

CREWS Project Status Report

1	Project Title	Strengthening national capacities for EWS Service Delivery in Burkina Faso
2	Project Reference	CREWS/CProj/03/Burkina
3	Reporting Period	December 2017-June 2018
4	Reporting Focal Point	Jean-Baptiste Migraine (jbmigraine@wmo.int)
5	Project Status Overview	<p>Before the reporting period (since July 2017):</p> <ul style="list-style-type: none"> • A Letter of Agreement has been signed between WMO and Burkina Faso Meteorological Service (ANAM), for an amount of US\$482,000. The first payment was transferred in October 2017; • A GIS software was procured to enhance ANAM capacity in relation with statistics and basic tools for climate services; • A license was purchased providing access to products from the European Centre for Medium-Range Weather Forecasts (ECMWF); • An assessment of the observing network took place, organized by WMO/WIGOS. The draft report is available and will become public soon; • An assessment of the capacity of the hydrological service took place, organized by WMO/HWR. The report will be made available publicly soon; • Assessments of user requirements with regards to agrometeorological services was developed for the pilot municipalities of Niangoloko, Tenado and Titao. <p>During the reporting period:</p> <ul style="list-style-type: none"> • A Letter of Agreement has been signed between WMO and Météo-France, for an amount of US\$310,000 to support (i) use of seasonal and sub-seasonal forecasts in agrometeorological services; (ii) use of remote sensing (including Land Data Assimilation Systems - LDAS) in agrometeorological services and (iii) strategic planning within ANAM, signed on May 24, 2018; • A training on sand and dust storm was provided to one ANAM forecaster (Cairo, 10-12 February 2018); • A training on numerical weather prediction was provided to two ANAM forecasters (Langen, 12-16 March 2018); • A ToR for the gender-informed socio-economic analysis was prepared; • Consultation with AGRHYMET and CIRAD was organized towards operational use of SARRA models in support of agricultural meteorology services. A letter to DG AGRHYMET inviting to be CREWS project formal partner has been sent in May; • Roving Seminars involving local radio communicators and agricultural extension agents with regards to agrometeorological services were held for the farmers at the pilot municipalities

	<p>of Niangoloko, Tenado and Titao in April-May 2018; the report will become available in June 2018.</p> <ul style="list-style-type: none"> Two technicians were supported to reinforce the seasonal prediction team (from usually 2 to 4) to take part in 2018 Seasonal Forecast Forum for Agro-hydro-climatic characteristics in the Sudano-Sahelian zone (PRESASS 2018), Abidjan from 30 April to 05 May, 2018. This team (4) will be working with Meteo France for the sub-seasonal component.
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6 Project Activities Contributing to CREWS Outputs –National Projects

CREWS Output 1: Assessments of capacities, user needs, alignment with other programmes and socio-economic benefits			
Project Outputs and Estimated Progress to Date	Output Start & End Date	Progress by Nov 2017	Progress by June 2018
<i>1.1. Assessment of the observing network as an update of the SAP-IC midterm review report (2017) and recommendations towards integration of the national hydro-meteorological observing systems in OSCAR/surface. Mission 17-19 October 2017, including discussions and visit to central facilities and to some meteorological stations. The draft WIGOS report is available and will become public by Q2 2018.</i>	Q4 2017-Q2 2018	60%	80%
<i>1.2. Assessment of the hydrological service’s national capabilities as an update of Serge Pieyns’ report (2014) with specific focus on end-to-end flood forecasting and early warning and recommendations towards modernization with CREWS and GCF/IDA resources. Mission 6-10 November 2017, the HWR report is available as draft and will become public by Q2 2018.</i>	Q4 2017-Q3 2018	40%	80%
<i>1.3. Assessment of agro-meteorological users’ requirements with regards to climate warnings in 3 pilot areas (Niangoloko, Tenado, Titao) and detailed work plan for the CREWS agro-meteorological component. Mission 17-22 December 2017, the mission reports are available and the work plan still under draft.</i>	Q4 2017-Q3 2018	60%	80%

CREWS Output 2: Access and use of hazard and risk information			
Project Outputs and Estimated Progress to Date	Output Start & End Date	Progress by Nov 2017	Progress by June 2018
<i>2.1. Licence to access products and forecasts from the European Centre for Medium-Range Weather Forecasts (ECMWF). Licence procured on 31 October 2017 covering 100Go of daily downloads from November 2017 until</i>	Q4 2017-Q4 2018	90%	90%

October 2019. Next step: training.			
2.2. Data concentration at ANAM and integration of the hydro-meteorological observing systems in OSCAR/surface.	Q3 2018- Q4 2019	0%	0%
2.3. Development of a Burkina-Faso specific interface as part of the West Africa Severe Weather Demonstration Project (SWFDP-West Africa).	Q3 2018- Q4 2019	0%	0%
2.4. Identification of flood prone areas and flood causes.	Q3 2018- Q4 2019	0%	0%
2.5. Calibration of a crop model (SARRA-H) for the agro-meteorological pilot zones and training of staff, to anticipate crop failures and enhance agro-meteorological advisories. Consultations with AGRHYMET and CIRAD were held in Q1 2018 and a training will be organized in 2018.	Q1 2018- Q4 2019	0%	10%
2.6. Development of priority agromet indices based on Land Data Assimilation Systems (LDAS).	Q1 2018- Q4 2019	0%	10%

CREWS Output 3: Improvement of NMHSs service delivery

Project Outputs and Estimated Progress to Date	Output Start & End Date	Progress by Nov 2017	Progress by June 2018
3.1. Procurement of ESRI ARCGIS software to enhance ANAM capacity in relation with statistics and basic tools for climate services. The software was procured in Nov 2017.	Q3 2017- Q4 2017	0%	100%
3.2. Development of an agro-meteorological production suite taking into account seasonal and sub-seasonal forecasting. The twinning arrangement (LoA) with Météo-France was signed in May 2018.	Q2 2018- Q4 2019	0%	10%
3.3. Development of a Flash Flood Guidance Service for meteorology, hydrology and civil protection.	Q3 2018- Q4 2019	0%	0%
3.4. Development of a GIS-based service delivery tool for meteorological, agro-meteorological and hydrological outputs.	Q3 2018- Q4 2019	0%	0%

CREWS Output 4: Development of long-term service delivery strategies and development plans for NMHS

Project Outputs and Estimated Progress to Date	Output Start & End Date	Progress by Nov 2017	Progress by June 2018
4.1. Strategic plan for ANAM, as an update to the KPMG Modernization Plan (2014) and National Framework for Climate Services (2016)	Q2 2018- Q4 2018	0%	10%
4.2. Strategic plan for national hydrological service (DGRE)	Q3 2018-	0%	0%

	Q4 2019		
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CREWS Output 5: Procurement and installation of high priority observation and information and communications technology (ICT) equipment			
Project Outputs and Estimated Progress to Date	Output Start & End Date	Progress by Nov 2017	Progress by June 2018
<i>5.1. Setup of a data concentration and data management system. Procurement process initiated for 12 PCs, 2 laptops, 1 server, 13 external disks, ten mobile broadband devices with Internet connectivity for 30 months.</i>	Q3 2017- Q2 2019	10%	10%
<i>5.2. Procurement and installation of soil moisture sensors in pilot sites</i>	Q3 2018- Q2 2019	0%	0%
<i>5.3. Support to operational use of remote sensing techniques for rainfall monitoring</i>	Q3 2018- Q3 2019	0%	0%

CREWS Output 6: Preparedness for response plans with operational procedures for dissemination, readiness to act with regular simulation exercises			
Project Outputs and Estimated Progress to Date	Output Start & End Date	Progress by Nov 2017	Progress by June 2018
<i>6.1. Proposal for standard operation procedures (SOP) for warning production, dissemination, response and return on experience in line with the national disaster risk reduction law (2014). Terms of reference were drafted.</i>	Q3 2018- Q4 2019	0%	10%
<i>6.2. Proposal for data exchange agreement between entities involved in the SOP.</i>	Q3 2018- Q4 2019	0%	0%

CREWS Output 7: Targeted education and public awareness programmes available for warning systems and related public action			
Project Outputs and Estimated Progress to Date	Output Start & End Date	Progress by Nov 2017	Progress by June 2018
<i>7.1. Training on sand and dust storm. Provided to one ANAM forecaster in Cairo, 10-12 February 2018</i>	Q1 2018- Q1 2018	0%	100%
<i>7.2. Training on limited area (LAM) numerical weather prediction. Provided to two ANAM forecasters in Langen, 12-16 March 2018</i>	Q1 2018- Q1 2018	0%	100%

<i>7.3. Training on the use of ECMWF eccharts, a web-based application providing easy access to medium-range forecasts in a graphical format and in their native resolution. First training provided through video-conference</i>	Q1 2018- Q3 2019	0%	25%
<i>7.3. Training on basic hydrological processes.</i>	Q3 2018- Q3 2018	0%	0%
<i>7.4. Training of ANAM agro-meteorological staff on the use of ARCGIS software for data analysis and production of services.</i>	Q3 2018- Q3 2018	0%	0%
<i>7.5. Training of ANAM staff on the use of sub-seasonal and seasonal outlooks in agro-meteorological advisories.</i>	Q1 2019- Q3 2019	0%	0%
<i>7.6. Joint training of ANAM and DGRE staff on standard operation procedures (SOP) for warning production, dissemination, response and return on experience.</i>	Q3 2018- Q3 2018	0%	0%
<i>7.7. Regional workshops for exchange of good practices among West Africa and DRC CREWS countries.</i>	Q3 2018- Q3 2018	0%	0%

CREWS Output 8: Activities promoting gender equality in all aspects of early warning systems

Project Outputs and Estimated Progress to Date	Output Start & End Date	Progress by Nov 2017	Progress by June 2018
<i>8.1. Identification of specific women requirements during user consultations in rural agro-meteorological pilot zones.</i>	Q3 2017- Q4 2019	40%	40%
<i>8.2. Agro-meteorological products targeted to women taking into account their specific roles in rural communities.</i>	Q3 2018- Q4 2019	0%	0%

7 Funding Spent	CHF 302,000 out of which CHF 30,000 during the current reporting period
8 Changes in Organization and Operating Procedures, Project Viability and Sustainability	The project time frame is being updated <ul style="list-style-type: none"> from January 2017 – December 2019 to July 2017 – December 2020

<p>9 Lessons Learned</p>	<p>The assessments available to date revealed that</p> <ul style="list-style-type: none"> • previous UNDP CIRDA project provided equipment without a proper maintenance plan nor a data management framework. Meteorological and hydrological data is currently collected (automatically and manually) through about 5 different networks and not concentrated in a single server nor assimilated into any forecast; • the World Bank is appraising 2 pipeline investments. The US\$31 million Africa Hydromet Program – Burkina Faso Country Project will support ANAM, DGRE, food security (SAP), civil protection (DGPC) and disaster risk reduction (CONASUR), as a direct continuation and expansion of the CREWS project; while the Water Resource Management project (US\$300 million) will also continue to support hydrological services with about US\$6 million. • While the meteorological service (ANAM) is operating with a reasonable context regarding premises, operation, maintenance, investment and salaries (with staff salaries similar to ASECNA), the hydrological service (DGRE/DEIE) is under-funded, cannot perform its basic mandate, despite availability of some equipment from the UNDP SAP-IC project most hydrological stations are not properly gauged and salaries are insufficient to attract and retain skills on the long term. • The institutional framework, data sharing practices and definition of warning are adequate for institutional collaboration in relation with anticipating impacts of drought and locust infestation; and still inadequate for warning in relation with rapid-onset events.
<p>10 Documents</p>	<ul style="list-style-type: none"> • Project proposal approved by CREWS Steering Committee - pdf • Agro-meteorological requirements, Titao pilot site (Dec 2017) - pdf • Agro-meteorological requirements, Tenado pilot site (Dec 2017) - doc • Agro-meteorological requirements, Niangoloko pilot site (Dec 2017) - pdf • Assessment of observing networks (Oct 2017) - to be validated • Assessment of hydrological capacities (Nov 2017) - to be validated • Report from the COSMO training (March 2018) - doc •