



ADAPTATION FUND

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Adaptation Fund Board
Project and Programme Review Committee
Thirty-eighth Meeting
Bonn, Germany, 19-23 October 2026

PROPOSAL FOR ARMENIA, GEORGIA, KAZAKHSTAN, MOLDOVA



ADAPTATION FUND

ADAPTATION FUND BOARD SECRETARIAT
TECHNICAL REVIEW OF PROJECT PROPOSAL FOR
"INTEGRATED FLOOD AND DROUGHT EARLY WARNING AND MANAGEMENT IN
EASTERN EUROPE"

Project Title	Integrated Flood and Drought Early Warning and Management in Eastern Europe
Project ID	AF00000580
Category	Regular size project (over \$1 million)
Type	Regional project
Stage	Pre-concept
Country	Regional (Armenia, Georgia, Kazakhstan, Moldova)
Implementing Entity	WMO
Financing Requested	USD 29,645,000.00
Reviewer	Una May Gordon

Co-reviewer(s)

IE Contact Person

Ana Laura Zuanazzi, Moyenda Chaponda, Petra Mutic, Sari Lappi, Valentin Aich

Secretariat's Overall Comment

The project Integrated Flood and Drought Early Warning and Management in Eastern Europe aims to enhance climate resilience and reduce the impacts of droughts and floods across Armenia, Georgia, and Moldova, with Kazakhstan contributing through its experience and supporting role in strengthening regional risk-management capacities. The proposal includes a request for a project formulation grant for US\$33,000. The initial technical review raises some issues, such as the uneven country diagnostics and perspectives, how concrete adaptation measures will be prioritised and the specific communities targeted, the added value of the regional approach, how gender considerations will be addressed, total project cost and PFG request, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Request (CAR) raised in the review.

Country Eligibility

Are all of the participating countries party to the Kyoto Protocol, or the Paris Agreement?

Response: Yes

Secretariat: Yes

Are all of the participating countries developing countries particularly vulnerable to the adverse effects of climate change?

Response: Yes

Secretariat: Yes. All five countries experience climate-related changes from floods and droughts. Armenia and Georgia are highly exposed to increasingly frequent and severe droughts and floods driven by climate change. Strong dependence on climate-sensitive sectors such as agriculture, energy, and water resources heightens their vulnerability to these hazards. Moldova exhibits a comparable pattern of vulnerabilities, with recurrent drought impacts reducing agricultural productivity and increasing rural vulnerability, while floods along its major rivers. Kazakhstan faces similar drought and flood pressures.

Project Eligibility

Have the designated government authorities for the Adaptation Fund from each of the participating countries endorsed the project/programme?

Response: Yes

Secretariat: Yes. As per the Endorsement letters dated: • 11 May 2026 – Armenia • 11 May 2026 – Georgia • 12 June 2026 -Kazakhstan • 1 August 2026 - Moldova

Has the pre-concept provided necessary information on the problem the proposed project/programme is aiming to solve, including both the regional and the country perspective?

Response: Pending

Secretariat: Yes. However further information is needed. The pre-concept provides an overview of the region identifying floods and droughts as issues faced by Armenia, Georgia, Moldova and to a lesser extent, Kazakhstan. However, country perspectives still appear uneven. It is also not entirely clear that Kazakhstan is a beneficiary country and both Moldova and Kazakhstan appear as add-ons. The problem statement is mostly descriptive with no evidence base and could be further strengthened by providing some brief baseline information and presenting the information in a clearer progression. CR1: After the regional climate risk context, please include one brief paragraph for each participating country on risk, sector and populations affected (supported by quantitative evidence e.g. some figures regarding flood/drought frequency, historical event and some contextual information about the stakeholders at the community level, including population affected) and the common systemic barriers/capacity gaps faced by each country. CR1: In addressing the above CR, make it explicitly clear that Kazakhstan is a beneficiary country and not only a knowledge/capacity building partner. CR2: Please number each paragraph throughout the proposal and ensure each paragraph has a sub-heading (similar to the points on page 6) to support ease of reference.

Have the project/programme objectives, components and financing been clearly explained?

Response: Pending

Secretariat: Yes. However further information is needed. The project objectives and components have been explained in substantial detail and are broadly aligned. However, there is some repetition between the objectives and component descriptions. CR3: Please ensure that the project more clearly distinguishes between the overall project objective, expected outcomes, component-level outputs, and activities.

Has the project/programme been justified in terms of how: - it supports concrete adaptation actions? - it builds added value through the regional approach? - it promotes new and innovative solutions to climate change adaptation? - it is cost-effective? - it is consistent with applicable strategies and plans? - it incorporates learning and knowledge management? - it will be developed through a consultative process with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund? - it will take into account sustainability?

Response: Pending

Secretariat: Yes However, further information is needed. The regional pre-concept is partially justified, and it contributes to the thematic area of Disaster risk reduction and early warning systems. Some areas require clarification to further strengthen the pre-concept. CAR2: The pre-concept include concrete adaptation actions

specifically in Component 2, whereby the project will pilot integrated risk mitigation measures, including nature-based solutions (NBS), sustainable land management (SLM), and integrated water resources management (IWRM) practices that reduce both flood and drought risks. Note that improved forecasts and warnings are not, by themselves, concrete adaptation. Please include (i) a simple pathway or sequence of how the proposed Early Warning Systems, climate services and governance activities, will lead to concrete adaptation action and benefits. A high-level statement should be adequate. CR4: Please indicate briefly: i. how these community-level activities (nature-based solution, sustainable land management and integrated water resources management) will be prioritised and if specific communities within the countries will be targeted to apply these measures. If this information is not yet available, please approximate how communities will be prioritised and how many will be targeted per country ii. state that the final site selection may be completed during the concept note stage iii. state in a brief paragraph, the main users, the decisions they will take because of this information, what action is taken and the possible measurable benefits. CR5: Please also provide a rough estimate of the number of people to benefit directly and indirectly, as well as highlight any vulnerable groups. Please also ensure this is elaborated during the concept note stage. CR6: Please include the rationale for the regional approach, particularly what regional cooperation delivers that national projects cannot. For example, what can a joint monitoring system do that a national system cannot do alone? CR7: Regarding innovative approaches, please show how the adaptation technologies proposed are new and innovative by clarifying what is currently being done and what new or improved solutions would support the claim of innovative. Please also briefly state a structured review of existing and ongoing initiatives will be undertaken during concept note development to adequately benchmark the proposed features, confirm additionality and avoid duplication of efforts. CAR3: Please briefly compare the proposed approach with credible alternatives or briefly highlight why this request would provide better results compared to previous investments. CAR4: Regarding consistency with national and regional plans, please confirm if all four countries have national adaptation plans or disaster risk reduction strategies and whether the project aligns to them. Please also briefly highlight any other key national, regional and sub-regional policies and strategies (including sectoral policies) to which the project is aligned. CR8: The pre-concept incorporates learning and knowledge management. Please indicate that a dedicated person. (e.g. Knowledge Management Specialist) will coordinate these activities. CAR5: Under Consultation, please state that for the gender perspective, consultations will be held with stakeholders with gender remit (including a few names of the association and/or the Ministry responsible) CAR6: Please clarify whether any gender focused organisations/agencies or women/youth associations that work on promoting gender equality and youth engagement will be involved. Please specify and ensure that they are integrated in the subsequent concept note. CAR7: Please also indicate how gender considerations will be operationalise in the project design. Please indicate the preliminary actions that will be undertaken to integrate gender in the project design. Please indicate that gender analysis and action plan will inform gender-responsive measures. CAR8: Sustainability has been taken into account. However, the pre-concept should highlight an exit strategy would be developed focusing on ownership, recurrent-cost estimates, operation and maintenance arrangements, budget commitments, staff-retention plans, system ownership and specific post-project responsibilities. Please explain the sustainability bullet point and explain that these would be elaborated at the concept note stage. CR9: Please include a bullet point on duplication of projects as a lesson learned analysis will be important. Briefly explain how the project will adopt lessons from previous projects, specifically the “Integrated Drought Management in Central Asia” which Kazakhstan is a part. CAR9: Please indicate that the project will only use Adaptation Fund’s resources to fully achieve adaptation objectives and outcomes and the project will not rely on external resources to achieve these.

Does the pre-concept briefly explain which organizations would be involved in the proposed regional project/programme at the regional and national/sub-national level, and how coordination would be arranged? Does it explain how national institutions, and when possible, national implementing entities (NIEs) would be involved as partners in the project?

Response: Pending

Secretariat: Yes. However further information is required. In Part III, the pre-concept notes the roles of key project stakeholders such as WMO as IE, GWPO and Regional Water Partnerships and the National Meteorology and Hydrological Services of each participating country as EEs, along with a project board. CR10: Please add that there will be a Project Implementation Unit led by a dedicated project manager who will be supported by specialist consultants in the areas of gender, E&S, M&E and knowledge management/communication) CR11: Please identify the Accredited National Implementing Entities in the participating countries and state how they will be engaged (e.g. participation in the project board).

Resource Availability

Is the requested project / programme funding within the funding windows of the programme for regional projects/programmes?

Response: Cleared

Secretariat: Yes

Are the administrative costs (Implementing Entity Management Fee and Project/ Programme Execution Costs) at or below 10 per cent of the project/programme for implementing entity (IE) fees and at or below 10 per cent of the project/programme cost for the execution costs?

Response: Pending

Secretariat: Yes. However further clarification is needed. The administrative costs for IE and EE are at 10% for IE fee (US\$2,695,000) and 9.1% for the EE fee (US\$2,450,000). The PFG request at pre-concept stage is US\$33,000 which is within the threshold for a PFG at this stage given the total requested. Note there appears to be a discrepancy in the total CR12: Please note that the Total Project Cost is the sum of the Project Components (US\$24,500,000) plus the Project Execution Costs (US\$2,450,000). Therefore, the Total Project Costs should equate to US\$26,950,000. Please revise the Total Project Cost and confirm that the Amount of Financing Requested remains accurate. CR13: In the PFG request, please clarify that the administration for hiring of consultant (US\$500) and WMO HR Support (US\$500) are part of the Implementing Fee. If so, the IE fee would be US\$3000. CR14: The total PFG request equates to US\$32,000 and not US\$33,000. Please amend once CR13 is addressed.

Eligibility of IE

Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?

Response: Cleared

Secretariat: Yes. The Implementing Entity is World Meteorological Organisations (WMO). The accreditation expiration date is 30 October 2027.

PRE-CONCEPT FOR A REGIONAL PROJECT

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project: Integrated Flood and Drought Early Warning and Management in Eastern Europe

Countries: Armenia, Georgia, Kazakhstan, Republic of Moldova

Thematic Focal Area¹: Disaster risk reduction and early warning systems

Type of Implementing Entity: Multilateral Implementing Entity

Implementing Entity: World Meteorological Organization (WMO)

Executing Entities: NMHSs of Armenia, Georgia, Kazakhstan, Republic of Moldova; GWPO and Regional Water Partnerships (CEE, CACENA)

Amount of Financing Requested: 29,645,000 (in U.S Dollars Equivalent)

Project Formulation Grant Request: Yes ☒ No ☐

Amount of Requested financing for PFG: 33,000 (in U.S Dollars Equivalent)

Letters of Endorsement (LOE) signed for all countries: Yes ☒ No ☐

NOTE: LOEs should be signed by the Designated Authority (DA). The signatory DA must be on file with the Adaptation Fund. To find the DA currently on file check this page: <https://www.adaptation-fund.org/apply-funding/designated-authorities>

Stage of Submission:

- ☐ This pre-concept has been submitted before
- ☒ This is the first submission ever of the pre-concept

In case of a resubmission, please indicate the last submission date:

Please note that pre-concept should not exceed 5 pages (in addition to this first cover page)

¹ Thematic areas are: Food security; Disaster risk reduction and early warning systems; Transboundary water management; Innovation in adaptation finance.

Project Background and Context:

1. Regional climate risk context. Armenia, Georgia, Kazakhstan and the Republic of Moldova span diverse geographic and climatic zones. Armenia and Georgia are characterized by mountainous landscapes, steep catchments and rapid elevation gradients, with climates varying considerably over short distances and with altitude. Conditions range from humid subtropical areas along Georgia's Black Sea coast to more continental and high-altitude environments across the Caucasus. The Republic of Moldova is predominantly lower-lying, with plains, rolling hills and river valleys under a temperate continental climate. Kazakhstan extends across a vast continental landmass, from forest-steppe and steppe landscapes in the north through semi-arid areas to extensive arid and desert zones, with major mountain systems in the east and southeast. Across these diverse geographic and climatic settings, all four countries are experiencing the effects of climate change, with rising temperatures and changing precipitation patterns intensifying drought and flood risks.

2. Armenia². Armenia is highly vulnerable to droughts, floods and other hydrometeorological hazards. Average temperature increased by 1.23°C between 1929 and 2016, while annual precipitation declined by about 9% between 1935 and 2016. Temperatures are projected to increase by 1.6°C by 2040, 3.3°C by 2070 and 4.7°C by 2100 (RCP8.5), while precipitation is projected to decline by 2.7%, 5.4% and 8.3%, respectively. Natural hazards caused over USD 1.5 billion in losses between 1994 and 2014. In 2024, extreme rainfall caused major flooding in northern Armenia, resulting in four deaths, over 2,000 evacuations and extensive infrastructure damage. Agriculture, water resources and rural livelihoods are particularly vulnerable, especially among low-income communities. Key gaps include fragmented coordination, limited relevant climate information and data sharing, and insufficient capacity for risk assessment, early warning and local adaptation planning.

3. Georgia³. Georgia is increasingly exposed to droughts, floods and other hydrometeorological hazards. Mean annual temperatures increased by 0.25–0.58°C across most regions between 1956–1985 and 1986–2015 and are projected to rise by 2.1–3.7°C by 2071–2100 (RCP4.5). Heavy-precipitation days have increased, alongside the intensity and duration of droughts. The 2015 Tbilisi flash flood caused 21 deaths and over USD 20 million in damage, while 2023 floods left around 100,000 people in need of livelihood support. Agriculture and water resources are particularly vulnerable, affecting irrigation, energy and water supply, while 41% of the population lives in rural areas. Vulnerable groups include women, children, older persons and persons with disabilities. Key gaps remain in climate-risk assessment and mapping, understanding impacts on water resources and livelihoods, and local planning and adaptive capacity.

4. Kazakhstan⁴. Kazakhstan faces increasing drought, flood and heat risks. Average annual temperature increased by 0.32°C per decade between 1976 and 2021, alongside marked seasonal and regional precipitation shifts. By 2100, high-hazard flood risks may triple and long-duration heatwaves increase six-fold (SSP2-4.5). The 2021 drought affected more than 50% of the country's land area, causing crop losses and livestock deaths, while the 2024 floods displaced 118,000 people. Agriculture, water resources and rural communities are particularly vulnerable. Barriers remain in institutional coordination, locally relevant climate information and data sharing, risk assessment and mapping, early warning and local adaptation capacity.

5. Republic of Moldova⁵. Moldova is highly vulnerable to droughts and floods. Average annual temperature is projected to increase by around 2°C between 2010 and 2040, while surface water flows could decline by 16–20% by 2030 and precipitation become increasingly variable. Seven significant droughts occurred between 2000 and 2023, with the 2007 drought causing around USD 1 billion in losses, while almost 10% of the population lives in high-risk flood zones. Agriculture, water resources and rural communities are particularly vulnerable, especially low-income households and other vulnerable groups. Key barriers include weak central-local coordination, limited local institutional and technical capacity, gaps in climate-risk information and monitoring, and insufficient capacity for early warning, preparedness and integration of adaptation into local planning.

6. Regional project approach. The project brings together Armenia, Georgia, Moldova and Kazakhstan to strengthen regional cooperation and knowledge exchange on drought and flood risk management, while tailoring support to different national capacities and needs. Armenia, Georgia and Moldova will be the primary focus of project support and investment, while Kazakhstan will participate principally as a regional knowledge-sharing and technical cooperation partner. Kazakhstan is already included in the Adaptation Fund's "Integrated Drought Management in Central Asia" proposal, which focuses on strengthening drought management capacities. To ensure complementarity and avoid duplication, the present project will therefore provide more targeted support to Kazakhstan, particularly on flood forecasting and related capacity building, while drawing on Kazakhstan's experience and expertise to support knowledge exchange and capacity development across the participating countries. This differentiated approach will enable all four countries to benefit from regional cooperation while directing project resources primarily towards Armenia, Georgia and Moldova.

7. Regional cooperation and EW4All. Since 2023, National Meteorological and Hydrological Services (NMHSs) of the countries have discussed a regional approach to addressing shared drought and flood monitoring and forecasting challenges

² Republic of Armenia, *Nationally Determined Contribution 2021–2030* (2021) and *National Adaptation Plan 2021–2025* (2021), UNFCCC: [Nationally Determined Contribution 2021–2030](#); [National Adaptation Plan 2021–2025](#).

³ Georgia, *Updated Nationally Determined Contribution* (2021) and *Fourth National Communication of Georgia under the United Nations Framework Convention on Climate Change* (2021): [Updated Nationally Determined Contribution](#); [Fourth National Communication](#).

⁴ Republic of Kazakhstan, *Nationally Determined Contribution 3.0* (2025) and *Eighth National Communication and Fifth Biennial Report* (2022), UNFCCC: [Nationally Determined Contribution 3.0](#); [Eighth National Communication and Fifth Biennial Report](#).

⁵ Republic of Moldova, *Nationally Determined Contribution 3.0* (2025) and *National Climate Change Adaptation Programme until 2030*, UNFCCC: [Nationally Determined Contribution 3.0](#); [National Adaptation Plan / Adaptation Programme](#).

under the UN Early Warnings for All (EW4All) initiative. Building on this foundation, the proposed four-country approach across Armenia, Georgia, Moldova and Kazakhstan brings together differing but complementary experiences and creates opportunities for peer learning, knowledge exchange and adaptation of good practices. The project will move this regional approach from dialogue to implementation by strengthening integrated drought and flood risk management at national and regional levels, including the links between these hazards, land degradation and ecosystem resilience. As a contribution to EW4All, it will strengthen or establish drought and flood Early Warning Systems across the full early warning value chain, risk knowledge; monitoring and forecasting; warning dissemination and communication; and preparedness and response, through improved monitoring and forecasting, interoperable data and risk assessment, effective warning dissemination and community preparedness, and stronger governance and cooperation across regional, national and local levels. Harmonized indicators, interoperable data and coordinated approaches will strengthen national systems through an integrated regional framework.

Project Objectives:

8. Overall Project Objectives. The project aims to enhance climate resilience and reduce the impacts of droughts and floods across the by strengthening integrated flood and drought risk management at national, regional and community levels. Flood and drought risks will be addressed in an integrated manner, while accounting for the distinct characteristics, drivers and management challenges associated with each hazard. The project will strengthen resilient, inclusive and proactive systems for managing these risks through improved early warning, community resilience and regional cooperation.

To achieve this overall objective, the project will pursue three specific objectives, which define the main components of the project. These specific objectives provide the strategic direction for the project and are translated in the results framework below into expected outcomes, component-level outputs and corresponding activities.

9. Specific Objectives and Subsequent Results Framework

1. Enhance Capabilities and Capacities for Monitoring, Forecasting, and Early Warning: Three expected outcomes structure this component. The first strengthens monitoring and risk information through improved observation networks, interoperable data systems and exchange, including WMO Information System 2.0 (WIS 2.0) and the WMO Hydrological Observing System (WHOS), and participatory drought-impact monitoring, including crowd-sourced information. The second strengthens forecasting through improved hydrological modelling and advanced approaches, including AI/ML, the Hydrological Status and Outlook System (HydroSOS) and the WMO Integrated Processing and Prediction System (WIPPS). The third integrates these capabilities into end-to-end multi-hazard EWS, supported by capacity development, knowledge transfer, communities of practice and twinning, including with Kazakhstan.

2. Enhance Community-Level Preparedness and Resilience to Floods and Droughts: Two expected outcomes structure this component. The first strengthens community preparedness and response through contingency planning, early-warning communication and risk-informed investment planning, applying gender-responsive, socially inclusive and locally led approaches. The second strengthens resilience in selected pilot areas through nature-based solutions (NBS), sustainable land management (SLM) and integrated water resources management (IWRM) measures, including guidance for their implementation and scaling.

3. Enhance Governance, Regional Collaboration, and Transboundary Cooperation:

This component will strengthen and institutionalize national, regional and transboundary governance and cooperation. Outputs will strengthen interministerial coordination and policy frameworks, regional and transboundary institutional and data-sharing arrangements, harmonized approaches, and joint monitoring and forecasting, including extension of Drought Management Centre for Southeastern Europe (DMCSEE) to Armenia and Georgia and strengthened engagement of Moldova. Peer learning will support sustained cooperation across countries and shared basins.

10. Cross-cutting objectives. Gender equality and social inclusion, capacity development, knowledge management and learning will be integrated across all components. The cross-cutting component will support project-wide knowledge management, communication, M&E and dissemination of results and lessons learned.

Project Components and Financing:

Project Components	Expected Outcomes	Expected Outputs	Countries	Amount (US\$)
1. Monitoring, Data, and Risk Knowledge Systems	1.1 Harmonised national and regional systems for monitoring and forecasting drought and flood strengthened.	1.1.1: National and regional drought and flood monitoring systems improved and harmonized, with standardized indicators, integrated data aligned with WMO Integrated Global Observing System (WIGOS) and WIS 2.0 frameworks, including interoperable platforms (WHOS).	All	9,000,000
	1.2 Sustained mechanisms for flood and drought risk assessments as well as drought impact monitoring established.	1.1.2: National and regional forecasting capabilities for drought and flood strengthened, including subseasonal-to-seasonal forecasting and integrating HydroSOS and the integration of AI/ML-based modelling tools and related data management compliant with WIPPS.	All	
	1.3 Operational mechanisms for information sharing and timely dissemination of early warnings on floods and	1.2.1: Baseline drought and flood risk assessments conducted across all participating countries to establish reference conditions for future monitoring and evaluation.	All	
		1.2.2: A sustained mechanism for flood and drought risk	All	

	drought strengthened/established.	assessments established and institutionalized, including protocols, workflows, and governance arrangements.		
		1.2.3: National drought impact monitoring systems established or enhanced, including the establishment of crowdsourcing data and community-based reporting mechanisms.	All	
		1.3.1: Operational information-sharing and early-warning dissemination mechanisms for droughts and floods strengthened or established incl. national drought bulletins, also with focus on last mile and stakeholder-oriented communication products.	All	
2. Response Capacity and Risk Mitigation Systems	2.1 Community-level preparedness and response capacity for flood and drought strengthened and demonstrated, linking regional, national, and local levels. 2.2 Integrated flood and drought risk mitigation and resilience measures implemented in pilot areas, including nature-based solutions (NBS) and sustainable land (SLM) and integrated water resources management (IWRM) practices.	2.1.1: Community preparedness and contingency plans for floods and droughts developed and aligned with national/regional frameworks.	All	7,500,000
		2.1.2: Community-based early-warning communication and response protocols strengthened and tested.	All	
		2.1.3 National and Sub-national flood and drought risk investment plans and financing strategies	All	
		2.2.1 NBS, SLM and IWRM solutions for long-term flood and drought resilience in pilot communities	All	
		2.2.2 Guidelines for implementation and scaling for above outputs developed and included in financing strategies.	All	
3. Governance and Regional/Transboundary Cooperation for Integrated Flood and Drought Management	3.1 National, regional, inter-regional, and transboundary governance, cooperation, and data-sharing frameworks for integrated flood and drought risk management strengthened and institutionalized, including through the enhanced role and extension of the Drought Management Centre for Southeastern Europe (DMCSEE).	3.1.1 Analysis of flood and drought risk related institutional and policy gaps based on 1.2.1.	All	3,000,000
		3.1.2 National interministerial committees on flood and drought established or strengthened, with defined mandates, membership structures, and operational procedures for flood and drought coordination.	All	
		3.1.3 National flood and drought policy frameworks updated or introduced.	All	
		3.1.4 Establishment/enhancement of regional, interregional institutional arrangements, including transboundary cooperation mechanisms among Armenia, and Georgia, based on existing structures including data-sharing agreements	All	
		3.1.5 DMCSEE's functions for South Caucasus extended and Moldova's engagement strengthened.	All	
4. Capacities, Communication, and Safeguards for Inclusive Flood and Drought Management	4.1 Institutional and technical capacities of national, regional, and local actors strengthened across all project components 4.2 Knowledge, awareness, communication, partner engagement, and gender-transformative and inclusive approaches on climate-resilient IDM enhanced and mainstreamed across all project components	4.1.1 Capacity-building programmes, including modular trainings, designed and delivered to strengthen the institutional, technical, and operational skills of national, regional, and local actors across all project components, with a focus on NMHSs.	All	5,000,000
		4.1.2 Knowledge-transfer and twinning activities implemented, drawing on Kazakhstan's experience to strengthen national and regional capacities in integrated drought and flood risk management.	All	
		4.2.1 Knowledge-sharing products, communication tools, and awareness materials developed and disseminated, supported by communities of practice that promote climate-resilient integrated drought and flood management.	All	
		4.2.2 Multi-stakeholder engagement mechanisms and communities of practice strengthened to foster collaboration among national institutions, communities, academia, civil society, and regional partners.	All	
		4.2.3 Gender-responsive and inclusive approaches mainstreamed across project activities, including through targeted capacity building, guidance materials, communities of practice, and integration into national and regional planning processes.	All	
6. Project Execution cost (10%)				2,450,000
7. Total Project Cost				26,950,000
8. Project Cycle Management Fee charged by the Implementing Entity				2,695,000
Amount of Financing Requested				29,645,000

Project Duration: 5 Years

PART II: PROJECT JUSTIFICATION

11. Adaptation pathway. The project follows an integrated pathway from risk knowledge to informed decisions, concrete adaptation action and measurable resilience benefits. Under Component 1, strengthened monitoring, forecasting, climate services and early warning systems will provide authorities, communities and other users with timely, reliable and actionable drought and flood information. This will inform preparedness, water and land management, contingency planning and investment decisions and, under Component 2, guide community-level adaptation measures, including NbS, SLM and IWRM. These measures will reduce vulnerability and strengthen water, ecosystem and livelihood resilience. Component 3 will enable this pathway through strengthened governance, coordination, data sharing and regional and transboundary cooperation, ensuring that risk information translates into sustained adaptation action. Compared with stand-alone or exclusively national approaches, the project connects monitoring, forecasting, early warning, preparedness and concrete adaptation measures across the full adaptation pathway, while adding a regional dimension for shared data, methodologies, knowledge and transboundary risk management. It builds on existing national systems and investments rather than creating parallel structures, enabling successful approaches to be institutionalized, replicated and scaled across participating countries.

12. Project Components

- 1. Monitoring, Data, and Risk Knowledge Systems:** Baseline flood and drought risk assessments will identify hazard characteristics, exposure, vulnerabilities, and impacts at national and regional levels, including transboundary dimensions. These assessments will establish reference conditions and inform a harmonized framework for integrated flood and drought risk assessment, monitoring, forecasting, and decision-making, guiding subsequent project components and investments in EWS. The project will strengthen national and regional hydrometeorological observation networks in line with WMO Integrated Global Observing System (WIGOS) frameworks and tools, including the WMO Regional Basic Observing Network (RBON). Real-time and historical data access, exchange, and harmonization will be enhanced through the adoption of the WIS 2.0 and WHOS. Hydrological monitoring and outlook development will also be strengthened in alignment with HydroSOS, to support more consistent assessment and communication of hydrological status and trends across countries and river basins. Ground-based observations will be complemented by remote sensing products to support monitoring of key flood- and drought-related variables. Forecasting capabilities for floods and droughts will be strengthened through improved access to global and regional products from WIPPS Centres, including short-range, extended-range, and subseasonal-to-seasonal forecasts including for Kazakhstan. Advanced methodologies, including AI/ML-based modelling, will be applied to enhance hazard and impact forecasting. Standardized, user-oriented regional flood and drought products will be defined, tailored, and integrated into national and regional systems. Drought impact monitoring will be enhanced through participatory approaches, including crowd-sourced and community-based reporting, while flood risk analysis will integrate historical flood data and inundation mapping. Together, these actions will strengthen evidence-based decision-making, improve preparedness and response, and support integrated, end-to-end multi-hazard early warning systems in line with EW4All.
- 2. Governance, Regional Collaboration, and Transboundary Cooperation:** The project will strengthen governance frameworks and institutional coordination for integrated flood and drought risk management at national, regional, and transboundary levels. Institutional and policy gap analyses will inform the updating or development of national flood and drought policies and the establishment or strengthening of interministerial coordination mechanisms. Regional and inter-regional cooperation will be enhanced through harmonized methodologies, operational data-sharing arrangements, and joint monitoring and forecasting initiatives addressing shared river basins and climate drivers. A core element is the extension of the Drought Management Centre for Southeastern Europe (DMCSEE) to the South Caucasus and the strengthening of Moldova's engagement, supporting institutionalized regional cooperation and sustained coordination.
- 3. Community-Level Preparedness, Response, and Risk Mitigation:** In selected pilot areas, integrated flood and drought risk management plans will be developed based on gender-responsive and socially inclusive risk assessments. These plans will combine preparedness, contingency planning, and response measures, aligned with EW4All Pillar 4. User-centred early warning communication channels developed under Component 1 will be applied at community level to ensure timely and actionable flood and drought warnings (EW4All Pillar 3). The project will pilot integrated risk mitigation measures, including nature-based solutions (NBS), sustainable land management (SLM), and integrated water resources management (IWRM) practices that reduce both flood and drought risks. Local and subnational risk investment plans and financing strategies will be developed, alongside guidelines to support scaling and replication.
- 4. Capacity Development, Knowledge, Communication, and Inclusion:** Capacity development will strengthen institutional, technical, and operational capabilities across all project components. This includes training in integrated risk assessment, hydrometeorological data management, monitoring and forecasting, impact-based forecasting, and the use of remote sensing and S2S products. Activities will be delivered through modular trainings, communities of practice, peer-to-peer learning, and twinning arrangements, drawing on Kazakhstan's experience to support regional knowledge transfer. Knowledge-sharing, communication, and stakeholder engagement activities will promote climate-resilient, gender-responsive, and inclusive approaches to integrated flood and drought risk management.

Other Considerations

14. Consultative Process: Given the diversity of participating countries and contexts, an inclusive consultative process at regional, national, and community levels is essential for effective project implementation. The project will engage a wide range of stakeholders, including government institutions, NMHSs, water and disaster management authorities, academia,

civil society, women's groups, and representatives of vulnerable communities, ensuring gender-transformative and socially inclusive participation. Concept Note consultations will specifically engage institutions with a gender mandate, including Armenia's Ministry of Labour and Social Affairs, Georgia's Interagency Commission on Equality between Men and Women, Moldova's Ministry of Labour and Social Protection, and Kazakhstan's National Commission for Women's Affairs and Family and Demographic Policy, as well as relevant women's and youth organizations.

15. Cost Effectiveness: The project adopts a cost-effective, integrated regional approach that leverages shared systems, harmonized methodologies, and regional cooperation to reduce duplication and maximize impact. Strategic pilot investments, combined with capacity development and policy support, will enhance national resilience while prioritizing long-term regional benefits. Community-driven approaches ensure long-term financial viability. Synergies with ongoing and planned initiatives (e.g. EW4All-related activities and other regional programmes) will be pursued to maximize financial efficiency. The project will rely solely on Adaptation Fund resources to fully achieve its stated adaptation objectives and outcomes and will not depend on external financing for their achievement.

16. Learning and Knowledge Management: Project activities will be underpinned by structured knowledge management, capacity development, and awareness-raising initiatives coordinated by a dedicated Knowledge Management Specialist. Communities of practice will foster informal collaboration and continuous learning. The project will strengthen knowledge exchange between countries with more advanced systems and those still developing capacities, ensuring alignment with existing regional frameworks and initiatives.

17. Innovation and Coherence: While many initiatives address floods or droughts separately, this project offers a coherent, integrated approach that explicitly addresses both hazards and their interactions. By linking local, national, and regional efforts and aligning with national EW4All roadmaps, Regional Frameworks for Climate Services, and WMO observing systems, the project promotes a shared understanding of multi-hazard risk management. Integrated monitoring and early warning of both hazards will be a key element, supported by innovative approaches such as WMO HydroHub, citizen science, and AI/ML.

18. Environmental, Socioeconomic Benefits (ESEB) and Gender: Environmental and social benefit analyses of integrated flood and drought management and a gender analysis and Gender Action Plan will inform project design and guide the development of gender-responsive measures and implementation. The project will generate ESBs through reduced disaster losses, strengthened livelihoods, enhanced water and food security, and protected ecosystems. All activities will follow Adaptation Fund and WMO environmental, social, and gender policies, applying a user-centric approach that prioritizes vulnerable populations. Preliminary actions will include identifying gender-differentiated drought and flood risks and needs, assessing barriers to accessing and acting on early warnings, ensuring meaningful participation of women and vulnerable groups in consultations and community planning, and integrating gender-responsive measures and indicators into relevant project outputs and activities.

19. Sustainability: Sustainability will be ensured by institutionalizing governance mechanisms, harmonized methodologies, and financing strategies for integrated flood and drought risk management. Nature-based solutions will enhance ecosystem services and link resilience-building to livelihoods. Strengthened institutional capacities at all levels, combined with regional coordination through mechanisms such as DMCSEE, and by ensuring complementarity and synergies with ongoing and under-development projects, will support long-term implementation and sustained impact beyond the project lifetime. An exit strategy will be developed to ensure the sustainability of project investments, addressing system and institutional ownership, post-project responsibilities, operation and maintenance, recurrent costs and budget commitments, and staff-retention needs. These sustainability arrangements will be further elaborated during Concept Note development.

20. Alignment with national and regional priorities. The project is grounded in the national adaptation priorities and climate-risk assessments reflected in the participating countries' NDCs, NAPs and related national climate and disaster risk management frameworks. Armenia and Moldova have adopted NAPs, while Georgia is currently developing its NAP and Kazakhstan is advancing its national adaptation planning process. The project will align with these evolving frameworks as they are finalized. At regional and international levels, the project contributes to EW4All and builds on relevant regional cooperation mechanisms, including DMCSEE, while strengthening transboundary cooperation.

21. Duplication of Projects: Lessons from relevant previous and ongoing projects, including the Adaptation Fund's "Integrated Drought Management in Central Asia" will inform project design and implementation, support complementarity and avoid duplication. Further relevant initiatives and lessons will be reviewed during Concept Note development.

PART III: IMPLEMENTATION ARRANGEMENTS

The project will be led by WMO as the Implementing Entity, with technical support provided through the Integrated Drought Management Programme (IDMP) and the Associated Programme on Flood Management (APFM), jointly led by WMO and the Global Water Partnership Organisation (GWPO). A dedicated project manager will oversee implementation, coordination, stakeholder engagement, and risk management. A Project Implementation Unit (PIU), led by a dedicated Project Manager and supported by specialist consultants in gender, environmental and social safeguards, M&E, and knowledge management and communication, will oversee project implementation, coordination, stakeholder engagement, and risk management. National execution will be led by the MHSs and relevant line ministries, with support from GWP Central Eastern Europe (GWP CEE) and GWP Caucasus and Central Asia (GWP CACENA) to engage stakeholders and to execute community level activities. Regional execution will be coordinated by GWPO and its Regional Partnerships (CEE and CACENA). Strategic oversight will be provided by a project board. Armenia's Environmental Project Implementation Unit (EPIU), the accredited National Implementing Entity (NIE) among the participating countries, will be engaged through participation in the Project Board. Detailed implementation and governance arrangements will be finalized during project development.

PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY

- A. Record of endorsement on behalf of the government⁶** *Provide the name and position of the government official and indicate date of endorsement for each country participating in the proposed project/programme. Add more lines as necessary. The endorsement letters should be attached as annexes to the project/programme proposal.*

<i>Aliona Rusnac, State Secretary, Ministry of Environment of the Republic of Moldova</i>	Date: 14/05/2026
<i>Hambardzum Matevosyan, Deputy Minister of Environment, Ministry of Environment of the Republic of Armenia</i>	Date: 11/05/2026
<i>Nino Tandilashvili, First Deputy Minister, Ministry of Environmental Protection and Agriculture of Georgia</i>	Date: 11/05/2026
<i>Mansur Oshurbayev, Vice-Minister, Ministry of Ecology and Natural Resources of Kazakhstan</i>	Date: 12/06/2026

- B. Implementing Entity certification** *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (.....list here.....) and subject to the approval by the Adaptation Fund Board, <u>commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund</u> and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
 Moyenda Chaponda Implementing Entity Coordinator Development Partnerships and Programme Delivery Division	
Date: 11 June 2026	Tel. and email: +41 22 730 8646 mchaponda@wmo.int
Project Contact Person: Ms Sari Lappi	
Tel. And Email: +41 22 730 8593; slappi@wmo.int	

⁶ Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.



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REPUBLIC OF ARMENIA
DEPUTY MINISTER OF ENVIRONMENT

РЕСПУБЛИКА АРМЕНИЯ
ЗАМЕСТИТЕЛЬ МИНИСТРА ОКРУЖАЮЩЕЙ СРЕДЫ

№ 1/18.15/3868

« 11 » « 05 » 2026

The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for “Integrated Flood and Drought Early Warning and Management in Eastern Europe”

In my capacity as designated authority for the Adaptation Fund in the Republic of Armenia, I confirm that the above regional project proposal is in accordance with the government’s national and regional priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Eastern Europe.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by the World Meteorological Organization and executed by the “Hydrometeorology and Monitoring Center” State Non-Commercial Organization (“Armhydromet” SNCO) of the Ministry of Environment of the Republic of Armenia and the other beneficiary countries as well as the Global Water Partnership Organization and Regional Water Partnerships in Central and Eastern Europe as well as Caucasus and Central Asia.

Sincerely,

Hambardzum Matevosyan



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ՇՐՋԱԿԱ ՄԻՋԱԿԱՅՐԻ
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**MINISTRY OF ENVIRONMENTAL PROTECTION
AND AGRICULTURE OF GEORGIA**

34, Marshal Gelovani ave
Tbilisi, 0156, Georgia
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+995 32 237 80 44
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11 May 2026



N 2748/01

**To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 32**

Subject: Endorsement for Integrated Flood and Drought Early Warning and Management in Eastern Europe

In my capacity as designated authority for the Adaptation Fund in Georgia, I confirm that the above regional project/programme proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the country.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by the World Meteorological Organization (WMO) and executed by the National Environmental Agency of Georgia, other relevant national stakeholders and Global Water Partnership (GWP).

Sincerely,

**Nino Tandilashvili
First Deputy Minister**

<https://edocument.ge/mea/public/#/2748-01-2-202605111750>







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010000, Astana city, Mangilik El avenue, 8
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tel.: +7 7172 74 08 44

12.06.2006 № 04-12/13254

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for Integrated Flood and Drought Early Warning and Management in Eastern Europe

In my capacity as designated authority for the Adaptation Fund in Kazakhstan, I confirm that the above regional project/programme proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the country.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by the World Meteorological Organization (WMO) and executed by the Republican State Enterprise (RSE) 'Kazhydromet', other relevant national stakeholders and Global Water Partnership (GWP).

Sincerely,



12.06.26.

Mansur Oshurbayev
Vice-Minister of Ecology and Natural Resources
of the Republic of Kazakhstan

Tel.: +7 7172 74-01-97

Email: m.oshurbaev@ecogeo.gov.kz

Alternative emails: climatekaz48@gmail.com

sh.tastemirova@ecogeo.gov.kz

**MINISTERUL
MEDIULUI
AL REPUBLICII MOLDOVA**



**MINISTRY
OF ENVIRONMENT
OF THE REPUBLIC OF MOLDOVA**

MD 2004, mun. Chișinău, bd Ștefan cel Mare și Sfânt, 162, tel. 022 20 45 87, e-mail: cancelaria@mediu.gov.md

Nr. 01-08/1568 14.05.2026

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for "Integrated Flood and Drought Early Warning and Management in Eastern Europe"

In my capacity as designated authority for the Adaptation Fund in Moldova confirm that the above regional grant proposal is in accordance with the government's national and regional priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Eastern Europe.

Accordingly, I am pleased to endorse the above grant proposal with support from the Adaptation Fund. If approved, the project will be implemented by the World Meteorological Organization and executed by the National Meteorological and Hydrological Services of Moldova and the other beneficiary countries as well as the Global Water Partnership Organization and its Regional Water Partnerships Central and Eastern Europe as well as Caucasus and Central Asia.

Sincerely,

Aliona Rusnac
State Secretary



Revised PFG Submission Form¹
Project Formulation Grant (PFG)

Submission Date: 11 June 2026

Adaptation Fund Project ID: ?

Country/ies: Armenia, Georgia, Kazakhstan, Republic of Moldova

Title of Project: Integrated Flood and Drought Early Warning and Management in Eastern Europe

Type of IE (NIE/RIE/MIE): MIE

Implementing Entity: World Meteorological Organization (WMO)

Executing Entity: World Meteorological Organization (WMO)

A. Project Preparation Timeframe

Start date of PFG	01 November 2026
Completion date of PFG	01 December 2027

B. Proposed Project Preparation Activities (\$)

List of Proposed Project Preparation Activities	Output of the PFG Activities	US\$ Amount	Budget note²
Support in writing of the project concept by external consultant	Project concept well-coordinated with country stakeholders and in line with AF rules and regulations	18,000	Contracting of a consultant to support the coordination and writing of the concept at a daily rate of 400 USD for 45 days
Support of different experts within the executing entity in formulating the concept	Project concept in line with latest standards and state of the art methodologies	6,000	Contracting of experts to provide matter expert advice for concept at a daily rate of 500 USD for 12 days
Stakeholder consultations	Concept based on stakeholder needs	6,000	Support stakeholder engagement processes e.g. potentially travel

¹ As presented in AFB/PPRC.33/40 Annex 1.

² The proposal should include a detailed budget with budget notes indicating the break-down of costs at the activity level. It should also include a budget on the Implementing Entity management fee use.

Implementing Entity Fee ³ (Administration and management of concept preparation)	Project concept coordinate and submitted in time	2000	This will support the proposal coordination officer
Implementing Entity Fee		500	This will support WMO Human Resources Support for hiring a consultant
Implementing Entity Fee		500	Administration for hiring a consultant
Total Implementing Entity Fee		3000	
Total Project Formulation Grant		33,000	

Please describe below each of the PFG activities and provide justifications for their need and for the amount of funding required:

- Support in writing of the project concept by external consultant:** An external consultant will be hired to support the writing process and coordinate with all national and regional stakeholders as well as the executing entities. This will ensure that all needs and expectations are well coordinated with country stakeholders and in line with AF rules and regulations. The amount allows to hire a consultant for 50 days at a daily rate of USD 500.
- Support of different experts within the implementing and executing entity in formulating the concept:** Different experts of the implementing and executing entities will be engaged in the process of preparing the project concept, providing expert input on different fields like Early Warning Systems (EWS), Monitoring etc. This amount is to compensate the different departments internally.
- Stakeholder consultation:** Stakeholder consultations will be carried out at national and regional levels, either online or in person, primarily making use of the contacts and networks of partners and the GWP. These consultations will ensure broad input, alignment with country priorities, and stakeholder ownership of the project concept.
- Implementing Entity Fee:** The 10% share will be used to support the coordination and administration within WMO.

C. Implementing Entity

This request has been prepared in accordance with the Adaptation Fund Board's procedures and meets the Adaptation Fund's criteria for project identification and formulation

Implementing Entity Coordinator, IE Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Mr. Moyenda Chaponda	<i>Moyenda Chaponda</i>	11 June 2026	Ms. Sari Lappi	+41 22 730 8593	slappi@wmo.int

³ 10% Implementing Entity Management Fee of USD 3,000 total.

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