



CREWS PROJECT PROGRESS REPORT

(January - June 2022)




1. Project title	Afghanistan - AF-ECLIM: Enhancing hydromet, early warning and climate Services for Resilience	2. Project reference P168141 (AF-ECLIM)
3. Implementing Partners involved in the project	World Bank World Meteorological Organization (WMO)	4. Regional/National Partners involved in the project Under revision (no direct engagement policy): AMD, NWARA (GDWR), MAIL, MRRD, SMDM, NSIA
5. Project Duration/Timeframe (from year – to year)	September 2019 – December 2023	6. Total Funding Approved by Steering Committee (in US dollars), including fees 3,660,000
7. Reporting focal point(s) from Implementing Partners	Arati Belle, Senior DRM Specialist - abelle@worldbank.org Yunziyi Lang, Climate Change Specialist - ylang@worldbank.org Fatih Kaya, Project Officer – fkaya@wmo.int	
8. Project overview	<p>Please include objectives, key project deliverables, leveraging, contextual information/statistics, significant events during the reporting period <u>in bullet points</u>. (max 250 words)</p> <p><u>Objectives:</u> To strengthen the capacity of provider and user agencies for the development and delivery of weather, water and climate-related early warning services.</p> <p><u>Key Deliverables:</u></p> <ul style="list-style-type: none"> • Production, translation and communication of weather forecasts, hydrological forecasts, and impact-based information; • Delivery of services to stakeholders and end-users for priority sectors including improvement in the dissemination of warnings for public safety and economic sectors; • Improvement of the information, including through regional collaboration. 	






	<ul style="list-style-type: none"> Enhanced decision-making to mitigate the adverse impacts of natural hazards on life, livelihoods and property. <p><u>Significant events during the reporting period:</u></p> <p>While the operational environment remained highly volatile during the current reporting period, direct engagement with the Client has been limited by the existing WBG engagement policies. In FY 2023, a relaxation in the WBG engagement policies is expected to ease restrictions and allow for tighter engagement with the Client. The task team is exploring options to restructure the project to enable better implementation if the engagement policies remain.</p>
<p>9. Progress summary</p>	<p><u>What has been achieved during this reporting period? – Please list in bullet points the most significant and tangible outcomes? (max 250 words)</u></p> <ul style="list-style-type: none"> - Production, translation & communication of weather and climate services to UN and humanitarian agencies; - WBG launched a selection and hired WMO to upgrade and upscale the Central Asia Region Flash Flood Guidance System (CARFFGS) with the inclusion of Afghanistan geographic extent. Given the transboundary nature of most of Afghanistan river basins, such as the Amu Darya, the largest basin in Central Asia, the scale-up of CARFFGS will benefit the prediction of flash flood events in Afghanistan and over the entire Central Asia region. Specifically, the riverine routing upgrade will enhance floods and flash floods modelling, resulting in improved forecasting, while the seasonal to sub-seasonal module will increase the lead time and the accessibility of long-term forecasts to the benefit of the Clients (Central Asia National Meteorological and Hydrological Services (NMHSs) and Humanitarian Agencies active in Afghanistan) and communities at risk in the region. - The WBG developed a note to pilot Agromet Advisory Services in Afghanistan which is currently being discussed internally with the WBG before potential implementation.



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 June, 2022</p> <p>From WB side: Disbursed \$607,567 (31% of total amount)</p> <p>Committed \$163,500 (to be committed for CARFFGS Upscale)</p> <p>From WMO side: Disbursed \$385,358 (40% of total amount)</p> <p>Committed \$245,254 (for landslide forecasting and warning system)</p>	<p>The engagement limitation which persisted throughout FY22 caused delays in the implementation of some activities (e.g. agromet advisory services, early warning delivery, capacity enhancement). While during the first semester of FY22 ongoing activities were completed, in the last months of the FY the WBG team re-planned some activities (flash flood early warning services through WMO) and is now considering to upscale similar approaches to other activities too (agromet advisory services).</p>	Fully aligned



11. Risk Status

Risk Status	<p>What is the current risk status as compared to what was identified in the project proposal?</p> <ul style="list-style-type: none"> • The risk levels are high because of the FCV context and the added constraints due to the COVID situation although all efforts are ongoing to move ahead through virtual work situation. • Operational limitations in directly engaging with Afghan Governmental Agencies although expected to ease during FY23, are still affecting rate of delivery. .
Measures to address	<p>What mitigation measures have been developed to address the risk status? In bullet points</p> <ul style="list-style-type: none"> • Virtual communications and meetings. “In consideration of the COVID related travel limitations and the precarious security situation in the country; • Enhance regional linkages and service delivery through international organizations and regional agencies active in the Country (e.g. FAO, RIMES, UN-OCHA, WFP); • Discussion with the WBG Country Management Unit to repurpose some of the CREWS funding towards: • Monitoring the situation on the ground (through the AF-DEWS and interactions with UN agencies); • Informing international partners/communities (Drought Bulletin, WMO Seasonal Forecasts and winterization Plans, attendance to country update events); • Supporting new programs, particularly in the Agriculture sector: currently under discussion within the WBG.

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 December 2021	Target for reporting period	Progress by June 2022



Hydromet Concept of operations (CONOPS)	TOR developed	Activity completed		
Services delivery strategy	TOR developed	Activity completed for GDWR, on-hold for AMD (no direct engagement possible)		No update.
Reinforcing the legal and institutional framework	TOR developed	Activity completed		
Introducing QMS across operations of AMD and WRD-MEW to interact with their user communities	-	On hold due to ongoing political situation.		On-hold.
Developing stakeholder/user surveys to tailor the services for users	Surveys completed	Activity on hold (no direct engagement possible)		On-hold.
<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). <u>Please list in bullet points.</u></p> <p>Given the WBG policies on Afghanistan (no direct engagement with the Client), ongoing activities were paused. Engagement will probably resume in FY23.</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 December 2021	Target for the reporting period	Progress by June 2022
Design of Drought Early Warning System	Design completed	Activity completed		
Development of Drought Early Warning System	Established and functional	Interaction with RIMES, UN-OCHA and Central Asian Country undertaken. Currently, RIMES and UN-OCHA seems the best options, given the limited interest demonstrated by Central Asian countries in adopting the tool. The CREWS team is currently discussing with the WBG CMU to be fully aligned with new initiatives being explored at the country level.	Decision taken regarding the potential handover of the drought monitoring and early warning tool.	Discussion with WFP and other UN agencies ongoing for potential handover of the drought monitoring and early warning tool.

Design of Agrometeorological services	Design document ready	On-hold	A concept note prepared.	A concept note, detailing possible implementation modalities, has been drafted and is currently being discussed internally. The activity might resume during FY23.
Flood Early warning designed and Flash Flood forecasting and alerting systems enhanced	Flood EW Design developed; Link with CAR FFGS established and capacity enhanced	Concept note is approved and project implementation is launched on December 11 2022. HRC is contracted for Riverine Routing and Seasonal to Subseasonal forecasting and warning components. Implementation will be finalized in March 2023. Landslide forecasting and warning	A consultant procured to develop and implement this activity.	A ToR was developed by the WBG and a selection process launched. HRC selected through WMO. HRC has initiated the implementation of the following Components: - Riverine Flood Forecasting System for Amu Darya - Seasonal to Subseasonal

		<p>components are designed and TORs are developed. TORs developed for landslide and riverine forecasting enhancements.</p> <p>Landslide component will use WRF and ICON models as the backbone of the forecasting operation as an integral part of the PARFFGS system.</p>	<p>Forecasting System</p> <p>This is slightly delayed due to internal clearance process for the UN Agency Business Unit Acceptance Memo. The team is following up activity.</p> <p>It was agreed with USAID/BHA and HRC that PARFFGS Landslide upgrade will be established. System requires upgrade of all legacy FFGS system of PARFFGS and inclusion of new modules. WMO through CREWS</p>
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				Afghanistan funds will cover the Afghanistan portion of the system upgrade.
Afghanistan is re-connected with Regional Climate Services	Completed	AMD attended the South Asia Hydromet Forum 3 (held virtually in November 2021)		AMD is engaged with regional climate services virtually through the South Asia Hydromet Forum. AMD is expected to attend virtually the next SAHF Executing Council.
Concept note for the Amu Darya Flow Forecasting and Early Warning System	Completed	Concept note is finalized and CAFEWS is launched on December 11 2021 on International Mountain day. Afghanistan is included within the Riverine Routing and Seasonal-to-		No update

		<p>Subseasonal forecasting components of the CAFEWS (Please check references below to access more information on the launch of CAFEWS)</p>		
<p>Strengthening the use of NWP for improving forecast accuracy</p>	<p>Expand regional NWP to cover Afghanistan</p>	<p>Afghanistan Domain; WRF Model implementation is finalized.</p> <p>WMO has finished the integration of WRF into FFGS system . The system is operational and AMD is benefitting from enhanced spatial and temporal resolution of WRF for forecasting</p>		<p>WBG activities ongoing, AMD will also be able to access the NWP regional platform currently being developed by RIMES through the SAHF program.</p>



		<p>and warning its people.¹</p> <p>DWD pilot run for ICON in the Cloud is finished. Initial results were successful. A report will be published in the 3rd Quarter of 2022.</p>		
<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>Given the WBG policies on Afghanistan (no direct engagement with the Client), ongoing activities were implemented through regional engagement (e.g. SAHF). Direct engagement will probably resume in FY23.</p>				

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 December 2021	Target for the reporting period	Progress by June 2022
Supporting MoUs between MRRD and other agencies relevant for the drought early warning system	MoUs signed	Activity cancelled		

¹ AMD with the WRF upgrade was able to provide better spatial and temporal resolution for their forecast and warnings, and which also resulted into timely warnings for the flash floods on 2-May-2022.



Developing a modern impact-based weather forecasting process	Impact-based forecasting process guidance document	Completed		
Establishing a HydroMet data management system for AMD, GDWR, and MAIL	Data management system for AMD and WRD established and operating	The assessment of the HydroMet ICT system has been finalized, incorporating all comments received from AFG CREWS team and relevant international partners (CSIRO, ADB and JICA).		The assessment report was released internally and to regional and international partners. Activity currently on-hold.
<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>Given the WBG policies on Afghanistan (no direct engagement with the Client), ongoing activities were paused. Engagement will probably resume in FY23.</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	Progress by December 2021	Target for the reporting period	Progress by June 2022
Capacity assessment for hydromet and DRM agencies	Current capacity assessed and training plan developed	Activity completed for hydromet agencies (AMD/GDWR-NWARA); and		No Update



		reports being finalized. Activity for DRM Agency (ANDMA) on hold.		
<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>Given the WBG policies on Afghanistan (no direct engagement with the Client), ongoing activities were paused. Engagement will probably resume in FY23.</p>				

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 December 2021	Target for the reporting period	Progress by June 2022
Afghanistan Hydromet Atlas	Completed	The document is completed and has been shared internally and with a limited number of stakeholders (UN agencies), given the current limitations in engaging with in-country institutions		No Update
Afghanistan is a member of the South Asia Hydromet Forum and its engagement in SAHF to be strengthened	Full participating member of SAHF (member of RIMES)	Afghanistan NMHS were officially invited		AMD is engaged with regional



	led SAHF executive council)	and attended the South Asia Hydromet Forum 3, held virtually in November 2021.		climate services through the South Asia Hydromet Forum.
Linkage with Central Asia and Indian Meteorological Department established	Strong linkage with CA and MOU with IMD established	RIMES and IMD are fully engaged and chairing the SAHF (regional) activities. Communications between them and AMD continue		
<p>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.</p> <p>Given the WBG policies on Afghanistan (no direct engagement with the Client), ongoing activities were implemented through regional engagement (e.g. SAHF). Direct engagement will probably resume in FY23.</p>				

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

State Project Output(s) in this section	Overall Project Target	Progress by December 2021	Target for the reporting period	Progress by June 2022
Community awareness on drought early warning (technical support)	Technical assistance for training developed	Activity is on hold until the institutional framework for		On hold

		the Drought Early Warning Tool is clarified.		
Capacity building for cost-effective observation network through establishing local capacities and capabilities (3D Printed Agromet Stations for research and academia)	Training completed	Previously 3DPAWS and database management system equipment were held captive in customs due to regime change. AMD has successfully taken the equipment from customs and requested WMO to support for the further installation and insitu training. WMO is working on supporting AMD through third party contractors and Turkish State Meteorological Service.		



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.

Given the WBG policies on Afghanistan (no direct engagement with the Client), ongoing activities were paused. Engagement will probably resume in FY23.

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	Progress by December 2021	Target for the reporting period	Progress by June 2022
N/A	N/A	N/A	N/A	N/A
<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). <u>Please list in bullet points.</u></p> <p>N/A</p>				

13. Certification on Use of Resources

This needs to be provided at the end of the year as part of the submission of the 2nd semester report. Each Implementing Partner to provide a certification of the use of resources signed by their authorized representative.

14. 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*



15. 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.*

16. 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*

- 3DPAWS equipment and databaser system are received from customs
- WRF implementation and integration completed and WRF-FFGS are operational
- Concept of Operations (CONOPS) developed
- Modern Impact-Based Weather Forecasting guidance document prepared
- HydrometService Delivery Strategy framework document prepared
- Rapid Assessment of DRM Capacities completed
- Afghanistan Drought Early Warning Decision Support Tool (AF-DEWS) prototype developed
- Central Asia and Afghanistan Flood Early Warning System (CAFEWS) concept note developed
- ICON in the Cloud started
- Capacities of HydrometServices: Dynamic Water Resources Assessment Tool (DWAT) utilized
- Cooperation and Twinning with TSMS
- ICT Assessment report developed
- Policy Note: Advancing the Road Map for Afghan-Tajik cooperation in Hydromet data exchange
- Afghanistan Hydromet Atlas
- CAFEWS Launched (11 December 2021)