

BACK ON THE MAP

Afghanistan Early Warning System



FACTSHEET - NOVEMBER 2018

NUMBERS AT A GLANCE

 **24/7**

operation

new automated weather information system

 **81%**

accuracy

alerting public to extreme weather events

 **68**

personnel

trained 286 days (total) in specialized competencies

 **27 000**

subscribers

for AMD and ACAA trilingual web and Facebook pages

 **2016**
2019

project period

implemented by WMO

US\$ 2,354,850
funds provided by USAID

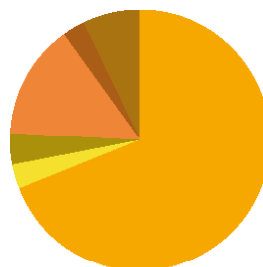
US\$ 1,245,000
contributions provided by TSMS

EFFECTS OF HYDROMETEOROLOGICAL DISASTERS

15,000 deaths
between 1980 and 2015

6 million people
affected

US\$ 400 million
in economic losses



- 65% Drought
- 3% Epidemics
- 4% Extreme temperatures
- 14% Flashfloods & floods
- 3% Landslides
- 7% Storms

KEY DEVELOPMENTS



9 weather stations
countrywide coverage



RECONNECTING TO THE WORLD

- High-end satellite systems
- Numerical weather prediction systems
- World-class facilities
- Investment in local talent
- Re-structuring of AMD
- Sustainability rooted in local commitment

FORECASTING DISASTERS

“AMD’s warnings have a direct effect on how people plan their days. We do get a good response when we use AMD warnings with these trilingual messages reaching over 200,000 people in just a few hours.”

Kathy Whitehead, Head of Online I TOLONews
Kabul, Afghanistan



EWS PROCESS



CONTEXT

Until the introduction of the EWS Project in 2013, the lack of early warning weather forecasting services and alerts put Afghanistan and its people at serious risk of life-threatening hydrometeorological disasters that could have been prevented or considerably mitigated.

Photo: flooded agricultural land



OBSERVATION CENTRES

Nine AMD observation centres (six automated + three manual) were operationalized to assure countrywide coverage through satellite data captured every five minutes.

Photo: one of the observation stations



DATA SHARING

AMD was capacitated technologically to collect, archive and share national and global hydrometeorological information using a new database and servers, with quality control and cloud backup.

Photo: forecasters using new technological installations



“I’m looking forward to using what we’ve learned to do our work according to international standards.”

Laila Amin, Afghanistan Meteorological Department



FORECASTERS TRAINED

Investment in knowledge and competency training assembled a skilled team of 68 hydrometeorological observers and forecasters (including nine women), as well as many other technical staff in support functions. This was achieved through close collaboration between WMO and TSMS in support of AMD.

The cadre of professional staff now running the EWS operations covers key functions including data collection, diagnostics and processing, nowcasting, issuance and dissemination of warnings and provision of critical information for disaster alerts.

Photo: one of the training sessions



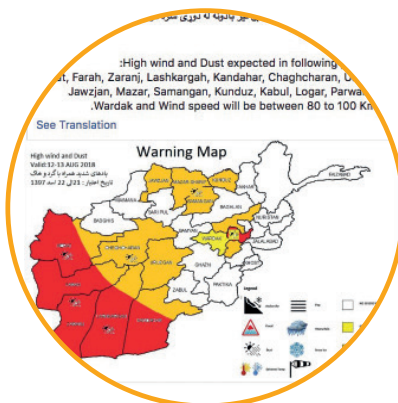
WARNINGS BROADCAST

Thanks to this collaboration between AMD, TSMS and WMO, and vital funding support from USAID/OFDA, the Afghan authorities and general population now have 24/7 access to reliable weather information. They can anticipate and prepare for adverse weather that may trigger life-threatening situations or disaster scenarios, such as floods and flash floods.

Warnings are broadcast through the AMD public website, disseminated via news bulletins and emails and picked up by TV stations and social media sites.

Work is ongoing to establish a disaster hotline for coordination in disaster situations through Common Alerting Protocols. This will strengthen response mechanisms among different government entities, including the Afghanistan Disaster Management Authority, the Ministry of Agriculture and the Water Resources Authority, as well as with international networks such as the South Asia Flash Flood Guidance System.

Photos: broadcasts of forecasts and warnings on website and Facebook





PROJECT ACHIEVEMENTS

STRENGTHENED CAPACITY THROUGH AMD LOCAL AREA NETWORK AND TRAINING

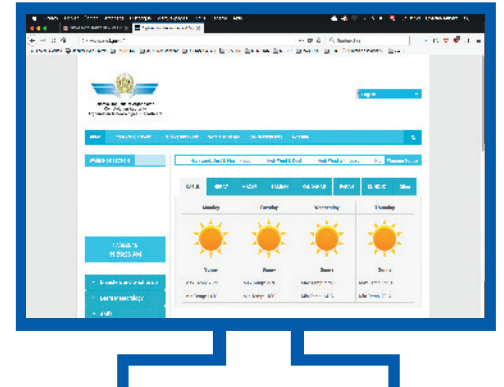
- ✓ AMD technical capacity enabled through WMO Global Telecommunications System
- ✓ networks developed and IT facilities equipped and installed
- ✓ training by WMO and TSMS of 68+ professional AMD staff, including 9 women, in specialized functions
- ✓ other Afghan personnel trained in meteorological and disaster-related services

ACCESSIBLE WEBSITE FOR PUBLIC WEATHER INFORMATION

- ✓ at www.amd.gov.af (in Dari, Pashto and English languages)
- ✓ public access to daily forecasts and three-day overviews
- ✓ warnings 12+ hours ahead of severe weather events
- ✓ easy-to-read maps flag potential disasters
- ✓ quick links to social media (Facebook posts)
- ✓ immediate information for TV weather broadcasts
- ✓ wider overall public outreach than ever before

NEW NATIONAL WEATHER FORECASTING SYSTEM

- ✓ 24/7 round-the-clock operation
- ✓ satellite-generated meteorological data provide reliable public weather information
- ✓ early warnings of severe weather events
- ✓ real-time alert guidance (common alerting protocols) for coordination of disaster response



PROJECT SUPPORT

FUNDING: US\$ 2,354,850
by U.S. Agency for International Development/
Office of U.S. Foreign Disaster Assistance (USAID/OFDA)

IN-KIND: US\$ 1,245,000
by Turkish State Meteorological Service (TSMS)

12/24 hour



Daily weather forecasts and early warnings easily accessible to public through trilingual website

www.amd.gov.af

SUSTAINING THE MOMENTUM

Significant progress has been made. AMD has achieved a high percentage (81% over a 12-month period) of accurate warnings about extreme weather events, offering invaluable services to authorities and public alike. To date, many staff have been trained and the government is ready to engage further in the project.

Ongoing steps to sustain the Afghanistan EWS Project include assuring funding and reliable maintenance of infrastructures and equipment, as well as continuing collaborative efforts by WMO, Kabul University trainers and TSMS to provide training for AMD staff.

Further developing AMD's capacity, especially for disaster prevention alerts and wider national and international collaboration with partners, is a long-term process: it is therefore vital for the international community to remain vested in this project.

For more details, see: <https://public.wmo.int/en/projects/Afghanistan-EWS>