

### **sCREWS PROJECT PROGRESS REPORT**

### (July – December 2022)

| 1. | Project title                       | Afghanistan - AF-ECLIM: Enhancing hydromet,                   | 2.       | Project reference   |
|----|-------------------------------------|---|----------|---|
|    |                                     | early warning and climate Services for Resilience             |          | CREWS/CProj/10/Afghanistan  |
| 3. | Implementing                        | World Bank (lead) (WB)  | 4.       | Regional/National Partners involved in the  |
|    | Partners involved in<br>the project | World Meteorological Organization (WMO)                       |          | project Under revision (no direct engagement policy): Afghanistan Meteorological Department (AMD), National Water Affairs Regulation Authority (NWARA) - General Directorate of Water Resources (GDWR), Ministry of Agriculture, Irrigation and Livestock (MAIL), Ministry of Rural Rehabilitation and Development (MRRD), State Ministry of Disaster Management (SMDM), National Statistics and Information Authority (NSIA) |
| 5. | Project Duration/Timeframe          | September 2019 – December 2023                                | 6.       | Total Funding Approved by Steering Committee (in US dollars), including fees  |
| _  | (from year – to year)               | World Bank  |          | 3,660,000   |
| /. | Reporting focal point(s) from       | Yunziyi Lang, Climate Change Specialist - <u>ylang@worldb</u> | ank (    | Org   |
|    | Implementing                        | Efrem Ferrari, Consultant - eferrari@ifc.org                  | <u> </u> | <u></u>   |
|    | Partners                            |   |          |   |
|    | T di tileis                         | World Meteorological Organization                             |          |   |
|    |                                     | Rokhaya BA - <u>rba@wmo.int</u>                               |          |   |
|    |                                     | Luis Roberto Silva Vara - <u>LSilvaVara@wmo.int</u>           |          |   |
|    |                                     |   |          |   |



### 8. Project overview

Please include objectives, key project deliverables, leveraging, contextual information/statistics, significant events during the reporting period <u>in bullet points</u>. (max 250 words)

<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.

#### **Key Deliverables:**

- 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.

### Significant events during the reporting period:

- **WB:** Despite the team effort, engagement limitations persisted, and the implementation of an activity planned the previous semester *The Upgrade of Central Asia Region Flash Flood Guidance System to include Afghanistan* had to be cancelled, given World Bank Group (WBG) internal policies. The team is currently discussing with the Afghanistan Country management Unit and project management team unit on ways to restructure some of the activities, particularly those that requires engagement with the Client. The team is also drafting a restructuring proposal to be submitted to CREWS Secretariat during the next semester.
- **WMO:** During the last reporting period WMO was capable of reestablishing contacts with AMD and WRD authorities involved in strengthening capacity building and staff hiring. Further to this, AMD is collaborating with other partners such as General Civil Aviation Authority (GCAA) an UAE company operating countries airport for the delivery of activities and services.



# 9. Progress summary What has been achieved <u>during this reporting period</u>? – Please list <u>in bullet points</u> the most significant and tangible outcomes? (max 250 words) 3D PAWS training was conducted on the 26 of December 2022: the aim was to learn the making of 3D PAWS stations. 12 participants (male), from the technical staff of AMD, joined the training. It is planned to engage other entities such as Kabul University by holding the practical training there in the future. AMD data servers, which were sent for maintenance to Ankara (Türkiye) and on hold at Customs, were finally delivered back to AMD on April 2022.

### **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 as of December 2022      | WB: No new activities were completed during the last reporting period. The WBG | Fully aligned           |
|           | From WB side:                         | and WMO teams are working towards a  |                         |
|           | Disbursed: USD 640,000 (26% of WB     | rationalization and revision of project  |                         |
|           | grant allocation)                     | activities, which is currently being   |                         |
|           | Committed: USD 34,780 (1% of WB grant | discussed internally and is planned to be                                      |                         |
|           | allocation)                           | submitted to CREWS Secretariat during  |                         |
|           |                                       | the next semester. The Central Asia Flash                                      |                         |
|           | From WMO side:                        | Flood Guidance System Contract (signed   |                         |
|           |                                       | with WMO in May 2022) had to be  |                         |



| Disbursed: USD 358,526 (41.8% of WMO     | cancelled because of contractual issues |  |
|--|---|--|
| grant allocation)                        | outside team control.                   |  |
| Committed: USD 245,254 (28.5% of         |   |  |
| WMO grant allocation), for the Landslide | WMO: Same as above                      |  |
| Forecasting and Warning System           |   |  |
|  |   |  |
|  |   |  |
|  |   |  |
|  |   |  |
|  |   |  |

### 11.Risk Status

| Risk Status         | <ul> <li>What is the current risk status as compared to what was identified in the project proposal?</li> <li>The risk levels are high because of the FCV context. The constraints due to the COVID situation are being eased; although efforts are ongoing to move ahead through virtual work situation.</li> <li>Operational limitations in directly engaging with Afghan Governmental Agencies are still affecting rate of delivery although some improvements have been observed since end of 2022.</li> <li>On Dec 24, 2022, the Taliban Interim Administration has ordered all foreign and domestic non-governmental groups in Afghanistan to suspend employing women. After the ban, majority of the local and international aid groups have suspended their operations completely.</li> </ul> |
|---------------------|---|
| Measures to address | What mitigation measures have been developed to address the risk status? In bullet points   |



- Enhance regional linkages and service delivery through international organizations and regional
  agencies active in the Country (e.g. Food and Agriculture Organization (FAO), Regional Integrated
  Multi-hazard Early warning System (RIMES), United Nations Office for the Coordination of
  Humanitarian Affairs (UN-OCHA), World Food Programme (WFP), General Aviation Airport Coalition
  (GAAC), Pakistan Meteorological Department (PMD), Tajhydromet, Uzhydromet, South Asia
  Hydromet Forum);
- Discussion with the CMU to repurpose some of the CREWS funding towards:
  - Monitoring the situation on the ground (through interactions with UN agencies);
  - Informing international partners/communities (Drought Bulletin, WMO Seasonal Forecasts and winterization Plans, attendance to country update events);
  - The international communities will be meeting with the ITA in Jan 2023. The CMU has advised CREWS activities from WB side to be halted until further notice.

### 12. Contributions to CREWS Output(s)s

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

### 12.1 National Output(s)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<br>Target | Progress by<br>June 2022 | Target for reporting period | Progress by<br>December 2022 |
|---|---------------------------|--------------------------|-----------------------------|------------------------------|
| Hydromet Concept of operations (CONOPS) | TOR developed             |                          |                             | Activity<br>completed        |



| Services delivery strategy   | TOR developed     | No update. | The activity is completed for GDWR & on-hold for AMD.   |
|--|-------------------|------------|---|
| 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.   | On-hold This activity has not yet been performed because TSMS was not able to twin with AMD. Instead of twinning, it could be done through contracting. |
| Developing stakeholder/user surveys to tailor the services for users                         | Surveys completed | On-hold.   | On-hold   |

Activities which could be implemented remotely and without direct engagement with the Client have been completed and wrapped up. Pending activities, (e.g., stakeholder/user surveys) are currently being restructured and alternative implementation modalities are being discussed between WMO and WBG.



# 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<br>Target  | Progress by June<br>2022   | Target for the reporting period | Progress by<br>December 2022   |
|---|----------------------------|--|---------------------------------|--|
| Design of Drought Early Warning System      | Design completed           |  |                                 |  |
| Development of Drought Early Warning System | Established and functional | Discussion with WFP and other UN agencies ongoing for potential handover of the drought monitoring and early warning tool.   |                                 | Tool developed, transfer of the tool from IWMI to a Public site to be completed during calendar year 2023. |
| Design of Agrometeorological services       | Design document ready      | A concept note, detailing possible implementation modalities, has been drafted and is currently being discussed internally. The activity might resume during FY23. |                                 | TOR developed,<br>activity currently<br>on-hold  |



| Flood Early warning designed and Flash Flood | Flood EW Design      | A ToR was          | Despite the     |
|--|----------------------|--------------------|-----------------|
| forecasting and alerting systems enhanced    | developed; Link with | developed by the   | contract being  |
|  | CAR FFGS             | WB and a           | successfully    |
|  | established and      | selection process  | awarded, the    |
|  | capacity enhanced    | launched.          | activity could  |
|  |                      | HRC selected       | not be          |
|  |                      | through WMO.       | implemented.    |
|  |                      |                    | Alternative     |
|  |                      | HRC has initiated  | implementation  |
|  |                      | the                | modalities are  |
|  |                      | implementation     | currently being |
|  |                      | of the following   | discussed       |
|  |                      | Components:        | between WMO     |
|  |                      | - Riverine Flood   | and WBG.        |
|  |                      | Forecasting        |                 |
|  |                      | System for Amu     |                 |
|  |                      | Darya              |                 |
|  |                      | - Seasonal to      |                 |
|  |                      | Subseasonal        |                 |
|  |                      | Forecasting        |                 |
|  |                      | System             |                 |
|  |                      |                    |                 |
|  |                      |                    |                 |
|  |                      | This is slightly   |                 |
|  |                      | delayed due to     |                 |
|  |                      | internal clearance |                 |
|  |                      | process for the    |                 |
|  |                      | UN Agency          |                 |
|  |                      | Business Unit      |                 |
|  |                      | Acceptance         |                 |
|  |                      | Memo. The team     |                 |



|   |            | is following up   |             |
|---|------------|-------------------|-------------|
|   |            | activity.         |             |
|   |            | ,                 |             |
|   |            | 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     |             |
|   |            | Afghanistan funds |             |
|   |            | will cover the    |             |
|   |            | Afghanistan       |             |
|   |            | portion of the    |             |
|   |            |                   |             |
|   |            | system upgrade.   |             |
|   |            |                   |             |
| Afabanistania na sangastad with Danianal Climata  | Camandatad | ANAD is supported | A salinitar |
| Afghanistan is re-connected with Regional Climate | Completed  | AMD is engaged    | Activity    |
| Services  |            | with regional     | completed.  |
|   |            | 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 | Completed       | No update           |           |
| Early Warning System                                |                 |                     |           |
|   |                 |                     |           |
| Strengthening the use of NWP for improving forecast | Expand regional | WBG activities      |           |
| accuracy  | NWP to cover    | ongoing, AMD        |           |
|   | Afghanistan     | will also be able   |           |
|   |                 | to access the       |           |
|   |                 | NWP regional        |           |
|   |                 | platform            | Completed |
|   |                 | currently being     |           |
|   |                 | developed by        |           |
|   |                 | RIMES through       |           |
|   |                 | the SAHF            |           |
|   |                 | program.            |           |

Given the current circumstances (including pandemic, travel & engagement limitations and security issues) the development and implementation of Early Warning Information Systems at Client' managed facilities are extremely complicated and likely to be unfeasible. Alternative design & implementation modalities – such as through publicly online websites and cloud-based platforms - are being discussed between WMO and WBG.



# CREWS Output(s) 3: Information and Communication Technology, including common alerting protocol, strengthened

| State Project Output(s) in this section   | Overall Project<br>Target  | Progress by June<br>2022  | Target for the reporting period | Progress by<br>December 2022   |
|---|--|---|---------------------------------|--|
| Supporting MoUs between MRRD and other agencies relevant for the drought early warning system | MoUs signed  |   |                                 | Activity on hold   |
| Developing a modern impact-based weather forecasting process                                  | Impact-based forecasting process guidance document                           |   |                                 | Assessment to inform IBF development completed - activity to be linked to SAHF and CARE Regional Projects. Virtual trainings of Client staff will probably resume later in 2023. |
| Establishing a HydroMet data management system for AMD, GDWR, and MAIL                        | Data management<br>system for AMD<br>and WRD<br>established and<br>operating | The assessment report was released internally and to regional and international partners. Activity currently on-hold. |                                 |  |



As instructed by the CMU, since late December 2022 the team has paused communication with the technical personnel of Afghanistan hydromet agencies, which is impacting and delaying also the external support provided by WB Regional initiatives.

The South Asia Hydromet Forum will host, in January 2023, a 5-days virtual training to introduce hydromet agencies to Impact Based Forecasting. The event will be recorded and will be made available to Afghanistan hydromet agencies later in 2023, if and when basic engagement with the Client resumes.

## 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<br>Target                             | Progress by<br>June 2022 | Target for the reporting period | Progress by<br>December 2022                                 |
|---|---|--------------------------|---------------------------------|--|
| Capacity assessment for hydromet and DRM agencies | Current capacity assessed and training plan developed | No Update                |                                 | The assessment, covering the period till 2021, is completed. |

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.

Completed



### CREWS Output(s) 5: Knowledge products and awareness programmes on early warnings developed

| State Project Output(s) in this section  | Overall Project<br>Target  | Progress by<br>June 2022   | Target for the reporting period | Progress by<br>December 2022  |
|--|--|--|---------------------------------|---|
| Afghanistan Hydromet Atlas   | Completed  | No Update  |                                 |   |
| Afghanistan is a member of the South Asia Hydromet Forum and its engagement in SAHF to be strengthened | Full participating<br>member of SAHF<br>(member of RIMES<br>led SAHF executive<br>council) | AMD is engaged with regional climate services through the South Asia Hydromet Forum. |                                 | Completed.  |
| Linkage with Central Asia and Indian Meteorological Department established                             | Strong linkage with CA and MOU with IMD established  |  |                                 | Completed for<br>Central Asia:<br>Engagement of<br>Tajikistan and<br>Uzbekistan's<br>NMHS for the<br>delivery of<br>capacity building<br>activities |
|  |  |  |                                 | Piloting implementation of the ICON-in the cloud (Numerical Weather Prediction Model)   |



by DWD (German Weather Service) covering Afghanistan and Central Asia Countries is completed. The report is available at https://document s1.worldbank.org /curated/en/0993 57409192232700 /pdf/IDU0a9852b 0f0154e049a908e 8405a45999ef5a7 .pdf

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.

The activity is ongoing and linkages with Central Asia countries have been re-established / strengthened (by WMO). Linkages with South Asia hydromet agencies, particularly through the South Asia Hydromet Forum, are currently on hold and will resumes if and when basic engagement with the Client will be allowed by the CMU.



### CREWS Output(s) 6: Gender-sensitive training, capacity building programmes provided State Project Output(s) in this section **Overall Project Progress by** Target for the **Progress by** December 2022 reporting period **Target** June 2022 Community awareness on drought early Technical On hold assistance for warning (technical support) training developed Capacity building for cost-effective Training On hold Training completed the 26 December 2022, will allow to start observation network through establishing completed making and installing the stations. local capacities and capabilities (3D Printed Agromet Stations for research and academia)



WMO was able to conduct a training during the current reporting period, while WB engagement with the Client is on-hold. The training, which was attended by 12 staff from AMD, introduced the 3D-PAWS concept (3D-Printed Automatic Weather Station) to Afghanistan. The training aimed at providing information on how to build and install 3D printed AWS, an important tool to enhance observation networks while reducing weather related risks at community level.

WMO and WB are discussing ways to resume training and capacity building programs given the current operational environment.

### 12.2 Regional Output(s)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<br>Target | Progress by<br>June 2022 | Target for the reporting period | Progress by<br>December 2022 |
|---|---------------------------|--------------------------|---------------------------------|------------------------------|
| N/A                                     | N/A                       | N/A                      | N/A                             | N/A                          |

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.

N/A



#### 13. Certification on Use of Resources

This needs to be provided at the end of the year as part of the submission of the 2<sup>nd</sup> 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 <u>produced during the reporting</u> period only

### 15. Supporting documents

a. List and annex to the report any documents providing details on project activities <u>conducted during the reporting period</u> 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 <u>in bullet points, include all visibility and supporting documents other than those</u> from the last 12 months
  - 3DPAWS training was done in December 2022 to be followed with the making and installation of stations.
  - 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 Hydromet Services: 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)