



# Findings & Recommendations to strengthen EWS in the Caribbean

Summary outcomes of multi-stakeholder validation exercise in the Caribbean on the priority gaps and key recommendations to strengthening people-centred Early Warning Systems in the region

6<sup>th</sup> Steering Committee Meeting

Geneva, Switzerland

June 14, 2018

# Re-Cap Lessons Learnt Following 2017 Caribbean Hurricane Season

- 8 month project (Dec 2017-July 2018)
- Total budget USD 316,000
- Evaluate the lessons learnt against proposed standards for an end-to-end people-centred EWS
  - Component 1: Assessing the performance of National and Regional EWS – Forecast Reliability - **Caribbean Institute of Meteorology & Hydrology (CIMH)**
  - Component 2: Review of dissemination and communication of warnings – **Caribbean Disaster Emergency Management Agency (CDEMA)**
  - Component 3: Cross-cutting Gender – **Dr Asha Kambon**



Turks & Caicos

British  
Virgin  
Islands

Anguilla

Barbuda  
Antigua

Dominica



# Expected Outcomes: Lessons Learnt

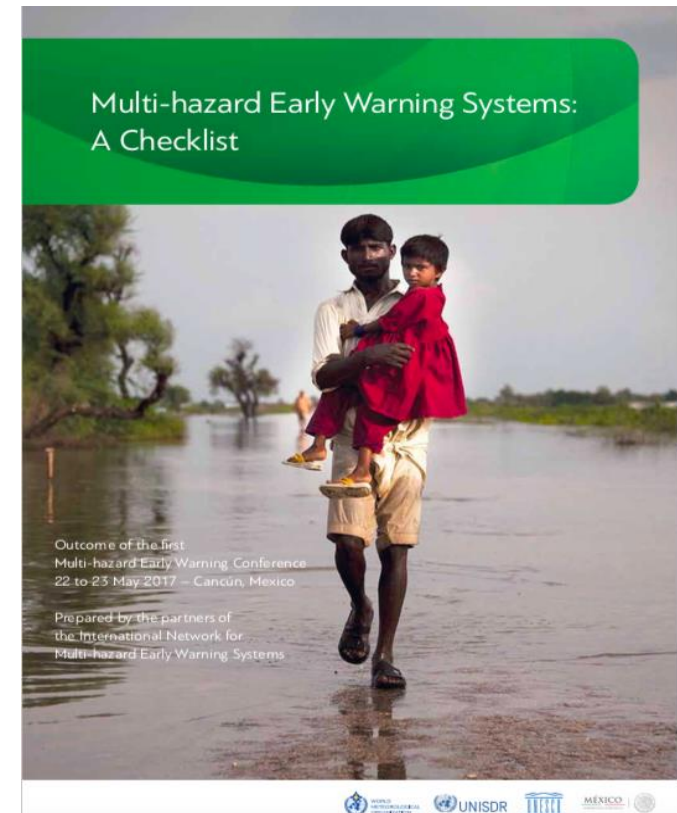
- Support efforts by countries to strengthen preparations for 2018 hurricane season
- Influence the inclusion of early warning needs in recovery funding
- Provide guidance on the integration of Gender in early warning systems
- Guide future CREWS investments and other early warning investments in the region

# How to measure People-Centred end-to-end EWS

## People Centred Focus



## Guide on standards



# Participation at Validation of Findings Workshop

- 15 countries with representatives from Meteorological Services, Disaster Management offices & Gender Bureaus
- Association of Caribbean States (ACS)
- Caribbean Centre for Renewable Energy & Energy Efficiency (CCREEE)
- Caribbean Community Climate Change Centre (CCCCC)
- Caribbean Community Secretariat (CARICOM)
- Caribbean Electric Utility Services (CARILEC)
- International Telecommunication Union
- Institute for Gender Development Studies, University of the West Indies (Barbados)
- The Royal Netherlands Meteorological Institute (KNMI)
- University of the West Indies (Trinidad Campus)
- UNISDR Panama Office
- UN Women
- World Bank – GFDRR
- World Meteorological Organization



15 islands



48 plus  
participants



12  
regional &  
international  
institutions





# Main Findings: Performance of National and Regional EWS – Forecast Reliability



- Forecasts were generally timely
- No institutional contingency for resourcing surge in human resource demands
- Rapid changes in trajectory and intensity created warning challenges
- Low predictions of secondary hazards (i.e. storm surge/coastal inundation) and insufficient use of information already available on the potential impacts (risk maps, historical impact records)
- Monitoring & Forecasting for multi-island territories a major challenge
- Restoring contact between NMHSs & NDMOs took between **3 and 5 days** in the most heavily impacted countries

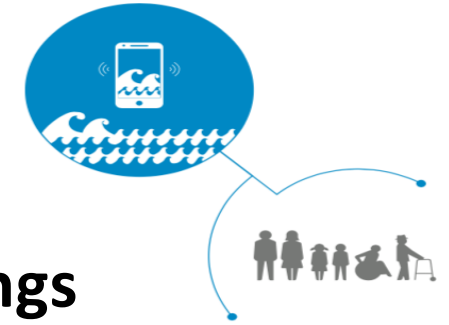


# Main Findings: Dissemination and Communication of Warnings



- Risk assessments were not linked to response planning
- Failure in communication systems increased difficulties to provide warnings
  - Over 50% lost communication during the events
  - Public information was compromised
- No assessment carried out to determine if messages were received
- Thresholds were pre-identified, with alert levels and specific actions linked to them for the hurricanes
  - No such standards for secondary hazards (start/end/intensity/recommended actions)
- Limited risk knowledge
  - Few communities indicated involvement in risk mapping and risk awareness
- Flood is the most mapped hazard
  - Little investment in flood EWS





# Main findings: Gender

## • National level findings

- Little systematic work conducted at the community level to understand risk with gender differentiation
- Little proof to show involvement of men and women in monitoring risks
- Little consideration to gender differentials either in preparedness or messaging
- Gender bureaus were marginalised
- Disaster management offices were weakly staffed & under resourced

## • Community level findings

- Receiving and understanding messages was influenced by the gender differential of time-use, risk perception and educational levels
- Access to technology played its part but differently
- “Machismo” culture acts as a stumbling block for men to take action
- Poor, single headed households (inclusive of the elderly and very young) are at extreme risk due to weak capacities to respond

# Unintended Result from the initiative – Increased Visibility

- **Increased visibility of the CREWS Investments at the Caribbean Community level** – The CREWS Investment initiatives in the region will be incorporated into the brief to the Heads of Government on Disaster Resilience that will be presented in July in Jamaica. It will be presented in the context of the support being provided to CDEMA and CIMH to strengthen the regional mechanisms.
- **Inclusion of CREWS Caribbean investments in the mid-year review of the SIDS Accelerated Modalities of Action (S.A.M.O.A).** The Caribbean Community Secretariat will work toward updating this document to highlight the CREWS investments and its potential to address the implementation of the Pathway as it relates to addressing impacts of natural disasters.

# Key Recommendations

- Advocate for developing/strengthening strategy and legislation for NMHS and NDMOs
- Develop prediction capacities and early warning systems for secondary hazards (coastal flooding and flash floods) across the Caribbean
- Shift from generic forecasts to impact-based forecasts
- Increase human and financial resources for NMHSs
- Prioritize redundancy in emergency communication systems to address challenges in communication between critical stakeholders
- Develop joint programming between NMHS and NDMOs, including public outreach and media engagement
- Expand stakeholder base to incorporate Gender Bureaus to advance the inclusion of gender in Multi-Hazard Early Warning Systems (MHEWS)

