



---

## The Second Multi-Hazard Early Warning Conference (MHEWC-II)

### *Early Warning and Early Action towards Sustainable, Resilient and Inclusive Societies*

13-14 May 2019, WMO Headquarters, Geneva, Switzerland

#### **Side Event 6 Concept Note**

**Side event title:** *Multi-sector and multi-hazard risk monitoring systems for Agriculture, Food Security and Nutrition*

**Date, time and venue:** *Tuesday, 14 May 2019, 13:00-14:30, Salle C2*

**Co-leads:** *Food and Agriculture Organization of the United Nations (FAO) and World Food Programme (WFP)*

**Other contributing partners:** *World Meteorological Organization's (WMO)*

#### **Main session objectives:**

The session of "Multi-sector and multi-hazard risk monitoring systems for Agriculture, Food Security and Nutrition" will bring together stakeholders across levels and sectors to highlight the importance of integrated multi-hazard risks monitoring systems for resilient agriculture and food systems. The event will:

- Introduce some of the innovative multi-hazard risk monitoring and forecasting systems that are currently being implemented in different countries and that bring together elements of risk prioritization, risk/vulnerability analysis, early warning systems (EWS) and early action;
- Showcase how these tools contribute to build resilience of vulnerable communities and food systems most at risk by strengthening coordination channels for information sharing, enhance preventive and risk reduction actions while also contributing to inform post-disaster assessments and response; and
- Present key lessons learned and challenges in setting up integrated monitoring and forecasting systems and the role they play in resilience building efforts and humanitarian assistance.

#### **Expected outcomes/results (bullet points)**

- Promote greater understanding of how monitoring processes/tools help to identify people and livelihoods most at risk and support measures to strengthen resilience of agriculture and food systems when linked to EWS and anticipatory action;
- Identify key building blocks of effective multi-hazard risk monitoring systems that are linked to EWS for agriculture and food security, including understanding of where people at risk are located; the nature and degree of their exposure and vulnerabilities; their coping capacities and risk mitigation measures for single or multiple natural hazards;

- Propose key recommendations geared at promoting greater coherence and integration across different tools/monitoring systems and related early warning and anticipatory actions measures.

#### Key messages:

- The agriculture sector<sup>1</sup> is exposed to a wide range of risks, including socio-economic, natural hazards and food chain crises<sup>2</sup>, which occur at different levels and at different temporal scales. Given its crucial reliance on weather, climate and water, the agriculture sector is particularly vulnerable to climate and weather-related extremes, as well as to pests and diseases.
- Climate change adds another layer of risk, as it not only alters the intensity and frequency of climate extremes (IPCC, 2012). Climate-related disasters are occurring nearly five times as often compared to 40 years ago, with great costs to local economies, livelihoods and lives; decreasing the resilience of many poor households and communities due to factors such as reducing agricultural productivity and increasing disease vectors and shortages of water and energy in many disaster-prone regions (UNISDR, 2009).
- While multi-hazard risk monitoring systems are key to inform investments and decision-making at all levels to mitigate the impacts of extreme weather events and climate variability, often monitoring systems are hazard specific leading to a fragmentation of data. Moreover, challenges remain in linking extreme weather events forecasting for agriculture and food systems with other such as markets, pests or plants diseases, conflict, food prices. This lack of triangulation often translate in a failure to provide a stronger signal about a potential crisis/disastrous impacts.
- Taking a multi-hazard risks approach is therefore essential to strengthen understanding of the overall risk context and to inform the development of policies and interventions, programmes that contribute to enhance the resilience of agriculture, food security and nutrition (FSN).
- Risk monitoring systems for Agriculture, Food Security and Nutrition should be (i) multi-sectoral (including crop, livestock, forestry, fisheries/aquaculture and relevant sectors such as environment and health); (ii) multi-hazards including elements related to markets, conflict, food chain crises; (iii) context specific to inform decision makers and agricultural smallholders on the necessary actions to be implemented.
- Risk monitoring systems must be coupled with a sound understanding of vulnerability and timely alerts to trigger accurate decision-making at institutional and community levels. Mechanisms such as EWEA, PRISM and FbF enables governments and key stakeholders to act early and effectively mitigate the

---

<sup>1</sup> The agriculture sector is understood to encompass the crops, livestock, fisheries and aquaculture and forestry sub-sectors.

<sup>2</sup> Food Chain Crises, comprehends the fast-spreading insidious transboundary animal and plant pest and diseases that could compromise food security, human health, economic and social stability of people, communities and countries, and specially of the world's poorest (FAO, 2018a).

impact of extreme weather events through a systematic use of early warning analysis and forecasts.

- Food security and nutrition monitoring and assessments are essential components of effective risk monitoring and EWS by specifying information about people who are food insecure or at risk. Knowing who they are, where they are located, and why they are food insecure or vulnerable enables organizations to tailor their interventions and implement effective solutions to build resilience to extreme weather events.
- Linking effective monitoring and forecasting systems with anticipatory action is key to build resilience and support vulnerable communities to the impacts of increased climate variability and extreme weather events.
- National ownership at all levels, from national to local, is key to ensure long term sustainability of systems and processes, with greater coherence across sectors and the required capacities in place across levels, allowing them to reach the most vulnerable population with context and sector relevant actionable alerts and early actions, in order to “leave no one behind”.

**Moderator:**

- **Ms Katuscia Fara**, Senior Climate and DRR Advisor, WFP Regional Bureau for Asia and the Pacific, Thailand

**Keynote speaker:**

- **Mr Ahmed Shukri**, FAO Deputy Strategic Programme Leader – Resilience, Italy

**Panellists:**

- **Mr Daniel Molla**, Food Security and Nutrition Analysis Unit, FAO, Somalia
- **Ms Huyam Salih**, Integrated Food Chain Threats Early Warning Analyst, FAO, Italy
- **Mr Nicolas Bidault**, Vulnerability Analysis and Mapping, WFP Regional Bureau for Asia and the Pacific, Thailand
- **Mr Gavin Iley**, Head of Crisis Management and Resilience, Met Office, UK
- **Mr Robert Stefanski**, Chief, Agricultural Meteorology Division, Climate and Water Department, WMO, Switzerland
- **Ms Kim Mallalieu** is Deputy Chairman of the Telecommunications Authority of Trinidad and Tobago (TATT), Trinidad and Tobago