



## CREWS PROJECT PROGRESS REPORT

(July – December 2020)

<b>1. Project title</b>	Caribbean - Strengthening Hydro-Meteorological and Early Warning Services	<b>2. Project reference</b> CREWS/CProj/04/Regional Caribbean
<b>3. Implementing Partners involved in the project</b>	World Bank (Lead) World Meteorological Organization UNDRR	<b>4. Regional Partners involved in the project</b> Caribbean Disaster Emergency Management Agency (CDEMA) Caribbean Institute for Meteorology and Hydrology (CIMH) Caribbean Meteorological Organization
<b>5. Project Duration/Timeframe</b>	<b>September 2018 – July 2021</b>	
<b>6. Reporting focal point(s)</b>	Melanie Simone Kappes – <a href="mailto:mkappes@worldbank.org">mkappes@worldbank.org</a> Anna Maria Bogdanova – <a href="mailto:ambogdanova@worldbank.org">ambogdanova@worldbank.org</a>  Other IP focal points: Jay Wilson - <a href="mailto:jpwilson@wmo.int">jpwilson@wmo.int</a> Donna Pierre – <a href="mailto:dpierre@wmo.int">dpierre@wmo.int</a> Jair Torres- <a href="mailto:jtorres@eird.org">jtorres@eird.org</a>	






<p><b>7. Project overview</b></p>	<p><b>Please include synergies, leveraging, key project deliverables and total funding in bullet points. (max 250 words)</b></p> <p><u>Budget:</u> US\$ 5.5 million - implemented by the WB/GFDRR, in collaboration with WMO and UNDRR (This is the first project involving all three IPs).</p> <p><u>Leveraging:</u> This project is complemented with US\$ 1.5 million from the CREWS contribution from Canada to WMO.</p> <p><u>Objectives:</u> To strengthen and streamline regional and national systems and capacity related to weather forecasting, hydrological services, multi-hazard impact-based warnings and service delivery for enhanced decision-making.</p> <p><u>Key Deliverables:</u> (i) Regional strategy to strengthen and streamline early warning and hydromet services; (ii) Institutional strengthening and streamlining of early warning and hydromet services; (iii) Piloting high priority national activities on end-to-end EWS including impact-based forecasting.</p>
<p><b>8. Progress summary</b></p>	<p><b>What has been achieved between (reporting period)? – Please list the most significant and tangible developments?</b></p> <ul style="list-style-type: none"> <li>• Situation Analysis finalized and shared with the regional partners through Regional EWS (REWS) Consortium in September 2020;</li> <li>• Based on the situation analysis a first draft of the regional MHEWS roadmap has been produced and shared for Project Steering Committee (PSC) review and discussion in the July 2020 Meeting;</li> <li>• A second draft of the regional MHEWS roadmap has been prepared incorporating comments from PSC, which will be distributed for review and consultation among REWS consortium members in early 2021.</li> <li>• Based on the strategic initiatives outlined in the regional roadmap and several selection criteria, pilot activities have been selected and a draft description for four Pilot activities has been prepared and shared with the Project’s Steering Committee during the July 2020 meeting. End of 2020 meetings</li> </ul>



	<p>were held with CDEMA, CIMH and CMO to discuss implementation of the pilot activities, the role of regional agencies and sustainability beyond the life of the project.</p> <ul style="list-style-type: none"> <li>• Through the end of 2020 additional progress has been made in defining the scope, reach, duration and participants of the Priority Activities (formerly pilot projects) that will be implemented starting in 2021.</li> <li>• Two baseline reports drafted to inform the final NSPs for Grenada &amp; Jamaica</li> <li>• Draft policy developed to inform design of model MET Bill</li> <li>• Two fellowships awarded to facilitate advance studies – Barbados &amp; Saint Lucia</li> <li>• Project advancements, concerning gender and vulnerable groups inclusion, and on private sector engagement on MHEWS were presented in the framework of the Hydromet CARIBBEAN Virtual Forum 2020.</li> </ul>
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## 9. Project Performance

Interpretation of color coding		
	<b>High</b>	Good progress; on track in most or all aspects of delivery
	<b>Medium</b>	Moderate progress or on track in some aspects of delivery
	<b>Low</b>	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
<b>Coding</b>	●	●	●
<b>Narrative</b>	<p>Disbursement December, 2020</p> <p>From WB side: is \$1,015,829 (39.4% of total amount)</p> <p>From WMO side: Commitment on December 2020 is \$544,185.95 (24 % of total amount)</p> <p>From UNDRR side: Commitment on December 2020 is US\$ 99,852. (31% of total amount)</p>	<p>Several activities, including the regional radar MoSSaic assessment, have been delayed since they require physical presence in the region which is impossible due to travel ban;</p> <p>The review and consultation processes of the developed products with counterparts take more time due to full virtual work modality that has been followed since the beginning of Covid19 pandemic;</p> <p>Deliverables under earlier agreed activities have to be revised to reflect the limited operational environment on the ground, i.e. Early Warning Checklist work with CDEMA had to be converted in a virtual format;</p> <p>Pilot activities planned as the next step will most likely take longer than expected due to travel ban and limited ability on the ground.</p> <p>Therefore, a 12-18 months no-cost extension will be required to complete</p>	<p>The project remains strongly aligned to the objectives.</p>



		<p>the project and achieve the development objectives.</p> <p>A complement project proposal is being prepared and discussed with the CREWS secretariat in order to extend the role of UNDRR within the current project.</p>	
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## 10. Risk Management Status

<b>Risk Status</b>	<p>What is the current risk status as compared to what was identified in the project proposal?</p> <p>Risk at this point of the project is higher than identified in the project proposal, and overall project implementation has been lower than expected over the last months, particularly due to the global pandemic. Going forward, the development of the COVID-19 pandemic creates some uncertainty for the further progress of the project.</p>
<b>Measures to address</b>	<p>What mitigation measures have been developed to address the risk status?</p> <p>To account for current and future delays as well as the uncertainty moving forward, most activities required re-adjustment in scope and timeline, as well as way of delivery (e.g. change from in-person to virtual interaction) and a project extension is being requested to account for this delays.</p>

## 11. Contributions to CREWS Output(s)

### 11.1 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	Target for reporting period	Progress by July 2020	Progress by December 2020
<i>National Strategic Plans Developed</i>	8	50%	0	50%
<i>Model Meteorological Bill Drafted</i>	1	100%	0	60%
<i>Meteorological Bills adapted at national level</i>	2	0	0	0

**Narrative: briefly indicate the major issues or challenges faced and mitigation steps taken to addressing them. (150 to 200 words)**

The development of the Model Met Bill has encountered a delay due to a lack of engagement with countries. The engagement of countries encountered challenges as most were focused on crisis and contingency planning related to COVID. An extension has been granted to the consultant by CMO which remains within the overall expected delivery timeframe. The delays in consultation on the model met bill has also affected the adaptation at the national level. The National Strategic Plans are going according to plan, these will be reported against more tangibly in the next reporting period.



**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	Target for reporting period	Progress by July 2020	Progress by December 2020
Hydrological observation, data management and flood forecasting strengthened	Implementation of a River Flood Forecasting System in Haiti and Dominican Republic	80%	0	70%
WMO Cascading initiatives implemented	2 SWFDP RSMT Meetings 10 SWFDP Regional Trainings conducted	1 RSMT Meeting 1 SWFDP Regional Training Conducted	1 1 (affected by COVID-19)	0
Biannual Caribbean Climate Outlook Fora	6 CariCOFs held	1	1 (changed from face to face to online)	1
Multi-hazard early warning systems, risk assessments and impact-based forecasting introduced	3 regional training events on hurricane forecasting 2 Regional Training events on Impact-based forecasting	1 1	1 1	1 1
<p><b>Narrative: briefly indicate the major issues or challenges faced and mitigation steps taken to addressing them. (150 to 200 words)</b>            The delays caused by Covid-19 and changes in the administration of INDRHI is responsible for the difference of 10 % for the reporting period.            Specific achievements include:</p> <p>I. Component: systems development</p>				



The implementation of an Integrated River Flood Forecasting System (IRFF) in the Hispaniola Island has been focused in two pilot basins in Dominican Republic. The progress made by December 2020 are:

- i) Developed beta version of the hydrological forecasting system component with inputs from SWFP and FFGS and real-time rainfall data connected;
- ii) Initiated the validation process of NWP in ONAMET with the support of Cuban NMS (INSMET);
- iii) Developed beta version of the impact-based forecasting system component in a pilot basin;
- iv) Initiated WHOS setting up in ONAMET;
- v) Web-platformed adapted to the hydrological component;

#### II. Component: training

- vi) Completed trainings in basic programming for hydrologists and introduction to hydrological modeling;
- vii) Agreement signed with RTC Argentina for the development of a distance learning platform to support training due to the impossibility of physical interaction due to COVID-19.

**The next RSMT of the SWFP will meet virtually in February**

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





State Project Output(s) in this section	Overall Project Target	Target for reporting period	Progress by July 2020	Progress by December 2020
National strategic plans and framework for weather and climate service with an action plan developed	8	0	0	0
Model Meteorological Bill developed	1	0	0	0
Adaptation of the Meteorological bill in two countries completed	2	0	0	0
<p><b>Narrative: briefly indicate the major issues or challenges faced and mitigation steps taken to addressing them. (150 to 200 words)</b>            Nothing to report in the period. NSPs previously reported it is already accounted for and appropriately placed in output 1.</p>				

**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	Target for reporting period	Progress by July 2020	Progress by December 2020
No outputs to report				



**Narrative: briefly indicate the major issues or challenges faced and mitigation steps taken to addressing them.**  
 Nothing to report in the period.

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

State Project Output(s) in this section	Overall Project Target	Target for reporting period	Progress by July 2020	Progress by December 2020
No outputs to report				

**Narrative: briefly indicate the major issues or challenges faced and mitigation steps taken to addressing them. (150 to 200 words)**  
 The inclusion of NSPs in this section needs to be removed as it is already accounted for and appropriately placed in output 1



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

State Project Output(s) in this section	Overall Project Target	Target for reporting period	Progress by July 2020	Progress by December 2020
National workshops for 'gender and vulnerable groups in early warning system' training with regional strategy consultation implemented	3 national workshops	0 national workshops	4 national workshops	4 national workshops
<b>Narrative: briefly indicate the major issues or challenges faced and mitigation steps taken to addressing them. (150 to 200 words)</b> Nothing to report in the period.				

**11.2 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	Target for reporting period	Progress by July 2020	Progress by December 2020
Regional strategy agreed with regional and national stakeholders	Development of a Regional EWS Roadmap	Diagnostic finalized and Roadmap second draft prepared.	Finalization of situation analysis. Roadmap first draft prepared and shared with PSC for comments.	Roadmap second draft prepared and ready to send to REWS consortium for comments in January 2021.



Integration of gender aspects and other vulnerable groups (children, elderly and the disabled) in the regional strategy for early warning systems.			Gender and vulnerable groups considerations incorporated in regional roadmap.	Gender and vulnerable groups considerations incorporated in regional roadmap.
Evaluation of the status and available gaps in the existing Doppler radar network.	Report on Doppler radar network produced.	Report on Doppler radar network produced.	Inception report prepared. Assessment report has been postponed due to cancelation of in field mission (Covid19).	No further progress
Assessment of socio-economic benefits of better hydromet services and EWS	Value proposition of MHEWS in the Caribbean prepared.	Finalized the value proposition report.	Value proposition of MHEWS in the Caribbean prepared.	Developped and agreed a methodology to develop the complete economic analysis of regional MHEWS in the Caribbean.
Set of priority investments and potential partnerships, including with private sector, identified	Set of priorities	First list of priorities identified.	First list of priority investments identified in the roadmap document.	First list of priority investments identified in the roadmap document.



**Narrative: briefly indicate the major issues or challenges faced and mitigation steps taken to addressing them. (150 to 200 words)**

The rate of implementation has been lower than expected over the last months, particularly due to the global pandemic. Going forward, the development of the COVID-19 pandemic creates some uncertainty for the further progress of the project. To account for current and future delays as well as the uncertainty moving forward, most activities required re-adjustment in scope and timeline, as well as way of delivery (e.g. change from in-person to virtual interaction).

## 12. Contributions to Value Propositions

<p><b>Gender Responsive</b></p>	<p><i>(How did the project capture relevant gender concerns? For example, including gender-inclusive indicators and targets, reporting on sex-disaggregated data, conduct of gender analysis, involvement of gender and/or women’s organisations, documenting effects on women, men and gender-relations, implementing gender specific actions/activities for women and men.)</i></p> <p>The project has gender and vulnerable groups as cross-cutting themes. This enables the EWS to consider the different groups, reach more people, specifically the ones most at risk, and further contribute to the concept of people-centered EWS.</p>
<p><b>Multiplier</b></p>	<p><i>(How did the project contribute to the promotion of a favorable environment for early warning systems? What additional financing has been leveraged or expected to be mobilized as an effect of the project?)</i></p> <p>By identifying regional best practices in the diagnostic, the regional roadmap aims at building on them and replicating them across the region.</p>
<p><b>People-centered</b></p>	<p><i>(Which local organisations have been engaged and what is their level of participation? How did the project ensure the involvement and uptake of end-users?)</i></p>

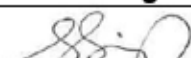


	<p>People-centered approach has been identified as one of the core values of the regional roadmap that is under development.</p>
<b>Promote Coherence</b>	<p><i>(What are the approaches undertaken to ensure complementarity and value-added of the project with existing projects and other international partner initiatives ? For example, conduct of joint planning, resource sharing, participation in consultations, workshops, meetings organized by partners.)</i></p> <p>The IP team is closely coordinating with stakeholders that are active in the region around the topic of end-to-end EWS, including regional organizations, consortia and other development partners. A mapping of ongoing projects and initiatives is planned to take place in a few months.</p>
<b>Solution-oriented</b>	<p><i>(What good and innovative practices have been produced or are evident in the project?)</i></p> <p>The regional strategy is identifying “strategic initiatives” that could be game changers, as they are addressing and offering solutions to some or the main weakness and bottlenecks identified in the diagnostic.</p>
<b>Unique</b>	<p><i>(How did the project support building sustained institutional capacity driven by countries?)</i></p> <p>While many national plans to strengthen EWS and regional plans to strengthen EWS aspects exist in the region, there is not yet any regional strategy that would set the frame for national level strengthening.</p>

### 13.Certification on Use of Resources

This is for authorized representatives from the Implementing Partners to certify that the resources allocated are used for their intended purpose. Please fill one table per Implementing Partner.



To your knowledge, 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.
<b>Institution</b>	UNDRR		
<b>Firstname, LASTNAME of authorized representative</b>	Sandya Prasad		
<b>Position Title</b>	Chief, Resource Planning and Management Section		
<b>Date and Signature:</b>	30/01/2021 		

#### 14. Visibility products

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

In order to communicate progress, share information and for consultation purposes the following website was established:

[www.GFDRR.org/en/crews-caribbean](http://www.GFDRR.org/en/crews-caribbean)

#### 15. Supporting documents

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