

# Preparing for the next earthquake

## Cross-border cooperation for disaster risk management in Central Asia

Earthquakes strike unannounced and cannot be prevented. Proper disaster risk management, however, can help to minimise the consequences of this natural threat. Adapted architecture and infrastructure, well prepared relief operations, mitigation measures and early warning help to reduce the vulnerability of the affected population. To put this in place, close regional as well as interdisciplinary co-operation is essential. This is true everywhere on earth and even more so in the Central Asia region and Afghanistan where, for historic reasons, cross-border cooperation is scarce, civil society and government structures are weak.

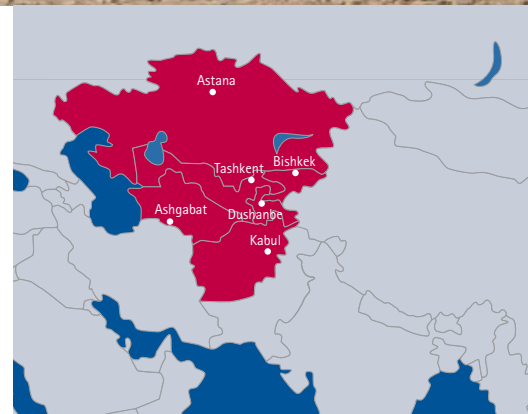
On behalf of the German Federal Foreign Office and in close cooperation with the German Research Centre for Geosciences (GFZ) – Helmholtz Centre Potsdam and the Central Asian Institute for Applied Geosciences (CAIAG) in Kyrgyzstan, as well as with national partner institutions, InWEnt supports the necessary technical and institutional development, network and capacity building in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan and Afghanistan.

On the technical side of the project a trans-boundary earthquake monitoring system, called CAREMON (Central Asian Real-Time Earthquake Monitoring Network), is being developed. This includes the installation or upgrade of six seismic stations in the six countries to form the network. In addition, new technology for quick data exchange across the region will be installed. Seismic microzoning of densely populated areas will help to identify areas prone to amplified ground motion that can lead to

increase of damage. Scientists and specialists will be trained to operate and maintain the technical infrastructure as well as to interpret and use the seismic data.

The project does not focus on technology alone. Capacity building and awareness raising activities will target scientists and engineers as well as decision-makers, regional planning authorities, civil society representatives and the general public at large. This includes the development of training material and train-the-trainers programmes. Special attention will be given to media representatives. They play a crucial role in explaining scientific know-how such as risk analysis and disaster preparedness measures to the general public.

Both aspects of the project aim at enhancing know-how, awareness, information exchange and cooperation on national and regional levels, thus contributing to improved prevention and preparedness for the next earthquake to come.



The five Central Asian countries together with neighbouring Afghanistan are regularly hit by severe natural disasters. Amongst others floods, droughts, mudflows, avalanches and especially earthquakes pose the greatest threats to the population. At least 12 Million people have been directly affected over the last 50 years. At the same time vulnerability is high. Social and economic crisis in most of the countries as well as many years of war in Afghanistan resulted in insufficient development of proper disaster risk management systems.



The project started off with a regional planning conference in Tashkent in 2008. InWEnt has been active in the field of disaster risk management in Asia and Africa for many years. Activities in the Central Asia region date back to the late 1980s.

### Central steps of the project:

- Introduction of supra-regional earthquake monitoring through CAREMON (Central Asian Real-Time Earthquake Monitoring Network), including the installation of six new seismic stations
- Seismic micro-zoning
- Regional awareness-raising workshops
- On-the-job training of local staff
- Regional and national inter-disciplinary professional training on the conduct and utilisation of risk analysis for scientists, civil engineers, decision makers
- Training on the use of the Global Risk Tool (scenario-based risk assessment), including a study tour to Germany

"Reducing vulnerability to natural disasters is a key factor enhancing sustainable development. There is a specific need to strengthen the integral Disaster Risk Management as well as the need to further develop the technological, institutional and human capacities of all relevant key actors in the region."

From Project's Letter of Intent

### InWEnt – Qualified to shape the future

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