

**KEY RECOMMENDATIONS FOR
STRENGTHENING CAPACITIES
TO PROTECT PEOPLE AND
LIVELIHOODS FROM DISASTER
& CLIMATE CHANGE IMPACT**

Policy Makers Digest
2023

THE

KYRGYZ REPUBLIC



The CADRI Partnership (CADRI) is a UN led global partnership that works to build the capacity of countries to find integrated and coherent solutions to disaster risk reduction and climate change as part of the Sustainable Development Goals (SDGs).

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This document presents the main findings and recommendations of the disaster risk reduction capacity diagnosis prepared in 2022 at the request of the Government of the Kyrgyz Republic with a view to identify priority interventions to strengthen national and local systems to manage disaster risks.

The capacity diagnosis mission was led by the Ministry of Emergency Situations, in close collaboration with the UN Country Team and with the support of the CADRI Partnership.

INTRODUCTION

Disaster risks pose a serious threat to the economy and social development path of the Kyrgyz Republic. This landlocked mountainous country in Central Asia is exposed and vulnerable to a range of geological, hydrometeorological, biological and man-made hazards. The Kyrgyz Republic is classified as the most seismically dangerous territory in the region but also one of the most vulnerable to climate change.

In the years to come, climate change is expected to further increase the frequency and intensity of disasters such as heat waves, droughts, floods and glacial lake outburst floods and the resulting landslides, mudflows or dam breaks. Such disasters in zones with mining facilities can escalate into environmental emergencies with transboundary impact. The country is also faced with the challenges of managing legacy wastes from past uranium mining and waste from mining industries.

Finally, the country is exposed to a variety of biological hazards ranging from respiratory diseases epidemics (pandemic influenza, emergent coronaviruses), and measles outbreaks to animal and plant diseases and pests. Management of chemical and hazardous waste also poses a risk to health.

The increased occurrence and intensity of disasters will be felt by many sectors of the economy, the most vulnerable being agriculture, water, energy, and

infrastructure. Losses from disasters threaten development gains, trigger forced migrations and can increase the inequality gap between women and men, and children vulnerability. In a context of high social vulnerability, vulnerable groups are disproportionately affected. The social and economic cost of the COVID-19 pandemic has exposed these vulnerabilities.

Cognizant of the threats posed by disaster and climate risk to the economy and social development, the country has made significant progress in strengthening its regulatory and legal framework for disaster risk reduction. The Ministry of Emergency Situation is committed to shift the focus from emergency response to increasing the level of preparedness and preventing disaster losses. This can only be done with the leadership of all socio-economic sectors, with clear roles and responsibilities and allocation of resources at all levels.

The selection of recommendations in this report are meant to strengthen the institutional set up and financing arrangements and the access to information on disaster risk by decision makers. Specific actions are proposed to improve investment in disaster prevention and preparedness in agriculture and food security; environment; infrastructure; social protection; health; education; and water and sanitation.



UNDERSTANDING RISK

Understanding risk is about understanding the vulnerability of different population groups, activities and landscapes to different types of hazards such as floods or epidemics. Understanding risk is fundamental to build resilience to disasters and mitigate the impacts of climate change at both the national and local levels.

The Kyrgyz Republic monitors different dimensions of disaster risk ranging from water quality and disease surveillance to weather observation and forecasting, and specialized organizations in different socio-economic sectors are responsible to assess different hazards. The Ministry of Emergency Situations manages the Unified Information Management System (UIMS) which collects data from various agencies and is used for warnings and notification. However,

the analysis of vulnerabilities to different hazards remains limited and needs to be better integrated in the assessment of risk.

Efforts are required to develop sector-specific risk assessment methodologies where the gender dimension is included. Sectoral ministries - including in social sectors such as social protection and education – need to be equipped with the skills and knowledge to analyze vulnerabilities of different population groups to different threats. The standards and procedures to exchange and disseminate data and information between actors and levels should be improved to help better identify risk and take preventive and preparedness actions.

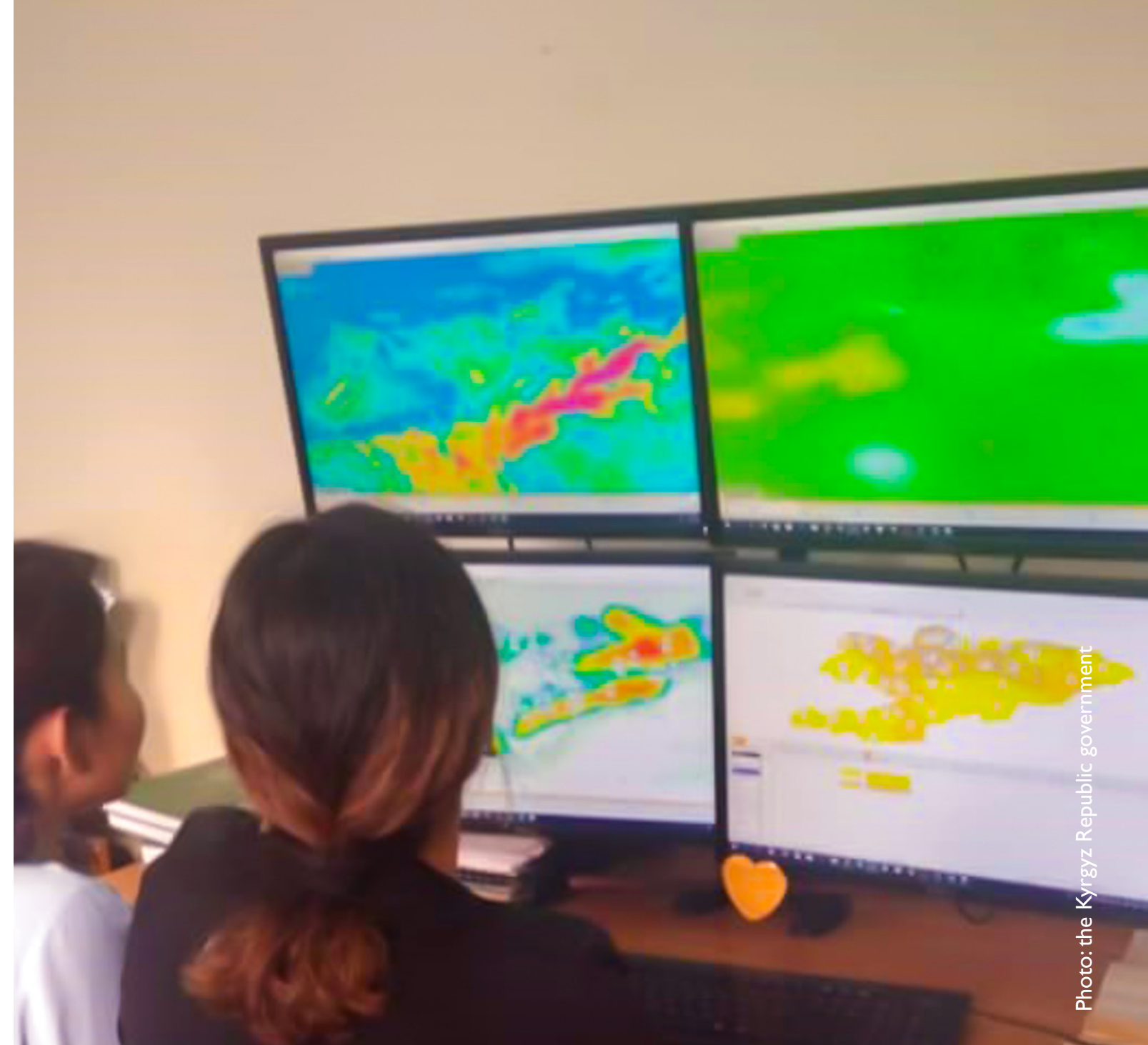


Photo: the Kyrgyz Republic government

KEY RECOMMENDATIONS:

1.

Develop a national guideline and methodologies to conduct risk assessment for various hazards, taking into consideration at-risk populations, notably vulnerable women, and disseminate the guideline to all public institutions.

2.

Deliver a training and skill development programme for priority sectors and municipalities on understanding disaster risk information and its application to disaster risk management.

3.

Clarify the regulations and protocols for data exchange on risk information including production and exchange of GIS data.

4.

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RISK GOVERNANCE

Disaster risk reduction is a national priority spelled out in the National Development Strategy of the Kyrgyz Republic for 2018-2040, the National Development Program, and the Concept of Comprehensive Protection of the Population and Territory from Emergencies for 2018-2030. The Ministry of Emergency Situations is the central body responsible for the implementation of the policy framework. The National Platform for Disaster Risk Reduction was established to support the coordination of efforts between various sectors and actors.

The main priority is to adapt the institutional framework and coordination mechanisms as well as existing policies across sectors to accompany the shift from emergency response to comprehensive disaster risk management. Policy coherence is a prime concern to address the inconsistencies between disaster risk management provisions and regulations across different sectoral policies and plans, and to strengthen the integration between climate change adaptation and disaster risk reduction.

KEY RECOMMENDATIONS:

1.

Clarify the institutional set-up of the National Platform for Disaster Risk Reduction to strengthen its role to promote coordination and multi-stakeholders engagement in disaster risk management.

2.

Review consistency between disaster risk reduction and climate change adaptation interventions to be integrated in sectoral policies and plans.

3.

Systematically integrate vulnerability analysis in disaster risk management measures to consider the needs of the most at-risk population groups including vulnerable women.

4.

Design and implement awareness and public education campaigns to help communities improve their knowledge of disaster risk and protect and empower the most at risk populations including vulnerable women.

5.

Establish a monitoring and evaluation system using sex- and age-disaggregated statistics to measure the effectiveness of programs and policies on different population groups, including women and men, boys and girls, the elderly, and people living with disabilities.

INVESTMENT IN DISASTER RISK REDUCTION

Investing in disaster resilience saves lives and money. It is estimated that for every dollar invested in disaster risk reduction, four to seven dollars can be saved in emergency response and reconstruction. In the Kyrgyz Republic, the government makes an annual national budget allocation to disaster risk management to a special account managed by the Ministry of Emergency Situations based on an assessment of risk. However, in the absence of a methodology that considers actual and projected disaster losses and damages across sectors, it is challenging to justify the required investment in protective risk reduction measures, especially for early warning, preparedness, and

recovery.

On order to reduce the cost of losses and damages to the economy, one key priority is to reform the financing system of disaster risk reduction at three levels. Firstly, investment in preparedness and preventive measures need to be eligible for the national budget allocation. Secondly, financing must be accessible at the level of the districts, cities and aiyl aimaks. Thirdly, investment in disaster preparedness and preventive measures need to be better integrated in sectoral budgets as “no-regret actions” with direct benefits for the sector.

KEY RECOMMENDATIONS:

1.

Develop a framework for accounting for disaster risk management expenditure categories (prevention and mitigation; preparedness; emergency response; recovery and reconstruction) into the national and local level budgets.

2.

Integrate investment in disaster preparedness and preventive measures in sectoral budgets (no-regret actions) with a special emphasis on protective measures for the most vulnerable segments of the population.

3.

Diversify the sources of funding for disaster risk reduction and climate change adaptation including mechanisms to mobilize external and private sector financing.

4.

Include budget allocations for awareness raising and public education on disaster risk reduction and climate change adaptation in social infrastructure facilities budget (including schools, universities, health centers).



PREPAREDNESS TO RESPOND AND RECOVER

The country has strengthened its emergency response and preparedness systems. There is an early warning system in place for earthquakes, avalanches, and extreme weather events such as heatwaves under the Unified Information Management System. The Crisis Management Center analyses, issues and disseminates notifications and warnings through the National Integrated System for Informing and Alerting the Population. There is a statewide comprehensive system of informing and alert the public; and a unified duty dispatch service 112. The early warning system can be further strengthened to become fully

automated, and to further clarify duties, tasks and functions between different stakeholders across sectors, from the national to the local level. Enhancing surveillance and cooperation to prepare for transboundary disasters is another priority.

Additional efforts are required to strengthen regional and local emergency contingency planning, enhance prepositioning, and improve the Ministry of Emergency Situations trainings center capacities to expand training opportunities for sectoral ministries.

KEY RECOMMENDATIONS:

1.

Improve the early warning system to better integrate environmental and biological hazards and consider existing vulnerabilities to protect men and women, boys and girls.

2.

Develop a standardized methodology for conducting post-disaster needs assessments.

3.

Establish the procedures to be able to mobilize international assistance through UNDAC and INSARAG in case of major catastrophe.

4.

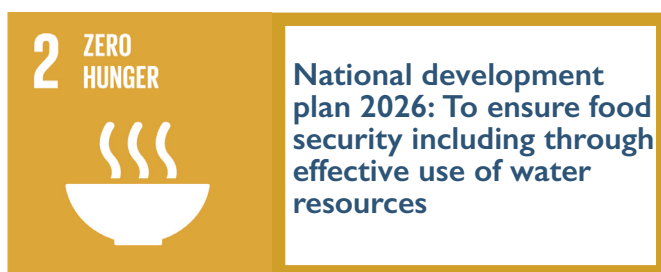
Increase prepositioning and stockpiling capacities at local level.

5.

Strengthen specialized search and rescue services, including a cynology service with established standards for dogs training.



Photo: UNDP/Danil Usmanov



While the share of agriculture in GDP has decreased, it remains a vital sector of the economy, providing livelihoods for 27% of the rural areas population, half of whom are women. Crop yields are unstable since agriculture is dependent on climatic conditions. The lack of irrigation is a major constraint to agricultural development and food security.

The use of disaster risk information in the agriculture sector is limited. The Ministry of Agriculture is responsible for monitoring of pests and veterinary control. Disaster losses in agriculture are collected on an annual basis. However, the lack of a unified agricultural information

system and insufficient interaction between responsible structures make it challenging to carry out a full-fledged risk analysis in this sector, and farmers do not have access to timely forecast information.

Although there are legal provisions to frame agricultural risk insurance, it does not yet work in practice. It is necessary to conduct a comprehensive review of the existing risk insurance system in agriculture with all stakeholders' involvement. Efforts should be taken to update specialist training programs and include risk assessment and climate change adaptation issues.

KEY RECOMMENDATIONS:

1.

Approve a methodological framework to integrate disaster risk management in agriculture policies and plans, including the unified methodology for damage and losses.

2.

Establish a system for collecting, monitoring, and analyzing information on natural hazards to assess the risk to agriculture sub sectors with sex-disaggregated indicators.

3.

Promote the dissemination of nature-based solutions, green technology, and traditional knowledge to reduce disaster risks in agriculture.

4.

Increase access of women engaged in agriculture to knowledge, resources and services to reduce disaster risk and implement climate-smart agriculture.

5.

Update agro-climatic zoning every 5-10 years.

AGRICULTURE AND FOOD SECURITY



Photo: FAO/Vyacheslav Oseledko

ENVIRONMENT

15 LIFE ON LAND



National development plan 2026: To reduce the negative consequences of industry and enhance waste management capacities

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KEY RECOMMENDATIONS:

1.

Use digital, remote sensing, and geo-information technologies to enhance data collection and surveillance of environmental hazards.

2.

Integrate environmental risk information into the Unified Information Management System and national early warning system.

3.

Develop detailed methodology for assessing the cost of damage and losses from disasters in monetary terms and physical units for industrial waste and accidents and the forestry sector.

4.

Introduce compulsory insurance for hazardous production facilities and industrial waste disposal.

HEALTH



Kyrgyzstan is largely exposed to outbreaks of infectious diseases. Although the country has a comprehensive, broad national legislative framework at various levels in the field of healthcare, recent events related to the COVID-19 pandemic have highlighted both the strengths and weaknesses of the existing healthcare system.

Due to existing national-level coordination mechanisms, where donors and partners are involved, it was possible to respond timely to the challenges faced by the country at the beginning of the COVID-19 pandemic. Due to the long-term nature of this situation, access to basic health services, including those related to reproductive health, was limited. It is necessary to strengthen intersectoral coordination and include all stakeholders, local

authorities, and communities to overcome the shortcomings of the existing system. Particular attention should be paid to reproductive health, reducing gender-based violence, which can become especially acute for vulnerable groups in emergencies.

The COVID-19 pandemic has accelerated the development of health management information systems that provide real-time epidemiological surveillance and early warning. An epidemiological information platform is being developed based on a standardized risk assessment methodology for public health events and will be used to assess the risks of public health emergencies. Further development of this methodology should include possible climate impacts and gender aspects.

KEY RECOMMENDATIONS:

1.

Introduce climate and gender aspects into the standardized methodology for assessing the risks of health emergencies.

2.

Synergize the emerging epidemiological information platform with other sectors (e.g., agriculture) and existing systems (e.g., the Crisis Management Centre of the Ministry of Emergency Situations).

3.

Provide training for health workers on climate change adaptation, including gender aspects, in case of emergencies.

4.

Implementation of a mechanism for coordinating a multisectoral response to gender-based violence and creating a unified system for attracting and accounting for professional psychologists in an emergency.

5.

Establish the distribution of reproductive health kits in case of emergencies to medical centers, mobile clinics and staff of health institutions.

SOCIAL PROTECTION

10 REDUCED INEQUALITIES



National development plan XXXX

The Kyrgyz Republic is a middle-income country; as of 2020, 29.3% of the inhabitants of rural regions and 18.3% of the urban population were below the poverty line. Social protection programs and various types of benefits and pensions are paid to some vulnerable groups. In 2017, spending on social protection amounted to 9.97% of GDP compared to developed countries such as France, which reached 23%.

There is a growing interest in using national social protection programs to support the population in emergencies. Still, there is no legal framework for post-emergency assistance focusing on the most vulnerable at this stage.

Gender aspects in providing social services to the population affected by gender-based violence in emergencies are not fully considered. It is worth noting that during and after an emergency, the failure of social services and systems exacerbates vulnerability

to an increased risk of gender-based violence. Interaction and coordination with organizations providing services to victims of gender-based violence in an emergency are not reflected in the plans of the social protection service.

The social protection service was formed several years ago. The social protection system has representations at the local level. The national payment system of monetary benefits is also present throughout the country, and payments are made through post offices and banks. Using the existing potential in the social protection system in disaster risk management is necessary. Social protection workers should be involved in assessing the population's vulnerability to disaster risks and the needs of the population. Payments for affected people can also be distributed via the social protection system.

KEY RECOMMENDATIONS:

1.

Prescribe a new category of beneficiaries in the general social protection law entitled to social protection in the event of a disaster and develop a list of social services and cash benefits for emergencies.

2.

Develop a methodology for assessing and analyzing the population's vulnerability to emergencies.

3.

Train social workers and involve them in vulnerability assessment and identifying the population's needs.

4.

Develop protocols/ instructions for behavior and actions for each type of disaster and standard operating procedures for preventing and responding to gender-based violence by all stakeholders in emergencies.

WASH (WATER SUPPLY, SANITATION, AND HYGIENE)

6 CLEAN WATER AND SANITATION



National development plan XXXX

Due to the country's current socio-economic situation, it is impossible to allocate sufficient funds from the budget for the necessary capital investments in the water supply and sanitation sector. In contrast, donors and international organizations make significant investments in this sector. The country has sufficient resources for fresh drinking water of good quality. However, the poor condition of water pipes, the lack of rural sewerage and industrial water treatment systems, industrial and municipal waste dumps, and other factors adversely affect natural water quality. Climate change in recent decades poses an additional threat to existing water supplies. Floods pollute freshwater supplies, increase the risk of waterborne diseases and provide breeding grounds for disease-carrying insects.

Societal vulnerability to disasters increases as infrastructure networks in the water supply and sanitation sector weaken, inequalities increase, and access to essential social services

in this area decreases. In Kyrgyzstan, the water provider is a woman in more than 60% of households. On average, women spend more than one hour daily collecting water. The use of water for sanitary and domestic purposes, the production and processing of food, cooking - all this is often the responsibility of women. At the same time, the entire process of water delivery and storage cannot guarantee the quality of drinking water that meets sanitary and hygienic norms and standards.

Informing the competent authorities about drinking water quality is a part of the information system in the country. However, the responsibilities are divided between different departments and agencies, complicating coordination, which becomes particularly important in emergencies. There is no clear emergency protocol, and there is a shortage of budget and expertise at the local level.

KEY RECOMMENDATIONS:

1.

Develop clear local emergency protocols with integrated WASH aspects to ensure that affected populations are provided with safe water and sanitation during recovery.

2.

Invest in disaster-resilient WASH infrastructure.

3.

Determine the availability of water supply sources for women and girls with respect to the right to personal safety when visiting these facilities in case of emergencies.

4.

Assist local and international agencies and humanitarian partners in maintaining a minimum stockpile of WASH funds in disaster-prone regions.

EDUCATION



The Government of the Kyrgyz Republic has adopted the State Program for School Safety, which includes aspects of disaster risk reduction based on the recommendations from the global “Safe School” initiative.

According to the UNICEF assessment (2013-2014), nearly all schools and preschool institutions are located in zones with high seismic risk; most buildings are unsafe. It is necessary to restore and rehabilitate the buildings according to the existing design standards aligned with internationally recognized safety standards.

The National Education Development Strategy in the Kyrgyz Republic for 2021-2040 foresees the integration of disaster risk reduction in school curricula. Being

an interdisciplinary area for effective implementation, good coordination is required. Better training of school managers and teachers in disaster risk management is needed.

An education management information system has been developed where educational institutions can provide operational information, for example, data disaggregated by sex and disability on enrollment, teaching process, general information about the school, and technical infrastructure. This information can be used in the analysis of the vulnerability of schools to disasters. Based on the assessment results, it is necessary to direct targeted funding and projects supported by donors to restore high-risk buildings or build new ones instead of existing ones.

KEY RECOMMENDATIONS:

1.

Development and implementation of a consolidated methodology for assessing the structural safety of the school.

2.

Adopt an inclusive and gender-responsive school disaster management system as a regulatory requirement. Girls and boys must be members of this management system along with teachers.

3.

Integrating existing education databases to ensure an integrated approach to disaster risk management.

4.

Raise awareness, literacy, and technical skills of girls and boys in disaster risk reduction and prevention of gender-based violence in emergency settings.

INFRASTRUCTURE

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



National development
plan 2026: Develop
the transport network
to better connect
Kyrgyzstan to
neighboring countries

Public investment in infrastructure increases with demographic growth and economic development. Infrastructure systems, especially in the transport, energy and water sectors, are exposed to landslides, earthquakes, extreme weather events, and man-made accidents.

The low maintenance of infrastructure and the limited implementation of the legal and regulatory framework contribute to increase its vulnerability to disaster and climate risks. Additionally, the lack of systematic data collection and analysis on the exposure and vulnerability of infrastructure and assets is a major impediment to resilient infrastructure development. Datasets are highly fragmented between various institutions such as the Ministry of Emergency Situations, sectoral ministries and infrastructure operators.

In urban areas, rapid population growth, continued expansion of informal settlements, degradation of urban infrastructure, and deterioration of the environment hamper the delivery of inclusive and sustainable infrastructure services for economic and social development. Disaster damages to the infrastructure systems and interruption of access to infrastructure services have a disproportionate impact on women and girls, the elderly, and people with disabilities.

The use of disaster risk information to promote integrated spatial planning of various infrastructure systems for transport, drainage, water and sanitation and energy is essential to reduce disaster losses and damages in urban and rural areas.

KEY RECOMMENDATIONS:

1.

Improve integrated planning of infrastructure systems and regulatory framework to ensure the sustainability of infrastructure, including introducing the concepts of “critical infrastructure”.

2.

Increase systematic data collection and analysis on the exposure of critical infrastructure systems to disaster and climate risk.

3.

Increase the capacity of infrastructure planners and operators to apply GIS tools and solutions.

4.

Conduct multi-risk and multi-stakeholder assessments of infrastructure exposure and vulnerability and adjust operational plans and budgets accordingly.



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