# Breaking down the Silos for More Effective Multi Hazard Early Warning

Integrated Multi Hazard Early Warning Systems and Services

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#### Impacts on people and assets in the LAC region (2000-2019)



**Economic losses** Bahamas 4.3% Turks and Caicos Islands 5.8% Cayman Islands Puerto Rico 9.1% 3.5% Grenada 7.8% Belize 3.4% Samoa Haiti 2.1% 8.0% Dominica Guyana 15% 3.6% Top ten countries / territories by economic losses as % of GDP (2000-2019)

Most impacted countries in the LAC region are located in the Western Tropical Atlantic Region

Total Affected Total Affected /100,000

#### **Risk is complex**

- Understanding risk means understanding what we know, what we don't know, and even trying to tackle what we know we don't know.
- There is a growing and complex interaction of political, human, economic systems with natural ones
- We need to understand how to deal with it without resorting to reductive measures that isolate and ignore the systemic nature of risk.



# **Growing risk in a shrinking world**

- Change does not happen in silos or in straight lines.
- Non-linear change brings new threat patterns
- The choices we make are creating new, emerging and larger risks.
- Human activity grows exposure, increasing the propensity for systems reverberations,
- The cascading consequences of risks happens across sectors and at different levels. (Sometimes there are difficult to foresee)

United Nations Office for Disaster Risk Reduction



Global Assessment Report on Disaster Risk Reduction

2019



#### **DRR at the Core of the Global Agendas**



# Multi Hazard Early Warning Systems



Early: Lead timeWarning: Decision-makingSystem: Flows and interactions

#### **4 Key Core Elements**



# **MHEWS – Shaping the Concept**

- Is not about making a single system work for all hazards.
- Is about taking advantage of the existing capacities and advancements of different EWS (individual, cluster o multi hazard), in the different core four elements of EWS.



- Is about taking into consideration the cascade effects while a specific hazard can trigger another one(s)
- Is about strengthening coordination, synergies, and efficiency in the use of resources and in providing the warning
- Is not only about being multi-hazard but multi-sectoral in their detection and in their response preparation.

# **UN Decade and Risk-informed sustainable development**



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The UN Decade of Ocean Science for Sustainable Development:

- Is an opportunity to improve the understanding of the impacts of ocean related risk and in the complex interaction of different natural and social systems;
- Could provide evidencebased knowledge to build prevention mechanisms for risk-informed sustainable development, including through MHEWS.

#### **Recommendations for Breaking down the Silos for Effective MHEWS**

- Systemic approach to MHEWS
- Better share and link data
- Improve disaster risk governance
- Coordinate actions
- Engage on political discussions and forums aiming to improve risk-informed sustainable development





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# Thank you

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