

# Parliamentary Action for Disaster Risk Reduction and Preparedness in the Caribbean

## Multi-Hazard Early Warning Systems: Perspectives on Sustainable and Inclusive Governance

Jair Torres

Programme Management Officer

UNDRR Subregional office for the Caribbean Regional

Barbados



# UNDRR

UN Office for Disaster Risk Reduction

**SENGAI FRAMEWORK**  
FOR DISASTER RISK REDUCTION 2015-2030



**ANTÓNIO GUTERRES**

*United Nations Secretary-General*



“



**Today I announce the United Nations will spearhead new action to ensure every person on Earth is protected by early warning systems **within five years.**”**

23 MARCH 2022

**Linked with Target G of the Sendai Framework  
for Disaster Risk Reduction !!!**



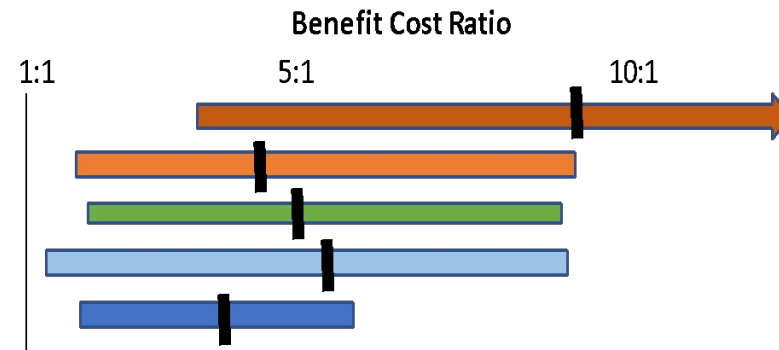
- Proactive investment in reducing disaster risk is highly cost-effective in protecting human lives and preventing economic damage and can save recovery costs.
- Annual investments of USD6 billion in DRR could generate total risk reduction benefits of USD360 billion.
- For instance, countries with high multi-hazard early warning systems (MHEWS) coverage have 6 to 8 times lower disaster-related mortality and five times lower disaster-affected people.
- A 24-hour alert can reduce economic losses by 30%
- There is a direct correlation between investments in MHEWS and countries' advances on sustainable development.

# Value Proposition

- **Benefit of a regional MHEWS**
  - Reduce morbidity
  - Reduce assistance costs
  - Improved productivity
- **Cost effectiveness of MHEWS**

## Adaptative investments

- Strengthening early warning systems
- Making new infrastructure resilient
- Improving dryland agriculture crop production
- Protecting mangroves
- Making water resources management more resilient





# Multi-Hazard Early Warning Systems Understandings

- **Narrower understanding of MHEWS**

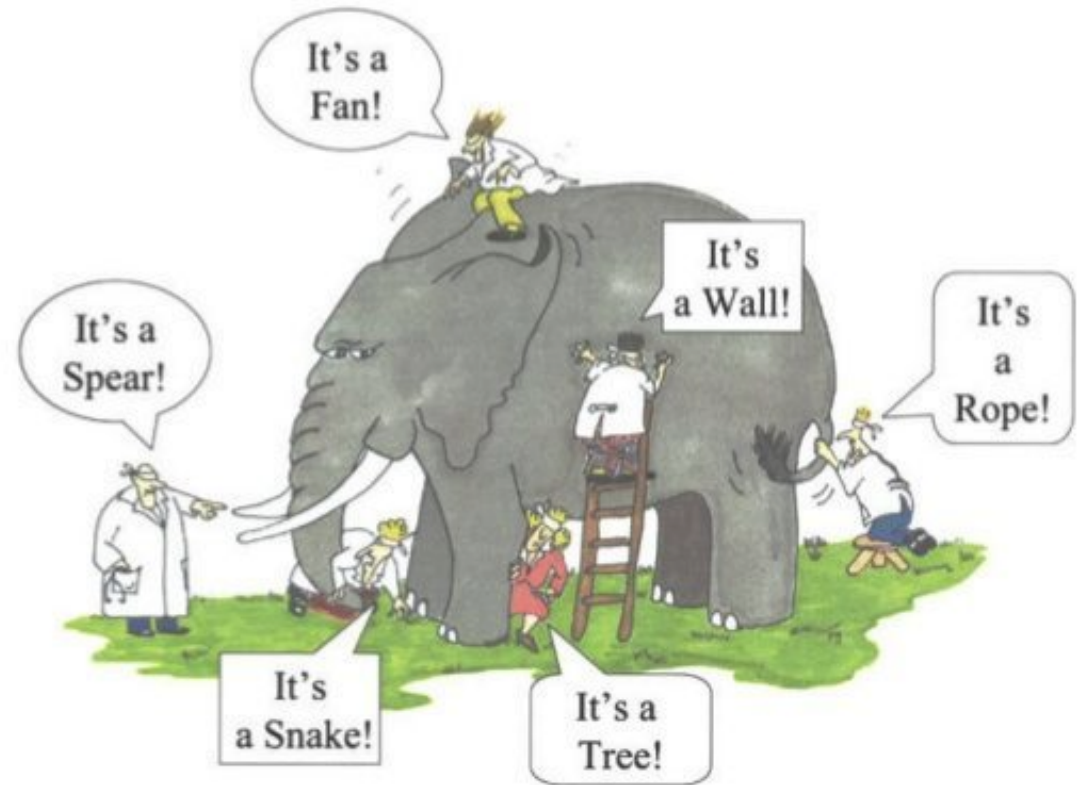
EWS comprises only the technical equipment detecting or forecasting a hazard event and sending its parameters to a decision-making authority.

(Technical view)

- **Wider understanding of MHEWS**

EWS are a social process that involves technical components embedded in their social context.

(DRM approach)



# 4+1 Pillars of MHEWS



## Disaster risk knowledge

Systematically collect data and undertake risk assessments

- Are the hazards and the vulnerabilities well known by the communities?
- What are the patterns and trends in these factors?
- Are risk maps and data widely available?



## Detection, observations, monitoring, analysis and forecasting of hazards

Develop hazard monitoring and early warning services

- Are the right parameters being monitored?
- Is there a sound scientific basis for making forecasts?
- Can accurate and timely warnings be generated?



## Preparedness and response capabilities

Build national and community response capabilities

- Are response plans up to date and tested?
- Are local capacities and knowledge made use of?
- Are people prepared and ready to react to warnings?



## Warning dissemination and communication

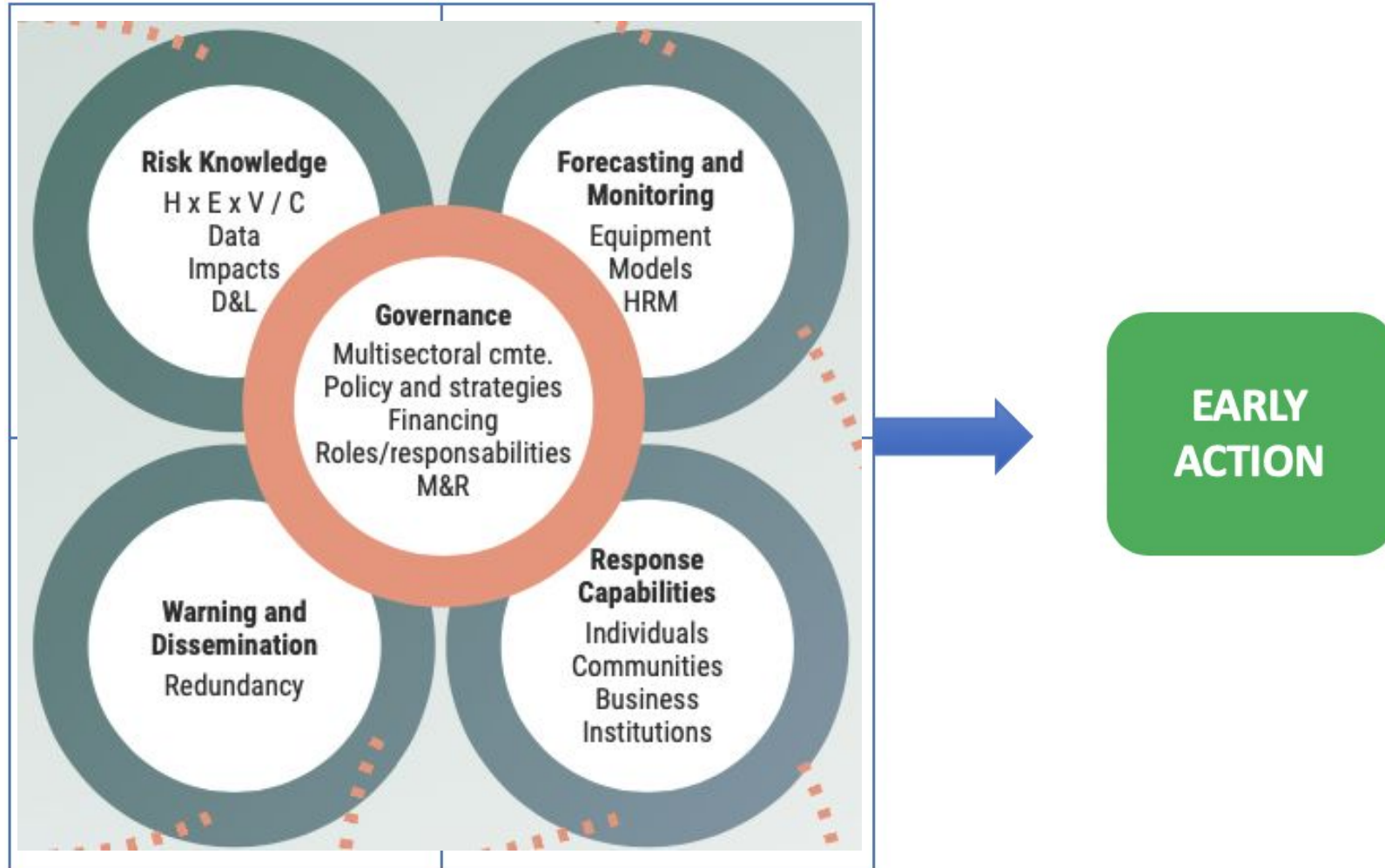
Communicate risk information and early warnings

- Do warnings reach all of those at risk?
- Are the risks and warnings understood?
- Is the warning information clear and usable?

Inter-Pillar = GOVERNANCE



# Disaster Risk Management Approach of MHEWS





**MHEWS doesn't mean a single system that englobes all hazards; but a coordinated & compatible mechanisms & capacities, involving multiple disciplines for updated & accurate hazards identification & monitoring for multiple exposed hazards.**



**Seventy-first session**

Agenda item 19 (c)

**Sustainable development: disaster risk reduction**

**Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction**

**Note by the Secretary-General**

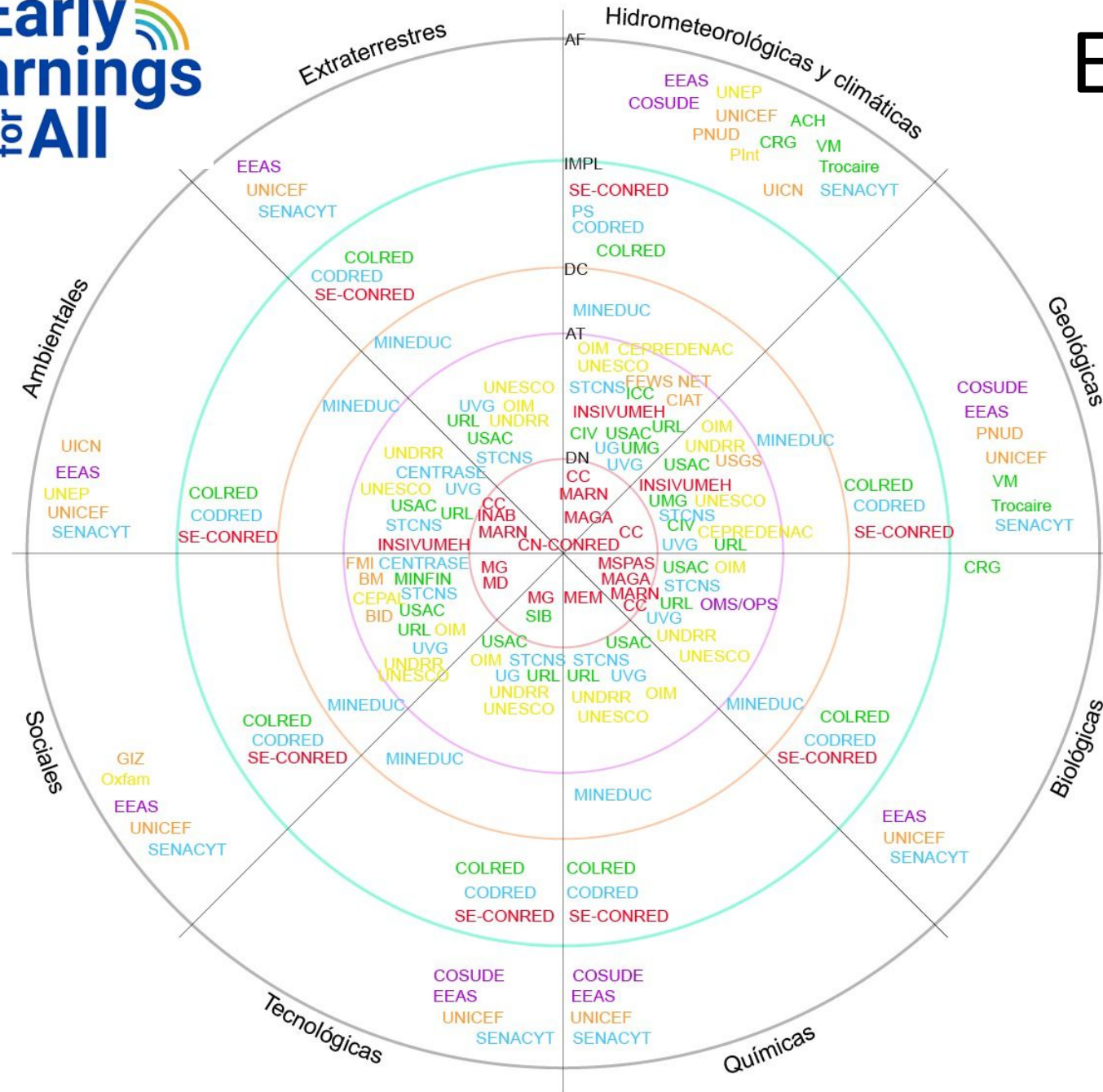
The Secretary-General has the honour to transmit herewith the report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction established by the General Assembly in its resolution 69/284 for the development of a set of possible indicators to measure global progress in the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030, coherent with the work of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators, and the update of the publication entitled "2009 UNISDR Terminology on Disaster Risk Reduction".





# Example: Guatemala

- Regulatory guidance
- Technical support
- Capacity development
- Implementation
- Financial and/or donor support



National



International



**Stakeholder mapping**

# Key Ways Parliamentarians Can Support the Adoption and Strengthening of MHEWS

## 1. Legislate

- Create MHEWS legislation - with clearly defined roles and responsibilities across all of government and key stakeholders and develop multi-hazard and multi-sectoral MHEWS and DRR strategies and policies.
- Review and amend existing sectoral legislation to integrate MHEWS and DRR that reflects international commitments and includes the latest knowledge, while ensuring that MHEWS and DRR can be adapted to evolving requirements.
  - MHEWS Policy, DRR Policy, NAPs, CWPs

## 2. Oversee

- Ensure that all parliamentary oversight functions and activities incorporate disaster risk reduction (DRR) and risk-informed decision-making, while providing access to comprehensive information presented in standardized and consistent formats.
  - Political control debates for those responsible for the operation of early warning systems



# Key Ways Parliamentarians Can Support the Adoption and Strengthening of MHEWS

## 3. Budget and Finance

- Develop and inform MHEWS financing strategies and financial instruments to fund long-term MHEWS (and DRR) initiatives – including funds for full operation, data collection and sharing, reporting and regulation enforcement, and anticipatory action – at all levels of government.
- Integrate and mainstream MHEWS and DRR into public and private investment decisions to deliver risk-informed investment.
  - Financing trends and prospects; Integrating the private sector; and Innovative financing mechanisms



## 4. Represent

- Promote inclusion and an all-of-society approach that ensures citizen engagement in MHEWS, with a focus on multi-sector consultation and coordination.
- Foster development of multi-sector scientific, academic and technical agencies and institutions to provide knowledge, advice, oversight and innovation for MHEWS
  - Ensuring No one is left behind





# Key Ways Parliamentarians Can Support the Adoption and Strengthening of MHEWS

## 5. Advocate

- Advocate that government shifts from an event-centred response and recovery approach to DRR and EWS with a multi-hazard approach,
- Advocate that the data, expertise and experience of national and international agencies and institutions and of other countries with similar hazard and geographic profiles be leveraged to inform MHEWS and DRR frameworks and strategies.
- Advocate a comprehensive climate and disaster risk management approach that consider MHEWS as a key strategy for adaptation and preparedness; and ensuring that they are integrated into development plans and initiatives to increase effectiveness and sustainability.
  - NAP annex on DRR of Trinidad and Tobago.





#EarlyWarningsForAll

“

Every person in the Caribbean, SIDS, and the world, must be protected by an effective multi-hazard early warning system. This is not a privilege, but a right to everyone.

”

**Amina J. Mohammed**

United Nations Deputy Secretary-General

---

**Jair Torres**

Programme Management Officer

Caribbean Region

[jair.torres@un.org](mailto:jair.torres@un.org)



**UNDRR**

Oficina de Naciones Unidas para la  
Reducción del Riesgo de Desastres



**SENDAI FRAMEWORK**

FOR DISASTER RISK REDUCTION 2015-2030