



Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 29-Jan-2024 | Report No: PIDDC00334



BASIC INFORMATION

A. Basic Project Data

Project Beneficiary(ies) Moldova	Operation ID P504278	Operation Name Strengthening Moldova's Disaster Risk Management and Resilience	
Region EUROPE AND CENTRAL ASIA	Estimated Appraisal Date 08-Apr-2024	Estimated Approval Date 05-Sep-2024	Practice Area (Lead) Urban, Resilience and Land
Financing Instrument Investment Project Financing (IPF)	Borrower(s) Republic of Moldova	Implementing Agency Ministry of Internal Affairs	

Proposed Development Objective(s)

The Project Development Objective is to enhance the capacity of the Government of Moldova to respond and prepare for disaster and climate-related shocks, and in case of an eligible crisis or emergency, respond promptly and effectively to it.

PROJECT FINANCING DATA (US\$, Millions)

Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)? No

Is this project Private Capital Enabling (PCE)? No

SUMMARY

Total Operation Cost	40.00
Total Financing	40.00
of which IBRD/IDA	40.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	40.00
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Environmental and Social Risk Classification

Moderate

Concept Review Decision

The review did authorize the preparation to continue

Other Decision (as needed)

N/A

B. Introduction and Context

Country Context

1. **Since independence in 1991, Moldova has had an uneven track record in bringing economic growth and prosperity to its people.** Despite solid economic performance and strong poverty reduction, Moldova remains among the poorest countries in Europe. Poverty¹ declined from 90 percent in late 1990s to 10.9 percent in 2021, with a small rise in-between due to the COVID-19 pandemic. As a small, landlocked, predominantly rural² country with limited natural resources, Moldova's economy has long been characterized by relatively low productivity, small-scale agriculture. Lack of job opportunities led to heavy outmigration, a large diaspora and a remittance-reliant domestic economy.

2. **The COVID-19 pandemic, severe droughts in 2020 and 2022, and Russia's invasion of Ukraine revealed the intrinsic vulnerabilities of the country's economic growth model and its limited resilience to shocks.** The pandemic's impacts compounded by the 2020 drought caused a 7.4 percent decline in Gross Domestic Product (GDP) in 2020, one of the most severe declines in Europe. The economy did recover from the COVID-19-induced recession, with economic activity bouncing back by 13.9 percent. However, the invasion of Ukraine, and the subsequent energy and refugee crisis, disruption of trade routes, and an additional drought in 2022 has led to 28.7 percent inflation, negatively affecting private investment and the economy and squeezing resources available to the Government of Moldova (GoM) to address long-term development priorities. Lower remittances in 2022 led to only modest growth in private consumption, despite substantial increase in social assistance and minimum pensions. The economy hit recession in 2022, and in the first half of 2023 GDP contracted by 2.3 percent.

3. **Against this backdrop, the GoM has set ambitious objectives to tackle recent and more longstanding development challenges and reform the Moldovan economy along a more resilient growth model.** The 2020 Presidential and 2021 Parliamentary elections resulted in a new and reform-minded government with an impetus to rapidly improve institutions, and the granting of European Union (EU) candidate status in June 2022 provides an opportunity to break from the past.³ Through convergence with EU economic, judicial, social, digital, and environmental and resilience standards, the EU accession process can open significant opportunities to unlock growth and prosperity potential for Moldova. However, while EU accession support will offer Moldova outstanding opportunities, the country must undergo profound legislative and institutional changes to meet EU requirements.

Sectoral and Institutional Context

4. **Moldova is exposed to natural hazards that disproportionately affect the poor and which are being exacerbated by the effects of climate change.**⁴ Economic losses from disasters are mostly due to extreme weather events, but high-

¹ Measured by the upper middle-income poverty line (PL) of \$US6.85 per day in 2017 purchasing power parity (PPPs).

² Around 60 percent of Moldova's population lives in rural areas compared to less than 30 percent on average in ECA.

³ Moldova applied for EU membership in March 2022 and was granted EU candidate status in June 2022.

⁴ World Bank (2021), Special Focus Note: Moldova's Vulnerability to Natural Disasters and Climate Risks.



impact, low-frequency earthquakes can cause catastrophic losses. In the past decade, floods and droughts caused US\$1.2 billion in damage.⁵ Disaster impacts are increasing due to increased exposure of people and economic assets, ageing infrastructure, and climate change effects. Around 80 percent of the poor live in rural areas (compared with 60 percent of rural population) and they are hit the hardest by extreme weather events that impact agriculture.⁶

5. **Floods, severe storms, and torrential rains are recurrent hazards.** Approximately 659 settlements (42 percent of all settlements) are at risk of flooding. In 2008, the country experienced severe torrential rains, which together with dam releases from rivers upstream in Ukraine led to severe flooding in the northern and southern parts of the country, affecting over 8,000 people and resulting in US\$120 million in losses to infrastructure and agriculture. Storms in May-August bring torrential rains, hail, and heavy winds⁷ which translates into a recurrent and cumulatively heavy cost, with damage to roads, power distribution network, and cause other infrastructural damage. Riverine flood protection is limited, as dams, canals, and dikes need substantial repair. Flash flooding often occurs without warning.

6. **Drought, extreme heat, and wildfire risks are also high.** Moldova has been experiencing severe droughts once every 3 to 10 years, depending on geographic location. The 2007 and 2012 droughts caused estimated losses of about US\$1.0 billion and US\$0.4 billion, respectively.⁸ The 2020 drought caused a drop of 26 percent in agricultural production and significant socio-economic impacts with almost 20 percent of overall job losses in the agriculture sector.⁹ The 2022 drought, combined with very high fertilizer and fuel prices due to the invasion of Ukraine, caused the aggregate cereal output to drop 46 percent below the five-year average level, the lowest volume on record.¹⁰ Extreme temperatures are also a risk in Moldova, with extreme heat and cold resulting in power outages and water shortages. Climate models predict future rises in mean temperature of more than 2 degrees by mid-century, a significant decline in precipitation in many areas and increased frequency and intensity of extreme weather events.

7. **Moldova is highly exposed to earthquakes which are expected to have a devastating impact.** Moldova is located close to Vrancea seismic area which produces infrequent but high magnitude earthquakes. In the past 200 years, Moldova has suffered 16 major earthquakes with magnitudes between 7 and 8, with growing risk due ageing buildings, expanding cities, inadequately maintained public infrastructure, and low risk awareness. A repeat of the 1940 earthquake (magnitude 7.7) today, is expected to result in more than 4,000 injured, hundreds of fatalities, more than 725,000 buildings damaged across the country rendering an estimated additional 1.4 million displaced.¹¹ Over 324,000 people, or about one in every two inhabitants of Chisinau, reside in high-risk buildings, which are expected to cause the most fatalities in the event of a severe earthquake event.¹² The approximate reconstruction needs for the building sector alone would amount to US\$5.8 billion. Chisinau, which generates 50 percent of the country's GDP and is home to close to one quarter of the population, would be particularly impacted.

8. **Moldova has adopted a comprehensive Disaster Risk Management (DRM) institutional framework, including working towards the harmonization of Moldovan legislation with EU standards.** The Law on Civil Protection, adopted in 1994, defines the basic principles for civil protection at all levels, and includes the design and implementation of preparedness, response, recovery, and reconstruction measures. The civil protection system has three key institutions that deal with emergencies and disasters. First, the *General Inspectorate for Emergency Situations (GIES)* under the

⁵ From 2011–2016 all disasters reported by the General Inspectorate for Emergency Situations - were weather and climate related.

⁶ The 2019 [Moldova Economic Update](#) (World Bank, 2019) indicates that extreme weather constitutes one of the main challenges to growth and poverty alleviation efforts, given that it directly disrupts agricultural production and affects vulnerable rural communities.

⁷ In 2016 intense rain flooded buildings after roofs were destroyed by hail. Summer rainfall is unpredictable and often dangerous. Moldova's central zone is high risk.

⁸ In Moldova most farm households are smallholders, who tend to be poorer and less buffered against shocks than larger farmers. More than one-third of farmers reported difficulties in paying for nutrition. Smallholders consume around 80 percent of their farm production, leaving little for income generation (World Bank 2016).

⁹ According to the FAO, above-average temperatures, and poor rainfall during the 2020 season, severely affected wheat and maize crops.

¹⁰ GIEWS Country Brief: Republic of Moldova 28-November-2022, FAO 2022.

¹¹ Strengthening Moldova's Disaster Risk Management and Climate Resilience (World Bank, 2020).

¹² Earthquake Risk in Multifamily Residential Buildings Europe and Central Asia Region (World Bank, 2020).



Ministry of Internal Affairs (MoIA),¹³ is an all-hazard emergency response agency with the duty to save lives and property and in charge of planning, coordinating, and managing disaster preparedness and emergency management. Second, the *National Commission for Emergency Situations*, responsible for managing the activities of state executive institutions during emergencies and for implementing long-term programs to prevent emergencies and eliminate consequences of an emergency.¹⁴ Third, the *State Hydrometeorological Service (SHS)* under the Ministry of Environment monitors, forecasts, and issues warnings related to hydro-meteorological, agro-meteorological and some environmental hazards. Regional and local governments, in coordination with GIES, have responsibility in response operations.¹⁵

9. **In September 2023, Moldova signed the Agreement to become a Participating State in the EU Civil Protection Mechanism (EU-CPM)¹⁶, an important step towards prevention, preparedness and response to disasters and emergencies.** By joining the EU-CPM, Moldova is connected to a Europe-wide network, including human resources and equipment for disaster response which can reduce response time, reduce damage and enable a more rapid recovery. The EU-CPM will also provide firefighters and rescuers with the opportunity to continually improve their capabilities and strategy for preventing and responding to exceptional situations, including through partnering with the other 36 EU-CPM participating countries during international response. The EU-CPM will build upon GIES' newly adopted Program for Emergencies and Exceptional Situations, that aims to strengthen civil protection response and management through a clear set of short to medium term actions.

10. **Despite progress, Moldova faces significant challenges to ensure an effective and efficient disaster response.** Emergency communication and early warning systems (EWS) are inadequate and emergency response equipment is absent or vastly outdated. EWS saves lives and protects livelihoods and is one of the most effective ways to reduce the impact of disasters, but this requires comprehensive nation-wide coverage, forecasting, and monitoring of potential threats and disseminating timely warnings to authorities and public. In Moldova several of these elements are critically missing and others (such as mapping of hazards, monitoring and forecasting of impending events) need significant investment. The existing EWS provides warnings through an outdated and poorly maintained network of sirens, rather through use of modern technology such as mobile phone alarms/alerts. Moreover, most of fire and emergency equipment is outdated (>35 years old), ill-fitted for the current needs and prone to failure.

11. **In parallel to strengthening disaster response, Moldova needs to accelerate risk reduction and climate adaptation in critical sectors.** Despite significant seismic risk, Moldova does not have a national program to assess and reduce this risk in public and residential buildings. There is an urgent need to assess risks and prioritize investments in disaster and climate risk reduction across key sectors. Emergency response services; government buildings providing critical public services (health, education etc.); critical infrastructure must be resilient with continued functionality in emergencies, with alternative energy and communications. Similarly, it is crucial to reassess and reinvest in Moldova's existing drought and flood protection measures which were built in the 1980s, comprising a number of ponds, dams, canals and over 1,200 km of flood defenses. However, due to lack of maintenance, these measures do not provide dependable flood protection nor adequate water storage during droughts.

12. **Efforts are also needed to enhance the financial resilience of Moldova against future disasters.** Not all risk can be eliminated. Proper financial planning to ensure availability of adequate and timely financing is, therefore, necessary for a cost-effective management of government contingent liabilities due to disasters. It is also critical for faster and more

¹³ GIES coordinates activities of national and local agencies/authorities, informs local authorities of emergencies, trains paramilitary, nonmilitary and emergency rescue, develops public educational programs, drafts normative acts/civil protection plans to be submitted to Parliament, coordinates civil protection research.

¹⁴ The Chair of the Commission is the Prime Minister of the Republic of Moldova, the First Deputy Chair is the First Deputy Prime Minister, and deputy chairs are the State Secretaries of the involved ministries, the Minister of Interior and the Head of the GIES of the Ministry of Internal Affairs.

¹⁵ At a regional (district) level and local (sites and villages) level - Heads of Civil Protection are leaders of public administration bodies.

¹⁶ The Agreement will fully enter into force as of 1 January 2024 after ratification by Moldova. The objective of the EU-CPM is to strengthen cooperation between the EU countries and 9 Participating States (Albania, Bosnia and Herzegovina, Iceland, Montenegro, North Macedonia, Norway, Serbia, Türkiye, and Ukraine) on civil protection to improve prevention, preparedness, and response to disasters.



complete recovery of households, firms and farmers after disasters and for reducing the impact of disasters on the most vulnerable, as well as protecting jobs and the economy. The government of Moldova retains most of the disaster risk on its balance sheet with almost no catastrophe insurance or other risk transfer mechanisms in place. The existing risk finance instruments do not offer sufficient and timely financing for potential natural disasters. Moldova can on average face an estimated MDL 2.9 billion (US\$146 million) funding gap each year. This is the size of funding, considering major disasters events, that will have to be covered from the government budget through budget reallocations and borrowing or remain unfunded.¹⁷

Relationship to CPF

13. **The proposed Project is consistent with the World Bank Group's Country Partnership Framework (CPF) FY23–27, the Climate Change Action Plan 2021-2025 (CCAP) and the Europe and Central Asia Climate Roadmap, as well as with the Green, Resilient and Inclusive Development (GRID) approach, and the Global Crisis Response Framework (GCRF).** The Project will specifically contribute to the High-Level Outcome 3 (HLO 3) of the CPF “Increased Resilience to Climate Change and Crises”, specifically Objective 3.2 to “Promote green and resilient investments in infrastructure and agriculture, and provide mutually re-enforcing support by addressing short-term shocks to improve prospects for long-term sustainable development while developing long-term resilience to help prepare for future shocks”. The proposed cross-sectoral approach also aligns with priority activities identified in the CCAP, including developing a comprehensive framework for climate and disaster-resilient development investments. The Project also aligns with the WB Europe and Central Asia Climate Roadmap, through supporting the ‘whole-of-economy’ approach (Policy, Finance, and People) to ensure ambitious, sustainable, and just climate action, and strengthen climate resilience in target sectors such as Urban and Agriculture. In line with the GRID approach, the project contributes to the saving lives, protecting the poor and rebuilding better objectives by improving policies and institutions. The Project also contributes to Pillars 3 (Strengthening Resilience) and 4 (Strengthening Policies, Institutions, and Investments for Rebuilding Better) of the GCRF.

C. Proposed Development Objective(s)

14. The Project Development Objective is to enhance the capacity of the Government of Moldova to respond and prepare for disaster and climate-related shocks, and in case of an eligible crisis or emergency, respond promptly and effectively to it.

Key Results (From PCN)

- Number of project beneficiaries covered by improved emergency and disaster response services (% women);
- Number of project beneficiaries covered by an improved early warning system (% women);
- Disaster and climate risk-informed investment planning capacity enhanced.

D. Concept Description

15. The proposed Project will include the following components:

16. **Component 1 – Investments and Institutional Strengthening for Emergency Preparedness and Response (US\$30 million).** This component will finance the procurement and installation of a national cell-phone-based EWS with its respective instrumentation and data servers, and integration with existing meteorological, hydrological, and geological resource information systems. The component will also finance the acquisition of emergency response vehicles and

¹⁷ World Bank, Oct 26 2022. Moldova Funding Gap Assessment: Historical Disaster Losses and Potential Future Loss Assessment to Inform Options for Strengthening Financial Preparedness for Disasters



equipment, and essential equipment and instrumentation for improved local-level emergency services. The component will also support strengthening SHS service delivery.

17. **Component 2 – Policy, Regulatory and Investment Support for Risk Reduction of Critical Infrastructure (US\$5 million).** This component will provide support to policy and regulatory measures and technical studies to better assess and manage natural hazard and climate related risks. This could include financing of the structural vulnerability assessments, geotechnical and other site investigations, as well as feasibility and design studies for rehabilitating, rebuilding, or reinforcing vulnerable critical infrastructure assets whose failure may cause loss of lives and livelihoods and significant economic damages and losses to the Moldovan economy. Activities financed under this component are intended to be used as pilots of good practices and later used as models for scale-up investments in the areas of flood protection, irrigation and/or seismic risk reduction.

18. **Component 3 – Financial Protection to Mitigate Natural Disaster Impacts (US\$ 1 million).** The component will support the development of strategic frameworks for risk finance to define government objectives for strengthening Moldova’s financial resilience to climate, disaster and other shocks and identify actions for implementation including putting in place new risk financing solutions or strengthening existing ones. It will then support its implementation focusing on embedding disaster risk considerations in government budget cycle including through either/and (i) assessing fiscal risks caused by disasters, (ii) strengthening post-disaster expenditure monitoring, and (iii) implementing risk-based budgeting. To further implement the strategy, this component will also finance development of a technical design / documentation for creating a dedicated disaster reserve fund, and potentially developing public asset insurance program and/or a catastrophe insurance program for households based on the identified priorities of the government.

19. **Component 4 – Contingency Emergency Response Component (CERC) (US\$0.00).** This component will enable the reallocation of credit proceeds from other components to provide immediate recovery and reconstruction support following an eligible crisis or emergency, as needed.

20. **Component 5 – Project Management (US\$4 million).** This component will finance the operational costs, consulting services, non-consulting services, goods and training to finance the overall project management cost, including the project team at the Project Implementation Unit (PIU) to carry out project management functions to ensure an efficient project implementation and close cooperation between the line ministries and implementing agencies, as well as other project stakeholders. It will finance capacity building activities for PIU staff and other implementing agencies. These functions will cover procurement, financial, environmental, social management, monitoring/ evaluation as well as communication and outreach activities.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Area OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts



21. **Environmental and Social Risks and Impacts (Moderate):** The Project's social and environmental risk classification is moderate. The Project will not finance infrastructure investments, with potential land acquisition and impacts on human and the environment, including worker and community health and safety risks. No significant environmental risks are foreseen, as major component relates to purchase of equipment for firefighters. The Project may finance feasibility studies for selected risk reduction investments of critical infrastructure where downstream risks will need to be re-assessed during Project preparation. Adverse social risks are limited and mostly residual due to poor quality of implementation. A critical element to deliver social benefits is the ability of the implementing agencies to actively involve relevant stakeholders, communities, and in particular vulnerable groups on awareness raising and capacity building about emergency preparedness and responses. Such risks are expected to be addressed as part of the Project's design and stakeholder engagement through implementation of a Stakeholder Engagement Plan (SEP). The Terms of References (ToRs) for TA (i.e., studies, regulatory support, etc.) will incorporate relevant risk assessments and mitigation measures and provisions for stakeholder consultations to promote transparency and public participation. Depending on the types of equipment and instrumentation to be procured, relevant capacity building to operators and project workers from OHS risk perspectives will be incorporated in the operation manual and Labor Management Procedures (LMP). A Project-level Environmental and Social Commitment (ESCP) will consolidate actions to be agreed by the implementing agencies for the management of environmental and social risks and impacts. Both the SEP and ESCP will be prepared, disclosed and consulted prior to appraisal. Other measures will be incorporated in the ESCP as time-bound actions and will be finalized during negotiations.

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APPROVAL

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