



CREWS PROJECT PROGRESS REPORT

(July – December 2021)

1. Project title	Measuring Effectiveness of Early Warning Systems through Sendai Framework Monitoring	2. Project reference CREWS/GlobalProj/02/Measuring EWS
3. Implementing Partners involved in the project	UNDRR and WMO	4. Regional/National Partners involved in the project 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 Duration/Timeframe (from year – to year)	Two years (June 2020 – June 2022)	6. Total Funding Approved by Steering Committee (in US dollars), including fees USD 761,620
7. Reporting focal point(s) from Implementing Partners	UNDRR: Sandra Amlang (amlang@un.org), Rahul Sengupta (sengupta@un.org>), Stefanie Dannenmann-Di Palma (dannenmann@un.org) WMO: Erica Allis (eallis@wmo.int)	

<p>8. Project overview</p>	<p>Please include objectives, key project deliverables, leveraging, contextual information/statistics, significant events during the reporting period <u>in bullet points</u>. (max 250 words)</p> <p>The project aims to: (i) strengthen the contribution of multi-hazard early warning systems (MEWS) 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: 2020 State of Climate Services report focusing on Climate Information and Early Warning Systems as a baseline.</p> <p>Outcome 2: Custom indicators have been developed and are available for measuring the effectiveness of national (single-, cluster- and multihazard) early warning systems (for use within the Sendai Framework Monitoring system)</p> <p>Outcome 3: 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 – Target (g)</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>9. Progress summary</p>	<p>What has been achieved <u>during this reporting period</u>? – Please list <u>in bullet points</u> the most significant and tangible outcomes? (Highlight at least 1 key achievement that can be elaborated in the 2021 Annual Report). (max 250 words)</p>

Outcome 2: 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)

The Project Support Group met on a bi-monthly basis to oversee the implementation of the project (comprised of UNDRR, WMO, CREWS Secretariat).




Following the formation of the Expert Group (EG) to oversee the development of the custom MHEWS indicators for the Sendai Framework Monitor and the active engagement of the EG in 2021, the custom indicators to measure the effectiveness of early warning systems were developed and finalized. The EG, which consisted of 36 members included the following organizations: CDEMA, Statistical Institute of Jamaica, CARICOM Secretariat, Meteo France, UK Met, Finnish Meteorological Institute, IN-MHEWS, Mauritius Meteorological Service, Practical Action, UK Met, Seychelles Meteorological Authority, Tanzania Prime Minister's Office, and UNDRR and WMO focal points. During the current reporting period the Expert Group met in July 2021. A consultant was hired and facilitated the engagement of the EG to develop case studies highlighting good practice in monitoring and evaluating EWS within countries and finalization of the indicators and methodology.




Outcome 3: 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 – Target (g).

Output 3.1 - Training package on monitoring and reporting of global Target (g) indicators and national custom indicators developed – has commenced.

Following the delivery of the custom indicators from WMO, a briefing on the custom indicators and discussion on the training package deliverables was held between the WMO and UNDRR focal points and the training development consultant. The consultant hired to develop the training package has delivered: 1) an inception report including the proposed work plan for the full consultancy; 2) the complete draft curriculum including suggested case studies for use in the training package. s
Ame comment as above.

10. Project Performance

Interpretation of color coding		
High		Good progress; on track in most or all aspects of delivery
Medium		Moderate progress or on track in some aspects of delivery
Low		Less than moderate or poor progress. Not on track in critical areas of its delivery. Requires remedial attention

	Rate of expenditure	Rate of delivery	Alignment of Objectives
Coding			
Narrative	<p>WMO: Expenditures on Objectives 1 and 2 have adhered to the timeline. WMO expenditures are outlined as follows: Revenue USD 192,100 Total spent (obligations + actuals inclusive of programme support cost) USD 180,704 Total exp. (%) 94%</p> <p>UNDRR: Expenditures on Outputs 2 and 3 have adhered to timeline. UNDRR expenditures are outlined as follows: Revenue: USD 569,520 Total spent (obligations + actuals inclusive of programme support cost) USD 127,657 Total exp. (%) 22%</p>	<p>The Expert Group (EG) overseeing the development of the custom MHEWS indicators for the Sendai Framework Monitor met in Feb, May, June, and July 2021. Furthermore, sub-working groups met four times (twice in May and June 2021).</p> <p>The consultant hired to develop the indicators has delivered; 1) inception Report, including a work plan for the full consultancy; 2) Progress report listing the cases reviewed and documented and initial list of proposed indicators, and 3) the final report including documented cases and the proposed indicators and the associated methodologies for their computation and excel tool. The final custom indicators, computation</p>	All activities have been in alignment with the objectives.

		<p>methodology, and excel tool were finalized at the end of October. The delay was due to comments received on the methodology from the expert team requiring additional time and expertise from WMO to resolve.</p> <p>The consultant delivered 1) the Inception Report including the proposed work plan for the full consultancy, and 2) a draft Curriculum, on time. A meeting to walk-through the curriculum deliverable was scheduled for 6 January 2022 with WMO and UNDRR early warning indicator focal points and relevant regional offices to maximize feedback.</p>	
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11. Risk Management Status

Risk Status	<p>What is the current risk status as compared to what was identified in the project proposal?</p> <p>Given the ongoing global pandemic, the risk of illness has changed from low as specified in the original project proposal to medium.</p>
Measures to address	<p>What mitigation measures have been developed to address the risk status? <u>In bullet points</u></p> <p>All recommended safety precautions are being followed and the implementing partners are closely monitoring implementation. All documents are shared online and support to the EG is ongoing.</p>

12. Contributions to CREWS Output(s)

(use number for activities and products and % for project component completion)

12.1 National Output(s)

CREWS Output(s) 1: National Meteorological and Hydrological Services service delivery improved, including the development of long-term service delivery strategies and development plans

State Project Output(s) in this section	Overall Project Target	Progress by July 2021	Target for reporting period	Progress by December 2021
To strengthen contribution of (multi-hazard) EWS to the reduction in risks and losses through enhanced capacities to measure and monitor EWS effectiveness and incorporate feedback/learning (lessons learnt) into the EWS value chain custom indicators, tool and methodology will be developed to better support LDCs and SIDS in measuring the effectiveness of their (multi-hazard) early warning systems and improving them over time	Develop indicators to measure effectiveness of national efforts in EWS	Draft indicators and methodology available	Final indicators and methodology	Indicators and methodology are now available
Additional information: briefly indicate, with concrete examples, the contributions to CREWS value propositions (gender-responsive, multiplier, people-centered, promote coherence, solution-oriented, unique), as relevant (150 – 200 words). Please list in bullet points. <ul style="list-style-type: none"> • Gender responsive: Care was taken to ensure diverse representation in the Expert Group. 70% of the group is comprised of women. This will help ensure a robust perspective in the development of the indices. Furthermore, indices will include a gender dimension in measuring the effectiveness of EWS. • Multiplier: The project builds on the well-established and globally endorsed tool for monitoring the implementation of the Sendai Framework (Sendai Monitor). The custom indicators will support scaling up of effective EWS, which will better direct additional financing to key priorities and gaps. • People-centered: Several potential users of the custom indicators are engaged as members of the Expert Group to oversee the development, ensure its usefulness, and support uptake of the indices. Potential users include members of the disaster risk reduction community and NGOs with close links to local communities EWS are designed to serve. 				

- **Promote Coherence:** As referenced under the ‘multiplier’ section above, the project builds from the Sendai Framework Monitor, which countries already use to report on Sendai Framework implementation progress. Furthermore, several members of the Expert Group are responsible for entering information into the Sendai Framework Monitor.
- **Solution-oriented:** It was recognized that the efforts to monitor early warning systems many times focus on design aspects and not on the effectiveness of the systems in saving lives and livelihoods. This project aims to bridge that gap. A complementary training package will further support understanding of the Target G and early warning effectiveness indicators for practical use and application
- **Unique:** In shifting the monitoring focus to a results orientation, the project supports a paradigm shift by creating the enabling environment to refine EWS for improved outcomes over time.

CREWS Output(s) 2: Risk Information to guide early warning systems and climate and weather service developed and accessible

State Project Output(s) in this section	Overall Project Target	Progress by July 2021	Target for the reporting period	Progress by December 2021
Not applicable				
Additional information: briefly indicate, with concrete examples, the contributions to CREWS value propositions (gender-responsive, multiplier, people-centered, promote coherence, solution-oriented, unique), as relevant (150 – 200 words). <u>Please list in bullet points.</u>				

CREWS Output(s) 3: Information and Communication Technology, including common alerting protocol, strengthened

State Project Output(s) in this section	Overall Project Target	Progress by July 2021	Target for the reporting period	Progress by December 2021
Not applicable				

Additional information: briefly indicate, with concrete examples, the contributions to CREWS value propositions (gender-responsive, multiplier, people-centered, promote coherence, solution-oriented, unique), as relevant (150 – 200 words). Please list in bullet points.

CREWS Output(s) 4: Preparedness and response plans with operational procedures that outline early warning dissemination processes developed and accessible

State Project Output(s) in this section	Overall Project Target	Progress by July 2021	Target for the reporting period	Progress by December 2021
Not applicable				

Additional information: briefly indicate, with concrete examples, the contributions to CREWS value propositions (gender-responsive, multiplier, people-centered, promote coherence, solution-oriented, unique), as relevant (150 – 200 words). Please list in bullet points.

CREWS Output(s) 5: Knowledge products and awareness programmes on early warnings developed

State Project Output(s) in this section	Overall Project Target	Progress by July 2021	Target for the reporting period	Progress by December 2021
Not applicable				

Additional information: briefly indicate the contributions, with concrete examples, to CREWS value propositions (gender-responsive, multiplier, people-centered, promote coherence, solution-oriented, unique), as relevant (150 – 200 words). Please list bullet points.

CREWS Output(s) 6: Gender-sensitive training, capacity building programmes provided

State Project Output(s) in this section	Overall Project Target	Progress by July 2021	Target for the reporting period	Progress by December 2021
Not applicable				
Additional information: briefly indicate, with concrete examples, the contributions to CREWS value propositions (gender-responsive, multiplier, people-centered, promote coherence, solution-oriented, unique), as relevant (150 – 200 words). <u>Please list in bullet points.</u>				

12.2 Regional Output(s) (for Regional Projects)

CREWS Regional Output(s): Institutional and human capacities at Regional WMO and Intergovernmental organizations to provide regional climate and weather services to LDCs and SIDS increased

State Project Output(s) in this section	Overall Project Target	Progress by July 2021	Target for the reporting period	Progress by December 2021
Not applicable				
Additional information: briefly indicate, with concrete examples, the contributions to CREWS value propositions (gender-responsive, multiplier, people-centered, promote coherence, solution-oriented, unique), as relevant (150 – 200 words). <u>Please list in bullet points.</u>				




CERTIFICATION ON USE OF CREWS RESOURCES BY WMO

(July – December 2021)

This is for authorized representatives from the CREWS Implementing Partners to certify that the resources allocated are used for their intended purpose.

Has there been any cases of non-compliance with the financial rules, regulations and procedures of your institution? If yes, please fill below			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Issue	Response Measures Taken	Date of Response	Active/Closed
		Click or tap to enter a date.	Choose an item.
		Click or tap to enter a date.	Choose an item.
		Click or tap to enter a date.	Choose an item.
Institution		WMO	
Firstname, LASTNAME of authorized representative		Brian COVER	
Position Title		Chief, Finance Division	
Date and Signature:			



Has there been any cases of non-compliance with the financial rules, regulations and procedures of your institution? If yes, please fill below			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Issue	Response Measures Taken	Date of Response	Active/Closed
		Click or tap to enter a date.	Choose an item.
		Click or tap to enter a date.	Choose an item.
		Click or tap to enter a date.	Choose an item.
Institution	UNDRR		
Firstname, LASTNAME of authorized representative	Sandya PRASAD		
Position Title	Chief, Resource Planning and Management Section		
Date and Signature:	17/02/2022 		

13. Visibility products

- a. *Insert or copy any links to press releases, videos or communication items and/or social media links produced during the reporting period only*

14. Supporting documents

- a. *List and annex to the report any documents providing details on project activities conducted during the reporting period such as reports of training sessions, assessment reports, online solutions and tools, manuals, summaries of high-level discussions etc.*
- *CREWS MEEWS indicator methodology report [here](#)*
 - *CREWS MEEWS indicator computation tool [here](#)*
 - *USAID indicator case study [here](#)*
 - *CDEMA indicator case study [here](#)*
 - *Country hydromet diagnostic tool case study [here](#)*
 - *MeteoFrance Vigilance case study [here](#)*

15. Project History

- a. *Highlight key achievements since project started in bullet points, include all visibility and supporting documents other than those from the last 12 months*

- The State of Climate Services Report, focusing on risk information and early warning systems, launched on 13 October 2020.
- The Expert Group (EG) overseeing the development of the custom MHEWS indicators for the Sendai Framework Monitor met in Feb, May, June, and July 2021. Furthermore, sub-working groups met four times (twice in May and June 2021).
- The consultant hired to develop the indicators has delivered; 1) inception Report, including a work plan for the full consultancy; 2) Progress report listing the cases reviewed and documented and initial list of proposed indicators, and 3) the final report including documented cases and the proposed indicators and the associated methodologies for their computation and excel tool. The final custom



indicators, computation methodology, and excel tool were finalized at the end of October. The delay was due to comments received on the methodology from the expert team requiring additional time and expertise from WMO to resolve.

- The consultant delivered 1) the Inception Report including the proposed work plan for the full consultancy, and 2) a draft Curriculum, on time. A meeting to walk-through the curriculum deliverable was scheduled for 6 January 2022 with WMO and UNDRR early warning indicator focal points and relevant regional offices to maximize feedback.