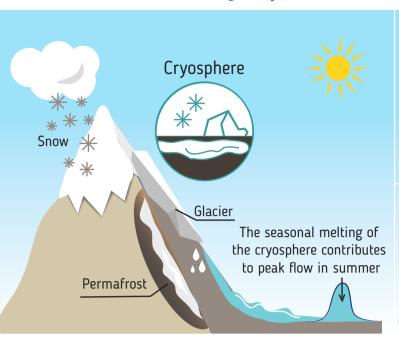
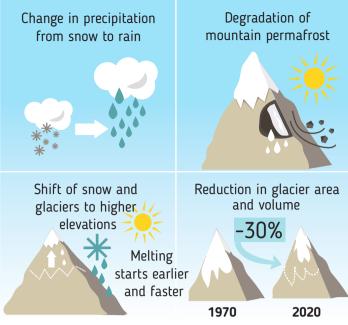
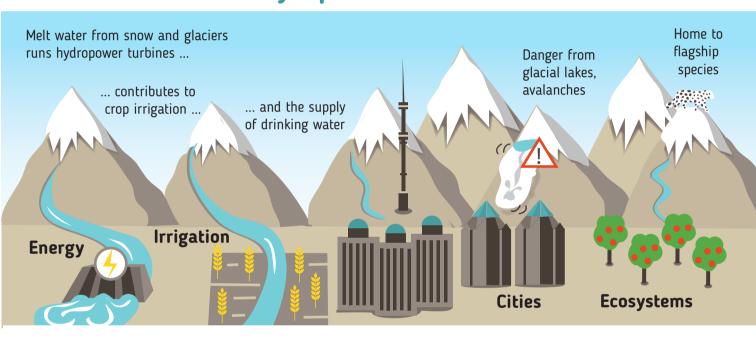
What is the cryosphere?

Changes in the cryosphere

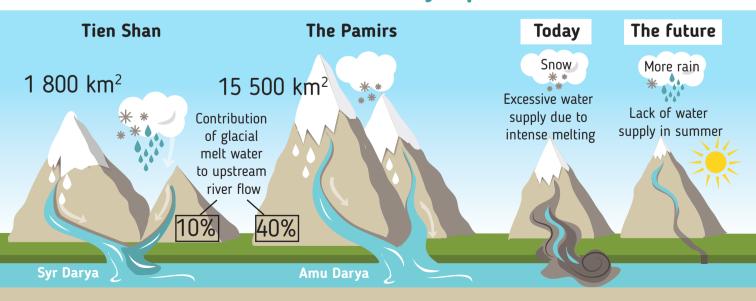




The cryosphere in Central Asia



Water and the cryosphere



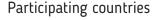
Project partners and funders













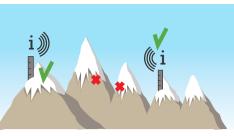








Gaps in knowledge and monitoring of the cryosphere



Sparse snow and glacier monitoring, limited time series



Very limited in-situ glacier and permafrost observations



Limited information exchange, lack of coordination

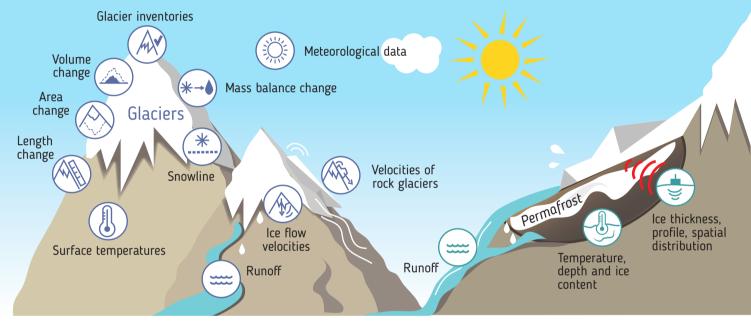


Lack of information for decision-making and adaptation to climate change

Limited public awareness

Limited inter-agency cooperation

Key elements of cryospheric monitoring



Beneficiaries



Legislators and top decision makers



Hydrometeorological services



National universities



Academia, institutes



Regional and external universities and centers



Non-governmental public organizations



International organizations



Agricultural authorities



Environmental authorities



authorities



Private sector



Project partners and funders







Global Environment







Participating countries





Tajikistan Turkmenistan Uzbekistan

The project in a nutshell



Duration 2022-2026 (planned)



Budget: GEF budget \$6 million. co-financing \$13 million





25 project partners



Better knowledge of the climate's trends and impact on the cryosphere



Improved science and policy links and cooperation



Regular glacier monitoring and regional exchange



Adaptation to climate change in glacier-dependent areas



Public and political interest in glaciers

Project activities and outcomes

1. Knowledge and information database





Diagnostic analysis (DA): changes in the cryosphere



National databases on the cryosphere



Glacier vulnerability and hazards



Climate, glacial and water scenarios

2. National and regional cooperation and centres

0 0 0 0



National action plans (NAPs)



Regional Strategic action program (SAP)



Inter-agency cooperation



National and regional centers and forums

3. Capacity for cryospheric monitoring 0 0 0 0 0 0 0



The regional glacier monitoring protocol



Regional knowledge exchange and training



National cryospheric monitoring programs



Assessment and forecasting of the climate's impact on the cryosphere

4. Training and demonstrating adaptation to climate change 0 0 0 0





Trainings



Projects in 5 countries













5. Public awareness and engagement 6



Virtual reality tours of glaciers



The project website, linked to IW:LEARN



Events and conferences



Stakeholder engagement

Project partners and funders















Participating countries





Kazakhstan

Kyrgyzstan

Tajikistan Turkmenistan Uzbekistan

Two glacier projects, many synergies



Focus on climate-sensitive mountain environments



Climate change as a key threat



Implemented by UNESCO

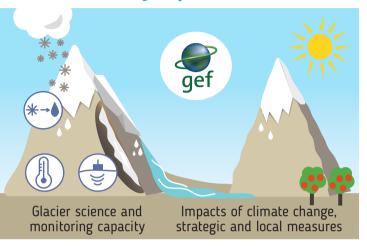


Supported by science



Targeting vulnerable communities

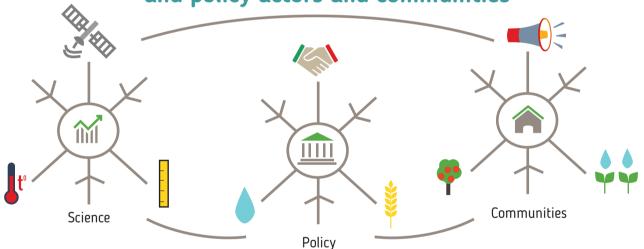
Cryosphere



Glacial Lake Outburst Floods



Cooperation and engagement of different science and policy actors and communities



Consideration of the cryosphere and glacial hazards in policy, international investment and global science



High level statements and initiatives



International investments and connectivity



Global climate and glacier science

Project partners and funders



Global Environment Facility









Participating countries





Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan