CREWS Cambodia and Lao PDR

Reinforcing the capacities of meteorological and hydrological services and enhancing the early warning systems in Cambodia and Lao People's Democratic Republic

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WMO

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Climate Risks & Early Warning Systems (CREWS)

CREWS Members

Australia, Finland, France (Chair), Germany, Luxembourg, Netherlands, Switzerland, United Kingdom

CREWS Observers

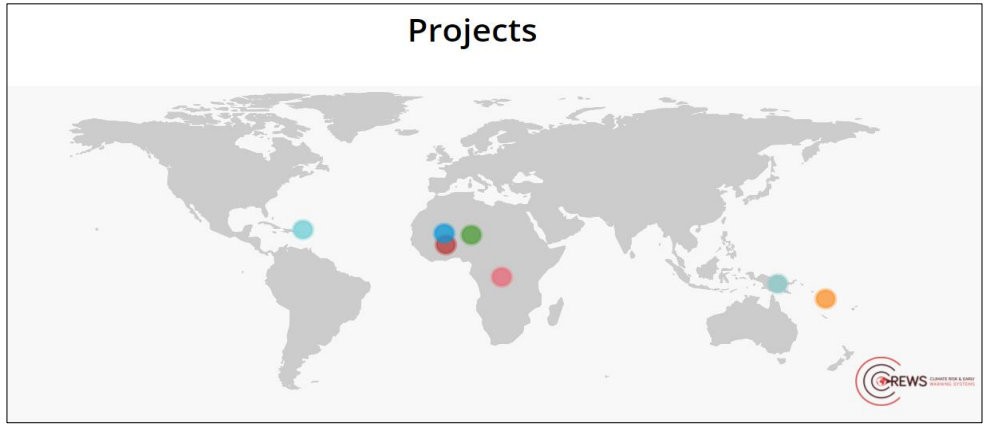
Canada, Japan, Mexico, New Zealand, Norway

European Commission, ACP, UNDP, USAID

CREWS Implementing Partners

WORLD METEOROLOGICAL ORGANIZATION, THE WORLD BANK IBRD • IDA | WORLD BANK GROUP, GFDRR Global Facility for Disaster Reduction and Recovery, UNDRR UN Office for Disaster Risk Reduction

The CREWS initiative supports LDCs and SIDS to significantly increase the capacity to generate and communicate effective, impact-based, multi-hazard, gender-informed early warnings to protect lives, livelihoods, and assets.



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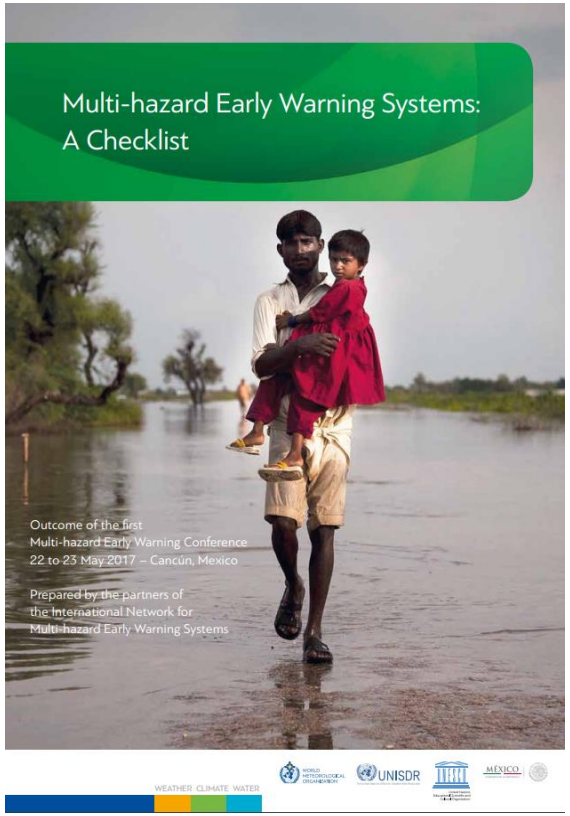
Addressing gaps and needs of E2E people-centered EWS



Disaster risk knowledge

- Are key hazards and related threats identified?
- Are exposure, vulnerabilities, capacities and risks assessed?
- Are roles and responsibilities of stakeholders identified?
- Is risk information consolidated?

Detection, monitoring, analysis and forecasting of the hazards and possible consequences

- Are there monitoring systems in place?
- Are there forecasting and warning services in place?
- Are there institutional mechanisms in place?

Warning dissemination and communication

- Are organizational and decision-making processes in place and operational?
- Are communication systems and equipment in place and operational?
- Are impact-based early warnings communicated effectively to prompt action by target groups?

Preparedness and response capabilities

- Are disaster preparedness measures, including response plans, developed and operational?
- Are public awareness and education campaigns conducted?
- Are public awareness and response tested and evaluated?

Figure 3. Four elements of end-to-end, people-centred early warning systems

Project Proposal: Developed through review of national documents, reports and assessments of country capacities, aligning and leveraging with past, current and future initiatives and consultation with in-country stakeholders, NMHS, NDMO's and UNCT and Experts

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Project Overview

Project Goal

CREWS Cambodia and Lao PDR aims to reduce the human and socioeconomic impact caused by hydromet hazards such as floods, droughts, landslides and severe weather, through increased access to early warnings and risk information

CREWS Cambodia and Lao PDR

Project Funding: USD 5.5m

Timeframe: July 2021 – July 2025

Project Objective

To enhance the capacities of national and regional stakeholders and institutions to provide hydromet, early action, and response services to ensure that vulnerable populations in Cambodia and Lao PDR are reached through effective and inclusive risk-informed early warning services

Project Outcomes

Structured around 5 main Outcomes designed to strengthen different pillars of National Early Warning Systems

Project Partners / Beneficiaries

Lao PDR: DMH, MONRE, NDPCC, MoLSW

Cambodia: DOM, DHRW, MOWRAM, NCDM

Ministry of Natural Resources and Environment

Ministry of Labour and Social Welfare

Ministry of Water Resources and Meteorology

National Committee for Disaster Management

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Project Structure

Outcomes are designed to strengthen each of the four elements of end-to-end people-centred national multi-hazard early warning systems within Cambodia and Lao PDR

1	2	3	4	5
Strengthened governance mechanism and enabling environment created for national and regional stakeholders	Enhanced capacity of NMHSs to provide forecasts and warnings	NMHS's Information and communication technology and capacities strengthened	Enhanced preparedness and response capability	Improved integration of gender and vulnerable groups across the EW-EA value chain

Disaster risk knowledge

Detection, monitoring, analysis and forecasting of the hazards and possible consequences

Warning dissemination and communication

Preparedness and response capabilities

Four elements

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Outcome 1

Outcome 1	**Strengthened governance mechanism and enabling environment created for national and regional stakeholders**
Output 1.1	Improve coordination and communication between MHEWS stakeholders, including the development of long-term service delivery strategies and development/action plans

Focus Areas / Activities

1	Support the NMHSs with the update and development of National Strategic Plans and relevant legislative documents
2	User Interface Platforms set up (structured forums for users, researchers and climate service providers to interact to ensure that user needs are addressed)
3	Assessment of national observation network and investment needs
4	DRR / preparedness and response coordination mechanisms functioning effectively
5	Promote integrated water resources management
6	Support drought monitoring and forecasting

Outcome 2

Outcome 2	**Enhanced capacity of NMHSs to provide forecasts and warnings**
Output 2.1	Increased access and use of regional/national data products, tools and services
Output 2.2	Risk information to guide early warning systems and climate and weather service developed and made accessible

Focus Areas / Activities

1	Strengthen NMHSs capacity in forecasting of severe weather, flash floods and landslides (SeAFFGS and SWFP-SeA)
2	Establish a visualisation platform for flood and drought monitoring and warning
3	Implement an integrated water resources assessment tool
4	Strengthen capacities in seasonal and sub-seasonal forecasts
5	Capacity building in Impact-Based Forecast and Warning Services (IBFWS)
6	Review, develop new and/or update existing flood and drought risk maps and dynamic risk analytics capacities
7	Develop/ enhance vulnerability index and profiling capacities for floods and droughts to inform risk assessment and EA
8	Enhance capacities for post-disaster impact assessment and disaster loss data management, reporting and sharing

Outcome 3

Outcome 3	**NMHS's Information and communication technology and capacities strengthened**
Output 3.1	Enhanced NMHSs' IT capacity to access, exchange and deliver meteorological, hydrological, and associated environmental information and services

Focus Areas / Activities

1	Assessment report outlining IT requirements for NMHSs
2	Develop roadmap targeting IT capacity development and sustainability aspects
3	Improve accessibility of forecast products to the public
4	Support countries in using a Common Alerting Protocol (CAP)

Outcome 4

Outcome 4	**Enhanced preparedness and response capability**
Output 4.1	Strengthened and accessible preparedness and response plans with operational procedures that outline early warning dissemination processes
Output 4.2	Establish mechanisms considering local and indigenous knowledge to ensure warning communication and dissemination systems reach local communities, including seasonal populations and those in remote locations

Focus Areas / Activities

1	Analysis of existing hydromet warnings and climatological analysis of severe events
2	Collaboration between NMHSs and DRM authorities to harmonize multi-risk information and warnings
3	Preparedness and response plans with operational procedures outlining early warning dissemination processes
4	Design and develop early action protocols and triggers for identification of financing mechanisms for selected hazards
5	Scalability frameworks for flood and drought events
6	Strengthen community-based flood management
7	Monitoring and evaluation tool for user-response to EWS chain

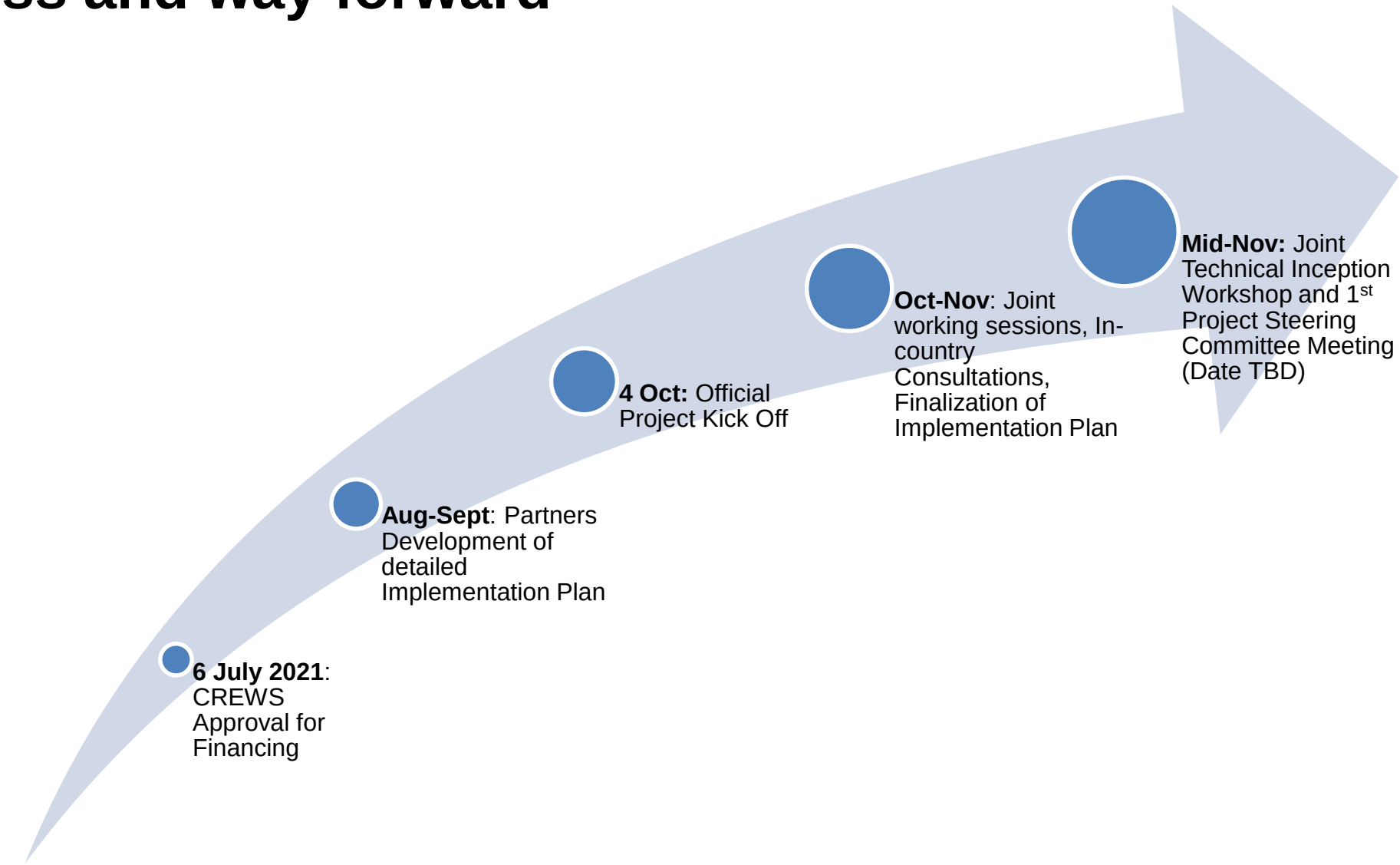
Project Structure

Outcome 5	**Improved integration of gender and vulnerable groups across the EW-EA value chain**
Output 5.1	Gender-sensitive and vulnerable people inclusive (incl. those with disabilities, children, migrants, marginalized minorities, etc.) guidance and capacity building programmes provided

Focus Areas / Activities

1	Develop Gender-responsive risk communication plans, early action protocols and response plans
2	Develop/ Establish Guidance on mainstreaming gender and disability in MHEWS

Process and way forward



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Thank You !

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