CREWS PROJECT STATUS REPORT
January – December 2024

Section 1. General Project Information

1. Project title	Central Africa - Seamless approach to forecasting and warning for meteorological, hydrological and climate extremes	**2. Project reference**	CREWS/RProj/10 /Central African Region
3. Lead Implementing Partner of the project	WMO	**4. Other Implementing Partners involved in the project**	UNDRR World Bank
5. Operational Partners involved in the project	AGRHYMET, SMHI, HRC, ANACIM-RSMC Dakar, DGM Maroc (WIGOS Regional Center), ECCAS/CAPC-AC	**6. Project Duration/Timeframe (from year – to year)**	March 2022 – March 2026
7. Current year of implementation	3 (Third)	**8. Total Funding Approved by Steering Committee (in US dollars), including fees**	4,850,000 USD
9. Reporting focal point(s) from Implementing Partners	WMO: Tania Gascon, taniagascon@wmo.int WB: Nathalie Wandel, nwandel@worldbank.org UNDRR: Muliro Mashauri, muliro.mashauri@un.org , Adair Ackley, adair.ackley@un.org , Stefanie Dannenmann-Di Palma, dannenmann@un.org		

Section 2. Overall rating

Interpretation of color coding		
High	🟢	The project is having good implementation progress. End-of project targets achievement or cumulative financial delivery are fully on track.
Medium	🟡	The project is having moderate progress. Implementation is facing issues. End-of project targets achievement or cumulative financial delivery are off track. Adaptive management should be undertaken immediately.
Low	🔴	The project is having less than moderate or poor progress. Implementation is not proceeding as planned facing major issues. End-of project targets achievement or cumulative financial delivery are severely off track. Requires remedial attention where restructuring may be necessary.

	Rating	Comments on delays
Rate of delivery	🟡	The project implementation has made moderate progress in 2024. The engagement with the national institutions and regional entities for setting up the implementation took some time. It was improved following a regional

		CREWS Central Africa workshop held in June 2024 in coordination with Central and West Africa FFGS project, brought together representatives of National Meteorological and Hydrological Services (NMHS) and Disaster Risk Reduction (DRR) of the 11 ECCAS countries, as from WMO, UNDRR, WB and ECCAS. This allowed the full CREWS Central Africa project team to better gather the country's needs, revise the workplan for technical implementation and to engage with focal points. From that, as part of WMO support, regional training on meteorological and hydrological observation was carried out, engagement of expertise and consolidation on training plan on weather and hydrological forecaster. In relation to UNDRR support, the ECCAS situation room was established and is currently operational and the training for Member States was conducted involving Hydromet and DRR focal points.
Rate of expenditure		• WMO: 812,448 USD (32%) => Time has been requested to structure the implementation of the major components according to country's needs, in consequence the rate of project expenditures is a little behind plan. • UNDRR: 746,191 (63%) • WB:676,302 (58%)

Section 3. Project Performance Progress

10. Progress summary	What has been achieved during this reporting period? – Please list by project outcome in bullet points: progress and main achievements. **WMO** During 2024, capacity building support was provided in various areas, a summary is provided below: At regional level: • A workshop on WMO Integrated Global Observing System (WIGOS) Centres (RWC) functions and tools, for West and Central Africa on 28 – 31 May 2024, Abuja, Nigeria (Hybrid). It allowed to designate as new RWCs Congo and Nigeria to jointly support Central Africa region on performance monitoring (data availability and quality) of the national observing networks. • An online workshop on hydrological variability by satellite altimetry of lakes in Central Africa (14 June 2024) brought together 33 participants working in hydrometeorology and water resources in the region. This allowed the identification of needs and the preparation of a detailed capacity building plan from 2025. • A Steering committee workshop of CREWS Central Africa was held in Kigali, Rwanda on 18-20 June 2024. 55 participants from NMHS, DRR, WMO, UNDRR, ECCAS, as well as technical partners HRC, SMHI, AGRHYMET revised workplans for regional implementation and mapped requirements to tailor it. • Concluded Central Africa Flash Flood Guidance System (FFGS) countries watershed delineations, as part of the implementation in Oct 2024 (Report) • A training workshop on WIS2 held in Casablanca held in Morocco, Casablanca during 11-15 November 2024 for West and Central Africa. 5 trained IT staff and WIS focal points on the national implementation of WIS 2 node for data sharing with global systems to improve global weather forecasting. • A training on Hydrological Data Exchange, Standardization, and Interoperability (WHOS) on 25 to 27 November 2024 Cape Town, South Africa (Hydrid). It allowed 4 central Africa participants to deepen on the hydrological data standards required for services development and the tools to facilitate data access/sharing. It is intended to rely on those participants for WHOS implementation in the region. • Training plan on the EUMETSAT Nowcasting as part of the Central Africa SWFP and Satellite-based hydrometeorological monitoring were developed. The courses will start from 2025. • Signed IA AGRHYMET-SMHI for the riverine flood forecasting (FANFAR) system implementation in Central Africa (Concept note).

- 1 consultant engaged to coordinate the development of agrometeorological services in Central Africa fostering cooperation with African regional centers, such as AGRHYMET, ICPAC, CAPC-CA (ToRs).

At national level in pilot countries

- **Angola**: 1 national consultant (Manuel Caetano) hired for the development of the INAMET National Strategic Plan (NSP) and the technical framework for climate services (ToRs). 1 initial planning workshops carried out on 05-07 November 2024.
- **Democratic Republic of Congo**: 1) 5 ISTA lector and 17 METELSAT forecasters trained on operational meteorology by EAMAC in Kinshasa during 19 Aug – 06 Sep 2024. As part of a tailored training plan (Concept note) and in coordination with CREWS DRC, and 2) supported METELSAT for the development of the approved CREWS ASW DRC (250 K USD) and preparation for implementation.
- **Equatorial Guinea:** initiated the identification of 1 consultant for the development of the NSP of future NMS (ToRs), based on EG Minister of the Environment, WMO, ECCAS, AUC agreed decision. To start in 2025.
- **Rwanda**: Definition of national priorities established (e.i. update the NSP of Meteo Rwanda and develop a National Framework for Climate Services). To be implemented from 2025.
- **Sao Tomé and Principe**: 2 national consultants (Teresa Vicente and Adnilde Lima) hired for the NSP development of the Instituto National de Meteorologia (INM) (ToRs). 1 Initial planning workshop carried out on 11-13 November 2024.

UNDRR

- In September 2024, the situation room of the Economic Community of Central African States (ECCAS), became operational. The situation room is based at the Climate Application and Prediction Centre of Central Africa CAPC-AC, in Douala, Cameroon. The situation room is an integral part of the Africa Multi-Hazard Early Warning System and Early Action (AMHEWAS network). This project funded the design, procurement of equipment, training to ECCAS Member States and hiring of an EWS Expert within the situation room.
- To celebrate the opening of the situation room a training was held for ECCAS Member States. The Head of the Disaster Risk Management and Climate Change Adaptation (DRM/CCA) Department of the ECCAS, representing the President of the ECCAS Commission took part with representatives from Disaster Risk Management (DRM) and Weather Forecasting from Republic of Angola, the Republic of Burundi, the Republic of Cameroon, the Republic of Congo, the Central African Republic, the Democratic Republic of Congo, the Gabonese Republic, the Republic of Equatorial Guinea and the Republic of Chad. Participants were equipped with the knowledge and skills to produce and apply multi-hazard early warning information under AMHEWAS, to hydrometeorological agencies and humanitarian organizations for effective preparedness and early action.
- In particular, the participants were equipped to use the early warning tools developed within the framework of AMHEWAS for early warning and early action at the national level, to integrate the information provided by AMHEWAS into the local bulletins and early warning report, with an emphasis on regional information from the ECCAS situation room installed at the CACP-AC, and to use the global data available on mydewetra.world and interpret it into useful information for DRR in order to help adapt AMHEWAS products and local data and information collected and integrated into the mydewetra.world platform to local needs.
- The situation room is now producing bulletins that are being distributed to Member States and in turn Member States are providing feedback to ECCAS that allows for customization of the bulletins based on the country needs. A high-level inauguration of the situation room is planned for when the new ECCAS Presidency begins in 2025.
- The project also supported the development and the validation of Disaster Risk Management Strategy (DRM) for the Democratic Republic of Congo in September 2024. Furthermore, support is being provided for the development of the DRM Strategy for the Republic of Congo and the development of the EW4All roadmap for Angola and Sao Tome and Principe.

Rwanda

	• Terms of Reference have been prepared for a consultancy to design a pilot flood early warning system in the Volcanoes region, focusing on dissemination and response. • Technical discussions have been held with Meteo Rwanda on developing their approach to flood early warning services in the Volcanoes Region. **Burundi** • In 2024, CREWS funds were instrumental in the preparation of the World Bank Urban Resilience Emergency Project (URP, P177146). During the first half of 2024, CREWS supported the design of *Sub-component 2.1: Strengthening capacity for improved information, flood early warning services and emergency preparedness (US$3.5 million equivalent)*, particularly the aspects on EWS. A quick diagnostic on EWS was developed, which underpins the prioritized activities that will be financed by the URP, namely: (i) strengthening hydrological and meteorological monitoring and forecasting capacity through the utilization and integration of the recently developed hydrologic models and flood risk assessments; (ii) establishment of an information-for-decision-making support system (DSS) at Bujumbura for risk reduction and EWS; and (iii) strengthening community engagement and participation by conducting flood risk awareness and implementing EWS for Mukaza, Mugere, and Ntahangwa communes. • During the second half of 2024, CREWS funds supported the development of the URP Terms of Reference for the "Recrutement d'un Bureau pour accompagner l'IGEBU dans la conception et la mise en œuvre d'investissements prioritaires en vue d'améliorer les services d'alerte précoce en cas de fortes pluies et d'inondations à Bujumbura et ses environs". The URP Project Implementation Unit launched the EOI for this activity on February 4th, 2025. • The above was accomplished thanks to several technical discussions, held virtually and in-person in Bujumbura, with key stakeholders in Burundi, including IGEBU and the Burundi DRM Platform.

11. Rating of progress towards achieving CREWS Indicators

Complete the following for the selected CREWS indicators in the project logical framework, at both outcome and output level. Use the unit of measure and disaggregation level defined for each indicator[1] and provide a progress summary justification of the indicator. This summary should state the evidence on the indicator's progress and describe in detail what has been achieved and performed focusing on results.

CREWS Outcome 1: National and local multi-hazard early warning systems prioritized and funded						
Indicator	**Baseline level**	**End-of project target level**	**Target for reporting period**	**Progress by ____ (Set as a percentage)**	**Progress summary justification as of ____**	**Progress rating[2]**
# of LDCs and SIDS with national investment plans and budgets prioritizing multi-hazard early warning programmes	• 0	• 5 (Which are part of EW4ALL)	• 1	• 40 %	1 (Burundi/ MHEWS plan developed. Chad, Rwanda and STP working on the finalization of their national plans/budget)	In-plan
Output 1.1 A country and/or region has developed or strengthened legislative and/or institutional frameworks to support and sustain multi-hazard early warning systems						

[1] CREWS Results Framework.
[2] Use scale system provided in Annex X of this document.

# of national plans, strategies and legislations on early warnings approved and/or implemented	• 0	• 5	• 1	• 40 %	• DRC had its Disaster Risk Managment Strategy validated in September 2024 • 2 countries (Angola and STP engaged consultants to develop NSP and held initial planning sessions) • 1 country (Equatorial Guinea published ToRs for the identification on consultants)	Delayed
# of coordination mechanisms strengthened or established to enhance collaboration on early warning among national or regional institutions	• 0	• 2	• 1	• 70 %	• 2 National EW4All Coordination mechanisms established (Burundi and STP) • 1 regional mechanism was introduced/ECCAS situation rooms to support countries in accessing products as support for early warning. Improvement of cooperation will continue in 2025. • (DGM Cameroon initiated preparation of SWFP training, as part of its RSMC Yaoundé demonstration process to support central countries on severe weather guidance for early warning.)	• In-plan
Output 1.2 Multi-hazard needs, gaps and priority assessments, analyses and related investment plans for early warning systems in a country or region are driven by CREWS financing						
# of multi-hazard assessments, analyses and other mapping of needs, gaps priorities that inform investment requirements on early warning	1	1	0	30%	Prepared a baseline draft on hydrometeorological / early warning (to be completed in 2025)	Delayed
Output 1.3. Partnerships and cooperation frameworks developed for financing and scaling up support to multi-hazard early warning systems						
Total volume of funds leveraged by national institutions and development partners (in USD)	0	TBD	0	TBD	USD 250,000 leverage in DRC (CREWS ASW DRC) for addressing critical training needs.	

through CREWS investments						
# of LDCs and SIDS benefiting from GCF resources through the GCF-SAP CREWS Scaling Up Framework	0	TBD	0	0	It requires a deep analysis to identify GCF/CREWS Scaling up. (To be carried out in 2025). •	n/a

CREWS Outcome 2: Improved early warning service delivery and accessibility by national and regional institutions						
Indicator	**Baseline level**	**End-of project target level**	**Target for reporting period**	**Progress by ____ (Set as a percentage)**	**Progress summary justification as of ____**	**Progress rating**
EW Maturity Index	n/a	n/a	n/a	n/a	n/a	n/a
# of hazards which pose a risk of life and economic loss for which forecasting and warning services are in place in LDCs and SIDS through CREWS support	4 (Extreme Rainfall, Flash floods, Riverine floods, Agriculture drought)	4	0	20%	Initiated development of systems for 1 hazard (Flash flood by FFGS) Engaged expertise and prepared workplans for addressing Riverine flood by FANFAR) engagement of expertise for nowcasting training, FANFAR implementation, and elaboration of agriculture monitoring implementation plan. Technical discussions and development of ToRs to support flood EWS in Rwanda	Delayed
Output 2.1 Risk information and tools generated by countries to enable the delivery of impact-based early warnings						
# of risk data tools developed or strengthened to generate early warning products and/or support impact-based warnings.	n/a	n/a	n/a	n/a	n/a	n/a

Output 2.2. Monitoring, analysis and forecasting of hazards that threaten the country/region are improved and sustained by the countries						
# of functioning monitoring and observation systems established or strengthened per hazard	0	1	0	0	From Q4 2025 water level monitoring system by satellite.	In plan
# of hazards monitoring, analysis and forecasting processes developed or improved	0	4	0	0	From 2026 processes for forecasting and analysis for the 4 hazards.	In plan
# of forecasting and prediction products developed and/or accessed from WMO Global Prediction Centers (GPCs), Regional Specialized Meteorological Centers (RSMCs) and NMHSs.	TBD	**TBD**	**0**	**0**	**TBD from 2025**	**TBD**
Output 2.3 Warnings are communicated by the countries based on common alerting protocols under agreed standard operational procedures (SOPs)						
# of warnings issued in CAP format	10 (Rain/Flooding	TBC	1	100%	The warning disseminate in 2024 by CAP composer could be consulted in Igebu.bi	Completed
# of updated LDCs and SIDS entries in the WMO register of alerting authorities	TBD	11	0	0	From 2025	In plan
# of communication channels through which warnings are disseminated in the area covered by a prediction service for a given hazard(s)	1	0	**0**	100%	A CAP composer was included in the climate information system developed for IGEBU/Burundi. This to disseminate warnings.	Completed
Output 2.4 Warnings are received, understood, and acted upon based on co-produced preparedness and response plans by the countries						
# of preparedness and anticipatory action plans or Standard Operating Procedures (SOPs)	TBD	n/a	n/a	n/a	n/a	n/a

that are operational and linked to prediction and warning services						
# of risk maps, advisory and other warning products that are available and adapted to the user group/development sector needs	n/a	n/a	n/a	n/a	n/a	n/a

CREWS Outcome 3: Early warning programmes are driven by people-centered and gender-responsive principles and promote private sector engagement						
Indicator	**Baseline level**	**End-of project target level**	**Target for reporting period**	**Progress by ____ (Set as a percentage)**	**Progress summary justification as of ____**	**Progress rating**
Level of integration of people centered and gender responsive approaches[3]	TBD	n/a	n/a	n/a	n/a	n/a
Level of users' engagement satisfaction in the people-centered and gender-responsive approaches/activities[4]	TBD	n/a	n/a	n/a	n/a	n/a
Output 3.1 People of different backgrounds, gender, youth, older persons, people with disability, poor, marginalized, displaced, and non-native, as well as related institutions have co-produced climate and weather information products tailored to their needs						
# of climate and weather information co-designed to users' needs by group representing vulnerable segments of exposed populations	**0**	**3**	**0**	**0**	From Q4 2025, prototype of climate and hydrometeorological information addressed to gender, youth and displaced groups	

[3] Please grade your project based on the following criteria: **Low**- The project did not perform consultations, activities to promote gender quality, and activities /developed products with a people-centered approach. **Medium**- There is evidence of the project performing at least one consultation, one activity to promote gender equality, and one activity/product developed with a people-centered approach. **High**- There is evidence the project performed more than one consultation, activities to promote gender equality, and activities/products developer with a people-centered approach.

[4] This indicator will only be completed when the survey is performed. Please provide the overall result of your survey result based on the following criteria: **Low**- Users do not feel the project considered their opinion, context and experience when developing or strengthening early warning systems. **Medium**- Users feel the project somewhat considered their opinion, context and experience when developing or strengthening early warning systems. **High**- Users feel the project considerably considered their opinion, context and experience when developing or strengthening early warning systems.

# of women and men trained through X # of capacity building programmes provided by CREWS	0	TBD	n/a	n/a	UNDRR: ECCAS MS AMHEWAS training September 2024: 21 males/5 females.	
# of CREWS projects that have included gender equality in early warning as an objective or outcome						
# of targeted outputs and activities towards gender implemented	0	2	**0**	**0**	2 workshops on gender to be delivered from Q4.	
Output 3.2 Private sector is engaged to foster innovation and sustainability in delivery of early warning services						
# of agreements with private sector to co-finance or co-implement EWS initiatives	**0**	**0**	**0**	**0**	**0**	**0**

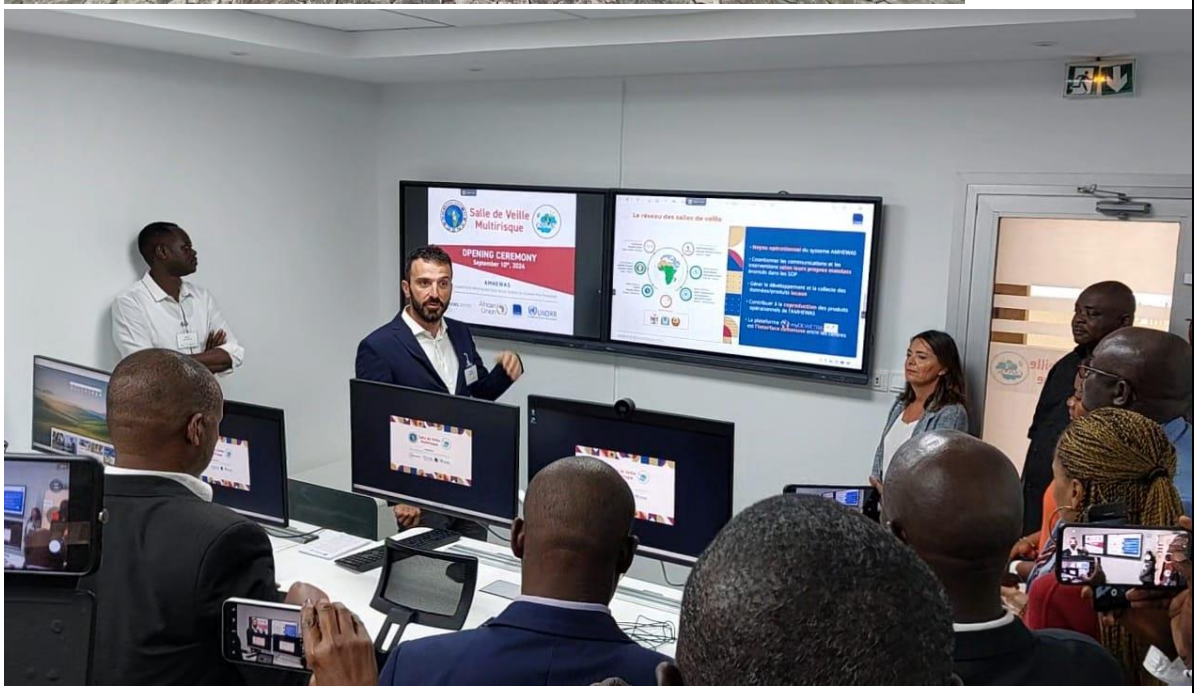
12. Risk Status

Insert ALL the risks identified at project proposal, those from previous/current project status reports, and the new risk identified for the current reporting period. If a risk has been mitigated or is no longer a risk, please specify it in the "current situation" column.

Description of risk *What is the cumulative risk status of the project in comparison to what was identified in the project proposal?*	Risk management actions. *What mitigation measures have been developed to address the risk status? In bullet points*	Current situation *If mitigation measures have been undertaken, what is the current status of the risk? If a risk has been mitigated or is no longer a risk, please specify it here.*
The risk identified in the project proposal remain the same.	In relation to Human Resources, 1 consultant has been engaged to assist coordination of implementation engaging closely countries in the region.	Medium is a persisting risk level.

13. Knowledge management and social media

Provide a list of knowledge activities / products (when applicable) produced during this reporting period only. Include any links to press releases, videos or communication items and/or social media. Please attach with this report any supporting files, including photos, videos, stories, and other documents.
https://www.cimafoundation.org/en/news/training-begins-for-the-ceeac-eccas-situation-room-in-cameroon/ https://x.com/CIMAFoundation/status/1834598570583797966 https://x.com/CIMAFoundation/status/1834598573310132638 https://x.com/CIMAFoundation/status/1833146734517604631 https://x.com/CIMAFoundation/status/1833146736551879121



14. **Partnerships & stakeholder engagement**

Optional: If the project worked with any of the following partners <u>in this reporting period</u>, please provide a summary of the partnership activities.	
Civil Society Organisations and/or NGOs	
Academic Institutions, regional centers, NMHSs	AGRHYMET, HRC, SMHI, AEMET, ANACIM (RSMC Dakar), DGM Morocco, CAPC-CA
Private Sector	

15. Impact stories

Provide a brief summary of any especially interesting and impactful project result that is considered to be worth sharing in the annual report to the Steering Committee, with concrete examples of the contributions to CREWS value propositions (gender-responsive, multiplier, people-centered, promote coherence, solution-oriented, unique) (max 500 words).
• In 2024, CREWS Central Africa managed to bring together representatives from NMS, NHS and DRR during two events (55 SC participants/June 2024 and launch of the ECCAS Situation Room/September 2024), this allowed to better identify the requirements in terms of early warning service provision, to learn from the challenges and actions of all countries to produce hydrometeorological services adapted to the needs of early actions. As well as to strengthen cooperation between regional centres and national institutions.

16. Financial management

Total financing approved (in approved project proposal):	4,850,000 USD: WMO – USD 2,500,000 WB – USD 1,170,000 UNDRR – USD 1,180,000
Cumulative amount for the reporting period *(how much has been used, actual expenditure)*:	WMO – USD 812,448 WB - USD 676,302 UNDRR – USD 746,099
Percentage used as of *(state end date of reporting period):*	WMO – 32 % WB – 58% UNDRR – 63%

17. Supporting documents

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.
• WMO: This have been included in relation in the summary points to facilitate the tracking of documents.

18. Certification on Use of Resources

Each Implementing Partner to provide a certification of the use of resources signed by their authorized representative.

19. Annex. Progress rating

Interpretation of color coding		
Achieved		• The indicator has achieved its end-of-project target.
Partially achieved		• The indicator is on track to achieve its end-of-project target.
Not achieved		• The indicator has not had any advancement towards achieving its end-of-project target.