

**OPENING STATEMENT AT THE
SCIENTIFIC AND TECHNICAL SYMPOSIUM OF THE
THIRD INTERNATIONAL EARLY WARNING CONFERENCE**

by

**M. Jarraud
Secretary-General
World Meteorological Organization
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Madam Chairperson,

Distinguished Guests, Dear Colleagues, Ladies and Gentlemen,

On behalf of the World Meteorological Organization (WMO) and my own, I wish to thank the Government of Germany for organizing the Third International Early Warning Conference and inviting me to address the opening of its Scientific and Technical Symposium. I also would like to acknowledge the commitment of Germany to the issue of Early Warning Systems and to thank the Government for organizing this important event to facilitate the international exchange of ideas, experiences and lessons learned on this subject.

Dear Colleagues, Ladies and Gentlemen,

Hazards are inevitable and threatening to everyone, but they tend to impact the hardest on the most vulnerable communities, especially the developing countries and the Least-Developed Countries (LDCs). This situation can often cause irreparable damage and set back the economies of these societies by years, and even by decades.

From 1980 to 2005, over 7000 natural disasters worldwide have taken the lives of nearly two million people and produced economic losses over one trillion Euros. However, as the number of disasters and their economic impacts increased during the period, the number of fatalities was diminishing. For example, for disasters linked to weather-, water- and climate- related hazards, there has been nearly a 4-fold increase in the number of disasters and a 5-fold increase in the economic losses, while the loss of lives decreased to one-third of its original value. This noteworthy achievement is due to several factors, one of which has been the development of specific end-to-end early warning systems.

Gradually, there has been a growing global awareness on the importance of early warning systems. During the Second World Conference on Disaster Reduction (Hyogo, Kobe, Japan, January 2005), 168 countries adopted the Hyogo Framework for Action 2005-2015 (HFA) and identified five high priority areas, of which the second stressed the need for “identifying, assessing and monitoring disaster risks and enhancing early warnings”, as a critical component of disaster risk reduction. Furthermore, the HFA stressed that disaster risk reduction must be addressed with an *integrated* and *multi-hazard* approach.

At the 2005 United Nations World Summit, held in New York last September, Governments requested the establishment of early warning systems for all natural hazards, building on existing national and regional capacities to complement broader disaster preparedness and mitigation initiatives. Opportunely, the preliminary report of the Global Survey of Early Warning Systems, which was requested by UN Secretary General, has confirmed that while there has been substantial progress, many gaps and challenges still remain. The Hyogo Framework for Action and the strengthened International Strategy for Disaster Reduction (ISDR), provide an excellent framework for all of us to work together in ensuring that early warning systems are integrated as part of disaster risk reduction strategies in all countries, particularly in those with least resources.

For several years, WMO has been advocating that the emphasis in risk management should be shifted from mitigation to prevention and preparedness. Indeed, it has been shown that one Euro spent on disaster preparedness can prevent 7 - 10 Euros of disaster-related losses. Therefore, while natural hazards may not be avoided, integration of risk assessment and early warnings with other preventive measures, together with coordination and preparedness at international, regional, national and local levels can lead to reduction of the risks of hazards. This means that we can take action to reduce considerably the loss of life and socio-economic damage caused by these hazards.

Without doubt, a fundamental pre-condition for disaster preparedness is a well-functioning early warning system, capable of delivering accurate information to the population at risk, dependably and in a timely manner. However, there still remain many challenges in ensuring that all countries are adequately equipped with technical operational capacities for monitoring and the timely provision of warnings to communities at-risk, as well as the capacity to act upon these warnings. Furthermore, education, public outreach and community-based programmes are needed to enable the public to understand the hazards and their potential impacts, and to respond effectively.

Through WMO's global operational network, which includes the National Meteorological and Hydrological Services (NMHSs) of its 187 Members, WMO has developed the operational technical capacity for observing, detecting, monitoring, and forecasting of a wide range of weather-, water- and climate-related hazards. The WMO Global Observing System (GOS) enables the collection of environmental information around the world. Through this system, data is obtained from 18 satellites, hundreds of ocean buoys, aircraft, ships and nearly 10,000 land-based stations.

In addition, more than 50,000 weather reports and other products are disseminated daily through WMO's Global Telecommunication System (GTS), which interconnects all NMHSs. The WMO Global Data-Processing and Forecasting System (GDPFS) ensures the cooperation of WMO's three World Meteorological Centres (WMCs) and 40 Regional Specialized Meteorological Centres (RSMCs) in the provision of forecasts, including the early warnings of severe events. Based on these, the NMHSs of each country can develop and provide warnings adapted to the local conditions and needs. For example, through this coordinated network, all countries at-risk have access to tropical cyclone observations and warnings.

There are many other such examples, for different hazards, demonstrating that the integration of risk assessment and early warnings with prevention and mitigation measures can indeed permit to save many more lives and reduce damages. While these efforts have led to progress in early warning systems, there still remain many challenges and gaps at legislative, financial, organizational, technical, operational, training and capacity building levels, to ensure that early warning systems will be implemented as an integral part of disaster risk management strategies, within a multi-hazard framework, in all countries and particularly in those with least resources.

Accordingly, the requirements and constraints in addressing these gaps need to be defined and prioritized, and clear follow-up actions need to be identified and implemented through close strategic partnerships at international, regional and national levels. This is a multi-stakeholder issue that needs to be addressed through closer coordination and collaboration among the different communities that are working on diverse aspects of disaster risk reduction.

Moreover, various hazard-specific early warning systems have similarities and share common elements. Enhanced integration of these systems at national and international levels contributes to the strengthening of national capacities in reducing the impacts of disasters. This requires partnerships, to identify and prioritize the actions that can be taken and to implement them by building on common strengths, infrastructure and the capabilities of different agencies and stakeholders.

As you are aware, the development and sustainability of effective end-to-end early warning systems can be expensive and resource-intensive activities. However, a multi-hazard approach can result in enhanced operational efficiency, cost effectiveness and sustainability. Additionally, the benefits of the multi-hazard approach will require further consideration in terms of governance, organizational and operational aspects.

This Scientific and Technical Symposium is, therefore, a major step to further explore the concept as well as the related potential economies and synergies, and to recommend the actions required.

Dear Colleagues, Ladies and Gentlemen,

In closing, I wish you a very successful session and numerous productive discussions. Your presence speaks of your dedication to the prevention and mitigation of natural disasters. Together, we are working for a safer world.

Thank you.