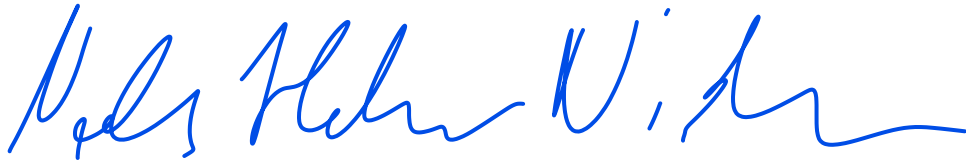




## CREWS PROJECT FINAL REPORT - NIGER

<b>1. Project title</b>	Niger - Early Warning Services Modernization	<b>2. Project reference</b> CREWS/CProj/07/ Niger
<b>3. Implementing Partners involved in the project</b>	World Bank (Lead) World Meteorological Organization	<b>4. Regional/National Partners involved in the project</b> <ul style="list-style-type: none"> <li>• Ministry of Humanitarian Action and Disaster Risk Management (MAH/GC) which ensures CREWS Coordination</li> <li>• General Directorate of Civil Protection (DGPC)</li> <li>• General Water Resource Directorate/National Hydrologic Directorate (DGRE/DHL)</li> <li>• National Meteorological Directorate (DMN);</li> <li>• Coordination Cell of Early warning system (CC/SAP) of food security</li> <li>• National Agency for Information society (ANSI)</li> </ul>
<b>5. Project Timeframe</b>	December 2017 – December 2022	
<b>6. Actual Project Duration/Timeframe (if no-cost extensions were approved)</b>	December 2017 – December 2022	
<b>7. SC approved Project Budget (in USD)</b>	2,740,000	
<b>8. Reporting focal point</b>	Claudia Soto, Senior Disaster Risk Management specialist: <a href="mailto:csoto@worldbank.org">csoto@worldbank.org</a> Pinghouinde Michel Nikiema: <a href="mailto:pmnikiema@wmo.int">pmnikiema@wmo.int</a>	

<p><b>9. Report Certified Accurate by (with signature):</b></p>	 <p><b>Niels B Holm-Nielsen</b> <b>Practice Manager</b> <b>Global Facility for Disaster Reduction and Recovery</b></p>
<p><b>10. 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\$ 2.74 million - implemented by the WB/GFDRR and WMO.</p> <p><u>Leveraging</u>: CREWS Niger was implemented in close synergy with the Niger Disaster Risk Management and Urban Development Project (P145268), the Climate Smart Agriculture Project (P153420), both financed by IDA, and Climate Information Development and Forecasting (PDIPC) investment project financed by AfDB-AfDF. The immediate response mechanism (IRM) activated on November 2020 following the unprecedented 2020 flooding in Niger contributed with US\$55,000 to establish a communication strategy with its action plan to prevent the (re) settlement of the population in the areas with flooding risk. The CREWS Niger also informed the preparation and supported the early implementation of the IDA-financed US\$250M Niger Integrated Urban Development and Multi-sectoral Resilience Project (P175857), which became effective in October 2022, as well as the West Africa Food System Resilience Program (P172769 – US\$45M for Niger), which was approved in November 2021. The amount of funding leveraged is US\$34M (US\$10M from P145268, US\$5M from P153420, US\$6M from P175857, and US\$13M from PDIPC) or x12.5. Key project deliverables are summarized in the section below and include training and capacity building in Hydromet data production, sharing and dissemination; flood risk awareness tools directed to the population; training and capacity building in crisis monitoring and flood response; Hydromet services diagnostic tools and investment plans, and analysis of Hydromet data to inform flood risk maps in selected urban areas.</p>
<p><b>11. Summary of outcomes</b></p>	<p><b>What project outcomes were achieved?</b></p> <ul style="list-style-type: none"> <li>Investment in building the capacity of the national hydro-met agencies to produce and disseminate regular information bulletins is yielding dividends: within the framework of their regular function and with the competences acquired thanks to the CREWS, the HYDROMET structures (MND and DHL) continue to publish the</li> </ul>

vigilance bulletins. The DMN publishes daily forecast bulletins from Monday to Friday and a weekend bulletin published Friday evening. The DHL publishes decadal notes on the flows on the basis of information provided by some automatic stations and data provided by observers in place at the level of the monitored stations:

- 12 ten-day bulletins produced by the national hydrology agency ensured populations along the Niger River, its tributaries, and the Komadougou Yobé River had timely information to better anticipate, prepare and protect against flooding during the rainy season. 5 monthly hydrology bulletins and 2 information notes on Guinea floods (floods happened when the river flow coming from in Guinea arrived in Niger) and along the Niger River were also issued.
- 6 daily weather bulletins are being produced each week by the national Met Service with improved quality and more user-friendly format. Disseminated by CREWS partners via community radio and a network of women leaders on disaster management to the population, the forecasts also inform monthly climate bulletins for agriculture, health, energy, water resources and disaster risk reduction.
- 3 flood awareness TV spots based on ones made in 2020 through CREWS were produced by the Humanitarian Affairs Ministry and broadcast. Focusing on gender, they were also used by women leaders in 8 regions for flood sensitization activities.
- TV spots produced in 4 local languages for 2020 floods were re-broadcast in Niamey in early 2021 to warn on Niger River water levels rising, and 15 more times in July ahead of flood season nationally.
- The national mechanism for early warning and crisis response (COVACC in French) is established and continuing to ensure the permanent monitoring of hydrometeorological phenomena to alert the authorities and the populations exposed to an imminent risk of flooding. To this end, warning and awareness messages were drafted and disseminated by the COVACC through public and private media before and during the rainy season. It also involved the coordination of the evaluation of the consequences of these floods continuously shared with the actors after validation by the committee on floods.
- National mechanism for early warning and crisis response (COVACC) is also extending into regions. COVACC ensures permanent monitoring of hydro-met phenomena to alert authorities and populations at risk of imminent flooding via public and private media.

- 9 workshops trained 172 staff in Niamey and regionally on issues such as initial response time, announcing a crisis, monitoring and evaluating a crisis for most effective response, and rapid mobilization of relevant resources to where they are needed.
- CREWS added value on Gender responsive, multiplier, people-centered : Training 600 women leaders in Niger on early warning and disaster risk and response was to build community resilience with knowledge. It has done more. It empowered the women to initiate and act. Through WhatsApp groups created in all eight regions to alert and info share, an organic early warning system was born. Success has led to an informal national Women Leaders Network run by civil protection authorities, connecting heads of diverse regional platforms. Information flows both ways as networks work closely with regional and national authorities. These now rely on the women for timely crisis prevention and response communication among communities. In four regions, they and UNICEF supported women leaders on a six-month flood sensitization effort. Elsewhere, women leaders are initiating their own actions to save lives.
- A wide-ranging diagnostic to underpin modernization of weather, water, climate, and early warning services to build on achievements made.
  - Evidence-based analysis on governance, user needs of service providers and end users, hydro-met resources and gaps, and investment possibilities, to inform future action to better serve 25 million people. It will also inform which activities World Bank projects for [Niger](#) and [West Africa](#) will fund, particularly in the implementation of the Niger Integrated Urban Development Project (PIDUREM).



2021s1132 Niger  
Hydromet Investmer

- National communication strategy and its plan of action developed on floods response made by the minister of humanitarian action and the communication strategy against the occupation of flood zones and promoting their sustainable use in 8 major cities of Niger developed during the implementation of the immediate response mechanism activated to response the 2020 unprecedented floods in Niger.



Stratégie  
Communication\_Zor

- **The Hydromet and early warning system diagnostic and its investment plan** supported the design and early implementation of the Hydromet/EWS components of the Niger Integrated Urban Development Project (PIDUREM) and the West Africa Food System Resilience Program (FSRP). The investment plan identified investment needs for strengthening and transforming the National Meteorology and Hydrology Service (NMHS) and the three associated emergency response organizations. The NMHS is made up of the National Meteorological Service and the National Hydrological Service, including National Meteorological Directorate (DMN-Niger) and General Water Resource Directorate/National Hydrologic Directorate (DGRE/DHL).
- The grant also financed the **collection and analysis of Hydromet data from the NMHS to develop preliminary flood hazard maps in 7 of the PIDUREM cities in support of the PIDUREM project** (Niamey, Gaya, Tahoua, Maradi, Tessaoua, Agadez and Diffa). These maps are currently informing the development of a flood risk reduction investment plan for urban areas, including construction and rehabilitation of (i) urban drainage, including rainwater collectors, drainage pavements, and the connected sanitation systems; (ii) flood protection measures, including river bank protections; stone barriers and weirs in 'koris' (intermittent sandy streams); dikes around urban areas; and (iii) sustainable land and water resources management practices, including soil recovery, sand dune fixation, stone embankments, and rock weirs/permeable dikes in watersheds; reshaping or re-profiling of natural drainage canals, and pond control structures. This investment plan, will in turn inform the development of the PIDUREM's flood risk reduction investments, in the amount of about US\$140M. These flood maps will also improve the Government's capacity to provide more precise EWS services at the local level, in particular in the targeted municipalities of the PIDUREM.
- Following the [3<sup>rd</sup> CREWS West Africa Steering Committee](#) on 15-16 June, WMO has been supporting Niger with (i) an updated Strategic Plan for the meteorological service, taking into account progress with the national framework for climate services, the plan to transition into a meteorological agency, and providing guidance for strategic positioning of the hydrological service within the Ministry of Hydraulics; (ii) a training on sub-seasonal forecasting for severe weather events ([MISVA](#)), which started on 23 June 2022; and (iii) a

training on flash flood guidance system (in San Diego), which is expected to be delivered operationally in Q2 2023.

**What was not achieved ?**

Some training and capacity building events to strengthen EWS at the municipal level had to be cancelled because of COVID-19. They were replaced by the Hydromet services diagnostic, investment plan and preliminary flood maps for 7 cities during the 2020-2022 period.

**Describe any unexpected outcomes.**

- Among the additional results, reflecting the impact of the implementation of CREWS in Niger, we can retain that the link with the national committee of climate services has been strengthened and the capacity offered to the actors to contribute effectively to the implementation of the action plan developed by the national framework of climate services set up in Niger. Indeed, by improving the capacities of the technicians of the meteorological and hydrological services of Niger, the CREWS initiative has enabled them to ensure the collection and processing of data, the production and dissemination of early warning information in order to increase the preparedness and responsiveness of communities. In addition to the tools produced and disseminated by CREWS, the project also helped to produce and disseminate monthly bulletins informing the population on the links between (i) climate and health, (ii) climate and water resources, (iii) climate and disaster risk management, and (iv) climate and food security.

## 12.Expenditures

	Rate of expenditure	Rate of delivery	Alignment of Objectives
<b>Coding</b>	●	●	●
<b>Narrative</b>	<b>From WB side:</b> Disbursed: 2,240,619.5 (99.98%)  <b>From WMO side:</b> Disbursed: US\$239,456 (96%)		

### 13. Lessons Learned

**Kindly note important lessons learned from the project, including what were the factors that hindered or enabled successful project implementation and contributions to each of the CREWS value propositions (200 to 250 words).**

In terms of lessons learned, a few ones are below :

- The opportunity offered to the Government to mobilize at least five state structures involved in disaster risk reduction to enable them to work together and develop a synergy of action, complementarity in terms of tools developed to improve the early/rapid warning system in response to food insecurity and flood-related risks and consequences;
- The strengthening of women's capacities, particularly in areas at risk of flooding in Niger, allows the risk alert system to be brought closer to the population and reduces the time it takes to reach the population in need of information, whether it be a message of vigilance or an alert. By training 600 women in early warning services, these women have created women-led WhatsApp groups to amplify advance warnings throughout their communities.
- The linkage of technical assistance for the strengthening of HYDROMET's technical and organizational capacities and related services offered within the framework of CREWS, with the investments in terms of infrastructure and equipment planned by the State's investment projects, makes it possible to set up a functional early warning system, with tools and organs developed that make it possible to alert the population and better organize relief efforts in emergency situations in Niger.
- TA for the strengthening of hydromet data analysis provided through the CREWS can lead to improved Government capacity to (i) assess flood risks in urban areas, (ii) design flood risk reduction investment plans, and (iii) provide improved EWS services in urban areas.



## 14.Stakeholders

**a. List all individuals or groups that either contributed to, have been engaged and have benefited from the funded project/activity.**

- Ministry of Humanitarian Action and Disaster Risk Management (MAH/GC) which ensures CREWS Coordination
- General Directorate of Civil Protection (DGPC)
- General Water Resource Directorate/National Hydrologic Directorate (DGRE/DHL)
- National Meteorological Directorate (DMN);
- Coordination Cell of Early warning system (CC/SAP) of food security
- National Agency for Information society (ANSI)
- Prime Minister's Office

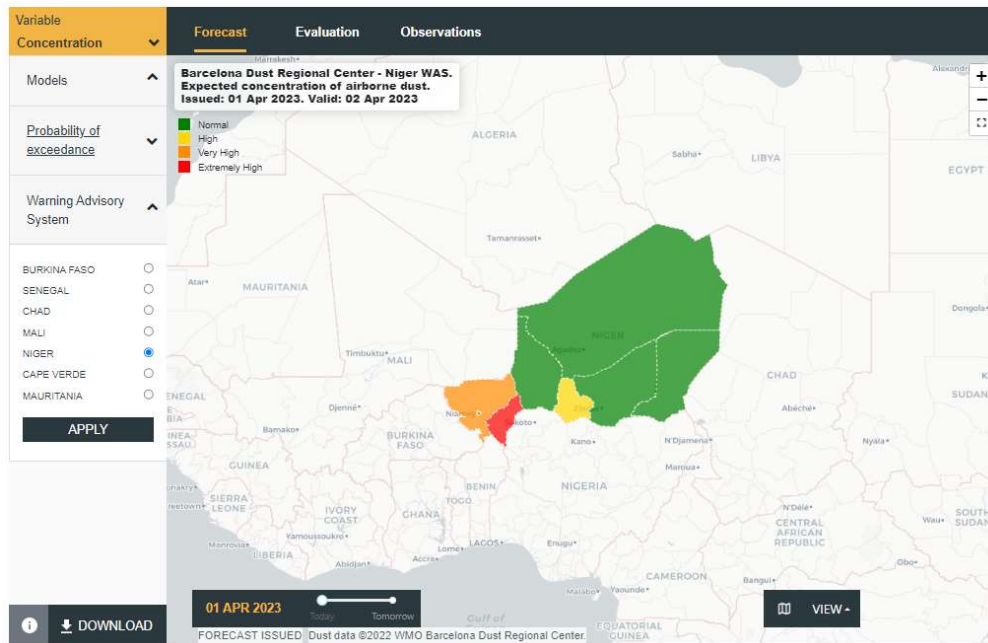
**b. What were the roles of the individuals or groups listed in a and what were their concrete contributions?**

Structure	Acronym	Outils/Produits d'actions
Cabinet du Prime Minister	Cabinet du PM	COVACC : Crisis pilotage
National Meteorological Directorate (DMN);	DNM/MT	Climatic data base; Daily Bulletins
General Water Resource Directorate/National Hydrologic Directorate (DGRE/DHL)	DHL/MHA	Hydro data base, Bulletins
Coordination Cell of Early warning system (CC/SAP) of food security	CC/SAP/DNPGCA	Vulnerability notes, follow-up of the sentinel sites, OSV, SCAP/RU
General Directorate of Civil Protection	DGPC/MI/D	Impact data collection, Vigilance/alert note, plan ORSEC, etc.
Ministry of Humanitarian Action and Disaster Risk Management which ensures CREWS Coordination	DPAC/MAH/GC	Pilotage du SAP inondation, validation des données sur les impacts,
National Agency for Information society	ANSI	<a href="http://www.risques-niger.ne/geonetwork/srv/fre/catalog.search">http://www.risques-niger.ne/geonetwork/srv/fre/catalog.search</a>

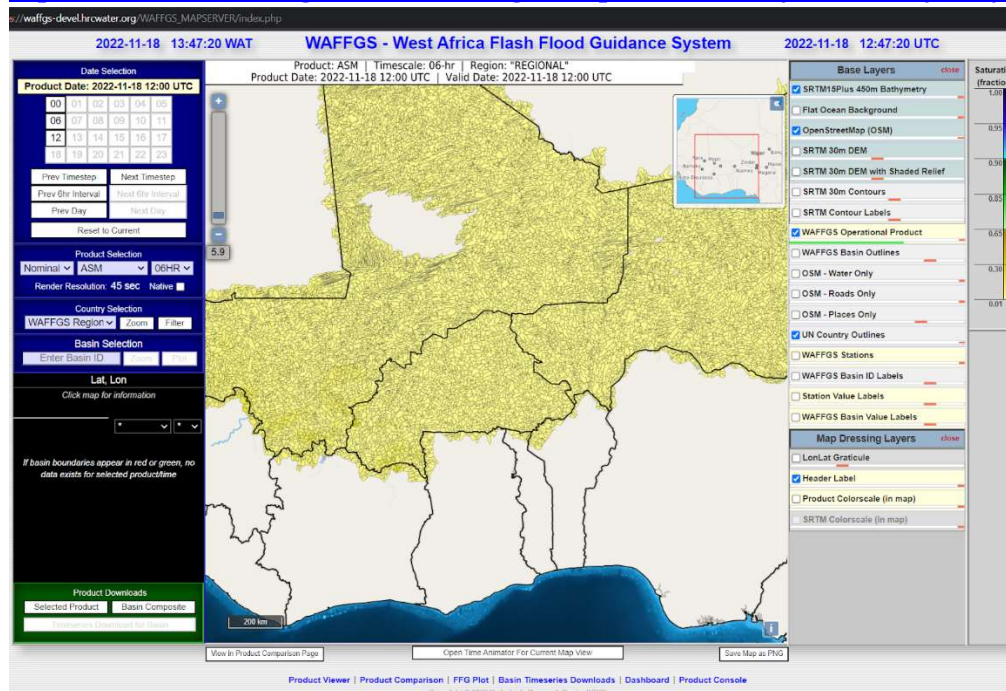
## 15.Visibility products

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

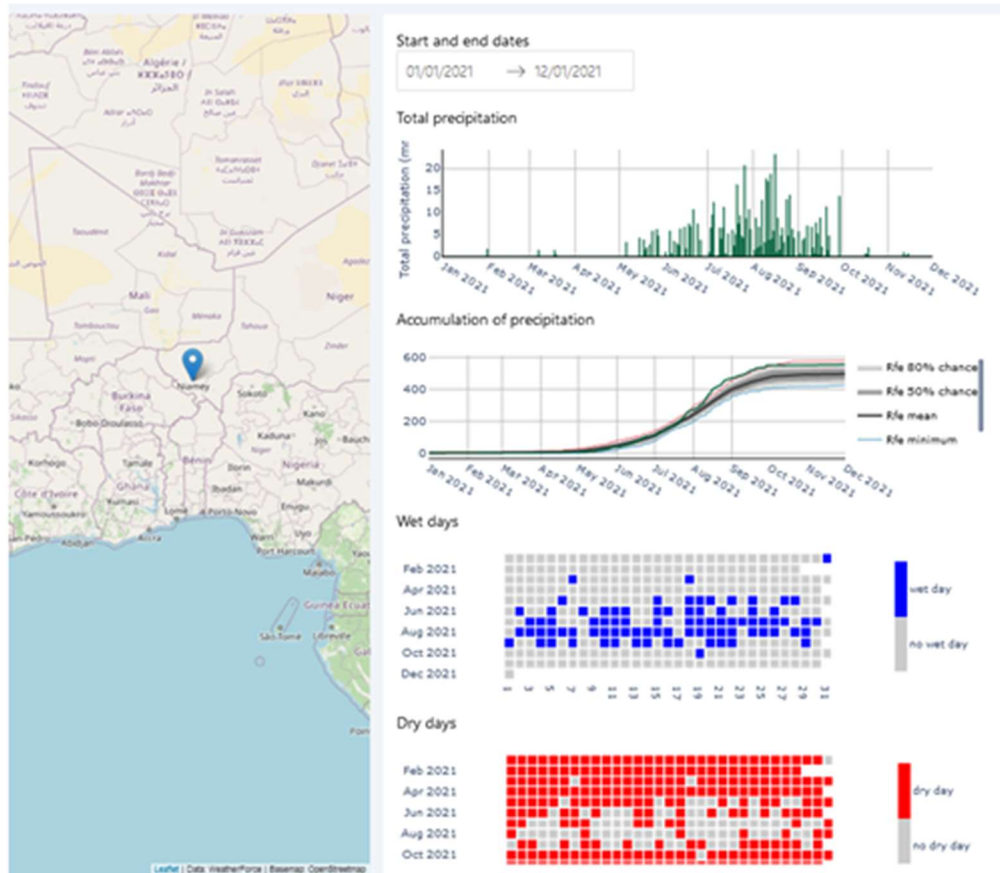
- [https://worldbankgroup-my.sharepoint.com/:v:/r/personal/imiko\\_worldbank\\_org/Documents/Illya%20OD/VID-20200318-WA0021.mp4?csf=1&web=1&e=x1KI08](https://worldbankgroup-my.sharepoint.com/:v:/r/personal/imiko_worldbank_org/Documents/Illya%20OD/VID-20200318-WA0021.mp4?csf=1&web=1&e=x1KI08)
- [https://worldbankgroup-my.sharepoint.com/:v:/r/personal/imiko\\_worldbank\\_org/Documents/Illya%20OD/Spot%20flood%20MAH-GC.mp4?csf=1&web=1&e=jvzL9T](https://worldbankgroup-my.sharepoint.com/:v:/r/personal/imiko_worldbank_org/Documents/Illya%20OD/Spot%20flood%20MAH-GC.mp4?csf=1&web=1&e=jvzL9T)
- [https://worldbankgroup-my.sharepoint.com/:v:/r/personal/imiko\\_worldbank\\_org/Documents/Illya%20OD/Spot%20COVID-19%20MAH-GC.mp4?csf=1&web=1&e=pbh1OB](https://worldbankgroup-my.sharepoint.com/:v:/r/personal/imiko_worldbank_org/Documents/Illya%20OD/Spot%20COVID-19%20MAH-GC.mp4?csf=1&web=1&e=pbh1OB)
- [www.risques-niger.ne](http://www.risques-niger.ne)
- <https://dust.aemet.es/>



- <https://www.hrcwater.org/all-news/hrc-begins-implementation-of-the-west-africa-flash-flood-guidance-system>



- [hub.weatherforce.net/service/crews](https://hub.weatherforce.net/service/crews)





- [rsmc.anacim.sn](https://rsmc.anacim.sn)

Home

User account

Username or e-mail address \*

Password \*

Log in

Contact us

Address: Aéroport LSS BP: 8184 Dakar-Yoff, Senegal

Phone: (+221) 33 865 60 00

Email: [anacim@anacim.sn](mailto:anacim@anacim.sn)

Follow us

© Copyright 2018-2020 ANACIM. Powered by WEDECOM®

FAQ's Sitemap Contact

## 16. Supporting documents

- List and annex to the report any documents providing details on project activities such as review reports, reports of training sessions, technical assessment reports, online solutions and tools, manuals, summaries of high-level discussions etc.
    - [https://worldbankgroup-my.sharepoint.com/:b:/r/personal/khoumkpe\\_worldbank\\_org/Documents/Mes%20Missions%20Ext/WASCAL/Deliverable\\_D2b\\_Niger\\_vFinal\\_21.12.2020.pdf?csf=1&web=1&e=wBODth](https://worldbankgroup-my.sharepoint.com/:b:/r/personal/khoumkpe_worldbank_org/Documents/Mes%20Missions%20Ext/WASCAL/Deliverable_D2b_Niger_vFinal_21.12.2020.pdf?csf=1&web=1&e=wBODth)
    - [https://worldbankgroup-my.sharepoint.com/:b:/r/personal/khoumkpe\\_worldbank\\_org/Documents/Mes%20Missions%20Ext/WASCAL/Project%20Staff%20from%20Technical\\_Prososal\\_WASCAL\\_29.05..2019\\_final.pdf?csf=1&web=1&e=fwZOIT](https://worldbankgroup-my.sharepoint.com/:b:/r/personal/khoumkpe_worldbank_org/Documents/Mes%20Missions%20Ext/WASCAL/Project%20Staff%20from%20Technical_Prososal_WASCAL_29.05..2019_final.pdf?csf=1&web=1&e=fwZOIT)
- Niger Hydromet Investment Plan (not published, available on demand)