

STRENGTHEN INTEGRATED AND COHESIVE PREPAREDNESS CAPACITY AT A REGIONAL, NATIONAL AND COMMUNITY LEVEL IN THE CARIBBEAN

Prepared through knowledge and planning

CONCEPT NOTE AND AGENDA

Fourth Meeting of the Regional Early Warning System Consortium

Date: 14 November, 2019, 08:30 – 13:00

Saint Lucia

Background

Over the last 15 years in the Caribbean, there have been observed improvements in early warning systems. There are a growing number of tools, equipment and capacities and these vary both by hazard and in space. Despite the continued investment in Early Warning Systems (EWS) and notable progress in some regions, including the Caribbean (Collymore 2016; UNISDR 2015), movement towards integrated multi-hazard warning systems, though evident, may be characterized as slow (Collymore, 2016). One area requiring improvement is the governance framework for EWS, and specifically the absence of policy, noting the results of the application of the MHEWS Checklist in 4 CDEMA participating states¹ and the priority areas for attention outlined in their national MHEWS roadmaps.

Under the “Strengthen integrated and cohesive preparedness capacity at a regional, national and community level in the Caribbean” Project funded by the European Civil Protection and Humanitarian Aid Operations (ECHO) (ECHO) which is implemented by United Nations Development Program (UNDP), the Caribbean Disaster Emergency Management Agency (CDEMA), United Nations Office for the Coordination of Humanitarian Affairs (OCHA), and the International Federation of the Red Cross and the Red Crescent (IFRC), two initiatives are underway to strengthen the governance framework for MHEWS in the region – the development of a national model MHEWS policy and adaptation guide that will allow for the first MHEWS policy through the adaptation of the policy for Saint Lucia and the formal establishment of the Regional Early Warning Systems Consortium (REWSC) that will provide oversight for MHEWS developments and monitoring in the region.

Introduction

This meeting is convened to build on the outcomes of the 2nd and 3rd Meetings of the Regional Early Warning System Consortium (REWSC) held on 31 January and 4 June, 2019 respectively. During the 2nd meeting a regional vision for early warning systems was articulated along with strategic objectives/goals. In addition, a mission statement for the Consortium was developed and initial actions identified as part of a draft action plan. Towards the formal establishment of the Consortium, the need to elaborate the roles and responsibilities of each Consortium member was determined to be a next

¹ Antigua and Barbuda, Dominica, Saint Lucia, and Saint Vincent and the Grenadines

step that would provide the scope for the institutional agreements to be signed during the Comprehensive Disaster Management (CDM) Conference to be held in Sint Maarten on 5 December, 2019. A schematic of roles and responsibilities is presented in *Figure 1* while a simplified version of a matrix of hazards and the four pillars of an Early Warning System (EWS) is presented in Table 1.

Recognizing the opportunity presented to move the work of the Consortium forward through partner collaboration, the Consortium partnered with the CREWS initiative to provide technical input to the regional early warning systems diagnostic and strategy during the consultation with the REWSC on the regional diagnostic and strategy from 26-27 September, 2019. Key outcomes of this meeting were the refinement of the Vision for a Regional MHEWS Strategy and the articulation of outcome and output statements for the Strategy. During the meeting, members of the Consortium also initiated the mapping of roles and responsibilities by hazard and component of the EWS, the results of which can be found at Appendix 1 and reflected in Figures 2-5. The draft action plan developed by the REWSC during meeting #2 will be aligned to the strategy articulated.

Objectives of the Meeting

The key objective of meeting #4 of the REWSC is the finalisation of the REWSC Consortium Agreement to formally establish the Consortium on 5 December, 2019 during the 11th Caribbean Conference on Comprehensive Disaster Management (CDM). Specific objectives include:

1. To review progress made on the establishment of the REWSC specifically as it relates to roles and responsibilities of Consortium Members
2. To advance arrangements for the formal signing ceremony
3. To identify key next steps in advancing the work of the Consortium

Expected outputs are:

1. Approved report of the 3rd Meeting of the REWSC
2. Validated roles and responsibilities of the REWSC
3. Identified next steps towards the formal signing ceremony on 5 December, 2019
4. Draft Signing Ceremony Programme for the REWSC
5. Agreed next steps towards the advancement of the work of the Consortium

Proposed Meeting Agenda

TIME	ITEM	LEAD
08:30 – 08:45	Registration	Participants
08:45 – 09:00	1.0 Welcome and meeting objectives	Chair
09:00 – 09:30	2.0 Review of Report of the 3 rd Meeting of the REWSC and follow up actions	Chair
09:30 – 10:15	3.0 Validation of roles and responsibilities of REWSC Members	Members
10:15 – 10:45	BREAK	
10:45 – 11:45	3.0 Validation of roles and responsibilities of REWSC Members (Cont'd)	Members
11:45 – 12:15	4.0 Review of REWSC Agreement	Members
12:15 – 12:30	5.0 CDM Conference 2019	Chair
12:30 – 12:45	6.0 A.O.B	Chair

Document List for Session:

1. Proposed Meeting Agenda (REWSC 19-11-14/DOC 1.0)
2. Draft Report of the Third Meeting of the REWSC (REWSC 19-11-14/DOC 2.0)
3. Final REWSC Concept Note Document (REWSC 19-11-14/ DOC 2.1)
4. Revised Amendments to the REWSC Concept Note Document (REWSC 19-11-14/ DOC 2.2)
5. Final REWSC Terms of Reference (REWSC 19-11-14/ DOC 2.3)
6. Revised Amendments to the REWSC Terms of Reference (REWSC 19-11-14/ DOC 2.4)
7. Draft REWSC Agreement (REWSC 19-11-14/DOC 4.0)

Figure 1. Schematic of the process for developing roles and responsibilities of institutions of the REWSC

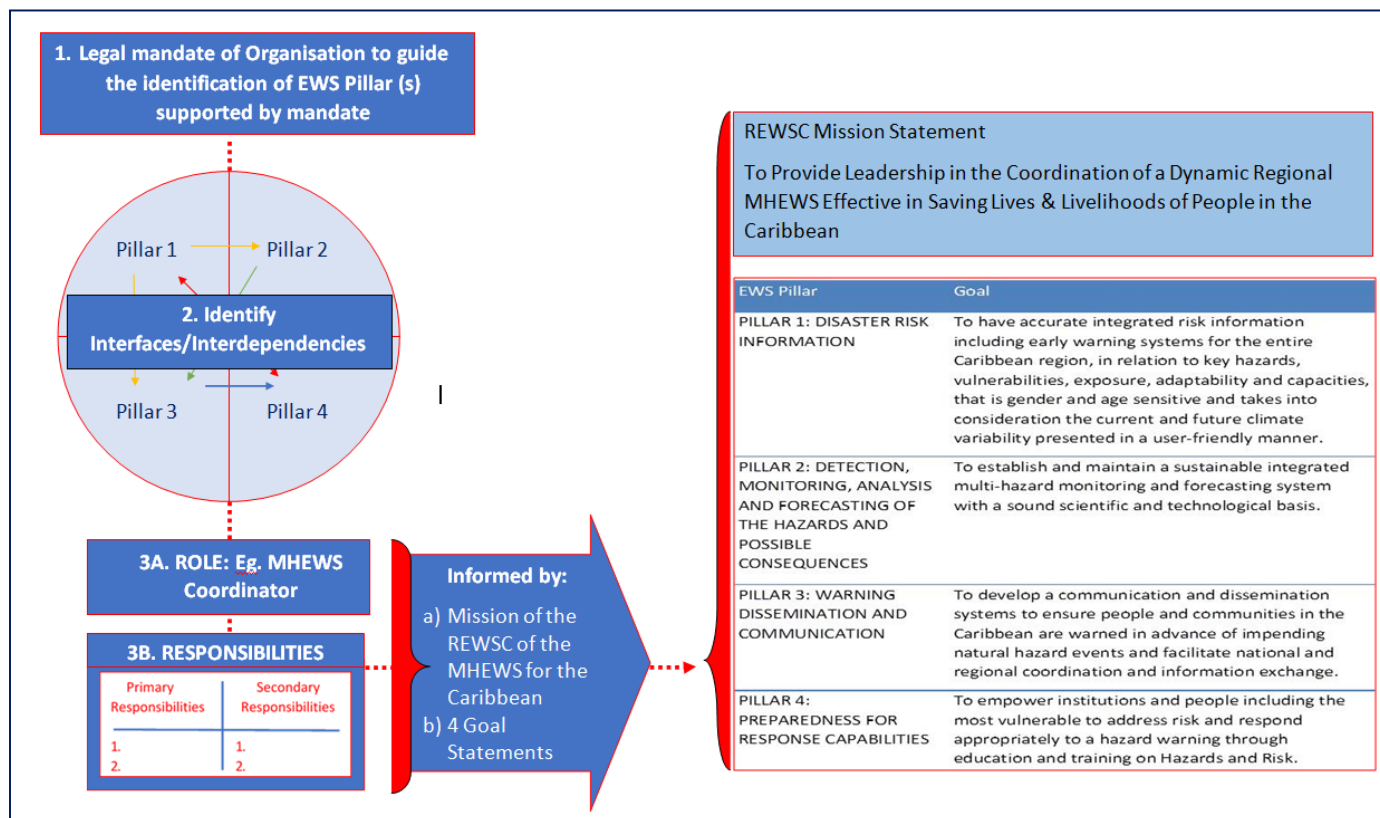


Table 1. A simplified version of a matrix of hazards and the four pillars of an Early Warning System

HAZARDS	FOUR ELEMENTS OF AN EARLY WARNING SYSTEM			
	Pillar 1: Disaster Risk Knowledge	Pillar 2: Detection, monitoring, analysis and forecasting of the hazards and possible consequences	Pillar 3: Warning Dissemination and communication	Pillar 4: Preparedness and Response Capabilities
Hydro-meteorological				
Geological				
Tsunami and Other Coastal Hazards				
Biological				

Appendix 1. Preliminary Results of Mapping of Roles and Responsibilities Based on Institutions’ Mandates

Pillar 1: Disaster Risk Knowledge

TROPICAL STORM	SEVERE THUNDERSTORM	LANDSLIDE	FLOOD	VOLCANIC ACTIVITY	TSUMANI	EARHQUAKE	HEATWAVE	DROUGHT	BIOLOGICAL	FIRES	BIOLOGICAL	SAHARA DUST	COASTAL AND MARINE	ALL	Coordination Role
MET: - information on national climate and climate change CCCCC - develop tools, models etc to provide info. Conduct assessment CMO HQ - facilitating the collection of meteorological data that is analysis to determine climates trends and risk analysis. UWI - CSGM: Research / modelling -e.g. how hurricane risk with change under changing climate. Future storm survey scenarios (e.g. for Jamaica). Tools	CMO HQ: Managing regional severe weather forecast demonstration Project for Eastern Caribbean	CIMH UWI - CSGM: Impact of I.S or 2.C warning on landslides and flood risks (future work)	CIMH CMO HQ and NMHS: UWI - CSGM: Impact of I.S or 2.C warning on landslides and flood risks (future work)	CIMH	ICG-CARIBE EWS: Promote Tsunami and other coastal hazards research		CIMH	CIMH UWI CSGM: Drought research and modeling. Characterization and Impacts CCCCC	CARPHA: Risk assessment UWI CSGM: Research - impact of CC variables on people (e.g. dengue)	CARPHA: Impact on health		CCCCC: Analysis and assessments CIMH CMO HQ and NMHS	CCCCC: Analysis and assessments CMO HQ and NMHS: Working with WMO or CMO on safety and security. Coordinating marine meteorology service delivery UWI: Research e.g. Sargassum and coastal erosion		CDEMA- CU: Clearing house

Pillar 2: Detection, monitoring, analysis and forecasting of the hazards and possible consequences

TROPICAL STORM	SEVERE THUNDERSTORM	LANDSLIDE	FLOOD	VOLCANIC ACTIVITY	TSUMANI	EARHQUAKE	HEATWAVE	DROUGHT	BIOLOGICAL	FIRES	BIOLOGICAL	SAHARA DUST	COASTAL AND MARINE	ALL	Coordination Role
<div>CIMH</div> <div>MET - Monitoring and forecasting go tropical cycles</div> <div>CMO HQ - cooperates with other services to promote and efficient region hurricane warning system, including warning systems with disaster agencies</div> <div>CCCCC - Develop CC models, tools, maps to provide guidance</div>	<div>CIMH</div> <div>MET: Warning and forecasting of severe weather</div> <div>CMO HQ and NMHS: Collects and disburses funds for regional monitoring facilities e.g. Caribbean Radar Network and Caribbean Radiosonde Network</div>	<div>CIMH</div> <div>MET: Aviation forecast of volcanic activity</div>	<div>CIMH</div> <div>MET: Flash Flood forecasting and worsening</div> <div>CMO HQ: Participation in international organisations that set standards for monitoring instruments and observation standards and forecasts procedures</div> <div>CARPHA</div>	<div>CIMH</div> <div>MET: Aviation forecast of volcanic ash</div> <div>SRC: regional monitoring network - Earthquake, volcano, Tsunami)</div> <div>Seismic stations in the Eastern Caribbean - 9 countries including MVO</div>	<div>SRC: regional monitoring network - Earthquake, volcano, Tsunami)</div> <div>ICG-CARIBE: Organise and facilitate as appropriate the exchange of seismic sea level and other data at or near real time, and information required for the inter-operability and integration for Tsunami</div>	<div>SRC: regional monitoring network - earthquake, volcano, tsunami</div>	<div>CIMH</div> <div>CARPHA: Impact on health</div>	<div>CIMH</div> <div>CARPHA: Impact on health</div> <div>MET: Drought forecasting and rainfall data management</div> <div>CCCCC</div>	<div>CARPHA: Public Heath Surveillance</div>	<div>UWI</div> <div>CSG: Research Modeling - drivers of bush fire and future fire variability</div>	<div>CIMH</div>	<div>CIMH</div> <div>MET: Sahara dust monitoring and forecasting</div>	<div>CCCCC: Instrumentation</div> <div>UWI-CSG</div>	<div>UWI CSGM: Climate based training, /capacity building.</div>	<div>CDEMA CU</div> <div>CTU: Spectrum management.</div>

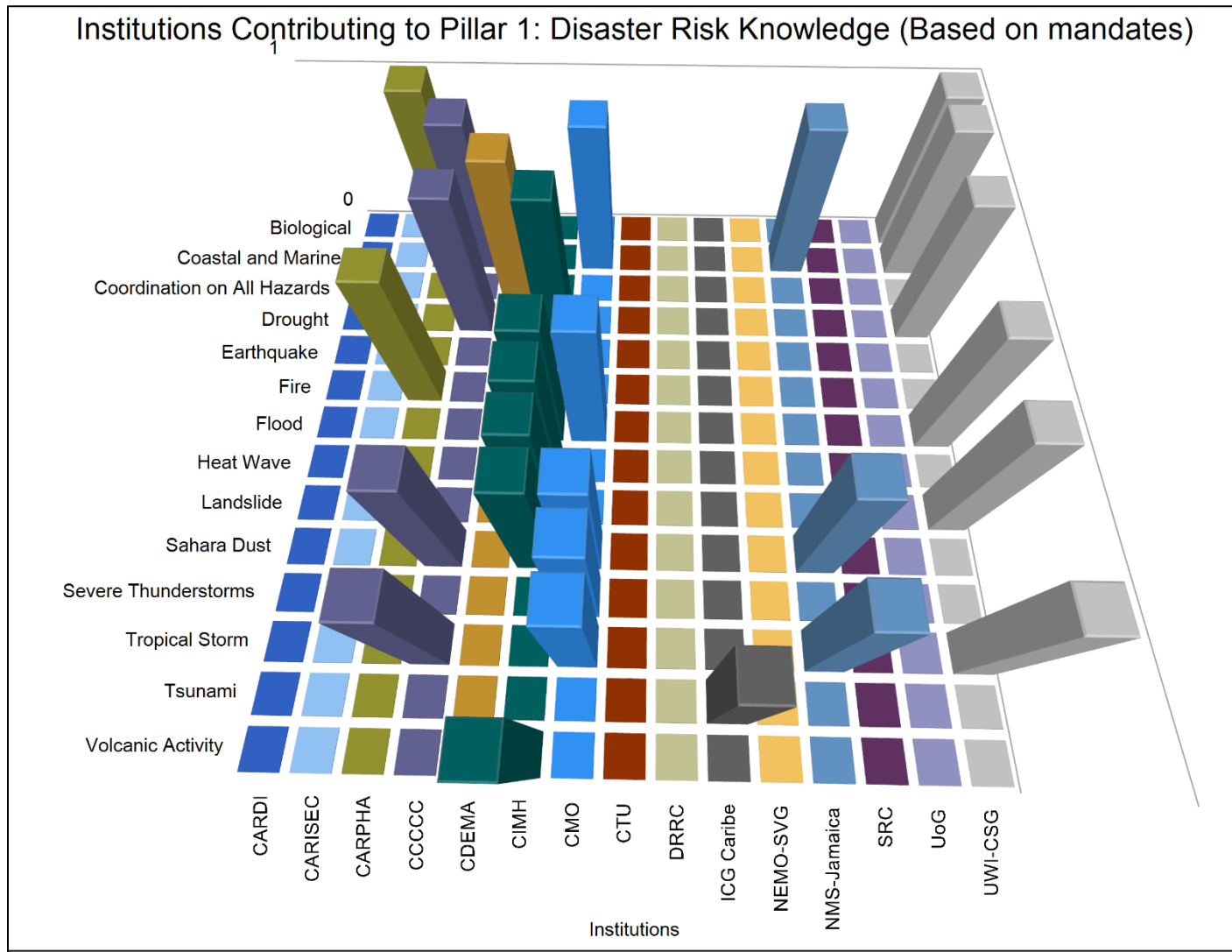


Figure 2. Preliminary Results of Institutions Mapped to the Hazards and Pillar 1

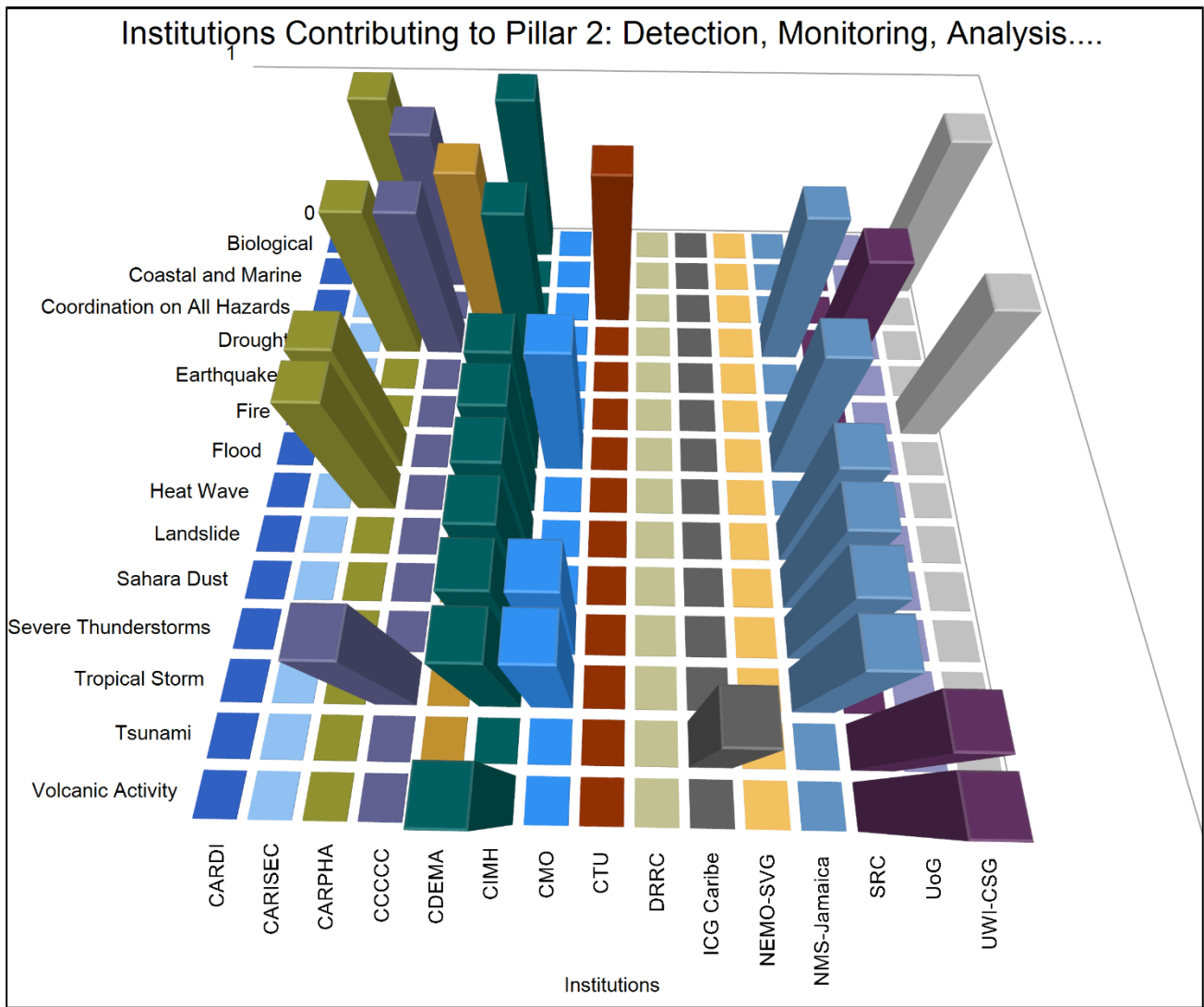


Figure 3. Preliminary Results of Institutions Mapped to the Hazards and Pillar 2

Pillar 3: Warning dissemination and communication

TROPICAL STORM	SEVERE THUNDERSTORM	LANDSLIDE	FLOOD	VOLCANIC ACTIVITY	TSUMANI	EARHQUAKE	HEATWAVE	DROUGHT	BIOLOGICAL	FIRES	BIOLOGICAL	SAHARA DUST	COASTAL AND MARINE	ALL	Coordination Role
CMO HQ NMHS CIMH CCCCC- provide / produce newsletters , bulletins, videos etc CARPHA: Risk communication. Information dissemination	CMO HQ CIMH MET: Warnings of tropical system activity CARPHA: Risk communication. Information dissemination	CIMH CARPHA: Risk communication. Information dissemination	CIMH CARPHA: Risk communication. Information dissemination	SRC: Dissemination of information on volcanoes CARPHA: Risk communication. Information dissemination	MET: alternate FP for Tsunami Warning ICG-CARIBE: Promote the establishment and further development of national tsunami and OCH warning and mitigation capacities in accordance with standard proposes and methods. CARPHA: Risk communication. Information dissemination	SRC: Dissemination of information on earthquakes CARPHA: Risk communication. Information dissemination	CIMH CARPHA: Risk communication. Information dissemination	CCCCC CIMH MET: Drought declarations and warning CARPHA: Risk communication. Information dissemination	CIMH CARPHA: Risk communication. Information dissemination	CARPHA: Risk communication. Information dissemination	CARPHA: Risk communication. Information dissemination	CIMH CARPHA: Risk communication. Information dissemination	UWI-CSG CARPHA: Risk communication. Information dissemination	UWI CSBM: Climate based: training (capacity building, sensitization, Awareness raising	CTU: Spectrum management , allocation and protection. Technical assistance

Pillar 4: Preparedness and response capabilities

TROPICAL STORM	SEVERE THUNDERSTORM	LANDSLIDE	FLOOD	VOLCANIC ACTIVITY	TSUMANI	EARHQUAKE	HEATWAVE	DROUGHT	BIOLOGICAL	FIRES	BIOLOGICAL	SAHARA DUST	COASTAL AND MARINE	ALL	Coordination Role
<div>MET- Hurricane preparedness</div> <div>CARPHA - public health response</div> <div>CMO HQ - prepare our met and hydromet services by providing join coordination for prepared and sensitization to hydro-met hazards</div> <div>CCCCC - capacity building via training workshops</div>	<div>CIMH</div> <div>CARPHA - public health response</div>	<div>CARPHA: Public Health preparedness and response</div>	<div>CARPHA: Response to health issues</div>	<div>SRC: Exercises and drills on volcanoes</div>	<div>ICG-CARIBE EWS: Provide the sharing of experience and expertise related to tsunami warning and mitigation for the Caribbean and AR3</div> <div>ICG-CARIBE CTIC: CTIC 's mission supports all elements of the regional Tsunami EWS for monitoring and detection hazard assessments, warning communication and information dissemination as well as preparedness, readiness and resilience</div>	<div>SRC: Exercises and drills on volcanoes</div> <div>CIMH</div>		<div>CIMH</div> <div>CCCCC</div>	<div>CARPHA: Mandate to support CARI?? In preparing for and responding to public health emergencies</div>				<div>CCCCC: Data provision and training UWI</div>	<div>UWI CSGM: Climate baseline. Training and capacity building. Awareness</div>	<div>CDEMA: CARISEC: Political buy-in. Advocacy. Coordination support to member states. Supply RM CTU: Spectrum management</div>

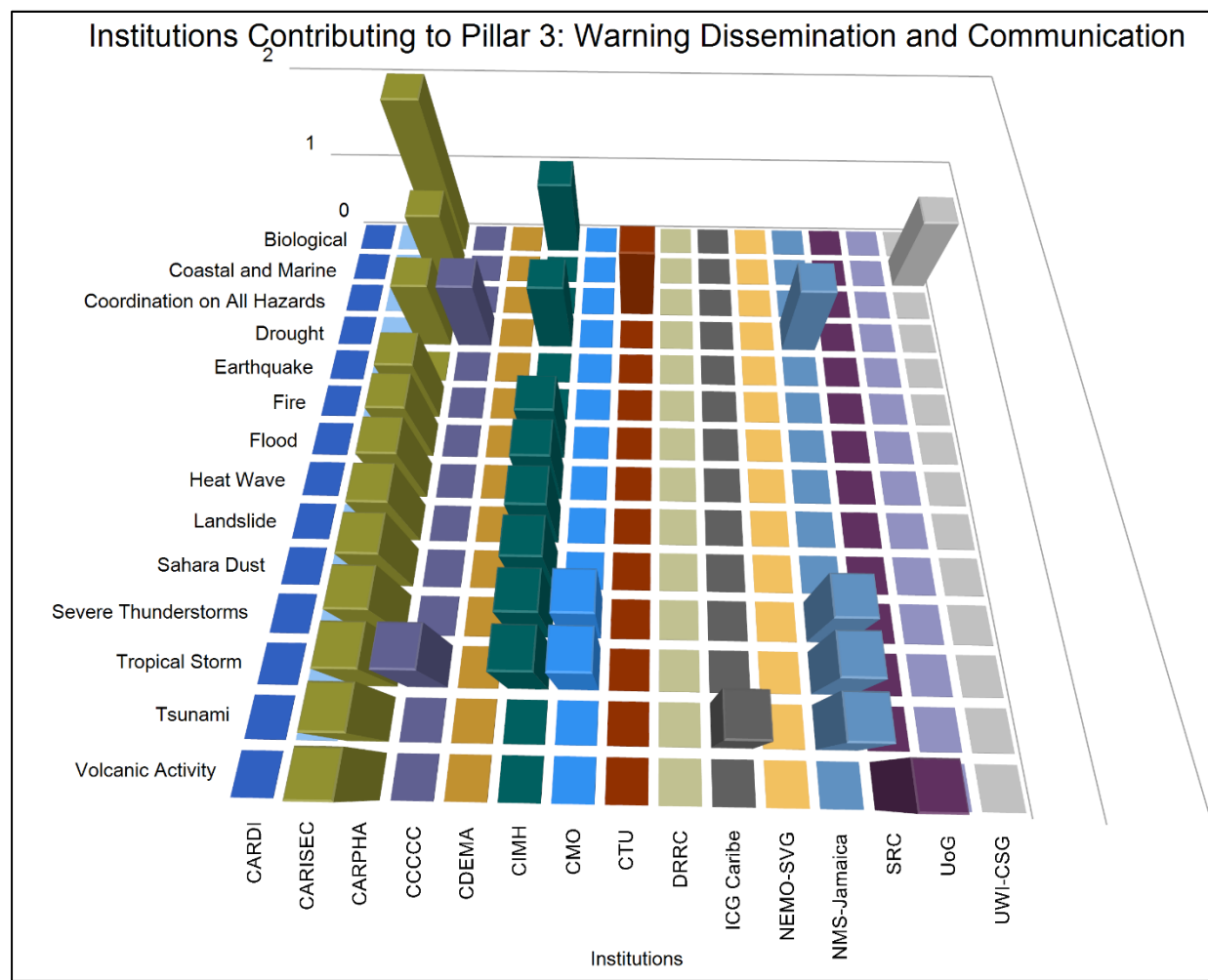


Figure 4. Preliminary Results of Institutions Mapped to the Hazards and Pillar 3

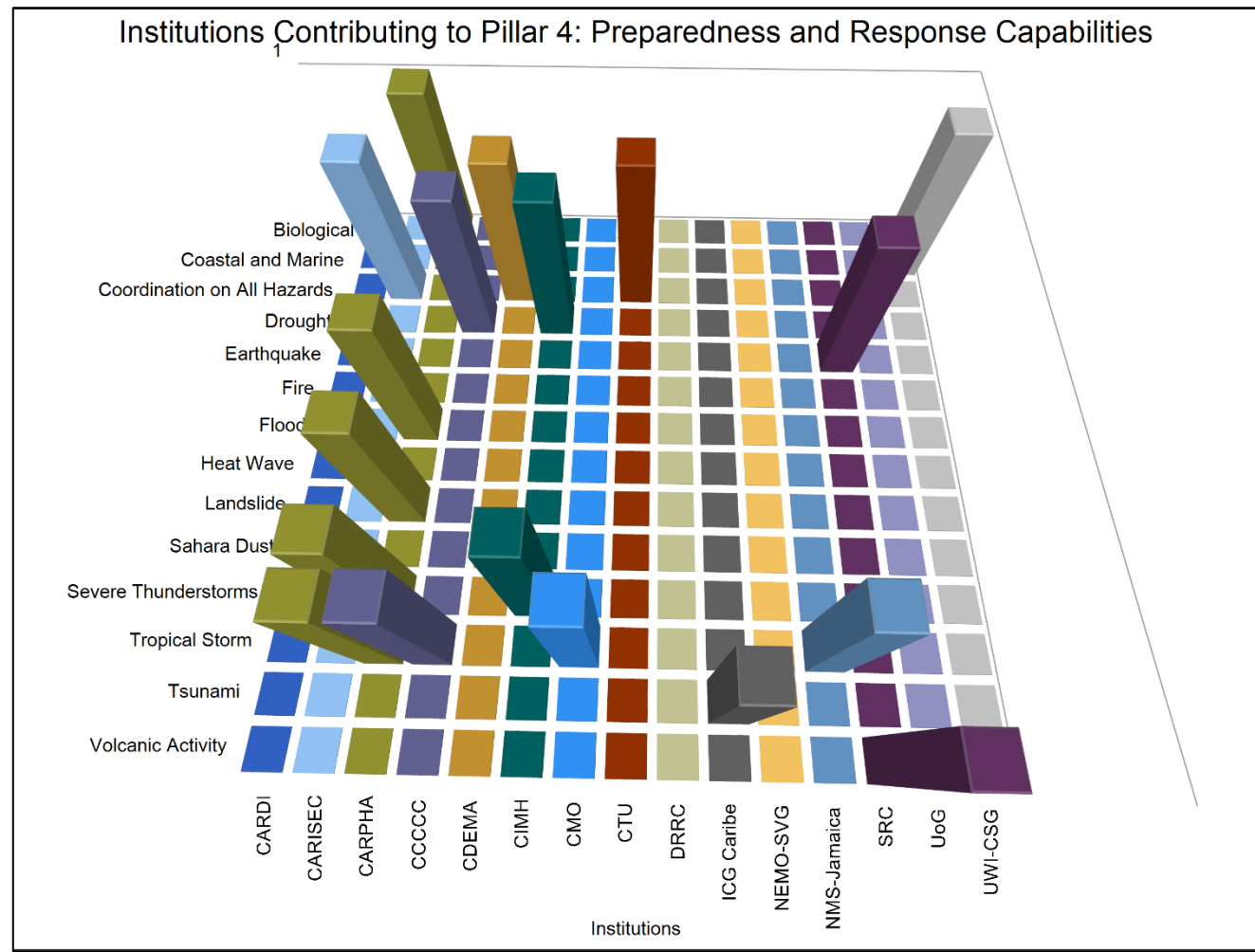


Figure 5. Preliminary Results of Institutions Mapped to the Hazards and Pillar 4