



CREWS PROJECT PROGRESS REPORT

(July – December 2021)

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, DRM Specialist - abelle@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>Key deliverables:</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. • Enhanced decision-making to mitigate the adverse impacts of natural hazards on life, livelihoods and property. 	



9. Progress summary	<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"> • Production, translation & communication of weather and climate services to UN and humanitarian agencies • Implementation of the mesoscale model ICON in the cloud • Completion/finalization of already initiated reports: <ul style="list-style-type: none"> - Hydromet Concept of Operations (CONOPS) for AMD - Hydromet Service Delivery Strategy - ICT assessment and roadmap - Policy Note: Advancing the Road Map for Afghan-Tajik cooperation in Hydromet data exchange - Afghanistan Hydromet Atlas • WRF model for Afghanistan domain became operational and inclusion to FFGS is completed • Central Asia Flood EWS (inc. Afghanistan) concept note finalized. Project is launched on International Mountain Day , 11 December 2021. Implementation will be finalized by March 2023. <ul style="list-style-type: none"> - Riverine Flood forecasting and warning system together with Seasonal-to -Subseasonal component will cover Afghanistan • Design of Landslide forecasting system for Afghanistan is completed, ToRs developed.
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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	Disbursement December, 2021 From WB side: is \$487,678 (19.9% of total amount) From WMO side: is \$351,620 (34% of total amount)	Activities being rebalanced towards virtual interactions, restructuring ongoing.	Fully aligned
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11. Risk Management Status

Risk Status	What is the current risk status as compared to what was identified in the project proposal? <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.
Measures to address	What mitigation measures have been developed to address the risk status? In bullet points <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 July 2021	Target for reporting period	Progress by December 2021
Hydromet Concept of operations (CONOPS)	TOR developed	Drafting of the CONOPS document initiated	None	Activity completed
Services delivery strategy	TOR developed	Drafting of the strategy document initiated	None	Activity completed for GDWR, on-hold for AMD (no direct engagement possible)
Reinforcing the legal and institutional framework	TOR developed	Drafting of the framework document and regulations initiated	None	Activity completed
Introducing QMS across operations of AMD and WRD-MEW to interact with their user communities	-	On-hold	None	On hold due to ongoing political situation.
Developing stakeholder/user surveys to tailor the services for users	Surveys completed	Preparation of surveys initiated, but not completed yet.	None	Activity on hold (no direct engagement possible)



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 existing operational constraints, activities which could be undertaken remotely – such as assessments and reports – have been revised by international stakeholders and then finalized.

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
Design of Drought Early Warning System	Design completed	Drafting of the technical brief underlining the design of the Drought Early Warning System completed	None	Activity completed
Development of Drought Early Warning System	Established and functional	Preliminary prototype for the Drought Early Warning System developed	Engagement of a regional entity to host the tool and provide support	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.
Design of Agrometeorological services	Design document ready	Drafting of the draft document completed.	On-hold	On-hold
Flood Early warning designed and Flash Flood forecasting and alerting systems enhanced	Flood EW Design developed; Link with CAR FFGS established and capacity enhanced	Draft concept on FFGS developed. PARFFGS system new NWP (Numerical Weather Prediction) module WRF (Weather Research & Forecasting) is operational and covering Afghanistan		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

				<p>will be finalized in March 2023. Landslide forecasting and warning 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>
Afghanistan is re-connected with Regional Climate Services	Completed	Communications between AMD and IMD initiated	Support attendance of AFG NMHS to regional initiatives	AMD attended the South Asia Hydromet Forum 3 (held virtually in November 2021)

<p>Concept note for the Amu Darya Flow Forecasting and Early Warning System</p>	<p>Completed</p>	<p>AMD and NWARA included in development of the EWS. Focal points from both organizations have been identified for follow-ups</p>		<p>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-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>NWP domain has been decided and DWD is working on pilot runs. Development of local datasets are in progress</p>	<p>NWP efforts will continue at the regional level; national datasets are secure. Afghanistan will use the system once ongoing</p>	<p>Afghanistan Domain; WRF Model implementation is finalized. WMO will continue working on</p>

				<p>model performance in 2022 in coordination with Pakistan Meteorological Department and Hydrological Research Center.</p> <p>DWD pilot run for ICON in the Cloud is ongoing and further efforts are planned for 2022 under the WBG Central Asia Hydromet Modernization Project, which is also covering Afghanistan Domain.</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 existing operational constraints, some activities within this output have been restructured by repurposing the focus towards UN and other international stakeholders rather than NMHS. As the situation evolves, CREWS team stands ready to support new initiatives currently under design with weather and climate cross-cutting components.</p> <p>Additional and new emphasis has been placed in providing multi-hazard early warning services through regional mechanisms to a range of new stakeholders, including the UN agencies that remained engaged in the Country.</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 July 2021	Target for the reporting period	Progress by December 2021
Supporting MoUs between MRRD and other agencies relevant for the drought early warning system	MoUs signed	(expected to be done under the ENETAWF) during Sept-Dec 2020	None	Activity cancelled
Developing a modern impact-based weather forecasting process	Impact-based forecasting process guidance document	Drafting of the guidance document initiated	None	Completed
Establishing a HydroMet data management system for AMD, GDWR, and MAIL	Data management system for AMD and WRD established and operating	Draft assessment done	Completion of the ICT assessment.	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).

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 existing capacity constraints, the covid related travel restrictions and other incidents in the country, the activities were sequenced and now priority is given to those activities which can be done through virtual communication means or with the support of a regional agency. In particular, the impact-based forecasting document has been prepared, and the ICT assessment report has been completed.



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
Capacity assessment for hydromet and DRM agencies	Current capacity assessed and training plan developed	A framework document on Capacity Assessment and questionnaires developed specifically for GDWR and delivered.	Capacity Assessment completed	Activity completed for hydromet agencies (AMD/GDWR-NWARA); and reports being finalized. Activity for DRM Agency (ANDMA) on hold.

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 existing capacity constraints, the covid related travel restrictions and other incidents in the country, the activities were sequenced and now priority is given to those activities which can be done through virtual communication means.

In particular, Capacity Assessments of AMD and GDWR have been done and results analyzed; reports are being finalized.

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
Afghanistan Hydromet Atlas	Completed	Document completed, pending forward ahead of publication.	Completion of the document.	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
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 led SAHF executive council)	Virtual meetings of the SAHF Executive Committee and Working Groups held. ToRs for 4 Working Groups (IBF, NWP, Observations, and	AMD is engaged in regional SAHF activities.	Afghanistan NMHS were officially invited and attended the South Asia Hydromet Forum 3, held virtually in November 2021.



		Capacity Building) developed and approved by the SAHF Executive Committee.		
Linkage with Central Asia and Indian Meteorological Department established	Strong linkage with CA and MOU with IMD established	Communications with IMD initiated	Consultations with CA are ongoing. Communications with IMD are ongoing and are supported by RIMES through SAHF activities	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>The WBG/WMO team is exploring opportunities to restructure the engagement through international agencies (UN) and regional partners (RIMES, IMD, PMD, Central Asian MDs) to ensure that the achievements made are preserved while the situation stabilizes. Engagement through RIMES initiated, and engagement with Central Asia being explored.</p>				

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
Community awareness on drought early warning (technical support)	Technical assistance for training developed	Remote training with the key agencies initiated	None – activity on hold	Activity is on hold until the institutional



		in the first semester 2021. However, given the current situation in the country, the activity was put on hold.		framework for 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	On hold	Activity will wait until further time	3DPAWS printers arrived to Afghanistan but due to ongoing political situation AMD couldn't get the printers, stations and other equipment from Kabul Airport Customs
<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>Activities under this output are currently on-hold.</p>				

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 July 2021	Target for the reporting period	Progress by December 2021
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>				

13.Certification on Use of Resources

This is for authorized representatives from the Implementing Partners to certify that the resources allocated are used for their intended purpose. Please fill one table per Implementing Partner.

Has there been any cases of non-compliance with the financial rules, regulations and procedures of your institution? If yes, please fill below			<input type="checkbox"/> Yes <input type="checkbox"/> No
Issue	Response Measures Taken	Date of Response	Active/Closed
		Click or tap to enter a date.	Choose an item.
		Click or tap to enter a date.	Choose an item.
		Click or tap to enter a date.	Choose an item.
Institution	Choose an item.		
Firstname, LASTNAME of authorized representative			



Position Title	
Date and Signature:	

Has there been any cases of non-compliance with the financial rules, regulations and procedures of your institution? If yes, please fill below			<input type="checkbox"/> Yes <input type="checkbox"/> No
Issue	Response Measures Taken	Date of Response	Active/Closed
		Click or tap to enter a date.	Choose an item.
		Click or tap to enter a date.	Choose an item.
		Click or tap to enter a date.	Choose an item.
Institution	Choose an item.		
Firstname, LASTNAME of authorized representative			
Position Title			
Date and Signature:			

Has there been any cases of non-compliance with the financial rules, regulations and procedures of your institution? If yes, please fill below			<input type="checkbox"/> Yes <input type="checkbox"/> No
Issue	Response Measures Taken	Date of Response	Active/Closed
		Click or tap to enter a date.	Choose an item.
		Click or tap to enter a date.	Choose an item.
		Click or tap to enter a date.	Choose an item.
Institution	Choose an item.		
Firstname, LASTNAME of authorized representative			
Position Title			
Date and Signature:			



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*

Launch of CAFEWS on International Mountain Day:

- i. Link to International Mountain Day: <https://public.wmo.int/en/media/news/international-mountain-day#:~:text=International%20Mountain%20Day%20is%20celebrated,is%20sustainable%20tourism%20in%20mountains.>
- ii. Link to CAFEWS: <https://www.worldbank.org/en/news/infographic/2021/12/10/cafews>

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.*

Annexed

7) ICT Assessment Report and roadmap finalized

8) Policy Note - Policy Note: Advancing the Road Map for Afghan-Tajik cooperation in Hydromet data exchange

9) Afghanistan Hydromet Atlas

10) Sample drought bulletin in English and dari

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*

- Concept of Operations (CONOPS) developed
- Modern Impact-Based Weather Forecasting guidance document prepared
- Hydromet Service 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)