

**5<sup>TH</sup> INTERNATIONAL CONFERENCE ON FLOOD MANAGEMENT**  
**High Panel Discussion: Safeguarding and recovering from mega-disasters**  
**Building global solidarity to safeguard nations and the people**

by

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**Your Imperial Highness, Crown Prince Naruhito,**  
**Excellencies,**  
**Dr Mitsuhiro Hatori, Permanent Representative of Japan with WMO,**  
**Distinguished Guests,**  
**Dear Colleagues, Ladies and Gentlemen,**

It is a pleasure for me to be in Tokyo to participate in the 5<sup>th</sup> International Conference on Flood Management (ICFM5) and, in particular, in this International Forum on Water Mega-Disasters. I would like to express my appreciation to the International Centre for Water Hazard and Risk Management (ICHARM) as its organizer; to the United Nations University (UNU) for holding today's session in its attractive headquarters building; and to congratulate Japan as the host country of this world-class event.

Statistics show that over the last 50 years, hydrometeorological hazards have been behind 90 % of all natural disasters and that water is generally a key determining factor: too much or too little water can trigger loss of lives and property, in particular as a consequence of hurricanes and typhoons, floods and droughts, among other large-scale events.

Even geological events can manifest themselves as water hazards, especially as tsunamis, so disaster risk reduction will continue to be a vital issue in the international hydrological agenda.

The magnitude of some recent hydrometeorological extremes has been unprecedented in our recorded history and the frequency of these episodes is increasing. In 2011, the second United Nations Global Assessment Report on Disaster Risk Reduction (GAR11) - *Revealing Risk, Redefining Development* - has highlighted decreasing rainfall and increasing water stress in the context of climate variability and climate change, in addition to increasing water demands due to urbanization, industrialization, tourism and growth of agribusiness.

In this respect, may I remind you that the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), which WMO co-sponsors with UNEP since 1988 and which in 2007 received the prestigious Nobel Peace Prize, anticipates an increasing vulnerability to weather, climate and water extremes on account of climate variability and change.

The GAR11 confirms the statistics I already mentioned in the sense that the mortality risk associated with major hydrometeorological hazards is declining globally, even if the tendency is less visible in countries with lower Gross Domestic Product (GDP) and weaker risk-governance capacities. However, economic loss risk continues to increase across all regions – threatening lower-income economies and impacting upon poverty-alleviation efforts. Accordingly, if the Hyogo Framework for Action 2005 – 2015 (HFA) and UN Millennium Development Goals (MDGs) objectives are to be achieved, new paradigms in disaster risk reduction must emerge in urgency.

Effective implementation of a comprehensive disaster risk management framework will require, in particular: risk assessment, to perceive and to quantify the risks associated with natural hazards and their impacts; risk reduction, through preparedness and prevention; and risk transfer, through appropriate financial instruments. These risk management components should be underpinned by the correct legal frameworks and policies; organizational coordination and cooperation mechanisms; and resources allocation. Furthermore, effective knowledge sharing among all the relevant stakeholders will be vital, supported by the appropriate capacity development programmes.

#### **Your Imperial Highness, Ladies and Gentlemen,**

The tragic multiple-disaster experienced in March 2011 by Japan, a highly developed, well-prepared and extremely resilient society, has demonstrated how complex it can be to categorize natural disasters as purely geophysical, hydrometeorological or technological. Even with a culture of preparedness already in place and fully integrated into the public policy, as well as with most early warnings issued in good time, the nature of the ultimate hazard was unpredictable at the earliest stages of the emergency, showing how rapidly one disaster category can turn into another, or again into a third.

These and other events endured in recent years have notably underscored the importance of fully-integrated multi-hazard early-warning systems as well as the aptness of platforms of competent agencies or disaster risk reduction institutions working together in real-time partnerships, in particular to support rapid information exchange across the relevant jurisdictions.

Due to the possibility of disaster transformation which I have already mentioned, but also to an increasing integration across the main risk-reduction stakeholders, there has been a tendency for WMO and the National Meteorological and Hydrological Services (NMHSs) of its 189 Members, to be called into action to contribute in the recovery efforts and the safeguarding from further impacts, in the wake of disaster episodes which previously might have been considered beyond our realm

of competence. Such was the case, notably, with the tragic Indian Ocean tsunami in December 2004, the catastrophic Haiti earthquake in January 2010 and the exceptional Pakistan floods in July 2010, to mention only some notorious examples.

In addition, the perceived increase in the magnitude and frequency of hydrometeorological hazards can be affecting humanitarian responsiveness through a potential fatigue in relief solidarity. However, to meet the challenges augmented funding for prevention and assistance will be necessary, as well as new financial mechanisms.

At the same time it is imperative that those most vulnerable be provided with the scientific knowledge needed to suitably deal with natural hazards. In addition, despite outstanding technological advances, the relevant available information may often not reach in time those countries most vulnerable to natural disasters, an issue which WMO is contributing to improve decisively through the new Global Framework for Climate Services (GFCS).

As you are aware, an increasing number of socioeconomic sectors are experiencing enlarged impacts on account of these hazards; in particular, those sectors in the vulnerable developing world which are closely related to agriculture and food security, water quality and health. However, unprecedented advances in climate science over the last decade have paved the way for new opportunities in climate services which can contribute decisively to safeguarding and recovery from mega-disasters.

In 2009, WMO convened the third World Climate Conference (WCC-3), with partners and with decisive support from Japan. The WCC-3 unanimously called for a GFCS. In response to the WCC-3 mandate, at the end of 2010 an international taskforce of high-level independent experts, including one from Japan, completed a report with key recommendations for GFCS development, implementation and governance, which was thoroughly considered in May/June 2011 by the Sixteenth World Meteorological Congress.

The WMO Congress adopted a number of significant decisions and it unanimously agreed that over the next four years, the initial GFCS priorities shall be disaster risk reduction; food and agriculture; health; and water. The achievement of the four priorities will be supported by appropriate capacity-development in these areas.

Next year, for the first time in 62 years of WMO history, an extraordinary session of the WMO Congress will be dedicated exclusively to the GFCS. Once fully implemented, the GFCS shall be a vital new element for climate change adaptation and disaster risk reduction, and it will also contribute to increase disaster resilience. Furthermore, it will be open-ended, by definition, so it can readily receive the invaluable contributions of all WMO Members as well as of WMO partners with internationally-assigned competences in various key areas.

GFCS development will require demonstrated aptitudes in data collection and exchange, sustained investments in high-quality science and, perhaps most importantly, unprecedented global interaction and collaboration between developed and developing countries. WMO looks forward to the vital contributions of all societies and, in particular, of those represented at this key International Conference.

In concluding, I would like to thank Japan and the ICFM5 organizers for their kind invitation, and to wish you a most successful Conference.

Thank you.

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