

# Climate Risk Management in Central Asia

## Context

Mountain glaciers in Central Asia are rapidly melting due to global warming and climate change. Following the latest reports, they will continue to shrink at least for several decades. According to the prognoses, extreme precipitation is expected to increase in major mountainous regions, with the potential for natural disasters such as floods, landslides, and lake outbursts in all scenarios of climate change. The integrity of ecosystems in general will be damaged, leading to problems with water supply, energy production, and agricultural and forestry production.

If the global warming continues to exceed 2°C every year, East and West Central Asia would become even drier, particularly already in the middle of the 21st century.

Since climate risks do not know national boundaries, their consequences affect multiple countries simultaneously. Therefore, governments of neighboring countries need to work together to address shared risks and coordinate their responses. This is also an opportunity to build stronger regional partnership, sharing knowledge and fostering joint efforts towards a climate-resilient future.

## Our objective

Transboundary climate and disaster risk management in Central Asia is improved.

## Our measures

The programme team provides expertise to water basin organizations and stakeholders from selected water basin councils, national emergency and hydrometeorological

Programme name	Climate Risk Management in Central Asia
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Programme regions	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan
Main partners	Kazakhstan: Ministry of Ecology and Natural Resources; Kyrgyzstan: Ministry of Natural Resources, Ecology and Technical Supervision; Tajikistan: Committee for Environmental Protection under the Government of the Republic of Tajikistan; Turkmenistan: Ministry of Environmental Protection; Uzbekistan: Ministry of Ecology, Environmental Protection and Climate Change; Center for Emergency Situations and Disaster Risk Reduction (CESDRR)
Duration	03.2022 - 02.2026

institutions, regional center for disaster risk reduction.

This includes the following:

- The programme involves conducting climate risk assessments at selected interstate small watersheds in Central Asian countries. This will be accomplished through an inclusive and participatory approach that actively engages local actors such as water basin organizations, basin councils, and local self-governing institutions. Our team of experts provides support to environmental government institutions and local partner organizations, equipping them with the necessary knowledge and tools to develop climate adaptation action plans.
- We assist relevant government ministries and agencies responsible for water resources management, climate change adaptation and disaster risk reduction in developing and implementing sound policies and plans in their area of work.



*L. to r.: Petrov Lake is the largest moraine glacial lake of the Tien Shan in terms of area and volume of water. It appeared 100 years ago as a result of melting of the Petrov glacier. Issyk-Kul region, Kyrgyzstan.*

*Presentation on flood protection methods and overview of floods during the study tour along the Danube River, Passau, 2023.*

*Pg 2: Workshop on climate risk assessment, Tashkent, 2024.*

*Meteorological Technology World Expo, Geneva, 2023.*



Sergey Makarov,  
 sergey.makarov@giz.de  
 Phone + 998 (933) 88 34 88

- We facilitate knowledge exchange and coordination among the participating countries thereby promoting mutual learning and collaboration. Furthermore, we support the formulation of regional policies and strategies to promote climate-resilient water resources management and disaster risk reduction.

The programme endeavors to encourage the active involvement of civil society and non-governmental organizations in climate risk management activities. Recognizing climate change as a global challenge necessitating coordinated action across sectors and regions, this approach assembles stakeholders from diverse backgrounds and regions. This convergence of perspectives aims to foster deeper understanding, cooperation, and the development of region-specific strategies tailored to address unique challenges and needs. This helps to ensure that the needs of local communities and vulnerable groups are met and that the formulated strategies adhere to principles of social and environmental justice.

## Selected results and impacts

More than 150 experts from government agencies and regional organizations were able to improve their knowledge and skills in climate change adaptation through participation in training seminars, conferences, and thematic study trips. The programme supported the organisation of several high-level conferences: the Regional Forum – Meeting of the Heads of Emergency Authorities of Central Asian countries and the Central Asia Climate Change Conference. These important platforms facilitate the exchange of experiences and discussion on the development of joint strategies in climate change adaptation and disaster risk management.

Eleven partner organizations received new equipment (computers, servers), software, or special gear for work (such as climbing gear, drones for field research, etc.).

Five transboundary basins were selected for climate risk assessment. The assessment results will help determine measures to mitigate the consequences of climate change and ways to implement them locally.

Published by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH  
 (German federal enterprise for international cooperation)

Registered offices Bonn and Eschborn, Germany

Regional Programme “Climate Risk Management in Central Asia”

Chimkentskaya Str. 7a, Mirabad District  
 100029 Tashkent, Uzbekistan  
 Phone + 998 (933) 88 34 88  
 www.giz.de

As at April 2024

Printed by

Design Aleksandra Ustinova, Bishkek

Photo credits

Programme archive: page 1,2  
 Vitaly Zaginaev: page 1  
 Ministry of Ecology, Environmental Protection and Climate Change of the Republic of Uzbekistan: page 2

Text

Sergey Makarov, Maya Eralieva, Behruz Ilazarov

GIZ is responsible for the content of this publication.

On behalf of

German Federal Ministry for Economic Cooperation and Development (BMZ)