



CREWS PROJECT PROGRESS REPORT

(July – December 2021)

1. Project title	Chad – Hydromet and Early Warning Services	2. Project reference CREWS/CProj/11/Chad
3. Implementing Partners involved in the project	World Bank (Lead) World Meteorological Organization	4. Regional/National Partners involved in the project (National Met Agency ANAM. Agriculture and Rural Development Agency ANADER, Food security Monitoring System SISAAP, Water Resources Directorate DRE,Civil Protection Directorate DPC)
5. Project Duration/Timeframe (from year – to year)	September 2019 – September 2024	6. Total Funding Approved by Steering Committee (in US dollars), including fees 3,150,000
7. Reporting focal point(s) from Implementing Partners	Makoto Suwa, Senior DRM Specialist (mkuwa@worldbank.org), Cecile Lorillou (clorillou@worldbank.org) and Mare Lo (marelo@worldbank.org) Jean-Baptiste Migraine, Head, Technical Coordination and GFCS Support Unit (jbmigraine@wmo.int)	
8. Project overview	<p>Please include objectives, key project deliverables, leveraging, contextual information/statistics, significant events during the reporting period in bullet points. (max 250 words)</p> <p>CREWS project is a Technical Assistance aiming at leveraging a Regional IDA operation that was initially designed to fund up to \$30 million investment for Chad. The objective is to strengthen climate, hydrological and meteorological services to improve forecasting, early warning and disaster response systems.</p> <p>Deliverables are:</p> <ul style="list-style-type: none"> - Capacity assessment and strategic planning 	






	<ul style="list-style-type: none"> - Pilot products for EWS for flood and food security - Community engagement activities - Development of training programs <p>The original Regional Hydromet project has been redesigned and merged into the Regional “West Africa Food resilience program” currently under preparation, in collaboration with the agriculture team.</p> <p>The project also supports the M\$150 pipeline “N’Djamena Integrated Urban Resilience and Jobs Project (P177044)” for the set-up of Flood-EWS in the capital. In Chad, there is a strong collaboration between ANAM the Met Agency and ANADER the agriculture and rural development agency which advocates for addressing climate information and EWS for food security in a coherent way.</p> <p>Total funding: US\$ 3,150,000 (WB: US\$ 1,650,000 / WMO: US\$ 1,500,000)</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> <ul style="list-style-type: none"> • From 13 June to 2 July 2021, three focal points (ANADER, SiSSAP & ANAM) involved in CREWS carried out a mission to the project sites to train the communities on climate change, early warning and seasonal rain forecasts with the objectives of sensitizing the communities on the above mentioned topics. A total of 179 people attended the training, including 139 producers and 40 staff (ANADER, meteorological and hydrological observers, community radio and communal authorities). Out of 139 producers, women account for 41% • On July 6 2021, during an online meeting, the Diagnostic report on MHEWS capacities, has been reviewed and validated. A <u>multi-hazard early warning system diagnostic</u> (developed along the MHEWS Checklist) and a <u>ANAM diagnostic</u> (developed along the <u>CHD</u>) were approved by ANAM, DRE, SISAAP, ANADER and DPC. • Diagnostic of the disaster preparedness and response systems of Chad was prepared, reviewed and is being finalized, using the “Ready to Respond (R2R)” framework developed by GFDRR. An investment plan was developed based on the diagnostics, reviewed and is being finalized. The investment plan gives a clear view of needed investments and reforms to set up a comprehensive




disaster response mechanism around the firefighters and civil protection in short, medium and long term.

- A World Bank mission visited N'Djamena from November 15 through 26, 2021 to (i) supervise and monitor activities implemented under this project; (ii) meet with the 4 institutions out of 5 involved in the project; (iii) present the Diagnostics of the disaster preparedness and response systems of Chad using the “Ready to Respond” (R2R) framework; (iv) prepare an Urban and Resilience Project for N’Djamena; and (v) increase synergies between CREWS, FSRP, R2R and the upcoming Urban and Resilience project. The WMO lead consultant, Abdoulaye Harou, was also in Ndajmena at the same time and interacted with the team, while updating ANAM project work plan.
- Discussion are on-going with the Water Resources Directorate (DRE) to better identify the required investments to strengthen early warning system on top of the CREWS support
- A training on the use of crop calendars for the production of agrometeorological bulletins took place, supported by the public university of Tarragona (Universitat Rovira i Virgili), was organized for ANAM and the GTP (see [manual](#)). It took place on 26-Jul and 11-Oct;
- Weekly briefings took place over the 2021 rainy season, on Tuesday mornings, with Météo-France and RSMC Dakar, to forecast extreme weather events based upon MISVA;
- IRD delivered a draft Instruments and Observing Methods (IOM) report in order to register the cellphone signal attenuation as a rainfall observing method;
- Additionnal activities were discussed and approved. They will focus on (i) strengthening capacities of Disaster Risk Management key players and potential key actors and (ii) reviewing and improving Disaster Risk Management legal framework.



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>Disbursement 31 Dec 2021</p> <p>From WB side: \$304,881 (16.1% of total amount)</p> <p>From WMO side: \$761 837 (51% of total amount)</p>	<p>Several factors have delayed implementation, made it difficult to maintain day-to-day contact with implementing agencies and therefore properly supervise implementation and monitor progress: (i) poor communication network in the country, (ii) travel restrictions; (iii) curfew in N'Djamena; (iv) limited opportunities for face-to-face meetings; (v) limited accessibility of the World Bank office in N'Djamena.</p>	<p>No change has been made to the design of the project, which remains relevant for the country and fully aligned with both the World Bank Strategy, the NMHSs' action plans and the National Development Plan.</p>



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>The risk to achieving project objective is medium/moderate, mainly due to the challenges related to COVID-19. Task Teams have been able to conduct one in-country mission but the activities in-country are limited by prevention measures adopted by the government.</p>
Measures to address	<p>What mitigation measures have been developed to address the risk status?</p> <p>To help project implementation and reduce the impact of COVID-19 on the project, the team recruited a local consultant based in West Africa to meet with the client when necessary (providing all measures against the COVID-19 are respected) so as to improve implementation on the ground. A Civil protection expert with a previous experience with the concerned stakeholders in Chad was also hired to advance on activities linked to Early warning and response capacities.</p>

12. Contributions to CREWS Output(s)

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

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	Progress by July 2021	Target for reporting period	Progress by December 2021
2 reports (one MHEWS and one CHD) - Assessment of institutional capacities of NMHSs, user needs, on-going and planned programs, and socioeconomic benefits of hydromet services and early warning (see report)	100%	90%	100%	100%
Delivery of enhanced early warning services in pilot zones	100%	50%	50%	50%



Strategic plan for ANAM – A consultant was recruited by WMO to guide the country-led process,	100%	0%	10%	10%
<p>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.</p> <p>Promote Coherence - One of the priority actions in the project is to (i) strengthen the multi-agency group on food security (GTP) to harmonize various activities implemented by national institutions to build collaboration, consistency and coherence; (ii) setup a rapid warning process for rapid-onset events, based on anticipation and collaboration. Weekly meetings involving the 5 institutions , WMO and WB were organized to (i) discuss and (ii) improve the MHEWS diagnostic. In addition, the WB, who is preparing the West Africa Food System Resilience Program (WAFSRP) shared activities prepared by ANAM with WMO and sought their inputs as CREWS project and WAFSRP are linked and will improve chad's capacity to provide better services.</p> <p>People-centered – The assessment of MHEWS capacities included a specific “return on experience” section related to emergency management during the 2020 floods. This section focuses on the disaster’s impacts to vulnerable communities, and recommends improvements about how better risk management processes led by national institutions could derive into further benefits to end-users.</p>				

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
Development of crop calendars for assessment of crop exposure and vulnerability depending upon the season (see report)	1	1	1	1
<p>People-centered - The CREWS project is aiming to improve and build the capacity of government institutions involved in the full value chain of Hydromet and disaster risk management services. The intervention focuses on providing needed trainings to officials in their areas of expertise, better equipping them to deliver mandated services to end-users. Identification missions were organized on project sites. The</p>				



project was explained to local authorities as well as end-users. Producer groups (women & men) as well as civil servant from the Agriculture and Rural Development Agency (ANADER) have been engaged since the beginning and attended training sessions.

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
Pilot products for EWS and food security	flood community mapping, awareness campaigns, gender groups	None	None	None

Solution-oriented - The objective of the diagnostic undertaken under the project is to propose practical solutions to the identified weaknesses and gaps. This is done in a participatory approach involving communities in the pilot sites and national institutions. The lead is given to the client. For instance, each institution appointed a focal point who was responsible to (i) write in the MHEWS Diagnostic and (ii) lead discussion with WMO, WB and end-users. The project team is pushing to ensure that the client maintains the driver seat for all activities under the project.

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
Operational procedures and MoUs supporting early warning	3	0	1	1



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.

Unique - Two diagnostic were produced (Hydromet and MHEWS). They provide strengths and weaknesses of various institutions involved in the project and make recommendations to make necessary adjustments. The proposed pilot products and activities are tailored to the Chadian context while drawing from regional and international experience.

People-Centered

- The Bank team prepared a Diagnostic of the disaster preparedness and response systems of Chad using the “Ready to Respond (R2R)” framework developed by GFDRR. The framework covers the five dimensions of legal and institutional accountabilities, information, facilities, equipment, and personnel. The purpose is to build the countries’ readiness to respond to disasters, reduce loss of lives, the impact on infrastructure and assets, and safeguard the environment. It has a dimension of people centered-approach as activities related to raising communities’ awareness to risk, capacity building, targeting the most vulnerable or affected people, and simulation exercises are included in the framework.
- This diagnostic was shared with Civil Protection authorities who are planning of integrating few recommended investments into the Country National Development Plan for the next 5 years. This approach will bring more coherence and added value in this sector as the government's interventions will henceforth be based on a logic of planning and anticipation rather than reaction.

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
Development of training programs in contingency planning of DGPC and other civil protection stakeholders, including simulation exercises with selected communities	Civil protection capacities strengthened through training and simulation exercises	None	None	None



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.

Multiplier - The CREWS proposal describes very clearly the limited capacity of agencies benefiting from the CREWS project. This intervention mainly driven by strategic assessments of needs and priority actions will help the agencies not only identify weaknesses but also carry our pilot interventions that could inform current interventions but also could be replicated and expanded with future projects.

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
Number of professionals having participated in trainings, study tours, conferences (of which women)	120 (50%)	57	179	179 (41%)
Number of village focal points trained in agro-meteorological monitoring	40	40	40	40

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.

Gender Responsive - Under component 2, the project carries out trainings and pilots products for EWS for flood and food security including targeted activities community engagement and gender. These activities will be gender informed as they will rely heavily on regional and local community organizations, some of which are led by women and others have major women participation.



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.*

- MISVA web portal – Météo France, oct 2021 ([link](#))
- Producer training in pilot zones ([link](#))
- Diagnostic report on hydromet and early warning - with return on experience on 2020 flooding event ([link](#))
- Manual on development of crop calendars ([link](#))
- Project in-country mission, November 2021
- Draft Instruments and Observation Methods (IOM) report on cellphone signal attenuation as a proxy for rainfall (Raincell)

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*

- *Diagnostics of the disaster preparedness and response systems of Chad was prepared*
- *An investment plan based on the R2R analysis was also prepared, reviewed and is being finalized.*
- *Other upcoming activities will focus on (i) strengthening capacities of key players working on DRM (ii) reviewing and improving the DRM legal framework.*
- Project inception mission, Sep 2019 ([link](#))



- Training on elaboration of crop calendars, Feb 2020 ([link](#))
- Implementation arrangement with ANAM Chad, April 2020 ([link](#))
- Identification of pilot sites , Aug 2020 ([link](#))
- Support plan for communities of the Mailao Tchendjou pilot site, Sep 2020 ([link](#))
- Implementation arrangement with IRD, Dec 2020 ([link](#))
- Implementation arrangement with Météo France, Dec 2020 ([link](#))
- Online training material on use of subseasonal forecasting ([link](#))