



**Name of Event: [Featured Event] Operational Climate Services for Managing Socio-Economic Risks linked to the Changing Climate**

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**Panellists:**

- Mr. Jan Egeland, Director, Norwegian Institute of International Affairs (Facilitator)
- Mr. Michel Jarraud, Secretary General of the World Meteorological Organization
- Lic Harley Rodriguez, Vice minister of Public Investment, Ministry of Development Planning, Plurinational State of Bolivia
- Mr David Cadman, President, Local Governments for Sustainability, ICLEI
- Dr Lucien Manga, Programme Manager of WHO Public Health and Environment in Africa
- Mr Christopher Chileshe, Assistant Director, Ministry of Energy and Water Development , Zambia
- Mr Rowan Douglas, CEO Global Analytics of Willis Re and Chairman, Willis Research Network

**1) Outline**

- What are the main risks associated with climate variability and change along your sector's value-chain, both extreme events as well as slowly varying changes. Can you provide concrete examples as to how these over the years have impacted your countries economy and socio-economic development?
- Availability and quality of water as a resource is critical to many aspects of social and economic development, agricultural production, hydro-power generation, health, tourisms, manufacturing, urban development and planning. In context of changing climate, many countries are experiencing reduction in their water supply and more frequency of flooding and droughts (too much or too little water) requiring more complex water resource management practices spanning across many sectors. Can you provide your perspective on this issue and implications for challenges you confront in your decision-making?

- The field of Disaster Risk Reduction is shifting from post disaster response to focus on investments in preparedness and prevention. To what extent in your country, is disaster risk reduction evolving beyond emergency preparedness to planning and holistic risk management within the economic sectors?
- Over the years scientific progress in understanding of the earth's climate system and ability to forecast and develop future scenarios, have provided unprecedented opportunities for information to support decision-making To what extent you are utilizing climate information and how have you benefited from these information in your decisions? What are the opportunities and challenges for you as a decision-maker to tap into these sources of information?
- Investment in science-based information to support informed decision-making has been the foundation for success in many sectors, development of climate information requires significant amount of cooperation and investments at local, national, regional and global levels. Many socio-economic studies are indicating that investing in climate services has high return on investment: What is your experience and view point? Can you provide examples from your experience?

## **2) Key messages, outcomes, recommendations**

- There is clear evidence that many sectors such as health, agriculture, energy, water resource management, infrastructure and urban planning and finance recurrently experience significant economic impacts linked to hydro-meteorological hazards. These impacts having increased significantly over the years, and are expected to continue to further increase due to increasing frequency, and severity of these events, linked in part to climate variability and climate change
- Progress in climate modeling and forecasting provides unprecedented opportunities for managing risks of extremes through informed medium- to long-term planning and risk management strategies
- There is need for making routinely available, tailored climate information suitable to carry out forward-looking risk analysis as basis for informed decision-making while appropriately recognizing that needs for climate information varies across sectors and the industry value chain
- Establishment of the Global Framework for Climate Services (GFCS) would ensure the availability of science-based tailored climate services to support informed investing and planning at all levels. GFCS will build on exiting institutions and infrastructure, through strengthened coordination and cooperation at international, regional, national and local levels.

- Climate information must be relevant to user's application and thus this requires a new level of cooperation of the scientific community with socio-economic sectors spanning both public and private sectors.

### 3) Conclusions

Virtually all sectors of economic activity experience significant economic impacts linked to weather, climate and hydrological hazards, with the agriculture, water and health sectors in the developing world being particularly vulnerable. These impacts are expected increase within our changing climate. In a World faced with meteorological hazards, understanding how climate is changing is key for planning effective risk reduction strategies. The extraordinary progress in climate modeling and forecasting over the last decade provides us with unprecedented opportunities for the development of climate services that will underpin the management of the risks of extreme weather events from the medium- to long-term. As a follow on to the third World Climate Conference (WCC-3), efforts are underway to develop a Global Framework for Climate Services (GFCS) aimed at providing better climate services that will ensure availability of relevant climate information routinely to all sectors and user at various levels. However this would require: (1) improved capability in climate data collection and exchange, (2) continued investment in high-quality scientific and socio-economic research to develop new services, (3) improved communication systems that can reach all climate service users and (4) global-regional-national-local cooperation and coordination to ensure that services are developed and utilized effectively in decision-making across many sectors. Development of national climate services must be a critical component of the national development planning and strategies. Through this cooperation, tailored climate information suitable for carrying out forward-looking risk analysis will be available to all that need it. A key focus of the Global Framework will be providing these services routinely and reliably to the most vulnerable in the developing world.

### 4) Reference

Report of the High-Level task Force for the Global Framework for Climate Services: Climate Knowledge for Action: *A Global Framework for Climate Service – Empowering the Most Vulnerable* ([http://www.wmo.int/hlt-gfcs/index\\_en.html](http://www.wmo.int/hlt-gfcs/index_en.html))