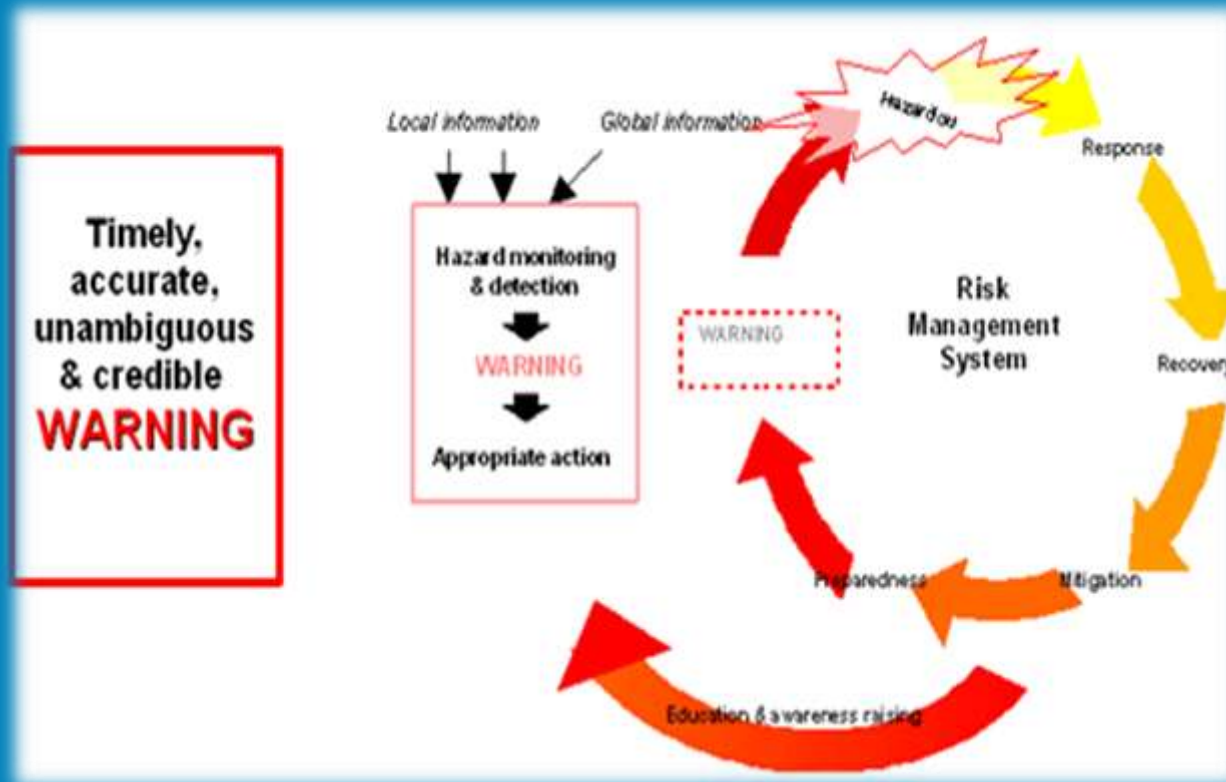


# EARLY WARNING SYSTEMS IN THE CARIBBEAN: A DESK REVIEW



Timely,  
accurate,  
unambiguous  
& credible  
**WARNING**

*Presented by*

*Jeremy  
Collymore*

*April 2016*

# BACKGROUND

Concern about adequacy of EWS from recent impacting events – Erika 2015; December floods 2013; Tomas 2010

Guidance and consideration for intersecting EWS in the resilience Agenda

Create the space for the effective interventions the 2015 DIPECHO Caribbean EWS program



# DESK STUDY REVIEW CONTEXT

Part of DIPECHO Caribbean 2015 EWS enhancement intervention through:

- Identification, documenting and sharing EWS good practice case studies
- Testing and integration of the Common Alerting Protocols (CAP)
- Review, for adoption, Community EWS Toolkit (CEWS)

Time Sensitive Overview



# APPROACH TO THE DESK REVIEW



Document collection and review – over  
125 items



Extensive web searches

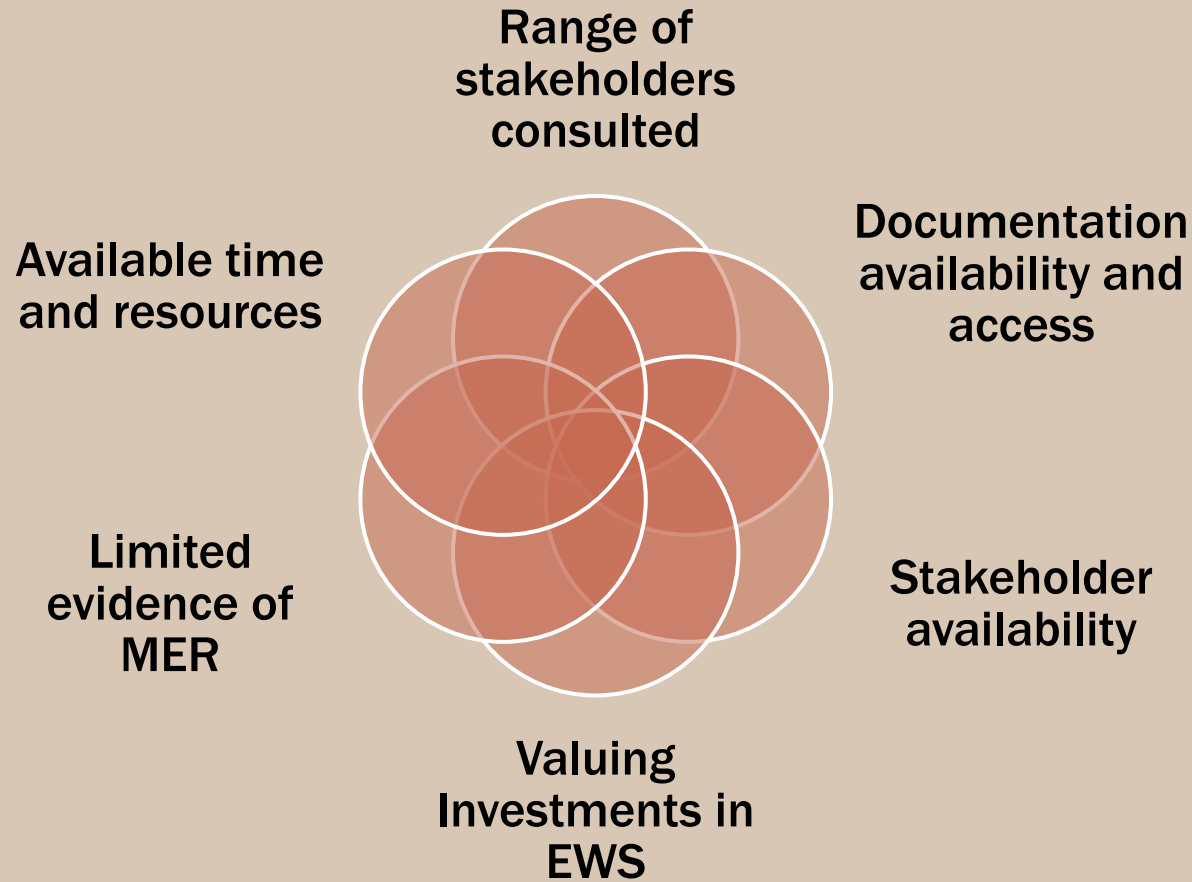


Semi-structured interviews with key EWS  
stakeholders:

CDEMA; CIMH; IFRC; PAHO; UNDP; SRC; Barbados; Jamaica; Saint Lucia  
and Virgin Islands



# STUDY LIMITATIONS



# SETTING FRAMEWORK FOR EWS



# EWS ELABORATED (UNISDR 2004/2009)

## OBJECTIVE OF EWS

- to empower individuals and communities threatened by natural or other hazards, to act in sufficient time and in an appropriate manner so as to reduce the possibility of personal injury, loss of life, damage to property and fragile environment



# DEFINING EWS

## ESSENTIAL INGREDIENTS

Multi-  
disciplinary  
risk  
knowledge

Under-  
standing  
and  
mapping of  
hazards

Warning and  
forecasting for  
decision making

Communicating  
with threatened  
populations

Initiating  
avoidance  
measures





# BASELINING THE DESK REVIEW

**2003  
WATERSHED  
IN EWS  
ASSESSMENT,  
POLICY AND  
PRACTICE**

- **2003 EWS Study in Americas Hemisphere**
- **Regional EWS Study**
- **EWCI Bonn**



# EWS BASELINE 2003



Warning systems primarily for the frequently experienced events – cyclones and floods



Initiation of ICTs in the EWS process



Embryonic work in EWS for tsunamis and volcano hazards



Limited understanding of phenomena constraint to EWS development for the low frequency hazards

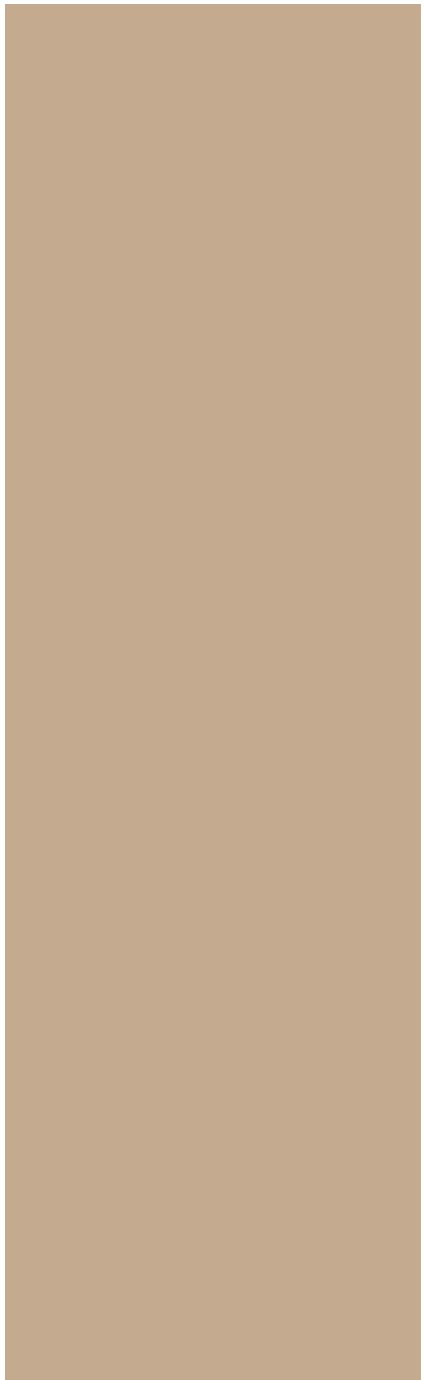


Inadequate resources to operate and implement the systems



Absence of specific EWS policies and the readiness to mitigate this reality





# INVESTMENT IN CARIBBEAN EWS

## 2005-2015

<b>DONORS</b>	<b>2005-2010</b>	<b>2011-2015</b>	<b>TOTAL</b>
Australian Aid	1,000,000	-	1,000,000
JICA-CARICOM-Japan Friendship Fund	3,100,000	267,466	3,367,466
CIDA	6,000,000	350,000	6,350,000
DFID	5,000,000	-	5,000,000
European Commission	22,511,600	706,245	23,217,845
Italian Development Cooperation	3,500,000	-	3,500,000
USAID	1,389,680	16,510,000	17,899,680
<b>Total</b>	<b>42,501,280</b>	<b>17,833,711</b>	<b>60,334,991</b>

Source: Author



# **EWS PRATICESCAPE**

## **(Embryonic Multi-hazard EWS)**

- EWS initiatives consistently articulated in relation to development
- Increase in hazard understanding initiatives
- Diversification in the hazards of focus
- Linking hazard understanding to operational decision making
- Intensification and enhancement of monitoring capability
- Expansion of Community EWS
- Multi-disciplinary teams and processes
- Intensified application of ICTs

# SURFACED ISSUES



Limited EWS Policy



Many initiatives but limited coordination



Modality for harmonization selectively embraced



Timing of Stakeholder engagement



Articulation of EWS not explicit in strategies or programs



Implementation logic of EWS initiatives



Success measures not evident



Institutional memory and documentation



Adequacy of legislative frameworks to guide multi-hazard EWS



# POTENTIAL EWS GAME CHANGERS

## Common Alerting Protocol

- needs clear policy articulation, coordination, harmonization mechanisms and stakeholder mapping

## Community Early Warning Systems Toolkit

- to be linked to safe communities, sustainable livelihoods; Revisiting the interface with resilience processes

## Good Practices/Case Studies

- Transparent and clearly articulated process for identification, selection, sharing and use



# EMBRACING CAP

Promote a CAP revisit and awareness program among stakeholders at regional and national levels

Promote and Lobby for a EWS Stakeholder Group

Advocate for a EWS Strategic Vision and Program for the Caribbean

Establish a Monitoring and Evaluation Framework for EWS and integrate into the Regional MER mechanism

Launch a Caribbean EWS Alliance





# COMMUNITY EWS TOOLKIT

Establish CEWS Training Working group, within the Civil Society Committee of the CHC whose task would be to lead the mapping of existing products, actors and CEWS

Develop an inventory, or plug into existing ones and establish training depth required to support such a program

Adopt or adapt Principles to inform CEWS in the Caribbean

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Formulate a strategy for integrating the CEWS within the CDM Knowledge Management infrastructure

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Explore how the CEWS Toolkit can support the Safe Communities Outcome of CDM 2014-2014.

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# TOWARDS GOOD PRACTICE CASE STUDIES

Develop a program and process to advance the EWS Case Study idea.

Link the Case Study to a larger regional EWS Alliance agenda, anchored in the CDM process.

Explore how ongoing DRM Portal development initiatives can support and sustain this output.

Anchor the Case Study idea to DRM Knowledge Management in the region.



# FRAMEWORK FOR ASSESSING EWS CASE STUDIES

## COMPONENTS

- Description of the Case study method
- Definition of the EWS Components
- Purpose of the Case study
- Implementation Methodology
- Literature review
- Stakeholders' consultation
- Description of the stakeholder consultation process
- Key areas of investigation
- Importance of identified information
- Use of Findings
- Articulation of assumptions and methods




# RUBIC FOR ASSESSING EWS CASE STUDIES


COMPONENTS	NO EVIDENCE	EMERGING EVIDENCE	CLEAR DOCUMENTATION	INSIGHTFUL AND SKILFUL ARTI-CULATION	PEER SCORE
	(Opt)	(1 pt)	(2 pts)	(3-4pts)	
Case study method described	The CS method is not described.	The description is vague or unclear	The description is clear	The description is clear and includes appropriate detail	
EWS Components are defined	EWS C are not defined	EWS C definition is vague and unclear	The definition is clear	Definition is clear and includes appropriate detail	
Purpose- what did the case study (CS) seek to achieve? What did the study hope to learn?	The purpose of the CS was not stated	The purpose of the CS was stated but was unclear or very vague	The purpose of the CS was clearly stated	The purpose of the CS was clearly stated and thoughtfully linked to the purpose of the consultancy	
How was initiative being reviewed implemented? When?	There is no discussion about implementation.	Description of implementation was very vague and/or superficial	Description of implementation appears to be complete and authentic	Description of implementation appears to be thoughtfully considered and interpreted	
Literature review (data collection process; currency of the literature (is this relevant here???) data collection tools)	No literature is cited	Less than 3 citations offered or relevance of citations is questionable or dated.	More than x relevant citations are provided	More than x citations provided were current and appear to be strongly related to the case study and the objectives of the consultancy	



# 3 BIG QUESTIONS



**Successful EWS** – Difficult to determine from interventions reviewed. Intervention logic weak, program and operating EWS articulation generally not explicit



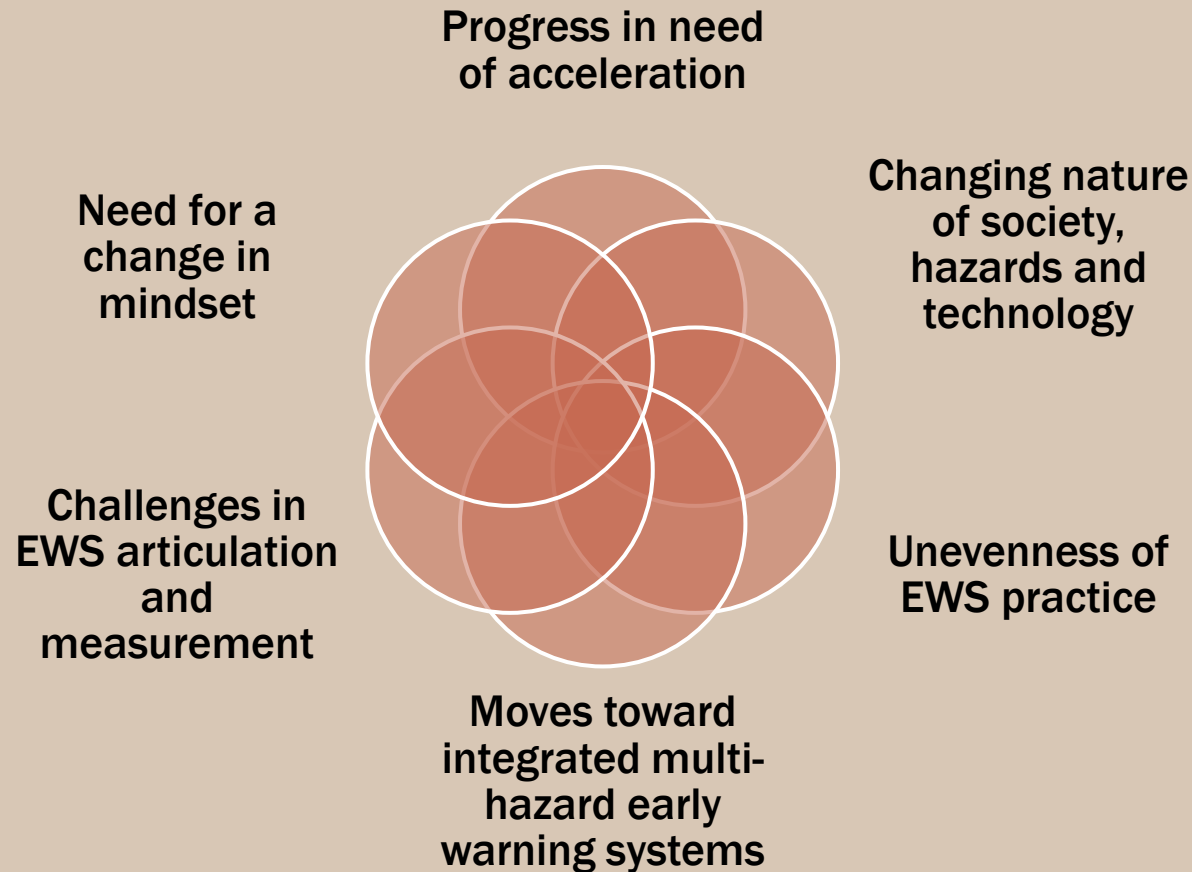
**Seamless Integration of National and Community EWS** – Not an explicit target in most interventions. Context for measurement not established. Cuba suggested as a proxy. VI framework a model for consideration.



**Attribution reduced mortality and damage to EWS** – evidence for cyclones suggest some correlation. More work needed.



# RECOMMENDATIONS - CONTEXT



# ADDRESS GAPS IN EARLY WARNING COMMUNICATIONS

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**Review the provisions of existing legislation for alert and warning**

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**Promote documentation and dissemination of approved protocols**

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**Formalize mechanisms for scheduled testing and public education and awareness of the protocols**

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**Establish a Regional Review Programme of early communications**

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**Establish a standard for post impact early warning performance assessment**

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**Assess the CAP as a contributor to the enhancement of the early warning communications.**



# ACCELERATE STAKEHOLDER ENGAGEMENT

- Advance the promotion of the articulation of the scientific and technical process of data acquisition, hazard modelling and forecasting with local resilience building actions.
- Interpret and translate scientific information into practical formats for the population and institutions and for public education needs.
- Involve stakeholders from the non-scientific community early in the development of EWS interventions and the redesign of existing ones.





# ESTABLISH A STRATEGIC VISION FOR EWS DEVELOPMENT

Establish a Stakeholder Working Group to draft recommendations for A Caribbean EWS Strategic Vision anchored in the global EWS Principles and aligned to resilience goals

Promote dialogue among stakeholder constituents

Present the EWS Strategic Vision to the CDM Harmonization Council (CHC) for endorsement

Lobby for adoption of the EWS Strategy Vision within a Regional Political Forum



# STRENGTHEN THE GOVERNANCE FOR EWS IN THE REGION

Build on the CIMH Stakeholder Facility to establish a broader EWS Stakeholders Forum. Integration of this into the CHC governance process should be considered.

Establish EWS standards for data management, product development and performance assessment.

Establish protocols for harmonized EWS program development

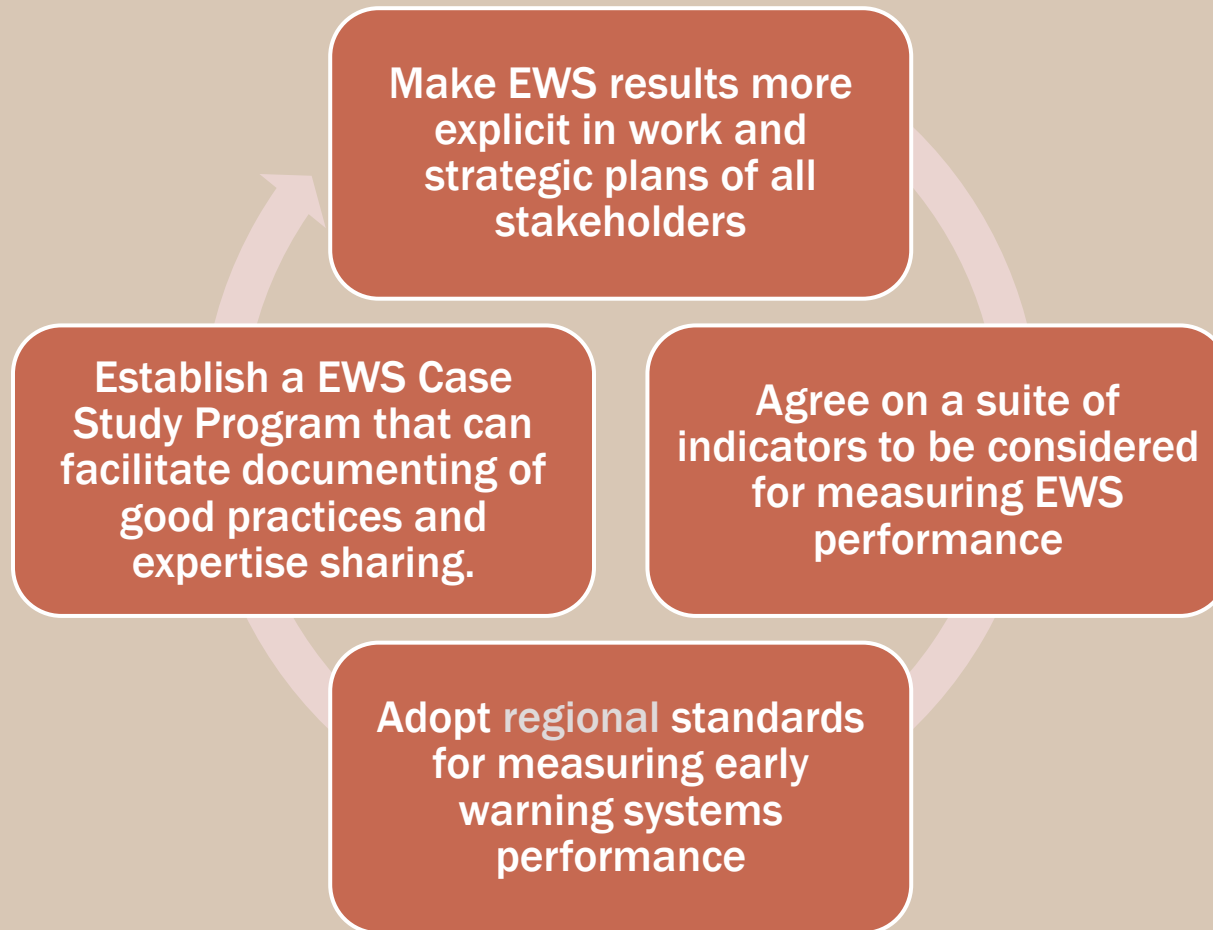
Agree on lead roles and responsibilities of stakeholders



# TOWARDS COMMUNITY EARLY WARNING SYSTEMS

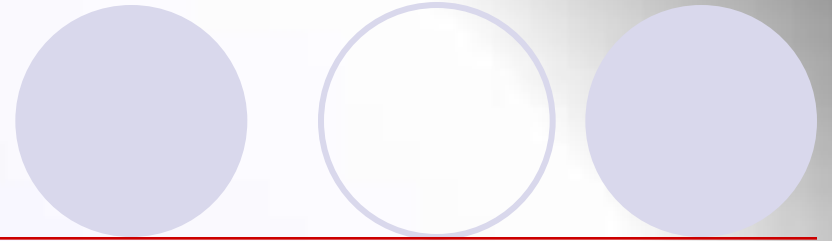
- Consider adopting/adapting the EWS principles and policy guides agreed at Bonn 2003.
- Review the IFRC Community Early Warning System Toolkit for adaptation in the Caribbean.
- Identify a strategy for integrating the CEWS within the CDM Knowledge Management infrastructure
- Establish a CEWS Training Working group, within the Civil Society Committee of the CDM Harmonization Council, whose task would be to lead the mapping of existing products, actors and communities early warning systems.
- Create an inventory, or plug in into existing ones, to establish training depth needed to support such a program
- Develop or adapt the Principles to inform CEWS in the Caribbean

# MAKING EWS MORE VISIBLE IN NATIONAL AND REGIONAL STRATEGIES AND PROGRAMS



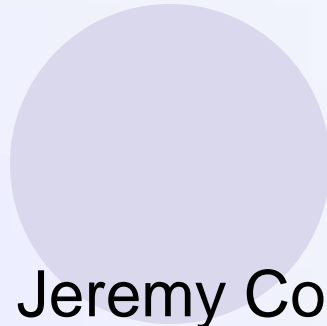
# TOWARDS INTEGRATED MULTI-HAZARD EARLY WARNING SYSTEM

- Consider adopting/adapting the EWS principles and policy guides agreed at Bonn 2003.
- Use EWS audits to inform priorities for hazards and EWS components at local, national and regional levels
- Invest in valuing the costs and benefits of EWS services
- Structure CDM Knowledge Management infrastructure to support and address the agreed priorities.
- Establish national and regional architecture for harmonizing, monitoring and reporting on EWS development and performance.
- Promote harmonized and good donorship initiatives in EWS.
- Diversify and strengthen public education and engagement using existing and emerging technologies



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# Questions, Comments



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