (inter-agency task force on disaster reduction and an inter-agency secretariat) to serve as a focal point within the United Nations system with the mandate to promote public awareness and commitment, expand networks and partnerships, and improve knowledge about disaster causes and options for risk reduction, building on the Yokohama Strategy and Plan of Action and as follow-up to the International Decade for Natural Disaster Reduction.
- The Johannesburg Plan of Implementation of the World Summit on Sustainable Development,³³ held in 2002, requested the Intergovernmental Panel on Climate Change to “improve techniques and methodologies for assessing the effects of climate change, and encourage the continuing assessment of those adverse effects...”. In addition, the General Assembly³⁴ has encouraged the Conference of the Parties to the United Nations Framework Convention on Climate Change,³⁵ and the parties to its Kyoto Protocol³⁶ (entering into force in February 2005) to continue to address the adverse effects of climate change, especially in those developing countries that are particularly vulnerable. The United Nations General Assembly³⁷ also encouraged the Intergovernmental Panel on Climate Change to continue to assess the adverse effects of climate change on the socio-economic and natural disaster reduction systems of developing countries.
- The Tampere Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations of 1998 entered into force on 8 January 2005.
- The Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation and its Plan of Action³⁸ (1994), was adopted at the World Conference on Natural Disaster Reduction, building on the mid-term review of the International Decade for Natural Disaster Reduction.
- The United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa³⁹, was adopted in 1994 and entered into force in 1996. The United Nations Convention on Biological Diversity⁴⁰ was adopted in 1992 and entered into force in 1993.
- The General Assembly⁴¹ (1991) requested strengthening of the coordination of emergency and humanitarian assistance of the United Nations, in both complex emergencies natural disasters. It recalled the International Framework of Action for the International Decade for Natural Disaster Reduction (resolution 44/236, 1989), and set out guiding principles for humanitarian

relief, preparedness, prevention and on the continuum from relief to rehabilitation and development.

[Notes]

- 1 Vulnerability is defined as: "The conditions determined by physical, social, economic, and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards". UN/ISDR. Geneva 2004.
- 2 Hazard is defined as: "A potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. Hazards can include latent conditions that may represent future threats and can have different origins: natural (geological, hydrometeorological and biological) or induced by human processes (environmental degradation and technological hazards)" UN/ISDR. Geneva 2004.
- 3 The scope of this Framework for Action encompasses disasters caused by hazards of natural origin and related environmental and technological hazards and risks. It thus reflects a holistic and multihazard approach to disaster risk management and the relationship, between them which can have a significant impact on social, economic, cultural and environmental systems, as stressed in the Yokohama Strategy (section I, part B, letter I, p. 8).
- 4 Some of these frameworks and declarations are listed in the annex to this document.
- 5 Review of the Yokohama Strategy and Plan of Action for a Safer World (A/CONF.206/L.1).
- 6 As per General Assembly resolution 58/214 of 23 December 2003.
- 7 Resilience: "The capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure This is determined by the degree to which the social system is capable of organising itself to increase this capacity for learning from past disasters for better future protection and to improve risk reduction measures." UN/ISDR. Geneva 2004.
- 8 The Johannesburg Plan of Implementation of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002, paragraphs 37 and 65.
- 9 As reaffirmed at the twenty-third special session of the General Assembly on the topic "Women 2000: gender equality, development and peace for the twenty-first century".
- 10 The establishment of national platforms for disaster reduction was requested in Economic and Social Council resolution 1999/63 and in General Assembly resolutions 56/195, 58/214, and 58/215. The expression "national platform" is a generic term used for national mechanisms for coordination and policy guidance on disaster risk reduction that need to be multi-sectoral and inter-disciplinary in nature, with public, private and civil society participation involving all concerned entities within a country (including United Nations agencies present at the national level, as appropriate). National platforms represent the national mechanism for the International Strategy for Disaster Reduction.
- 11 See footnotes 1, 2 and 3 for the scope of this Framework for Action.
- 12 See footnotes 1, 2 and 3.
- 13 As recommended in General Assembly resolution 58/214.
- 14 "Structural measures refer to any physical construction to reduce or avoid possible impacts of hazards, which include engineering measures and construction of hazard-resistant and protective structures and infrastructure. Non-structural measures refer to policies, awareness, knowledge development, public commitment, and methods and operating practices, including participatory mechanisms and the provision of information, which can reduce risk and related impacts". UN/ISDR. Geneva, 2004.
- 15 According to the principles contained in General Assembly resolution 46/182
- 16 In compliance with General Assembly resolution 58/118 and OAS General Assembly



- resolution 2018 (xxxiv-0/04).
- 17 As identified in General Assembly resolution 57/270 B.
 - 18 Such as the Tampere Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations (1998), which entered into force 8 January 2005.
 - 19 The United Nations Advisory Board on Water and Sanitation established by the Secretary-General made an urgent appeal to halve loss of human life caused by major water related disasters, including tsunami, by 2015.
 - 20 Defined by General Assembly resolution 46/182.
 - 21 Work towards the consistent implementation of General Assembly resolution 57/150.
 - 22 A review process regarding the institutional arrangements within the United Nations pertaining to disaster reduction is currently being carried out and will be completed, following the World Conference on Disaster Reduction, with an evaluation of the role and performance of the International Strategy for Disaster Reduction.
 - 23 To serve as a tool for sharing experience and methodologies on disaster reduction efforts. States and relevant organizations are invited to actively contribute to the knowledge-building process by registering their own effort on a voluntary basis in consideration of the global progress of the Conference outcomes.
 - 24 General Assembly resolution 57/270B, follow-up to United Nations conferences, and the General Assembly resolutions on Implementation of the International Strategy for Disaster Reduction, which request the Secretary-General to report to the second committee of the General Assembly under "Sustainable development" (54/219, 56/195, 57/256 58/214, 58/215, 59/231).
 - 25 General Assembly resolution 58/214. 19
 - 26 For a more comprehensive listing of relevant frameworks and declarations, see information document: Extracts Relevant to Disaster Risk Reduction From International Policy Initiatives 1994- 2003, Inter-Agency Task Force on Disaster Reduction, ninth meeting 4-5 May 2004.
 - 27 General Assembly resolution 58/213. Further implementation of the Programme of Action for the Sustainable Development of Small Island Developing States.
 - 28 A/CONF.199/20
 - 29 A/CONF.191/11
 - 30 General Assembly resolution 55/2
 - 31 General Assembly resolution 58/291
 - 32 General Assembly resolutions 59/231, 58/214, 57/256, 56/195, 54/219
 - 33 A/CONF.199/20, paragraph 37 e).
 - 34 General Assembly resolutions on natural disasters and vulnerability (59/233, and 58/215)
 - 35 United Nations, Treaty Series, vol. 1771, No. 30822.
 - 36 FCCC/CP/1997/7/Add.1, decision 1/CP.3, annex.
 - 37 General Assembly resolutions on natural disasters and vulnerability (59/233, and 58/215)
 - 38 A/CONF.172/9
 - 39 United Nations, Treaty Series, vol. 1954, No. 33480
 - 40 United Nations, Treaty Series, vol. 1760, No. 30619 22
 - 41 General Assembly resolution 46/182
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