



CREWS PROJECT STATUS REPORT

| | | |
|--------------------------|---|---|
| 1. Project title | Caribbean - Strengthening Hydro-Meteorological and Early Warning Services | 2. Project reference CREWS/CProj/04/Regional Caribbean |
| 3. Lead IP | World Bank | 4. Other Implementing Partners WMO, UNDRR |
| 5. Reporting period | June 2019 – November 2019 | |
| 6. Reporting focal point | <p>Melanie Simone Kappes – mkappes@worldbank.org Anna Maria Bogdanova – ambogdanova@worldbank.org</p> <p>Other IP focal points: Jay Wilson - jpwilson@wmo.int Maria Kontro - mkontro@eird.org</p> | |
| 7. Project overview | <p>Please include synergies, leveraging, key project deliverables and total funding in bullet points. (max 250 words) <i>this is not expected to evolve much from one reporting period to another</i></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 Implementing Partners).</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>Key Deliverables: (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>8. Progress summary</p> | <p>What has been achieved between June to November? – Please list the most significant and tangible developments?</p> <p>Overall, the implementation progress is rated as satisfactory. Rate of implementation is on track according to the implementation plan, and the project remains strongly aligned to the objectives. The most significant developments are as follows:</p> <p>General progress:</p> <ul style="list-style-type: none"> - A CREWS’ representative has been incorporated to the Regional Early Warning Systems Consortium as an observer during project implementation timeframe. <p>Component I - Development of a regional EWS Strategy:</p> <p>The development of a regional strategy for the Caribbean has continued during this reporting period. The process of developing the strategy has been as follows:</p> <ul style="list-style-type: none"> - The CREWS team has reached an agreement with the Regional Early Warning Systems Consortium (REWSC), led by the Caribbean Disaster Emergency Management Agency (CDEMA), that the regional strategy will be aligned with the Action Plan of the REWSC. REWSC will provide regular feedback at all stages of the strategy preparation. This will ensure the ownership of the strategy in the region and facilitate this process. - The World Bank and UNDRR have been working closely on the integration of gender and vulnerable groups as a cross-cutting theme in the diagnostic and regional strategy. Four national level trainings and consultations have been conducted on gender and vulnerable group inclusion in EWS (exceeding the originally planned three workshops, due to high interest of the countries). For the private sector role in EWS as a second cross-cutting theme, the UNDRR work with ARISE has been used as starting point for |

integration of information and suggestions into the diagnostic and strategy.




- Drafting of a diagnostic “situation analysis” of the regional setup of Early Warning Systems by a team of experts based on desktop reviews and face-to-face or videoconference interviews with key stakeholders
- Consultation I: A 3-day consultation meeting was held in Barbados Sept. 25-27, 2019 where feedback on the diagnostic was received, and key inputs for the strategy were elaborated. Participants included the members of the Regional Early Warning Systems Consortium and “Early Warning Information Systems Across Climate Timescales (EWISACTS)” stakeholders.
- Consultation II: Building on the findings of the diagnostic and with the outputs of the consultation workshop held in Barbados, an outline of the “Regional strategy for strengthening and streamlining end-to-end EWS for the Caribbean” was developed, presented and consulted with the REWSC stakeholders (St Lucia, Nov. 13, 2019) and the hydromet community led by CMO and CIMH at the “Annual Meeting of Directors of Meteorological Services” (Anguilla, Nov. 13, 2019).




Component II – Initial activities under Institutional strengthening and streamlining of early warning and hydromet services

- Draft agreement between WMO and the Caribbean Meteorological Organization (CMO) developed to deliver 8 National Strategic Plans, a model Meteorological Bill and the development of two national Meteorological Bills. The draft agreement is currently being reviewed.
- A Letter of Agreement for the following CariCOF and EWISACTs Fora is signed for the remainder of the project.

Component III: Activities are expected to start early 2020 with the identification of pilot countries.

9. 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 | Rate of expenditure is on track with US\$500,634 (20%) (WB), US\$ 438,000 (20%) (WMO), and US\$ 63,000 (UNDRR) of approved US\$5,500,000 being expended. | Regional diagnostic is taking more time than originally allocated. While the rate of delivery is on track in most aspects, the development of the regional diagnostic and strategy are experiencing some delays. | The project remains strongly aligned to the objectives. |

10. Risk Management Status

| | |
|----------------------------|--|
| Risk Status | Currently, the risk is rated as moderate and is mostly concentrated around coordination between multiple stakeholders and regional set-ups. In addition to the complex regional setup, there are several regional consortia that are actively working in the field of EWSs including on the strategic vision for the region. Regional Early Warning Systems Consortium (REWS) as well as the Early-Warning Information Systems across Climate Timescales (EWISACTs) were identified as important additional partners that should be involved in the consultation for defining the regional EWS strategy. This leads to the risk of a) creating parallel processes and strategies for the region if consultations and coordination are not done properly; b) delays with the strategy preparation caused by the complicated coordination between stakeholders and c) lack of ownership of the regional strategy by main regional stakeholders. |
| Measures to address | To mitigate the risks, the Bank and other Implementing Partners reached out to both consortia and organized a joint consultation meeting with both consortia to present the key findings of the regional diagnostic and use the outcomes of the consultations as critical contribution for the Regional Strategy for strengthening and streamlines early-warning and hydromet services which is under preparation. Both consortia leaders (CDEMA and CIMH) are taking part of Project Steering Committee too. In addition, CREWS team representative has been integrated into the REWS Consortium as an observer to ensure better coordination of agendas and processes. |

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 June 2019 | Progress by November 2019 |
|---|------------------------|-----------------------------|-----------------------|---------------------------|
| <i>National strategic plans developed</i> | 100% | 0% | 0% | 0% |

| | | | | |
|--|---------------------|----|----|----|
| National and Regional Meteorological Bills Drafted | 3 Met Bills drafted | 0% | 0% | 0% |
|--|---------------------|----|----|----|

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

The target countries for the development of NSP have been identified and include Anguilla, Antigua and Barbuda, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St Vincent and the Grenadines. The ToRs for the drafting of a regional meteorological bill have been developed and the Letter of Agreement between WMO and CMO is currently in its finalization phases. WMO and CMO will begin sourcing a team of consultants to develop these NSPs, met bill template and two met bills. The development of a meteorological bill template is expected to be completed by Q3 2020, and the following two meteorological bills will be developed in Q2 2021.

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 June 2019 | Progress by November 2019 |
|--|--|---|-------------------------|---------------------------|
| Hydrological observation, data management and flood forecasting strengthened | Implementation of a River Flood Forecasting System in Haiti and Dominican Republic | 0 | N/A | 0 |
| WMO Cascading initiatives implemented | 2 SWFDP RSMT Meetings 10 SWFDP Regional Trainings conducted | 1 RSMT Meeting 1 SWFDP Regional Training Conducted | 1 RSMT Meeting 0 | 0 1 |
| Biannual Caribbean Climate Outlook Fora | 6 CariCOFs held | 2 CariCOFs held | 1 CariCOFs held | 2 CariCOFs held |



| | | | | |
|---|---|--|-----------------------|--------------|
| 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 regional training hurricane forecasting N/A | 1 Training N/A | 0 N/A |
| <p><i>Narrative: briefly indicate the major issues or challenges faced and mitigation steps taken to addressing them. (150 to 200 words)</i></p> <ul style="list-style-type: none"> • The Severe Weather Forecasting Demonstration Project- Eastern Caribbean (SWFDP-EC) conducted its Regional Sub-Management team meeting in Curacao during the WMO Regional Association IV Hurricane Committee Meeting. This venue also allowed for the development and further discussions on the SWFDP Training plan for the remainder of the project. This training plan will facilitate the implementation of the SWFDP-ECWMO signed Letter of Agreement with CIMH concerning the CariCOF and EWISACTs fora for the remainder of the project. • The project supported the annual regional training on hurricane forecasting at the National Hurricane Center (NHC) in Miami, Florida. • The Dry Season CariCOF will take place between 25-29 November. • The 2 Regional Training events on Impact-based forecasting are planned to take place in year 2 and 3. | | | | |

| 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 June 2019 | Progress by November 2019 |
| Eg: | | | | |

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

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 June 2019 | Progress by November 2019 |
|---|------------------------|-----------------------------|-----------------------|---------------------------|
| Eg: | | | | |

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

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 June 2019 | Progress by November 2019 |
|--|--|-----------------------------|-----------------------|---------------------------|
| Increased use of social/communication science to improve formulation of actionable information and warning supported | 2 regional communication workshops conducted | 0 | N/A | N/A |

| | | | | |
|--|--|---|-----|-----|
| Awareness raising with multiple actor on early warning as integrated element of disaster risk management | | 0 | N/A | N/A |
| Awareness raising and capacity building for priority sectoral users through joint training with service providers | | 0 | N/A | N/A |
| Narrative: briefly indicate the major issues or challenges faced and mitigation steps taken to addressing them. (150 to 200 words) Activities under this output is planned for Y2 and Y3. | | | | |

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 June 2019 | Progress by November 2019 |
|--|------------------------|-----------------------------|-----------------------|---------------------------|
| National workshops for 'gender and early warning system' training with regional strategy consultation implemented | 3 national workshops | 3 national workshops | 0 national workshops | 4 national workshops |
| As the integration of gender and vulnerable groups is a cross-cutting theme, the process is linked to the development of the regional diagnostic and strategy; there were very few existing gender and vulnerable group statistics and advanced in relation to EWS in the Caribbean region, for which the workshops included a large consultation component, in order to collect information for the regional diagnostic, as well as recommendations for the strategy. It was possible to raise the interest of the national entities as that was recognized as a key factor in implementing the workshops, collect the inputs and guarantee ownership also for the actions defined in the strategy. The workshops were conducted in St. Lucia (July), St. Vincent and the Grenadines (September), Dominica (November) and Antigua & Barbuda (November). | | | | |
| Gender training | 1 Gender training | 0 | N/A | N/A |
| [WMO]: There will be a gender training during CariCOF in November 2020. Workshop to be scheduled with regional partners in year 2. | | | | |

11.2 Regional Output(s)

| 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 June 2019 | Progress by November 2019 |
| Regional development strategy agreed with regional and national stakeholders | Regional EWS strategy | Diagnostic finalized and advanced strategy framework. | Diagnostic outline prepared. Work plan for elaboration of regional strategy elaborated, presented and endorsed by PSC. | Finalization of diagnostic is underway. Additional research will go into the areas that have been identified as incomplete during the consultations. A draft regional strategy is under preparation with an outline to be presented at the CDM conference in December 2019. |
| Set of priority investments and potential partnerships, including with private sector, identified | Set of priorities | 0 | N/A | N/A |

Complex institutional setup in the region with numerous regional stakeholders and consortia. To mitigate the risks, the Bank and other Implementing Partners reached out to key stakeholders and consortia and incorporated them in the process of diagnostic and strategy drafting by co-organizing and participating in several regional meetings and events. The PSC also played a critical role, advising and endorsing the process for the regional strategy elaboration, and providing advice on a continuous basis.

11.3 Contributions to Value Propositions

| | |
|--------------------------|---|
| Gender Sensitive | 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. |
| Multiplier | By identifying regional best practices in the diagnostic, the regional strategy aims at building on them and replicating them across the region. |
| People-centered | People-centered approach has been identified as one of the core values of the regional strategy that is under development. |
| Promote Coherence | The Implementing Partner 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. |
| Solution-oriented | The regional strategy is identifying “strategic initiatives” that could be game changers, as they are addressing and offering solutions to some or the main weaknesses and bottlenecks identified in the diagnostic. |
| Unique | 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. |



12. Visibility products

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

- Participation and presentation of CREWS Caribbean at the regional diagnostic at the “IV Meeting of REWSC consortium” in Barbados, Sept 25-27. <https://www.facebook.com/cdemacu1/posts/2423048414637134>
- Gender and vulnerable groups are important focus areas in the Caribbean early warning systems: <https://eird.org/americas/news/gender-and-vulnerable-groups-in-early-warning-systems-are-one-of-the-main-focus-in-the-caribbean.html#.XdbA5ldKiUm>
- Participation and presentation of CREWS Caribbean and the regional strategy outline at the “V Meeting of REWSC consortium” in St Lucia, Nov 13.
- Participation and presentation of CREWS Caribbean and the regional strategy outline at the “Annual Meeting of Directors of Meteorological Services” in Anguilla, Nov 13.
- In the context of UR Caribbean the following blog was prepared: <https://understandrisk.org/end-to-end-early-warning-systems-what-does-it-take-to-avoid-the-disaster/>
- In order to communicate progress, share information and for consultation purposes the following website was established: www.GFDRR.org/en/crews-caribbean

13. 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.

-