

## CREWS PROJECT STATUS REPORT (January - December 2024)

Secti	ion 1. General Proj	ect Information			
1.	Project title	Strengthening Risk informed planning, Hydro-Meteorological and Early Warning Services in Malawi	2.	Project reference	CREWS/CProj/14/Malawi
3.	Lead Implementing Partner of the project	World Bank	4.	Other Implementing Partners involved in the project	WMO
5.	Operational Partners involved in the project	<ul> <li>Department of Climate Change and Meteorological Services (DCCMS),</li> <li>Department of Water Resources (DWR),</li> <li>Department of Disaster Management Affairs (DoDMA)</li> <li>District Council</li> <li>IFRC, Red Cross Climate Center and National Societies (Malawi Red Cross Society)</li> <li>International Research Institute for Climate and Society (IRI) of initiative of Columbia University</li> </ul>	6.	Project Duration/Timeframe (from year – to year)	2022-2026
7.	Current year of implementation	3	8.	Total Funding Approved by Steering Committee (in US dollars), including fees	\$3,000,000 WB: \$1,400,000 (+\$140,000 fees) WMO: \$1,292,035 (+167,965 fees)
9.	Reporting focal point(s) from Implementing Partners	WB: Arati Belle ( <u>abelle@)</u> WMO: Joshua Ngaina ( <u>ing</u>	<u>worlo</u> gaina	<u>lbank.org</u> ) i@wmo.int)	

### Section 2. Overall rating



The project is having good implementation progress. End-of project targets achievement or cumulative financial delivery are fully on track.

Interpretation of color coding

Medium	The project is having moderate progress. Implementation is facing issues. End-of project targets achievement or cumulative financial delivery are off track. Adaptive management should be undertaken immediately.
Low	The project is having less than moderate or poor progress. Implementation is not proceeding as planned facing major issues. End-of project targets achievement or cumulative financial delivery are severely off track. Requires remedial attention where restructuring may be necessary.

	Rating	Comments on delays
Rate of delivery		
Rate of expenditure	From WB side: High From a total of \$1.4 million: Disbursed: \$631,184.4 Committed: \$113,688 From WMO side: High From a total of \$1,292,035 Disbursed: \$498,592 Committed: \$399,270	

## Section 3. Project Performance Progress

10. Progress	What has been achieved during this reporting period? – Please list by project outcome in bullet							
summary	points: progress and main achievements							
	A. <u>WB Activities</u>							
	<ul> <li>Technical assistance for the deployment of the ODSS which integrates hydrological data for flood risk information; support for design of hydrological monitoring infrastructure network</li> </ul>							
	<ul> <li>Development of the Malawi Hydromet Roadmap (including review and consultations with Govt.)</li> </ul>							
	<ul> <li>Completion of Assessments on Disaster preparedness and contribution to the conceptualization of the National Emergency Preparedness and Response Plan.</li> <li>Technical assistance for the Blantyre Flood Risk Assessment</li> </ul>							
	<ul> <li>Technical inputs to support adoption of Risk Financing Instruments including the Malawi Contingent Emergency Response Project, the first in the World Bank to be approved.</li> </ul>							
	• Contribution to the modelling and analysis of flood induced landslides at Mt Soche and development of recommendations.							
	<ul> <li>Capacity building and TA to DCCMS and DoWR on instrumentation, procurement of hydromet infrastructure, data management systems etc.</li> </ul>							
	• Support for the Malawi Disaster and Climate Risk Symposium (a joint initiative with GOM)							
	CREWS resources leverage substantial investment at country and regional level. Since the approval							

of the CREWS initiative, the World Bank's Regional Program for Climate Resilience 2 (Malawi) has
become effective (May 2024). A detailed consultation with Govt of Malawi is ongoing to
strengthen the alignment of CREWS activities along with the investments planned under RCRP2
and to enhance sustainability of EW related investment in related projects (MWASIP, MRDRMP)
which are essential for improved disaster risk management and early warning in the country. An
update to the proposed activities is being developed and will be available by April.
Details regarding the Hydromet Roadmap for Malawi: Significant achievements within this sub-
component include the development of the Draft Strengthened and Fit for Purpose Meteorological
and Early Warning Services in Malawi Roadmap, an analysis of the current operational and human
capacity of the <b>Department of Climate Change and Meteorological Services (DCCMS)</b> in Malawi,
and recommendations for strengthening meteorological service provision in the country. This
process entailed:
1. Benchmark Survey Questionnaire: Completed and submitted to DCCMS to gather
baseline information.
2. Online Interactions: Conducted a series of online discussions with DCCMS to clarify
survey responses and obtain further details.
3. In-Person Meetings: Held detailed discussions with DCCMS during the team mission to
Biantyre in October 2024 to further understand needs and challenges.
4. Uratt Koadmap: Developed and submitted the draft roadmap to DCCMS in November
2024, incorporating feedback and input from key stakeholders.
<b>Ubjectives of the Roadmap: Assess Current Infrastructure and Services:</b> Review DCCMS's existing
meteorological and early warning systems, identifying gaps and challenges and Provide a Strategic
Framework: Outline recommendations for enhancing meteorological and early warning services in
both the short and long term.
Expected Outcomes for DCCMS:
The used as a single to improve DCCMC/s shill the
The roadmap aims to improve DCCMS's ability to:
Broduce Manage and Communicate Date: Enhance canabilities to produce and
Produce, Manage, and Communicate Data: Enhance capabilities to produce and     ammunicate passurate meteorological data for stalkabelders and end work
communicate accurate meteorological data for stakeholders can access interpret and
Improve Access and Offization of Data: Ensure stakenoiders can access, interpret, and use mateorological information offectively
Enhance Warning Systems: Improve the discomination of early warnings for public
• Emance warning systems. Improve the dissemination of early warnings for public safety and economic security.
Salety and economic security.
Support Sustainable Development: Provide data for informed planning, investment     desicions, and climate adaptation strategies
decisions, and chinate adaptation strategies.
Key Recommendations in the Roadman
key keconimentations in the Kodulinap.
1 Sector-Specific Requirements
a. Agriculture and Food Security: Data for extension services
h Disaster Risk Management (DRM): Data for early warning and preparedness
c. <b>Transport</b> : Data and forecasts for aviation safety and transport economics
d. Water Resources: Data for irrigation and water conservation.
2. Modernization Plan:
a. 5-Year Plan: Focuses on long-term modernization with three components:
i. Enhancing service delivery systems.
ii. Strengthening institutional capacity (Met Law, data sharing, quality
management systems).
iii. Modernizing observation, ICT, and forecasting infrastructure.
b. 2-Year High Priority Plan: Focused on fast-tracking improvements with key
activities, such as:
i. Technical training and capacity building.
ii. Upgrading observation networks.
iii. Acquiring new equipment for modernization.
iv. Improving forecasting and service delivery.

Investment and Budget:
<ul> <li>Total Cost for 2-Year Plan: US\$ 4.8 million, including US\$ 733k for training and capacity building.</li> </ul>
• <b>Operation &amp; Maintenance (O&amp;M)</b> : An estimated US\$ 1 million is required annually to ensure sustainability, though this is not included in the total project cost.
DCCMS Status and Needs:
<ul> <li>Visibility and Mandate: DCCMS needs enhanced visibility to carry out its legally mandated responsibilities.</li> <li>Capacity Building Across the Hydromet Value Chain: There is a need to strengthen infrastructure, ICT systems, data management, forecasting, and service delivery.</li> <li>Sustainability Focus: A commitment to long-term operations and maintenance (O&amp;M) and building human capacity is essential.</li> </ul>
Presentation at the DRM Symposium (December 9-11, 2024):
The roadmap was presented during the Disaster Risk Management (DRM) Symposium, in a session on improving early warning systems and disaster preparedness. Key points included:
<ul> <li>Integration of climate change projections into risk assessments.</li> <li>Enhancement of hydromet systems to improve resilience and early warning capacities.</li> <li>Building capacity for data sharing, risk communication, and informed decision-making to improve climate adaptation and disaster risk reduction strategies at the community and government levels.</li> </ul>
Hydrological Information Systems activities:
<ul> <li>Technical assistance supported the assessment of hydrology and provided training on the hydrological information system linked to the Operational Data Support System (ODSS), including Sub-Component 2.2: Strengthening Flood and Drought Risk Management in the Shire Basin under the MRDRMP. This included a review and contribution to assessments of hydrological networks.</li> </ul>
<ul> <li>A consultant provided a review and technical input for the Terms of Reference (TORs), including the design review and rehabilitation supervision of hydrological monitoring stations, as well as the installation of monitoring equipment.</li> </ul>
• A technical mission took place between July 29 and August 2, 2024. The mission aimed to:
<ul> <li>Review ongoing hydrometeorological (hydromet) activities.</li> <li>Assess system functionality.</li> <li>Identify points of failure for systems not operating optimally.</li> <li>Recommend short-term and medium-term measures for improvement within the MRDRMP and RCSP-II projects.</li> </ul>
<ul> <li>During the mission, the team engaged with officials from DCCMS, DWR, DoDDA, and NWRA—agencies responsible for data generation, analysis, forecasting, and dissemination of hydromet information. The focus was specifically on hydromet systems, including manual observations and database management.</li> </ul>
• The team requested detailed information on the status of hydromet systems, including metadata, system functionality, and operational status.
• Personal interactions with agency officials helped identify significant system gaps.
• A brief field visit to a DWR-operated station was conducted.

<ul> <li>Additionally, the team requested information on the legal frameworks, mandates, and data-sharing policies related to hydromet systems, some of which are included in an annexure for further consolidation.</li> </ul>
The next step is to support the development of a Strategic plan for DCCMS including a cost-benefit analysis aimed at enhancing the financial support provided for O&M.
B. WMO Activities
<ul> <li>CREWS Outcome 1: National and local multi-hazard early warning systems prioritized and funded</li> <li>The National Framework for Water and Climate Services (NFWCS) finalised and launched by DCCMS and DWR in August 2024 and now at implementation stage (Step 5)</li> <li>Contribution to Disaster prepared planning (development of National emergency planning and response framework) – draft prepared</li> <li>Initial drafting national forecast and warning dissemination strategy through technical support from the MRCS</li> <li>Launch of the NFWCS for Malawi which is designed to enhance the provision and utilization of hydrometeorological services across various sectors in Malawi</li> <li>Revamping and strengthening of Village Civil Protection Committees (VCPCs) teams in Zomba and Mzuzu to help manage disaster risk as well as responsible for coordinating disaster risk management at the village level including orientation of Wards Civil Protection Committees (WCPCs) with focus on clear early warning teams and inclusion of women, youths and disability representation</li> <li>Initial discussion on possibility to start drafting of possible scaling up of activities through the GCF-SAP CREWS scaling up framework</li> </ul>
CREWS Outcome 2: Improved early warning service delivery and accessibility by national and regional institutions
<ul> <li>Forecasting and warning services improved for multi hazards such as Flood, landslides, cyclones, intense rainfall. Drought, dry spells. Mwere winds</li> </ul>
<ul> <li>The latest versions of the ENACTS datasets, Climate Data Tool (CDT), AWS Data Tool (ADT), and Maprooms are installed and operational at DCCMS, along with the installation and configuration of PyCPT. DCCMS has also received capacity building the tools as well development of a robust model for seasonal and sub-seasonal forecasting using PyCPT.</li> </ul>
<ul> <li>The IRI AWS Data Tool (ADT), the latest version of the Climate Data Tool (CDT), and the easy-to-use Python interface to the Climate Predictability Tool (CPT) or PyCPT, have been installed and configured, with updates also made to the DCCMS Data Library and Maprooms.</li> <li>Updated protocols and SOPs based on risk assessment findings in Zomba and Mzuzu including support to development of community contingency plans</li> <li>A robust model for seasonal and sub-seasonal forecasting (PyCPT) installed and operational at DCCMS</li> </ul>
<ul> <li>DCCMS's freely accessible data library and suite of Maprooms has been updated to include new products tailored for the agricultural and health sectors</li> <li>Monitoring and forecasting capabilities for various climate related hazards by DCCMS have been</li> </ul>
<ul> <li>developed and improved including adoption of ENACTS tools</li> <li>suite of Maprooms has been updated to include new products tailored for the agricultural and health sectors</li> </ul>
• Design of Early warning bulletin being finalized leveraging on data at global (GPCs) as well as regional centers and national level
<ul> <li>Regular and timely seasonal climate outlook products coproduced through National Climate Outlook Forums</li> <li>Technical support in the development and operationalization of climweb (public website http://www.metmalawi.gov.mw/) at DCCMS</li> </ul>
<ul> <li>Capacity building and technical support to DCCMS on CAP publishing significantly increasing the number of warnings issued CAP alerts by DCCMS disseminated through WMO Severe Weather Information Centre (SWIC) hence enhancing the availability of authoritative warnings and information related to extreme and/or potentially high-impact weather, water, and climate events</li> <li>Update and operationalization of public website (climweb package) at DCCMS thus increasing</li> </ul>

	DCCMS rate of CAP alerts publishing
•	Ongoing stakeholder engagement on the design and development of early warning products to
	Identification of Anticipatory/Early Action at district and community level completed by the
	Malawi Red Cross Society in Mzuzu and Zomba districts
•	Support to development of community contingency plans finalised by MRCS
•	Gender-sensitive risk assessment finalised for Mzuzu and Zomba through identification of risks,
	determination of vulnerabilities, identification of capacities and determination of acceptance levels of Risk
•	Support to the development of community contingency plans for Mzuzu and Zomba
•	Support to generation of downscaled seasonal Climate Outlooks and other early warning
	products such as Agrometeorological bulletins
•	Freely accessible data library and suite of Maprooms at DCCMS including products tailored for different sectors such as DRR, agriculture, and health
C re	REWS Outcome 3: Early warning programmes are driven by people-centered and gender- esponsive principles and promote private sector engagement
•	Through the MRCS, project activities included more than one consultation, activities to
	promote gender equality, and activities/products developer with a people-centered approach
	in each of the two districts leading to;
•	Gender sensitive risk assessment for Zomba and Mzuzu finalised.
٠	Revamp of VCPCs and creation of WCPSs in Zomba and Malawi with focus to strengthen early
	warning teams and inclusion of women, youths and disability
•	Mainstreamed gender and child sensitive approaches to the NFWCS in Malawi
•	Survey and focused group discussions held at WVCPCs Q3 and Q4 of 2024 by MRCS with community representatives (Users)
•	In January and February 2024, a three-day training of trainers (ToT) with 10 DCCMS staff on
	climate basics and Maprooms for its users was implemented, followed by a four-day training
	by the trained DCCMS staff with 28 users on climate basics and Maprooms, under the
	supervision of the IRI for quality control
•	DCCMS supported to participate in the regional Climate Outlook Foriums (RCOFS) and hold
	National climate outlook forums (NCOF) which brings experts and end users to coproduce of
	downscaled seasonal climate at district levels
•	Training of 10 DCCMS staff as ToT on climate basics, the Automatic Weather Station Data Tool
	(ADT), the Climate Data Tool (CDT), the Data Library and Maprooms.
•	Training of 28 users on climate basics and Maprooms by trained DCCMS staff under the supervision of the IRI for quality control
•	Support provided by MRCS to develop a gender sensitive and inclusive community based EWS
	as one of the main objective
•	Gender-sensitive risk assessment for targeted districts of Mzuzu and Zomba
•	Discussions initiated with through MRCS to coordinate engagement of business members in
	Zomba and Mzuzu. This to include potential training on search and rescue operations and the
	developed early warning systems, demonstrating the private sector's contribution to EWS

#### 11. Rating of progress towards achieving CREWS Indicators

Complete the following for the selected CREWS indicators in the project logical framework, at both outcome and output level. Use the unit of measure and disaggregation level defined for each indicator<sup>1</sup> and provide a progress summary justification of the indicator. This summary should state the evidence on the indicator's progress and describe in detail what has been achieved and performed focusing on results.

CREWS Outcome 1: National and local multi-hazard early warning systems prioritized and funded

<sup>1</sup> CREWS Results Framework.

Indicator	Baseline level	End-of project target level	Target for reporting period	Progress by (Set as a percentage)	Progress summary justification as of	Progress rating <sup>2</sup>
# of LDCs and SIDS with national investment plans and budgets prioritizing multi- hazard early warning programmes Output 1.1 A country support and sustain p	0 and/or reg	4 ion has de	2 eveloped or s	50%	<ul> <li>Roadmap for MW developed for DCCMS. Technical support and training provided on hydrology for development of decision support system.</li> <li>The National Framework for Water and Climate Services (NFWCS) finalised and launched by DCCMS and DWR in August 2024 and now at implementation stage (Step 5)</li> </ul>	orks to
# of national plans, strategies and	2	5	2	70%	<ul> <li>Contribution to Disaster prepared planning (development of National emergency planning and response</li> </ul>	
legislations on early warnings approved and/or					<ul> <li>framework) – draft prepared</li> <li>Initial drafting by the MRCS of national forecast and warning dissemination strategy</li> </ul>	
# of coordination mechanisms strengthened or established to enhance collaboration on early warning among national or regional institutions	0	3	1	60%	<ul> <li>Malawi as part of RCRP – linking countries through SADC component of RCRP1 and well AU component of RCRP1 and well AU component of RCRP2. TORs have been developed</li> <li>Launch of the NFWCS for Malawi which is designed to enhance the provision and utilization of hydrometeorological services across various sectors in Malawi</li> <li>Revamping and strengthening of Village Civil Protection Committees (VCPCs) teams in Zomba and Mzuzu to help manage disaster risk as well as responsible for coordinating disaster risk management at the village level including orientation of Wards Civil Protection Committees (WCPCs) with focus on clear early warning teams and inclusion of women, youths and disability representation</li> </ul>	
Output 1.2 Multi-haza systems in a country of	ard needs, g or region ar	aps and pi e driven b	iority assess y CREWS fina	ments, analyse ancing	es and related investment plans for earl	y warning
# of multi-hazard assessments, analyses and other mapping of needs, gaps priorities that inform investment requirements on early warning	0	4	3	100%	<ul> <li>Supported development of post-Freddy hydromet performance assessment</li> <li>Support of post Freddy EP&amp;R assessment</li> <li>Support development of the National and Blantyre Multi Hazard Risk Atlas tools.</li> </ul>	

<sup>2</sup> Use scale system provided in Annex X of this document.

# Output 1.3. Partnerships and cooperation frameworks developed for financing and scaling up support to multi-hazard early warning systems

Total volume of					RCRP 2 MW – 240 mn	
					SADC + AU - ~15 mn	
funds leveraged by						
national institutions						
and development						
partners (in USD)						
through CREWS						
investments						
# of IDCs and SIDS	0	1	0	20%	<ul> <li>Initial discussion on possibility to start</li> </ul>	
					drafting of possible scaling up of	
benefiting from GCF					activities through the GCF-SAP CREWS	
resources through					scaling up framework	
the GCF-SAP CREWS						
Scaling Up						
Framework						

CREWS Outcome 2: Improved early warning service delivery and accessibility by national and regional institutions								
Indicator	Baselin e level	End-of projec t target level	Target for reportin g period	Progress by (Set as a percentage )	Progress summary justification as of 	Progress rating		
EW Maturity Index								
# of hazards which pose a risk of life and economic loss for which forecasting and warning services are in place in LDCs and SIDS through CREWS support Output 2.1 Risk info	0 rmation an	5 d tools ge	2 nerated by 0	100% countries to er	<ul> <li>Forecasting and warning services improved for multi hazards such as Flood, landslides, cyclones, intense rainfall, Drought, dry spells, Mwera winds</li> <li>The latest versions of the ENACTS datasets, Climate Data Tool (CDT), AWS Data Tool (ADT), and Maprooms are installed and operational at DCCMS, along with the installation and configuration of PyCPT. DCCMS has also received capacity building the the tools as well development of a robust model for seasonal and sub-seasonal forecasting using PyCPT.</li> <li>Table the delivery of impact-based early war</li> </ul>	nings		
# of risk data tools developed or strengthened to generate early warning products and/or support impact-based warnings.	1	4	3	75%	<ul> <li>ODSS – updating functionality</li> <li>MHRA and Blantyre Flood risk Plan</li> <li>Multi-Hazard Risk Assessment Tool</li> <li>Shire river basin flood management tool</li> <li>The IRI AWS Data Tool (ADT), the latest version of the Climate Data Tool (CDT), and the easy-to-use Python interface to the Climate Predictability Tool (CPT) or PyCPT, have been installed and configured, with updates also made to the DCCMS Data Library and Maprooms.</li> <li>Updated protocols and SOPs based on risk assessment findings in Zomba and Mzuzu including support to development of community contingency plans</li> </ul>			

# Output 2.2. Monitoring, analysis and forecasting of hazards that threaten the country/region are improved and sustained by the countries

				-		
<ul> <li># of functioning monitoring and observation systems established or strengthened per hazard</li> <li># of hazards monitoring,</li> </ul>	0	4	1	30% 20%	<ul> <li>A robust model for seasonal and subseasonal forecasting (PyCPT) installed and operational at DCCMS</li> <li>DCCMS's freely accessible data library and suite of Maprooms has been updated to include new products tailored for the agricultural and health sectors</li> <li>Support to operationalization of ODSS for flood forecasting</li> <li>Contribution to improving these through development of Roadmap for met service</li> </ul>	
analysis and forecasting processes developed or improved					<ul> <li>Monitoring and forecasting capabilities for various climate related hazards by DCCMS have been developed and improved including adoption of ENACTS tools</li> </ul>	
# of forecasting and prediction products developed and/or accessed from WMO Global Prediction Centers (GPCs), Regional Specialized Meteorological Centers (RSMCs) and NMHSs.	0	4	2	50%	<ul> <li>Technical support for Radar meteorology and Numerical weather prediction (expected in the current period)</li> <li>suite of Maprooms has been updated to include new products tailored for the agricultural and health sectors</li> <li>Design of Early warning bulletin being finalized leveraging on data at global (GPCs) as well as regional centers</li> <li>Regular and timely seasonal climate outlook products coproduced through National Climate Outlook Forums</li> <li>Technical support in the development and operationalization of climweb (public website <u>http://www.metmalawi.gov.mw/</u>) at DCCMS</li> </ul>	
Output 2.3 Warning operational procedu	s are comi ires (SOPs)	municated	l by the cou	Intries based o	on common alerting protocols under agreed	d standard
# of warnings issued in CAP format	0	10	33	100%	<ul> <li>Capacity building and technical support to DCCMS on CAP publishing significantly increasing the number of warnings issued</li> </ul>	
# of updated LDCs and SIDS entries in the WMO register of alerting authorities	0	2	1	70%	• CAP alerts by DCCMS disseminated through WMO Severe Weather Information Centre (SWIC) hence enhancing the availability of authoritative warnings and information related to extreme and/or potentially high- impact weather, water, and climate events	
# of communication channels through which warnings are disseminated in the area covered by a prediction service for a given hazard(s)	2	4	2	50%	<ul> <li>Update and operationalization of public website (climweb package) at DCCMS thus increasing DCCMS rate of CAP alerts publishing</li> <li>Design and development of early warning products to be published</li> </ul>	

Output 2.4 Warnings are received, understood, and acted upon based on co-produced preparedness and	response p	plans
by the countries		

# of preparedness and anticipatory action plans or Standard Operating Procedures (SOPs) that are operational and linked to prediction and warning services	0	4	2	70%	<ul> <li>Identification of Anticipatory/Early Action at district and community level completed by the Malawi Red Cross Society in Mzuzu and Zomba districts</li> <li>Support to development of community contingency plans finalised by MRCS</li> <li>Gender-sensitive risk assessment finalised for Mzuzu and Zomba through identification of risks, determination of vulnerabilities, identification of capacities and determination of acceptance levels of Risk</li> <li>Support to the development of community contingency plans for Mzuzu and Zomba</li> </ul>	
# of risk maps, advisory and other warning products that are available and adapted to the user group/developme nt sector needs	4	10	6	70%	<ul> <li>Support for socializing usage of MHRA, ODSS and other tools (technical dissemination through RCRP2 engagement for district level resilience grants program and through the DCRM symposium)</li> <li>Support to generation of downscaled seasonal Climate Outlooks and other early warning products such as Agrometeorological bulletins</li> <li>Freely accessible data library and suite of Maprooms at DCCMS including products tailored for different sectors such as DRR, agriculture, and health</li> </ul>	

CREWS Outcome 3: Early warning programmes are driven by people-centered and gender-responsive principles and promote private sector engagement

Indicator	Baseline level	End-of project target level	Target for reporting period	Progress by  (Set as a percentage)	Progress summary justification as of	Progress rating
Level of integration of people centered and gender responsive approaches <sup>3</sup>	0	4	2	60%	<ul> <li>Through the MRCS, project activities included more than one consultation, activities to promote gender equality, and activities/products developer with a people-centered approach in each of the two districts leading to;</li> <li>Gender sensitive risk assessment for Zomba and Mzuzu finalised.</li> <li>Revamp of VCPCs and creation of WCPSs in Zomba and Malawi with focus to strengthen early warning teams and inclusion of women, youths and disability</li> <li>Mainstreamed gender and child sensitive approaches to the NFWCS in Malawi</li> </ul>	

<sup>&</sup>lt;sup>3</sup> Please grade your project based on the following criteria: **Low**- The project did not perform consultations, activities to promote gender quality, and activities /developed products with a people-centered approach. **Medium**- There is evidence of the project performing at least one consultation, one activity to promote gender equality, and one activity/product developed with a people-centered approach. **High**- There is evidence the project performed more than one consultation, activities to promote gender equality, and activities/products developer with a people-centered approach.

Level of users' engagement satisfaction in the people-centered and gender-responsive approaches/activities <sup>4</sup> Output 3.1 People of diffe and non-native, as well as a	0 rent backgro related institu	5 unds, gende utions have	2 er, youth, oldd co-produced o	60% er persons, peopl climate and weat	<ul> <li>Survey and focused group discussions held at WVCPCs Q3 and Q4 of 2024 by MRCS with community representatives (Users)</li> <li>In January and February 2024, a three-day training of trainers (ToT) with 10 DCCMS staff on climate basics and Maprooms for its users was implemented, followed by a four-day training by the trained DCCMS staff with 28 users on climate basics and Maprooms, under the supervision of the IRI for quality control</li> <li>with disability, poor, marginalized, dister information products tailored to theil</li> </ul>	placed, r needs
# of climate and weather information co-designed to users' needs by group representing vulnerable segments of exposed populations	4	5	3	100%	DCCMS supported to participate in the regional Climate Outlook Foriums (RCOFS) and hold National climate outlook forums (NCOF) which brings experts and end users to coproduce of downscaled seasonal climate at district levels	•
# of women and men trained through X # of capacity building programmes provided by CREWS	0	250	250	100	<ul> <li>Malawi DCRM Symposium (250)</li> <li>Training of 10 DCCMS staff as ToT on climate basics, the Automatic Weather Station Data Tool (ADT), the Climate Data Tool (CDT), the Data Library and Maprooms.</li> <li>Training of 28 users on climate basics and Maprooms by trained DCCMS staff under the supervision of the IRI for quality control</li> </ul>	
# of CREWS projects that have included gender equality in early warning as an objective or outcome	0	1	1	70%	<ul> <li>Support provided by MRCS to develop a gender sensitive and inclusive community based EWS as one of the main objective</li> </ul>	
# of targeted outputs and activities towards gender implemented	0	4	2	100%	<ul> <li>Gender-sensitive risk assessment for targeted districts of Mzuzu and Zomba</li> </ul>	
Output 3.2 Private sector is # of agreements with private sector to co-	s engaged to 0	foster inno	vation and sus	tainability in del	ivery of early warning services     Discussions initiated with through     MRCS to coordinate engagement of	
finance or co-implement EWS initiatives					business members in Zomba and Mzuzu. This to include potential training on search and rescue operations and the developed early warning systems, demonstrating	_

<sup>&</sup>lt;sup>4</sup> This indicator will only be completed when the survey is performed. Please provide the overall result of your survey result based on the following criteria: **Low**- Users do not feel the project considered their opinion, context and experience when developing or strengthening early warning systems. **Medium**- Users feel the project somewhat considered their opinion, context and experience when developing or strengthening early warning systems. **High**- Users feel the project considerably considered their opinion, context and experience when developing or strengthening early warning systems.

		the private sector's contribution to EWS	

#### 12. Risk Status

# Insert ALL the risks identified at project proposal, those from previous/current project status reports, and the new risk identified for the current reporting period. If a risk has been mitigated or is no longer a risk, please specify it in the "current situation" column.

Description of risk	Risk management actions.	Current situation
What is the cumulative risk status of		If mitigation measures have been
the project in comparison to what was	What mitigation measures have	undertaken, what is the current status of the
identified in the project proposal?	been developed to address the risk	risk? If a risk has been mitigated or is no
	status? <u>In bullet points</u>	longer a risk, please specify it here.
Moderate. The CREWS proposal outlined an ambitious agenda given the institutional and capacity weakness as well as underestimated the cost of activities in Malawi (given the current macro-economic situation).	<ul> <li>A detailed consultation with the Government has been completed to align the CREWS WB activities closer to the governments priorities and to investments planned and undertaken under the Regional Program for Climate Resilience 2 that also leverages regional activities (AU and SADC) that would benefit Malawi.</li> <li>A consultative review of CREWS WMO activities carried out in August 2024 and now and a revised plan including priorities activities aligned to government needs being</li> </ul>	<ul> <li>An update to the activities is being developed and will be ready for submission by April 2025. This closer alignment with RCRP2 (as well as key activities of aligned project eg Radar acquisition through MWASIP) will mean that the technical assistance provided by CREWS is embedded fully into the Government institutional strengthening and investment program.</li> <li>A revised activities and plan to be shared by end of Q1 2025</li> </ul>
	finalised.	

#### 13. Knowledge management and social media

Provide a list of knowledge activities / products (when applicable) <u>produced during this reporting period only</u>. Include any links to press releases, videos or communication items and/or social media. Please attach with this report any supporting files, including photos, videos, stories, and other documents.

- 1. Malawi DCRM Symposium December 2024 (agenda attached)
- 2. Multi-Hazard Risk Assessment (document and portal to be made available within two weeks)
- 3. The 2024-2025 Seasonal Climate Outlook: <u>https://www.metmalawi.gov.mw/publications/the-2024-2025-seasonal-climate-outlook/</u>
- 4. District Downscaled Seasonal Forecast for 2024-2025 produced by DCCMS support through NACOF provides localized, downscaled seasonal forecasts tailored for districts across Malawi. By making these forecasts easily accessible, DCCMS aims to support informed planning and resilience in the face of climate variability. <u>https://www.metmalawi.gov.mw/products/district-downscaled-seasonal-forecast-2024-2025/</u>
- 5. Capacity building and technical support to DCCMS on CAP publishing significantly increasing the number of warnings issued CAP alerts by DCCMS disseminated through WMO Severe Weather Information Centre (SWIC) hence enhancing the availability of authoritative warnings and information related to extreme and/or potentially high-impact weather, water, and climate events. <a href="https://www.metmalawi.gov.mw/weather-warnings/">https://www.metmalawi.gov.mw/weather-warnings/</a>
- 6. Update and operationalization of public website (climweb package) at DCCMS thus increasing DCCMS rate of CAP alerts publishing; <a href="https://www.metmalawi.gov.mw/">https://www.metmalawi.gov.mw/</a>
- 7. Support to DCCMS to host the World Meteorological Day themed "At the Frontline of Action" https://www.metmalawi.gov.mw/events/world-meteorological-day-at-the-frontline-of-action/
- Support to DCCMS to host the Annual State of Climate Workshop in Malawi a premier event dedicated to assessing and discussing the impacts of climate change within our nation; <u>https://www.metmalawi.gov.mw/events/annual-state-of-climate-workshop/</u>
- 9. Enhancing National Climate Services (ENACTS) Maproom Stakeholder Training Workshop on ENACTS (Enhancing National Climate Services) Climate Services in Malawi, a pivotal event designed to bridge the gap between climate data and actionable insights for sustainable development. <u>https://www.metmalawi.gov.mw/events/enhancing-national-climate-services-enacts-maproom-stakeholder-training/.</u>

- 10. Data and tools: <u>http://maproom.metmalawi.gov.mw:8091/</u>
- 11. The National Framework for Water and Climate Services (NFWCS) for Malawi (September 2024): <u>https://www.metmalawi.gov.mw/publications/the-national-framework-for-water-and-climate-services-</u> <u>nfwcs-for-malawi/</u>
- 12. Early Warning Systems, Making Malawi More Resilient interview by CREWS Malawi project focal point at DCCMS. <u>https://www.metmalawi.gov.mw/news/early-warning-systems-making-malawi-more-resilient/</u>

#### 14. Partnerships & stakeholder engagement

Optional: If the project worked with any of the following partners <u>in this reporting period</u>, please provide a summary of the partnership activities.

Civil Society Organisations and/or NGOs	•	Malawi Red Cross Society (MRCS)
Academic Institutions	•	The International Research Institute for Climate and Society (IRI), at Columbia Climate School at Columbia University in New York, USA.
Private Sector		

#### 15. Impact stories

Provide a brief summary of any especially interesting and impactful project result that is considered to be worth sharing in the annual report to the Steering Committee, with concrete examples of the contributions to CREWS value propositions (gender-responsive, multiplier, people-centered, promote coherence, solution-oriented, unique) (max 500 words).

#### A. Interesting and impactful project result based on WB activities

The "Charting a Path to a Resilient Malawi: Climate and Disaster Risk Management (DCRM) Symposium" which was supported by CREWS was held in Blantyre City, Malawi, from December 9-11, 2024. This inaugural event, hosted by the Government of Malawi in partnership with the World Bank, provided a platform for discussing the outcomes of resilience related initiatives with a substantial attention on Early Warning, Hydromet services and disaster preparedness. The symposium highlighted Malawi's progress toward resilience, shifting from reactive disaster response to proactive preparedness, risk reduction, and building back better and stronger.

The symposium marked the conclusion of the Malawi Resilience and Disaster Risk Management Project, which played a crucial role in supporting foundational infrastructure investments and focusing on technical and analytical studies in areas such as basin management, hydrometeorological systems, landslide risk analytics, water resource management, urban resilience planning, and disaster preparedness. Over three days, 200 delegates, including representatives from the Government of Malawi, regional and global technical institutions, governments of Mozambique, Sierra Leone, and Nigeria, UN agencies, development partners, academia, civil society, and local leaders, discussed ways to operationalize key technical and analytical products to guide future investments.

The hybrid event featured presentations, expert panels, and open discussions, both in-person and virtually. A significant focus was on embedding resilience into government planning at national and local levels using tools like the Multi-Hazard Risk Assessment. Sessions emphasized integrating national hazard data with localized flood modeling, improving disaster preparedness, and strengthening early warning systems. Key topics included the role of climate change projections in long-term resilience, enhancing hydrometeorological data, improving forecasting accuracy, and modernizing early warning systems for extreme weather events.

The symposium also explored strategies for building resilient cities, using case studies from Lilongwe and Blantyre on integrating flood risk management into urban planning; the Blantyre Urban Structure Plan and Flood Risk Management Plans provide the analytics for resilient urban planning. Particular attention was given to strengthening road resilience standards and managing landslide risks, with insights from recent landslides in Soche and Mulanje Mountains. The visiting delegations shared their experiences, highlighting opportunities for regional collaboration and knowledge exchange.

The symposium underscored the need for better early warning systems at the community level and the integration of disaster and climate risk into district planning and local investment programs. Key takeaways emphasized the importance of translating tools into actionable steps and scaling up initiatives to ensure sustainability beyond project completion. Infrastructure planners and investment developers were encouraged to use this information in ongoing and future projects and investments. The importance of effective coordination across agencies for an integrated disaster risk management and resilience strategy was well emphasized. Attendees expressed satisfaction with the symposium and a demand for future such symposia, as part of a systematic series.

#### B. Interesting and impactful project result based on WMO activities

- A gender-sensitive risk assessment conducted in the cities of Zomba and Mzuzu: A gender-sensitive risk assessment conducted in Zomba and Mzuzu across 10 wards aimed to identify how disasters disproportionately affect various demographic groups, such as women, men, girls, the elderly, and disabled individuals. Key findings revealed that women responded quicker to flood warnings than men, while older women were hesitant to take risks. These insights highlighted the need for gender-sensitive early warning systems and preparedness programs. The assessment adopted an inclusive, bottom-up approach, engaging community leaders, women's groups, and elder associations to disseminate early warning information. This participatory approach enhanced resilience and ensured disaster strategies were more effective and reflective of local realities. The project integrated gender considerations across sectors, promoting coherence in planning and response. It provided solution-oriented recommendations for specialized preparedness programs and tailored early warning messages, making it a unique contribution to disaster risk management by addressing gender disparities often overlooked in traditional approaches.
- Enhanced access to climate data through the Climate Data Library and the introduction of Maprooms. The IRI, in partnership with Malawi's Department of Climate Change and Meteorological Services (DCCMS), implemented technical strengthening and capacity development activities through the CREWS initiative. These efforts aimed to enhance the availability, access, and use of climate data for decision-making and anticipatory risk management. The initiative introduced four key innovations: the Automatic Weather Station Data Tool (ADT), Climate Data Tool (CDT), Data Library, and Maprooms. These tools are gender-responsive, offering tailored climate data for sectors like agriculture and health, supporting gender-sensitive interventions. By making climate data accessible to stakeholders such as agricultural officers and disaster managers, the Maprooms amplify the impact of climate information. Designed to be user-friendly, the tools promote a people-centered approach to climate risk management. They also foster coherence across sectors and offer a solution-oriented approach to overcoming data fragmentation, significantly enhancing Malawi's climate resilience and aligning with CREWS' goals of accessibility, coordination, and effective solutions.
- The National Climate Outlook Forum (NACOF) 2024: The NACOF brought together over 60 stakeholders to enhance the use of climate information across sectors like agriculture, disaster risk management, and service provision. The forum emphasized gender-sensitive approaches, promoted cross-sector collaboration, and co-developed action plans to address climate impacts. It fostered a people-centered approach by incorporating the needs of vulnerable communities and promoted coherence by integrating diverse sectors. Solution-oriented discussions focused on practical responses like crop diversification and climate-smart technologies. This unique, participatory forum strengthened Malawi's climate resilience by providing stakeholders with actionable strategies for 2024-2025.

#### 16. Financial management

Total financing approved (in approved project proposal):	\$3,000,000
Cumulative amount for the reporting period (how much has been used, actual expenditure):	WB Total: of US\$1,400,000, US\$775,233 has been disbursed and US\$ 79,000 is committed.
	WMO Total: of US\$1,292,035, US\$498,592 has been disbursed and US\$ 399,270 is committed.
Percentage used as of (state end date of reporting period):	

#### 17. Supporting documents

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.

Nothing to add. Links provided in section 13 (Knowledge management)

#### 18. Certification on Use of Resources

Each Implementing Partner to provide a certification of the use of resources signed by their authorized representative.

#### 19. Annex. Progress rating

Interpretation of color coding					
Achieved		The indicator has achieved its end-of-project target.			
Partially achieved		The indicator is on track to achieve its end-of-project target.			
Not achieved		The indicator has not had any advancement towards achieving its end-of-project target.			