




CREWS PROJECT FINAL REPORT – Template for Global Projects

1. Project title	Measuring Effectiveness of Early Warning Systems through Sendai Framework Monitoring	2. Project reference CREWS/GlobalProj/02/Measuring EWS
3. Implementing Partners	UNDRR and WMO	4. Operational Partners CDEMA, Statistical Institute of Jamaica, CARICOM Secretariat, Meteo France, UK Met, Finish Meteorological Institute, IN-MHEWS, Mauritius Meteorological Service, Practical Action, UK Met, Seychelles Meteorological Authority, Tanzania Prime Minister's Office and UNDRR focal points.
5. Project Timeframe	Two years: July 2020 – July 2022	
6. Actual Project Duration/Timeframe (if no-cost extensions were approved)	N.A.	
7. SC approved Project Budget (in USD)	USD 761,620	
8. Reporting focal point	Rahul Sengupta (UNDRR)	

<p>9. Report Certified Accurate by (with signature):</p>	<p>Richard Bailey (UNDRR)</p> 
<p>10. Project overview</p>	<p>Please include synergies, leveraging, key project deliverables and total funding in bullet points. (max 250 words)</p> <p>The project aims to: (i) strengthen the contribution of multi-hazard early warning systems (MHEWS) to the reduction in risks and losses through enhanced capacities to measure and monitor early warning system (EWS) effectiveness and incorporate feedback/learning (lessons learnt) into the EWS value chain; and (ii) to better support LDCs and SIDS in measuring the effectiveness of their (multi-hazard) early warning systems, in particular through reporting on the Sendai Framework for Disaster Risk Reduction Targets, and improving them over time.</p> <p>Key project deliverables:</p> <p>Outcome 1 (\$50,000): 2020 State of Climate Services report focusing on Climate Information and Early Warning Systems as a baseline.</p> <p>Outcome 2 (\$178,000): Custom indicators have been developed and are available for measuring the effectiveness of national (single-, cluster- and multi-hazard) early warning systems (for use within the Sendai Framework Monitoring system)</p> <p>Outcome 3 (\$416,000): Increased capacity of targeted countries to regularly monitor their early warning systems, understand assessment results and inform decision-making/to propose improvements through the use of Sendai Framework Target (g) custom indicators</p> <p>Project management and support costs: US\$ 117,620</p> <p>Increased capacity of targeted countries to regularly monitor their early warning systems, understand assessment results and inform decision-making/to propose improvements through the use of custom indicators. These will complement the country reporting on global indicators of Sendai Framework Target (g) that have been recommended by the Open-ended Intergovernmental Expert Working Group (OIEWG) on DRR related Indicators and Terminology and approved by the UN General Assembly.</p>

<p>11. Summary of outcomes</p>	<p>What project outcomes were achieved? What were not realized? Describe any unexpected outcomes.</p> <p>Project Outcomes Achieved</p> <ul style="list-style-type: none"> • The 2020 State of Climate Services report was published focusing on Climate Information and Early Warning Systems as a baseline. It was launched on the occasion of Internal Day for Disaster Risk Reduction in October 2020. The report is available here: 2020 State of Climate Services report • With the active engagement of an Expert Group (EG) on the development of the MHEWS indicators for the Sendai Framework Monitor, 53 national-level custom indicators and methodological guidance on their use were developed to help measure the effectiveness of national (single-, cluster- and multi-hazard) early warning systems. It was made available within the online Sendai Framework Monitor (SFM), which allows countries to select and add or customize MHEWS effectiveness indicators from a menu of custom indicators to complement national reporting on global Target G among other global and national targets. The indicators and methodological guidance were translated and are available in all six UN languages plus Portuguese. • Pilot training in two (2) countries Fiji and Mauritius, plus 2022 Global Platform for Disaster Risk Reduction Learning Lab), and at three (3) subsequent multi-country training workshops in the Caribbean, Pacific and West Africa, helped increase the capacity of the targeted countries to regularly monitor their early warning systems, understand assessment results and inform decision-making related to Sendai Framework Target G. • Developing and making EWS effectiveness custom indicators available via training workshops and Sendai Framework Monitor to Member States, particularly SIDS and LDCs, has strengthened capacities to regularly monitor their EWS, understand assessment results, and inform decision-making and/or propose improvements to EWS through the use of custom indicators. • Special focus on the importance of enhancing or setting up a recommended multi-sectoral institutional framework at the national level to inform the EWS governance and guide priorities for programming, institutional capacity development, and resource allocation (including engagement of national meteorological services) was realized. Training workshops engaged representatives of national meteorological services and DRR focal ministries from 16 SIDS and 11 LDCs to work together – many for the first time – to understand and explore dimensions of multihazard risks, possible actions and indicators to measure MHEWS effectiveness through mutual understanding and collaboration. In addition, regional intergovernmental, UN, and related national representatives participated, including from 15 neighboring States or territories.
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- The SFM E-Learning modules hosted by ADPC were updated with videos on how to access and use the MHEWS custom indicators in SFM, with links to the guidance.
- Training participants appreciated the linkage and synergy with other ongoing CREWS projects in Africa, the Caribbean and Pacific.
- The workshop created an enabling environment for discussions on existing needs, gaps, and capacities in EWS and opportunities for collaboration at the national and regional levels among different stakeholders involved in EWS.

Unrealized outcomes/modifications

- Given the ongoing COVID-19 pandemic which restricted the ability of all target participants and facilitators to travel, training had to be adapted for Online or hybrid (in-person and Online) format. Testing the full training package as a two-day in-person workshop as the primary delivery vehicle was not possible. However, the delivery modality adaptation led to enhanced training materials, facilitator guides and tailored workshops.
- Whilst making the indicators and training available to the targeted countries was a strong step resulting in increased understanding and prioritization of possible actions to enhance the effectiveness of EWS in country with new or strengthened cooperation, follow-up through technical support may be needed to strengthen MHEWS design and setup, and the use of the EW custom indicators for implementation monitoring to assess longer term outcomes. This is an opportunity for ongoing and future CREWS and UNDRR and WMO Center of Excellence supported MHEWS projects.

Unexpected outcomes

- **As a direct result of the pilot training workshops in Fiji and Mauritius**, partnerships and agreements among national agencies for data sharing and collaboration were immediately established. For example, the Fiji Met Office, who monitors extreme weather related events, and the Mineral Resources Department, who monitors geophysical hazards, agreed to have an agreement to share data. Mauritius shared their early experience at the MHEWS indicator Learning Lab at the Global Platform for DRR.
- **As a direct result of the workshop in West Africa**, six LDCs (Burkina Faso, The Gambia, Guinea, Niger, Nigeria, and Senegal) reported their intention to select and use the majority of the indicators whilst also providing feedback on how and why they will or will not use them.
- **As a direct result of the workshop in the Caribbean**, the regional intergovernmental Caribbean Disaster Emergency Management Agency (CDEMA) emphasized the linkages with the indicators and standards specified in the Caribbean MHEWS checklist to assess the EWS, endorsed by the 2018 Technical Advisory Committee; linked the importance of this work with CDEMA's objective of seeking to improve and

	<p>integrate EWS, building community capacity through tools and processes to support states to identify and prioritize gaps for strengthening MHEWS; informed about the EWS Consortium -a strategic advisory body for the advancement and strengthened coordination of EWS in the region.</p> <ul style="list-style-type: none"> • As a direct result of the workshop in the Pacific, a joint country scoping mission among Tonga, Vanuatu, Kiribati, and Samoa with government partners is planned to identify needs and priorities in EWS and develop a joint plan of action. Further targeted training and capacity building on Target G and the custom indicators, including a stocktake of EWS and revision of existing SOPs and frameworks, is also planned for partners requiring support. Community-based drills and exercise and public awareness on EWS and preparedness were also planned through the ongoing CREWS Pacific project. Support to the development of a MHEWS Roadmap was also offered to interested countries. • 2022 acceleration of MHEWS efforts: All key stakeholders were briefed on the UN Secretary-General's March 2022 call for Early Warning for All and the establishment of the UNDRR and WMO Center of Excellence on climate change and disaster risk reduction in Geneva, which will also support efforts on measuring the effectiveness of EWS, understanding and using custom indicators, and providing an evidence-based information. West African and Caribbean participants were also informed of and contributed to inputs to the Midterm Review (MTR) of the Sendai Framework, including its thematic review of EWS; MTR sessions included in the workshops to further strengthen understanding of priority gaps and opportunities for member states. <p>Recommendations and opportunities to strengthen outcomes</p> <ul style="list-style-type: none"> • Usefulness of indicators: Pacific workshop participants found proposed custom indicators useful to measure the effectiveness of their early warning systems, however suggestions were made to revise some indicators on measuring inclusiveness, gender-responsiveness, use of traditional knowledge, and capacity of EWS services and infrastructure. • Prioritization for increased reporting: Following the Caribbean and West Africa workshops, it was suggested that indicators could benefit from prioritization. The identification and use of good proxy indicators that could also provide a good measure of progress in the five areas was encouraged. To encourage more reporting, the West Africa workshop facilitators suggested reducing the number of indicators by identifying (i) primary indicators, and (ii) correlations between the indicators. Correlations could be drawn between group 4 (Dissemination and Communication) and 5 (Preparedness and Response), and between these and the general group 1 (Governance) indicators. For example, if there are SOPs for issuing alerts (indicator 1.2), it is likely there are channels and methods of meeting defined between the various "emissaries" of alerts (indicator 4.1). Or, within group 4, if the communication and
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	<p>dissemination systems have fallen on the needs of different groups, especially vulnerable ones (indicator 4.3), then they should be clear and designed to be understood by everyone (indicator 4.7). Similarly there could be a correlation between indicators 5.3 and 5.5.</p> <ul style="list-style-type: none"> • Mainstreaming MHEWS monitoring. promoting systems thinking: MHEWS monitoring should be connected to national development plans and programmes and not seen in isolation. Consider how to better engage all key sectors in this context and ensure their coordination. The role of Ministry of Planning/Ministry of Finance and Economic Development should be explored. • Cross-sectoral participation builds sustainable capacity: All participants recognized the importance of breaking siloes and ensuring a disaster risk management model that sustains capacity. In the Pacific, retirees were recognized as having key knowledge and skills to be tapped. In the Caribbean, institutions responsible for different hazards were encouraged to work together with MET, NDMO and Statistics, e.g. Seismic hazards (SRC/UNESCO IOC); Health related hazards (CARPHA); Water (CIMH, GWP-C, UNESCO IHP); Environmental hazards (UWI, REMPEITC). In addition, the tourism sector was identified as a key stakeholder and partner. • Good practices can be replicated. Global and regional good practices can be shared and replicated to inspire national replication where applicable. See Caribbean workshop report for examples. • Systemic risk considerations: Indicators were discussed in the context of MHEWS Pillars, however, some participants questioned if their effectiveness is adequately defined based on the current hazard experience, where the intersectionality of hazards experienced (systemic risks) in the regions and dynamic experiences (multi-hazard, concurrently occurring with cascading impacts) occur. • Data disaggregation discussions and initiatives: Lack of disaggregated data collection and data sharing arrangements among different agencies, including government institutions who are involved in EWS was one of the main gaps in early warning value chain. Follow-up in this area is needed. • Tailored EWS investment and capacity: Participants identified a need for investments in EWS infrastructure and strengthening capacities of national partners through designing training programmes and projects that are tailored to their needs as a priority. • Indigenous knowledge: Inclusive MHEWS should integrate traditional and indigenous knowledge, and ensure participation of all parties, especially last/first mile. <p>Overall Recommendation:</p> <ul style="list-style-type: none"> • Member States and partners are encouraged to use and customize the indicators, as necessary. The workshops largely validated the utility of the MHEWS custom indicators to help measure the effectiveness of national (single-, cluster- and multi-hazard) early warning systems and confirmed the need to enhance
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	<p>or set up a multi-sectoral institutional framework at the national level to inform the EWS governance and guide priorities for programming, institutional capacity development, and resource allocation. There was neither consensus nor specific feedback common to all regions on the indicators to require an update. Indicators need to be customized and updated as needed within the country context.</p> <ul style="list-style-type: none"> • Consider utilizing CREWS projects and/or expert consultative groups to review and update, if necessary, the MHEWS custom indicators and methodological guidance based on the feedback drawn and/or future use cases. • Use this set of indicators as an opportunity for Member States to provide a baseline measure of the efficiency of their MHEWS, which will help to track the progress towards the UN Secretary-General's call for universal coverage of global population through early warning.
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12. Lessons Learned

Kindly note important lessons learned from the project, including what were the factors that hindered or enabled successful project implementation and contributions to each of the CREWS value propositions (200 to 250 words).

- An inclusive, consultative and co-creative process was critical. The development of the custom indicators upon which all training material, pilots and training conduct was dependent upon close collaboration between UNDRR and WMO and their respective technical advisors representing members states and partner organizations. Including targeted countries and their respective regional intergovernmental experts in the development and validation of the indicators contributed to member states' trust.
- The development of detailed facilitator guides for each training module was key to help facilitators adapt workshops according to known needs, time available, and delivery modality.
- Engaging WMO and other national or regional experts in the training delivery together with UNDRR contributed to ownership and uptake for next steps.
- Researching and including national case studies to illustrate the indicators was critical to demonstrate that the recommended actions within the indicators and the monitoring of the indicators are indeed feasible. The forthcoming Words Into Action on MHEWS can further support training and uptake of the custom indicators.

13. Stakeholders

a. List all individuals or groups that either contributed to, have been engaged and have benefited from the funded project/activity.

Participants, representative of the National Disaster Management Organizations/Agencies (NDMO/NDMA), National Meteorological and Hydrological Service, National Statistics Offices, sectoral ministries (e.g. construction, energy/mineral resources, economy, food, gender and family welfare, health, transport), local authorities, research institutions, UN, international and regional intergovernmental organizations.

Facilitators, presenters, representative of UNDRR, WMO, regional intergovernmental organizations.

NO	Country and/or Role	Title	Name and Surname	Position	Organization	Sex	Attendance
1	Fiji	Mr.	Aminiasi Niumataiwalu	SAO EPC	National Disaster Management Office	Male	In person
2	Fiji	Mr.	Mesake Mataitoga	SAO RMR	National Disaster Management Office	Male	In person
3	Fiji	Mr.	Wojciech Dabrowka	TA Policy	National Disaster Management Office	Male	In person
4	Fiji	Mr.	Ben Kuboutawa	TA Telecommunications	National Disaster Management Office	Male	In person
5	Fiji	Mr.	Kevin Maitava	SAO DRR (East)	National Disaster Management Office	Male	In person
6	Fiji	Mr.	Shinya Abe	TA DRR	National Disaster Management Office	Male	In person
7	Fiji	Mr.	Terry Atalifo	Acting Director	Regional Specialized Meteorological Center/ Fiji Met Services	Male	In person
8	Fiji	Mr.	Stephen Meke	Acting Manager Forecasting Centre	Regional Specialized Meteorological Center	Male	In person

9	Fiji	Mr.	Viliame Vereivalu	Manager Hydrology Division	Regional Specialized Meteorological Center	Male	In person
10	Fiji	Ms.	Poasa Nainima	Focal Point -Programmes	Fiji Bureau of Statistics	Female	In person
11	Fiji	Mr.	Ashish Chand	Focal Point - Environment Survey	Fiji Bureau of Statistics	Male	In person
12	Fiji	Mr.	Raymond Mohammed	Acting Director	Mineral Resources Department	Male	In person
13	Fiji	Mr.	Laisenia Rawace	Acting Scientific Officer, Seismology Unit, Geological Services Division	Mineral Resources Department	Male	In person
14	Fiji	Ms.	Menuka Aanandani	Acting Principal Technical Officer, Geological Survey Division	Mineral Resources Department	Female	In person
15	Fiji	Mr.	Aklesh Kumar	Technical Officer	Mineral Resources Department	Male	In person
16	Fiji	Mr.	Shivanal S. Kumar	Climate Change Adaptation Specialist	Ministry of Economy	Male	In person
17	Participant	Mr.	Jiuta Korovulavula	Programme Officer	UNESCO	Male	In person
18	Participant	Ms.	Jen Stewart	Climate and Resilience Delegate	IFRC	Female	Online
19	Participant	Ms.	Katerina Nabola	Programme Officer	WFP	Female	Online
20	Participant	Ms.	Tessa Tafua	Programme Officer	WMO	Female	Online
21	Participant and Facilitator	Mr.	Henry Taiki	WMO Representative for South-West Pacific	WMO	Male	Online
22	Participant	Ms.	Iria Touzon Calle	Programme Officer	UNDRR Regional Office for Asia and the Pacific	Female	Online
23	Participant	Ms.	Yo Kunieda	DRR Officer	UNDRR Pacific	Female	Online
24	Facilitator	Ms.	Gabrielle Emery	Head of Office	UNDRR Pacific	Female	In person

25	Facilitator	Ms.	Nazgul Borkosheva	Programme Officer	UNDRR Pacific	Female	In person
26	Facilitator	Ms.	Shimala Kuar	Admin Officer	UNDRR Pacific	Female	In person
27	Facilitator	Mr.	Sanjaya Bhatia	Head of Office,	UNDRR Global Education and Training Institute (GETI)	Male	Online
28	Facilitator	Ms.	Sarah Wade-Apicella	Programme Management Officer	UNDRR Global Education and Training Institute (GETI)	Female	Online
NO	Country and/or Role	Title	Name and Surname	Position	Organization	Gender	Attendance
1	Mauritius	Mr.	Vinay Kumar Rawoo	Manager	Construction Industry Development Board (CIDB)	Male	Online
2	Mauritius	Mr.	Danam Pothunnah	Air Traffic Control Supervisor	Department of Civil Aviation	Male	Online
3	Mauritius	Mr.	BOJNAUTH Sundeep	Local Disaster Management Coordinator	District Council of Black River	Male	In person
4	Mauritius	Mr.	BEEHARRY Akash	Health Inspector	District Council of Flacq	Male	In person
5	Mauritius	Ms.	BACHOOA Nadeeya	Local Disaster Management Coordinator	District Council of Grand Port	Female	In person
6	Mauritius	Mr.	HEERAH Vipin	Local Disaster Management Coordinator	District Council of Riviere du Rempart	Male	In person
7	Mauritius	Ms.	KHEDAN Radhana Devi	Local Disaster Management Coordinator	District Council of Savanne	Female	In person
8	Mauritius	Ms.	Nishta Surajbali	Economist	Mauritius Chamber of Commerce and Industry	Female	Online
9	Mauritius	Mr.	CHUMROO Suresh	Acting Divisional Fire Officer	Mauritius Fire and Rescue Service	Male	In person
10	Mauritius	Mr.	SEETOHUL D	Ag Divisional Meteorologist	Mauritius Meteorological Services	Male	In person

11	Mauritius	Mr.	Manvendra Singh	PRS	Mauritius Oceanography Institute	Male	Online
12	Mauritius	Mr.	Vijay Anand Doorgha	Police Inspector	Mauritius Police Force	Male	Online
13	Mauritius	Mr.	MAUTBUR Fakruddin	Logistics Officer & Assistant Head of Programmes	Mauritius Red Cross Society	Male	In person
14	Mauritius	Mr.	Christian David	Team Leader	Mauritius Revenue Authority	Male	Online
15	Mauritius	Mr.	RAMRUKHEEA BISSOONDYAL	Manager, Port Emergency Services	Mauritius Ports Authority	Male	Online
16	Mauritius	Mr.	Rajcoomarsingh Ramti	Forest Conservation and Enforcement Officer	Ministry of Agro-Industry and Food Security	Male	Online
17	Mauritius	Mr.	NUNDLAUL Vimul	Ag Senior Scientific Officer (Conservation), National Parks & Conservation Service	Ministry of Agro-Industry and Food Security	Male	In person
18	Mauritius	Mr.	Fakoo Manoj	Scientific Officer/Senior Scientific Officer	Ministry of Blue Economy, Marine Resources, Fisheries and Shipping	Male	Online
19	Mauritius	Mr.	BEEGUN Neerunjun	Administrator	Ministry of Education, Tertiary Education, Science and Technology	Male	In person
20	Mauritius	Mr.	Caullychurn Mooneswar	Ag. Lead Engineer	Ministry of Energy and Public Utilities	Male	Online
21	Mauritius	Ms.	BHEEMUL-SOMA Runa	Environment Officer	Ministry of Environment, Solid Waste Management and Climate Change (Environment and	Female	In person

					Climate Change Division)		
22	Mauritius	Mr.	Beerachee Bhaguthsing	Director	Ministry of Environment, Solid Waste Management and Climate Change (Solid Waste Management Division)	Male	Online
23	Mauritius	Mr.	JAYRAM POORUNDER	PRINCIPAL SOCIAL WELFARE OFFICER	Ministry of Gender equality and family welfare	Male	Online
24	Mauritius	Mr.	Chutkoi Feroz	Principal Safety and Health Officer	Ministry of Public Service, Administrative and Institutional Reforms	Male	Online
25	Mauritius	Mr.	BUNOOMALLY Hurrinarain	Ag Deputy Commissioner, Social Security	Ministry of Social Integration, Social Security and National Solidarity (Social Security and National Solidarity Division)	Male	In person
26	Mauritius	Ms.	GOOLY Sneha Kamakshi	Local Disaster Management Coordinator	Municipal City Council of Port Louis	Female	In person
27	Mauritius	Mr.	BABLEE David Allan	Local Disaster Management Coordinator	Municipal Council of Beau Bassin-Rose Hill	Male	In person
28	Mauritius	Ms.	CHUKRA CHETTY Neesha	Local Disaster Management Coordinator	Municipal Council of Curepipe	Female	In person
29	Mauritius	Ms.	CALLYCHURN Tarini	Local Disaster Management Coordinator	Municipal Council of Quatre Bornes	Female	In person
30	Mauritius	Mr.	JAMANSING Yuvraj	Local Disaster Management Coordinator	Municipal Council of Vacoas-Phoenix	Male	In person

31	Mauritius, Speaker	Mr.	Sookhareea Aneerood	Superintendent of Police	NDRRMC	Male	In person
32	Mauritius, Speaker	Mr.	BISSESSUR Heman	Coordinator for Community Mobilisation	NDRRMC	Male	In person
33	Mauritius	Mr.	SUNNASSY Venoo	Coordinator for Community Mobilisation	NDRRMC	Male	In person
34	Mauritius	Mr.	RUGHOO Pravind	Information and Communication Manager	NDRRMC	Male	In person
35	Mauritius	Mr.	REESAUL Yogesh	ICT Specialist	NDRRMC	Male	In person
36	Mauritius	Mr.	PAUL Denis	Police Constable	NDRRMC	Male	In person
37	Mauritius	Mr.	SOWUMBER Uttam	Police Constable	NDRRMC	Male	In person
38	Mauritius	Mr.	RAMROOP Bhavish	Recovery Programme Officer (Engineering)	NDRRMC		In person
39	Mauritius	Mr.	DUSOYE Deshraj	Police Constable	NDRRMC	Male	In person
40	Mauritius	Ms.	Doyana Jolicoeur	Wpc	NDRRMC	Female	Online
41	Mauritius	Mr.	DURBARRY Rajiv	Chief Inspector of Police	NDRRMC Special Mobile Force (Disaster Response Unit)	Male	In person
42	Mauritius	Mr.	LUCHMAN K	Police Corporal	NDRRMC Special Mobile Force (Disaster Response Unit)	Male	In person
43	Mauritius	Mr.	Thomas David	Police Corporal	NDRRMC Special Mobile Force (Disaster Response Unit)	Male	In person
44	Mauritius	Mr.	MANNICK VAROUNESH	Police Corporal	NDRRMC Special Mobile Force (Disaster Response Unit)	Male	In person
45	Mauritius	Mr.	Guveesh Chumroo	Safety and Health Officer	Outer Islands Development Corporation	Male	Online

46	Mauritius	Mr.	BEEKHARRY Oomesh	Assistant Divisional Manager	Road Development Authority	Male	In person
47	Mauritius	Mr.	SUNYASI DARMEN	Assistant Divisional Manager	Road Development Authority	Male	In person
48	Mauritius	Ms.	Caroline Momus	Wpc	Rodrigues disaster	Female	Online
49	Mauritius	Ms.	MEWA HURDOWAR Dicksha	Statistician	Statistics Mauritius	Female	In person
50	Mauritius	Ms.	CHEETAMUN Parmeshwaree	STM	Statistics Mauritius	Female	In person
51	Mauritius	Mr.	Peroumal Narana Pillay	Tourism Enforcement Officer	Tourism Authority	Male	Online
52	Participant	Dr.	MATTAN-MOORGAWA Sushma	Senior Lecturer	University of Mauritius	Female	In person
53	Participant	Ms.	Vimi Dookhun	Senior Lecturer	University of Mauritius	Female	Online
54	Facilitator	Mr.	Sanjaya Bhatia	Chief of Section	UNDRR Global Education and Training Institute	Male	Online
55	Facilitator	Ms.	Sarah Wade-Apicella	Programme Management Officer	UNDRR Global Education and Training Institute	Female	Online
56	Facilitator	Ms.	Auriane Denis-Loupot	Programme Management Officer	UNDRR Africa	Female	In person
57	Facilitator	Mr.	Roberto Schiano Lomoriello	Programme Management Officer, Sendai Framework Monitor	UNDRR Africa	Male	Online
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1	The Virgin Islands	Mr.	Keon August	Emergency Communications Manager Ag	Department Of Disaster Preparedness	Male	In person
2	Barbados	Mr.	Shawn Boyce	Chief Hydrologist Caribbean Institute for Meteorology and Hydrology	Caribbean Institute for Meteorology and Hydrology (CIMH)	Male	In person



3	Barbados	Ms.	Danielle Lisa Skeete	Deputy Director (Ag)	Department of Emergency Management's (DEM)	Female	In person
4	Dominica	Mr.	Marshall Alexander	Senior Meteorological Officer	Dominica Meteorological Service	Male	In person
5	Participant	Ms.	Chante Saunders	Student and social Media Manager	The University of the West Indies (UWI) - Disaster Risk Reduction Centre (DRRC), Barbados	Female	In person
6	Tobago (T&T)	Mrs.	Carolyn De Coteau	Meteorologist I (Crown Point Meteorological Office, Tobago)	Trinidad and Tobago Meteorological Service	Female	In person
7	Tobago (T&T)	Mr.	Bobby Andrews	Director	Department of Planning - THA)	Male	In person
8	Jamaica	Ms.	Nikeisha Hibbert	Meteorologist	Meteorological Service Division	Female	In person
9	Cayman Islands	Mr.	Shamal Clarke	Meteorologist	MET	Male	In person
10	Saint Lucia	Ms.	Maria Medard	Deputy Director	NEMO	Female	In person
11	Saint Lucia	Ms.	Vigil Saltibus	Meteorologist	Saint Lucia Meteorological Services	Female	In person
12	St. Kitts & Nevis	Mr.	Jacob Ngumbah	Head of office Nevis	National Emergency Management Agency	Male	In person



13	Dominican Republic	Mr.	Carlos Paulino	Sub. director del COE, Encargado de Planificación y Desarrollo Institucional	NEMO	Male	In person
14	Republic of Guyana	Ms.	Allana Walters	Mitigation & Recovery Unit	Estadísticas Ambientales	Female	In person
15	Anguilla	Ms.	Susan Hodge	Programme Officer Community Outreach	Department of Disaster Management	Female	In person
16	Anguilla	Ms.	Twayna Thomas	Meteorologist	MET	Female	In person
17	Antigua and Barbuda	Mr.	Statchel Edwards	Chief Statistician (Ag) Statistics Division	Statistics Division, Ministry of Finance and Economy	Male	In person
18	Barbados	Mr.	Brian Murray	Deputy Director	Barbados Meteorological Services	Male	In person
19	Cayman Islands	Mr.	Simon Boxall	Public Awareness and media Relations Officer	Hazard Management Cayman Islands	Male	In person
20	Curacao	Mr.	Marshandy Luciano	Chief of Operation	National Meteorological Department of Curacao	Male	In person
21	Dominican Republic	Ms.	Leidy Ivelisse Ventura	Coordinadora, Departamento de Estadísticas Ambientales	Oficina Nacional de Estadísticas (ONE)	Female	In person
22	Dominican Republic	Mr.	Jenuel Almonte	Meteorologist and WMO, Expert Team on Hydrological Infrastructure	National Office of Meteorology	Male	In person

23	Grenada	Ms.	Tonya Hyacinth	Deputy Disaster Coordinator (Ag.)	National Disaster Management Agency (NaDMA)	Female	In person
24	Grenada	Ms.	Trisha Miller	Meteorologist	Meteorological Department, Grenada Airports Authority	Female	In person
25	Republic of Guyana	Mr.	Frank Grogan	Meteorologist	MET	Male	In person
26	Saint Lucia	Ms.	Sherma Small	Statistical Assistant	Central Statistical Office	Female	In person
27	St. Kitts & Nevis	Ms.	Oureika Lennon Petty	Planning Officer	National Emergency Management Agency	Female	In person
28	St. Kitts & Nevis	Mr.	Elmo Burke	Senior Meteorological Officer	MET	Male	In person
29	St. Vincent & the Grenadines	Ms.	Lavorne Williams	Chief Statistician, Statistical Office	Statistical Office, Central Planning Division, Ministry of Finance, Planning and Economic Development	Female	In person
30	St. Vincent & the Grenadines	Mr.	Kenson Stoddard	Deputy Director at NEMO	NEMO	Male	In person
31	St. Vincent & the Grenadines	Mr.	Billy Jeffers	Manager Meteorological Services	MET	Male	In person

32	Sint Maarten	Ms.	Angelique Gumbs	Manager	Department of The Interior and Kingdom Relations	Female	In person
33	Sint Maarten	Mr.	Joseph Nathaniel Isaac	Head	Meteorological department St Maarten	Male	In person
34	Suriname	Mrs.	Anjali De Abreu-Kisoensingh	Environment Statistics and SDG focal point at the GBS	General Bureau of Statistics	Female	In person
35	Suriname	Mr.	Dewnath Bhaggoe	Deputy director of research and innovation	Meteorological Service Suriname	Male	In person
36	Turks & Caicos Islands	Mr.	Edward Hall	Policy Analyst from the Strategic Planning and Policy Department	Department of Statistics	Male	In person
37	Turks & Caicos Islands	Ms.	Holly Hamilton	Director of Meteorology	MET	Female	In person
38	Participant	Mr.	Gregory Linton	Team lead for Disaster and Risk Reduction	Caribbean Agricultural Research and Development Institute (CARDI), St. Vincent & the Grenadines	Male	In person
39	Participant	Mr.	Temitope D. Timothy Oyedotun	Dean	Faculty of Earth and Environmental Sciences (FEES), University of Guyana (UG)	Male	In person

40	Participant	Ms.	Silvia Chacón-Barrantes	Coordinator SINAMOT Program, Physics Department, Universidad Nacional, Costa Rica	ICG-Intergovernmental Coordination Group Tsunami & Other Coastal Hazards Warning System for the Caribbean & Adjacent Regions /CARIBE- EWS	Female	In person
41	Participant	Mr.	Jeremy Collymore	DRM and Resilience Specialist and Honorary, Research Fellow, Institute of Sustainable Development, UWI	The University of the West Indies (UWI) - Disaster Risk Reduction Centre (DRRC), Barbados	Male	In person
42	Participant	Ms.	Faustina Wiggins	Environmental Statistician, Regional Statistics Programme	CARICOM, Guyana	Female	In person
43	Trinidad (T&T)	Mr.	Anwar Baksh	Planning and Development Officer	Office of Disaster Preparedness and Management	Male	In person
44	Participant	Mr.	Horace Glaze	FRC's Disaster Management Coordinator for the Dutch and English-Speaking Caribbean	IFRC, Jamaica	Male	In person
45	UN	Mr.	Oswald Alleyne	Development Coordination Officer - Data, Monitoring and Reporting	UN Barbados Resident Coordinator Office	Male	In person
46	Trinidad (T&T)	Mr.	Tyrone Gopaul	Acting Senior Statistician, Agriculture Division	Central Statistical Office	Male	In person

47	Trinidad (T&T)	Mr.	Brett Lucas	GIS Specialist	Office of Disaster Preparedness and Management	Male	In person
48	Trinidad (T&T)	Mr.	Navindra Persad	Regional Coordinator	Office of Disaster Preparedness and Management	Male	In person
49	Trinidad (T&T)	Mr.	Lloyd Lynch	Research Fellow	The University of the West Indies (UWI) - Seismic Research Centre	Male	In person
50	Trinidad (T&T)	Mr.	Haley Anderson	Science and Technology Officer	Caribbean Meteorological Organization (CMO)	Male	In person
51	Trinidad (T&T)	Dr.	Dr Arlene Gloretta LAING	Coordinating Director	CMO	Female	In person
52	Participant	Ms.	Artie Dubrie	Coordinator, Sustainable Development and Disaster Unit	ECLAC	Female	In person
53	Participant	Mr.	Jônatas De Paula	Environmental Affairs Officer, Sustainable Development and Disaster Unit	ECLAC	Male	In person
54	Participant	Ms.	Vanita Redoy	Research Assistant (EWS)	IFRC	Female	In person
55	Participant	Ms.	Christal Benjamin	Research Assistant	Association of Caribbean States (ACS)	Female	In person
56	Participant	Ms.	Rosemary Lall	Programme Officer Office of Energy, Environment and Disaster Management	United Nations Development Programme (UNDP)	Female	In person



57	Participant	Mr.	Peter Williams	Technical Officer, Infectious Diseases and Emergency Response	Caribbean Public Health Agency (CARPHA)	Male	In person and Online
58	Participant	Ms.	Angela Hinds	Head of the Health Information Communicable Disease	Caribbean Public Health Agency (CARPHA)	Female	In person and Online
59	Trinidad (T&T)	Mrs.	Paula Wellington	Meteorologist III (Ag) - Trinidad Meteorological Office	Trinidad and Tobago Meteorological Service	Female	Online
60	Belize	Ms.	Michelle Augustine	Deputy Chief Meteorologist	Belize Meteorological Services	Female	Online
61	Guyana, Republic of	Mr.	Errol La Cruz	Chief Statistician	Bureau of Statistics	Male	Online
62	St. Lucia	Ms.	Josette Edward-Charlemagne	Programme Officer, Climate Change & Disaster Risk Management	Climate Change & Disaster Resilience Unit, Org. Eastern Caribbean States (OECS)	Female	Online
63	Barbados	Ms.	Valerie Taylor	Field Office/Liaison Officer Damage Assessment	Barbados Statistical Service	Female	Online
64	Jamaica	Ms.	Camille Beckford-Palmer	Southern Regional Coordinator	Office of Disaster Preparedness and Emergency Management	Female	Online
65	Barbados	Ms.	Nicole Greenidge	Disaster Risk Management Specialist	Caribbean Disaster Emergency Management Agency (CDEMA)	Female	Online



66	Participant	Dr.	Erouscilla Joseph	Director	UWI Seismic Research Centre, Trinidad (T&T)	Female	Online
67	Trinidad (T&T), Speaker	Major Gen. Rtd.	Rodney Smart	Chief Executive Officer, Retired	Office of Disaster Preparedness and Management	Male	In person
68	Trinidad (T&T), Speaker	Hon.	Fitzgerland Hinds	MP, Minister of National Security	Government of Trinidad and Tobago	Male	In person
69	Speaker and Participant	Ms.	Andria Grosvenor	Deputy Executive Director (ag)	Caribbean Disaster Emergency Management Agency (CDEMA)	Female	In person
70	Speaker	Mr.	Dennis Zulu	Acting UN Resident Coordinator	United Nations Resident Coordinator Office for Trinidad and Tobago, Suriname, Aruba, Curaçao and St. Maarten	Male	In person
71	Speaker	Mr.	Raul Salazar	Chief of Office	UNDRR Regional Office for the Americas and the Caribbean	Male	In person
71	Facilitator	Mr.	Rodney Martínez	Representative for North America, Central America, and the Caribbean Member Services and Development Department	World Meteorological Organization (WMO)	Male	In person

73	Facilitator	Mr.	Carlos Uribe	Program Officer	UNDRR Regional Office for the Americas and the Caribbean	Male	In person
74	Facilitator	Dr.	Jair Torres	Disaster Risk Reduction Advisor	UNDRR Regional Office for the Americas and the Caribbean	Male	In person
No.	Country and/or Role	Title	Name and Surname	Position	Organization	Gender	Attendance
1	Cook Islands	Mr.	Arona Ngari	Director	Cook Islands Meteorological Services	Male	In person
2	Cook Islands	Mr.	John Strickland	Director	Emergency Management Cook Islands	Male	In person
3	Cook Islands	Ms.	Lydia Sijp	Planning and Advisory Officer	Emergency Management Cook Islands	Female	In person
4	Tonga	Ms.	Luisa Uai Taunga	Head of Training Division	National Emergency Management Agency	Female	In person
5	Tonga	Ms.	Aisea Fungavai	EOC Manager	National Emergency Management Agency	Female	In person
6	USA (Hawaii) & Facilitator	Mr.	Tom Evans	Deputy Director	NOAA's National Weather Service	Male	In person
7	Fiji	Mr.	Raymond Mohamed	Director	Mineral Resources Department	Male	In person
8	Fiji	Ms.	Laisenia Rawace		Mineral Resources Department	Female	In person
9	Fiji	Mr.	Vilimone Raqona		Mineral Resources Department	Male	In person

10	Fiji	Mr.	Mika Seru		Mineral Resources Department	Male	In person
11	Fiji	Mr.	Stephen Meke		Fiji Meteorological Services	Male	In person
12	Fiji	Mr.	Sakeasi Rabitu		Fiji Meteorological Services	Male	In person
13	Tokelau	Ms.	Jewel Tuitama	Manager	the National Disaster Management Unit	Female	Online
14	Solomon Islands	Mr.	Jonathan Tafiariki	Director	NDMO	Male	Online
15	Solomon Islands	Mr.	David Hiba	Director	Meteorological Services	Male	Online
16	Vanuatu	Mr.	Allan Rarai	Acting Director	Vanuatu Meteorology & Geology Department	Male	Online
17	Vanuatu	Mr.	Fred Jockley	Manager, Weather Forecasting & Services	Vanuatu Meteorology & Geology Department	Male	Online
18	Vanuatu	Mr.	Dan Tari	Acting Manager, Geo-Hazards	Vanuatu Meteorology & Geology Department	Male	Online
19	Vanuatu	Ms.	Melinda Aru	Data Analyst	Vanuatu Meteorology & Geology Department	Female	Online
20	Vanuatu	Mr.	Jerry Timothy	PSO, Aviation Weather Services	Vanuatu Meteorology & Geology Department	Male	Online
21	Samoa	Ms.	Frances Reupena	Chief Executive Officer	Ministry of Natural Resources and Environment	Female	Online
22	Samoa	Mr.	Luteru Tauvale	Assistant CEO Meteorology	Ministry of Natural Resources and Environment	Male	Online

23	Samoa	Mr.	Malaki Iakopo	Assistant CEO Water Resources	Ministry of Natural Resources and Environment	Male	Online
24	Samoa	Ms.	Molly Nielsen	Acting Assistant CEO Disaster Management	Ministry of Natural Resources and Environment	Female	Online
25	New Zealand	Ms.	Dana MacDiarmid	Senior Technical Advisor	National Emergency Management Agency Te Rākau Whakamarumaruru	Female	Online
26	New Zealand	Mr.	James Lunny	Manager	WMO Met Services	Male	Online
27	Facilitator	Mr.	Sanjaya Bhatia	Chief of Section	UNDRR Global Education and Training Institute	Male	Online
28	Facilitator	Ms.	Sarah Wade-Apicella	Programme Management Officer	UNDRR Global Education and Training Institute	Female	Online
29	Rapporteur	Ms.	Yo Kunieda	DRR Officer	UNDRR Pacific	Female	In person
30	Admin	Ms.	Shimala Kuar	Administrative Officer	UNDRR Pacific	Female	In person
31	Facilitator	Ms.	Jair Torres	DRR Advisor	UNDRR Americas and the Caribbean	Male	In person
32	Facilitator	Ms.	Nazgul Borkosheva	Programme Management Officer	UNDRR Pacific	Female	In person
No.	Country	Title	Name	Position	Organization	Sex	Attendance
1	Benin	Mr.	Gildas Tossou		DG Eau Bénin	Male	In person
2	Burkina Faso	Mr.	Hamidou Diallo		SP/Conseil National de Secours d'Urgence et de Réhabilitation (CONASUR)	Male	In person
3	Burkina Faso	Mr.	Guillaume Nakoulma		Agence Nationale de la Météorologie du Burkina Faso	Male	In person

4	Burkina Faso	Mr.	B. Aristide Simpore		SP/Conseil National de Secours d'Urgence et de Réhabilitation (CONASUR)	Male	In person
5	Cabo Verde	Mr.	Alves Cabral Jeremias		MAI / National Service of Civil Protection	Male	In person
6	Cabo Verde	Mr.	Correia Rodrigues Valdir		MAI / National Service of Civil Protection	Male	In person
7	Cabo Verde	Mr.	Mendes De Carvalho Da Costa Anedito Zico		INMG / DMC	Male	In person
8	Cote d'ivoire	Mr.	Abdel Kader Touré		Prime Minister Office, Executive Secreteriat of the National DRR Platform	Male	In person
9	Cote d'ivoire	Mr.	Benjamin Aristide Aguia		Services de météorologie nationale	Male	In person
10	Cote d'ivoire	Ms.	Mariam Traoré		Prime Minister Office, Executive Secreteriat of the National DRR Platform	Female	In person
11	Ghana	Mr.	Koranteng Abrokwa		National Disaster Management Organisation (NADMO)	Male	In person
12	Ghana	Mr.	Frank Dankwa Carboo		National Disaster Management Organisation (NADMO)	Male	In person
13	Ghana	Mr.	Joshua Asamoah		-	Male	In person
14	Guinea	Mr.	Alhassane Barry		Centre National de Gestion des Catastrophes et des	Male	In person

					Urgences Environnementales		
15	Guinea	Ms.	Fatoumata Binta Diallo		Direction Nationale de la Météorologie	Female	In person
16	Guinea	Ms.	Malon Conde		Centre National de Gestion des Catastrophes et des Urgences Environnementales	Female	In person
17	Guinea Bissau	Mr.	Alsau Sambu		National Service of Civil Protection	Male	In person
18	Guinea Bissau	Mr.	Benvindo Nagague			Male	In person
19	Guinea Bissau	Mr.	Agostinho Moises Mane			Male	In person
20	Liberia	Mr.	Henry O. Williams		NDMA	Male	In person
21	Liberia	Mr.	Arthur Gar-Glahn		Liberia Meterological Service	Male	In person
22	Liberia	Ms.	Gemeh Buway Roberts		NDMA	Female	In person
23	Mali	Mr.	Bakary Dao		Protection Civile	Male	In person
24	Mali	Mr.	Fily Sissoko		Agence Nationale de la Météorologie (MALI- METEO)	Male	In person
25	Mali	Mr.	Diarra Seydou			Male	In person
26	Niger	Mr.	Mahaman Bachir Adamou Idiguini		Cellule de coordination du SAP (CC/SAP) / Primature	Male	In person
27	Niger	Mr.	Djibo Ali		DGPN Commissaire Divisionnaire de Police	Male	In person

28	Niger	Mr.	Katiellou Lawan Gaptia		Direction Nationale de la Météorologie	Male	In person
29	Nigeria	Mr.	Daniel Etim Obot		Nigeria National Emergency Management Agency (NEMA)	Male	In person
30	Nigeria	Ms.	Aisha Musa Ibrahim		Nigeria National Emergency Management Agency (NEMA)	Female	In person
31	Nigeria	Mr.	Daniel Chibueze Okafor		Nigerian Meteorological Agency (NIMET)	Male	In person
32	Senegal	Mr.	Abdoulaye Noba		Direction de la Protection Civile (DPC)	Male	In person
33	Senegal	Mr.	Sadibou Ba		Agence nationale de l'Aviation civile et de la Météorologie (ANACIM)	Male	In person
34	Senegal	Mr.	Abdoulaye Ndiaye		Direction de la Protection Civile (DPC)	Male	In person
35	Senegal	Mr.	Idriss Moulaye Coulibaly		Direction de la Protection Civile (DPC)	Male	In person
36	Senegal	Mr.	Ndongo Diouf		Direction de la Protection Civile (DPC)	Male	In person
37	Senegal	Mr.	Malick Diagne		Direction de la Protection Civile (DPC)	Male	In person
38	Sierra Leone	Mr.	John Vandí Rogers		National Disaster Management Agency (NDMA)	Male	In person
39	Sierra Leone	Mr.	Ibrahim Sinneh Kamara		Sierra Leone Meteorological Agency	Male	In person

40	Sierra Leone	Mr.	Thomas Aloysious Lebbie		National Disaster Management Agency (NDMA)	Male	In person
41	The Gambia	Mr.	Bubacarr Fofana		National Disaster Management Agency (NDMA)	Male	In person
42	The Gambia	Mr.	Lamin Mai Touray		Department of Water Resources	Male	In person
43	The Gambia	Mr.	Peter Gibba		Department of Water Resources	Male	In person
44	Togo	Mr.	Yoma Baka		Agence nationale de la protection civile (ANPC)	Male	In person
45	Togo	Mr.	Nelson Akibode		Agence nationale de la protection civile (ANPC)	Male	In person
46	Togo	Mr.	Abalo Affo-Dogo		Direction Générale de la Météorologie Nationale	Male	In person
47	Senegal	Mr.	Avinash Ramessur		UNDP	Male	In person
48	Senegal	Mr.	Mbaye Kane Deng		OCHA	Male	In person
49	Senegal	Mr.	Elhadji Chamsidine Marena Mane		OCHA	Male	In person
50	Senegal	Mr.	Cheikh Ba		UNRCO	Male	In person
51	Participant	Mr.	Mohammed Ibrahim		ECOWAS	Male	In person
52	Participant	Mr.	Mohammed Mahamat		AGRHYMET	Male	In person
53	Participant	Mr.	Bernard Gomez		WMO	Male	In person
54	Admin	Mr.	Indangasi Mike		UNDRR Africa	Male	In person
55	Facilitator	Ms.	Auriane Denis-Loupot	Programme Management Officer	UNDRR Africa	Female	In person
56	Facilitator	Mr.	Roberto Schiano Lomoriello	Programme Management Officer, Sendai Framework Monitor	UNDRR Africa	Male	Online

NO	Country and/or Role	Title	Name	Position	Organization	Gender	Attendance
1	Cook Islands	Mr.	Arona Ngari	Director	Cook Islands Meteorological Services	Male	In person
2	Cook Islands	Mr.	John Strickland	Director	Emergency Management Cook Islands	Male	In person
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7	Fiji	Mr.	Raymond Mohamed	Director	Mineral Resources Department	Male	In person
8	Fiji	Ms.	Laisenia Rawace		Mineral Resources Department	Female	In person
9	Fiji	Mr.	Vilimone Raqona		Mineral Resources Department	Male	In person
10	Fiji	Mr.	Mika Seru		Mineral Resources Department	Male	In person
11	Fiji	Mr.	Stephen Meke		Fiji Meteorological Services	Male	In person
12	Fiji	Mr.	Sakeasi Rabitu		Fiji Meteorological Services	Male	In person
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14	Solomon Islands	Mr.	Jonathan Tafiariiki	Director	NDMO	Male	Online
15	Solomon Islands	Mr.	David Hiba	Director	Meteorological Services	Male	Online
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17	Vanuatu	Mr.	Fred Jockley	Manager, Weather Forecasting & Services	Vanuatu Meteorology & Geology Department	Male	Online
18	Vanuatu	Mr.	Dan Tari	Acting Manager, Geo-Hazards	Vanuatu Meteorology & Geology Department	Male	Online
19	Vanuatu	Ms.	Melinda Aru	Data Analyst	Vanuatu Meteorology & Geology Department	Female	Online
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21	Samoa	Ms.	Frances Reupena	Chief Executive Officer	Ministry of Natural Resources and Environment	Female	Online
22	Samoa	Mr.	Luteru Tauvale	Assistant CEO Meteorology	Ministry of Natural Resources and Environment	Male	Online
23	Samoa	Mr.	Malaki Iakopo	Assistant CEO Water Resources	Ministry of Natural Resources and Environment	Male	Online
24	Samoa	Ms.	Molly Nielsen	Acting Assistant CEO Disaster Management	Ministry of Natural Resources and Environment	Female	Online
25	New Zealand	Ms.	Dana MacDiarmid	Senior Technical Advisor	National Emergency Management Agency Te Rākau Whakamarumarū	Female	Online

26	Participant	Mr.	James Lunny	Manager	WMO Met Services (New Zealand)	Male	Online
27	Facilitator	Mr.	Sanjaya Bhatia	Chief of Section	UNDRR Global Education and Training Institute	Male	Online
28	Facilitator	Ms.	Sarah Wade-Apicella	Programme Management Officer	UNDRR Global Education and Training Institute	Female	Online
29	Rapporteur	Ms.	Yo Kunieda	DRR Officer	UNDRR Pacific	Female	In person
30	Admin	Ms.	Shimala Kuar	Administrative Officer	UNDRR Pacific	Female	In person
31	Facilitator	Ms.	Jair Torres	DRR Advisor	UNDRR Americas and the Caribbean	Male	In person
32	Facilitator	Ms.	Nazgul Borkosheva	Programme Management Officer	UNDRR Pacific	Female	In person
Project Management							
1	NA	Mr.	Cyrille Honoré	Director, Disaster Risk Reduction and public Services	World Meteorological Organization	Male	NA
2	NA	Ms	Erica Allis	Scientific Officer	World Meteorological Organization	Female	NA
3	NA	Mr.	Animesh Kumar	Head, UNDRR Office in Bonn	UNDRR	Male	NA
4	NA	Mr.	Sanjaya Bhatia	Head, UNDRR Office in Incheon	UNDRR	Male	NA
4	NA	Ms.	Sandra Amlang	Head, Interagency Cooperation Unit, Partnership Branch	UNDRR	Femail	NA
5	NA	Ms.	Sarah Wade-Apicella	Programme Management Officer, Global Education and Training Institute	UNDRR	Female	NA
6	NA	Ms.	Stefanie Dannenmann-Di Palma	Programme Management Officer, External Relations Section	UNDRR	Female	NA
7	NA	Ms.	Sarah Houghton	Programme Management Officer, External Relations Section	UNDRR	Female	NA



8	NA	Mr.	Rahul Sengupta	Programme Management Officer, UNDRR Office in Bonn	UNDRR	Male	NA
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b. What were the roles of the individuals or groups listed above and what were their concrete contributions?

Member States speakers and participants: participated actively in discussions and exercises to understand the custom indicators, consider their relevance and application to their country contexts to assess MHEWS effectiveness, identify gaps and opportunities, exchange experience among and across participating ministries/organizations and countries.

UN, international and regional intergovernmental organizations participated actively in discussions with member states to understand needs, context, and opportunities to support member states' efforts.

UNDRR, WMO and some regional intergovernmental organization or specialized agencies facilitated or presented in specific sessions of the trainings and helped to facilitate group discussions and exercises. UNDRR and WMO also worked in close partnership to ensure successful implementation of all the deliverables of the project within the exact time span approved by CREWS, even while the project was implemented in the most critical period of the COVID-19 pandemic.

14. Visibility products

a. Insert or copy any links to press releases, videos or communication items and/or social media links

- Learning Labs: Sendai Framework Monitoring (Early Warning Systems): <https://globalplatform.undrr.org/conference-event/learning-labs-sendai-framework-monitoring-early-warning-systems>
- UNDRR ROAC: Caribbean Regional Workshop - Measuring Effectiveness of Early Warning Systems through Sendai Framework Target (g) and Custom Indicators: <https://www.undrr.org/event/undrr-roac-caribbean-regional-workshop-measuring-effectiveness-early-warning-systems-through>
- Trinidad and Tobago gears up to increase resilience to disasters <https://www.undrr.org/news/trinidad-and-tobago-gears-increase-resilience-disasters>
- Trinidad and Tobago Gears Up to Increase Resilience to Disasters: <https://trinidadandtobago.un.org/en/190799-trinidad-and-tobago-gears-increase-resilience-disasters>



- ACS participates in the "Measuring the effectiveness of early warning systems, through Sendai Framework target (G) and customised indicators" workshop: <http://www.acs-aec.org/index.php?q=resources/galleries/2022/acs-participates-in-the-measuring-the-effectiveness-of-early-warning-system>
- UNDRR ONEA & GETI newsletter, Issue 34, April-June 2022: <https://www.undrr.org/sites/default/files/inline-files/UNDRR%20ONEA%20%26%20GETI%20Newsletter%2034.pdf>
- LinkedIn Posts: https://www.linkedin.com/search/results/all/?keywords=MHEWS%20custom%20indicators&origin=GLOBAL_SEARCH_HEADER&sid=fjJ

15. Supporting documents

- List and annex to the report any documents providing details on project activities such as review reports, reports of training sessions, technical assessment reports, Online solutions and tools, manuals, summaries of high-level discussions etc.*

Methodological guidance and computational worksheet:

<https://www.undrr.org/publication/multi-hazard-early-warning-system-custom-indicators-methodologies-computation>

<https://www.preventionweb.net/publication/multi-hazard-early-warning-system-custom-indicators-methodologies-computation>

Translations: Arabic, Chinese, English, French, Spanish and Portuguese

Training package (Arabic, Chinese, English, French, Spanish and Portuguese, with selected case study reading in original English language only)

Workshop reports and adapted training materials

https://drive.google.com/drive/folders/1QMLIRYJH7nil_8IXOxC-PetPYrfyNqW2?usp=sharing

SFM Monitor (accessible to Member States only) <https://sendaimonitor.undrr.org/>

SFM Monitor E-Learning <https://courses.adpc.net/courses/course-v1:UNISDR+SFM001+2019Y1/about>

UNDRR-ADPC YouTube SFM video lecture modules: <https://www.youtube.com/channel/UCflwuGyO-i24n-RDCQhf1CQ/featured>