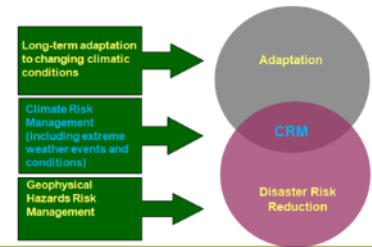


UNDP Programme on Climate Risk Management in Central Asia



Yegor Volovik
Regional Program Coordinator

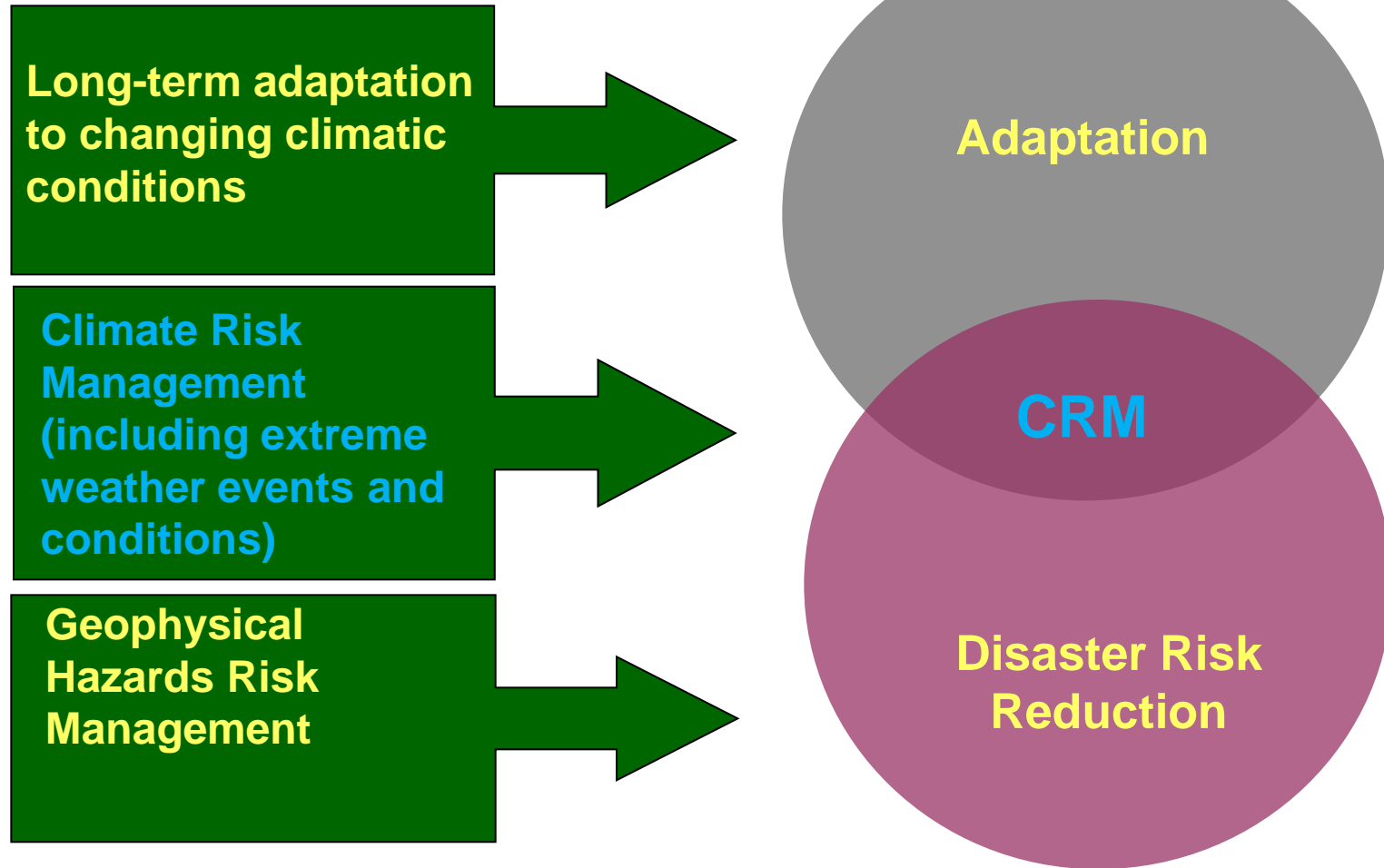


“Climate Risk Management (CRM) is a term is used for a large and **growing** body of work, bridging the climate change adaptation, disaster risk management and development sectors.”

Definitions

Climate risk management is the culture, processes and structures directed towards realising potential opportunities, whilst managing adverse effects. It is the systematic process of using administrative decisions, organisations, operational skills and capacities to implement policies, strategies and coping capacities of the society and communities to minimise the impacts of natural hazards and related environmental and technological disasters. This comprises all forms of activities, including structural and non-structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of hazards.

Correlation between CC Adaptation and Disaster Risk Reduction

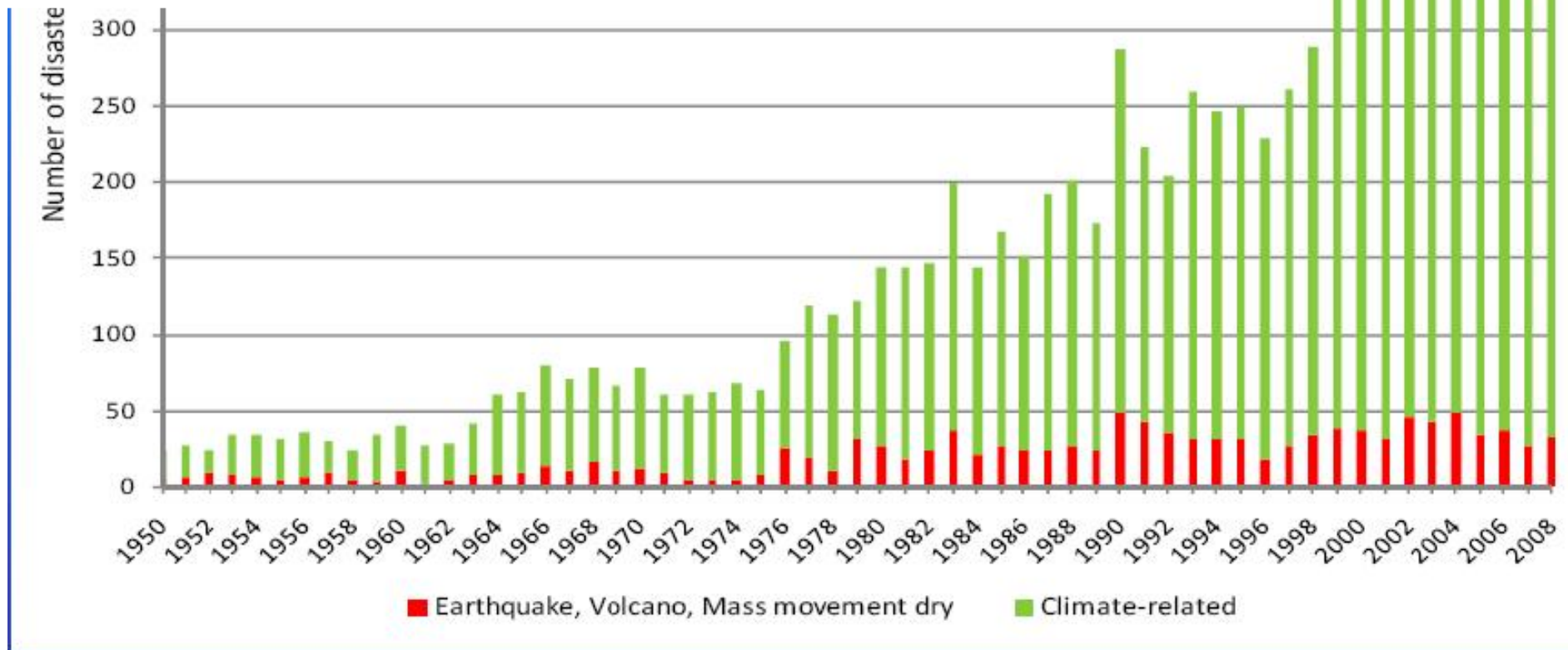


Climate variability and climate change

Cyclic effect or global warming?

Frequency of natural hazards

(Central & Eastern Europe and Central Asia)

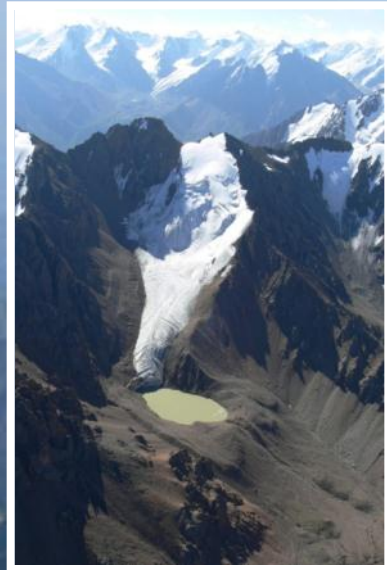
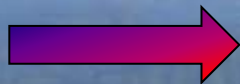


Source: Climate related disasters compared to geophysical disasters.
http://ec.europa.eu/development/icenter/B2_cred_20090427.pdf





1958



2008

#6



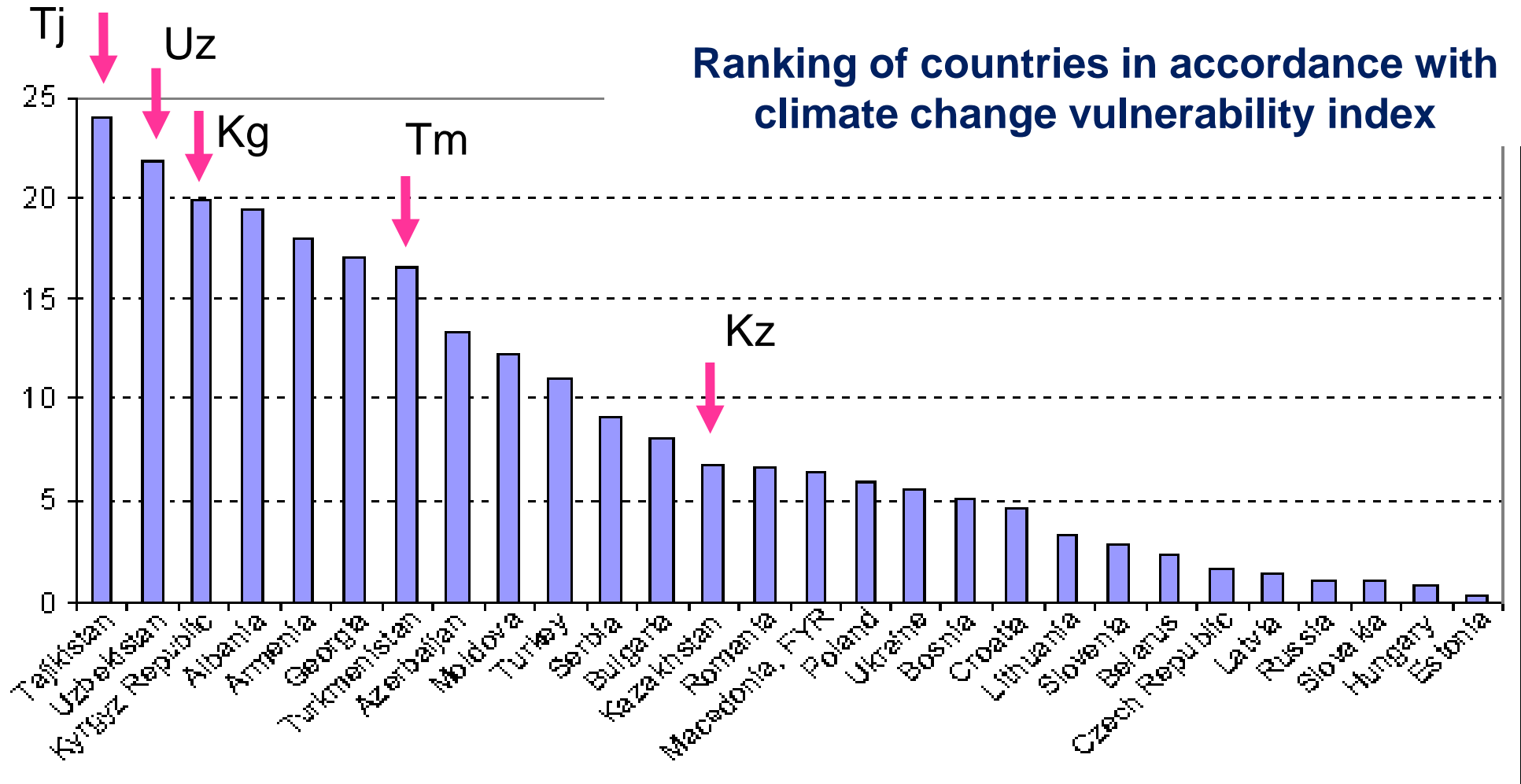
Glacier: Manshuk Mametovoy

#1



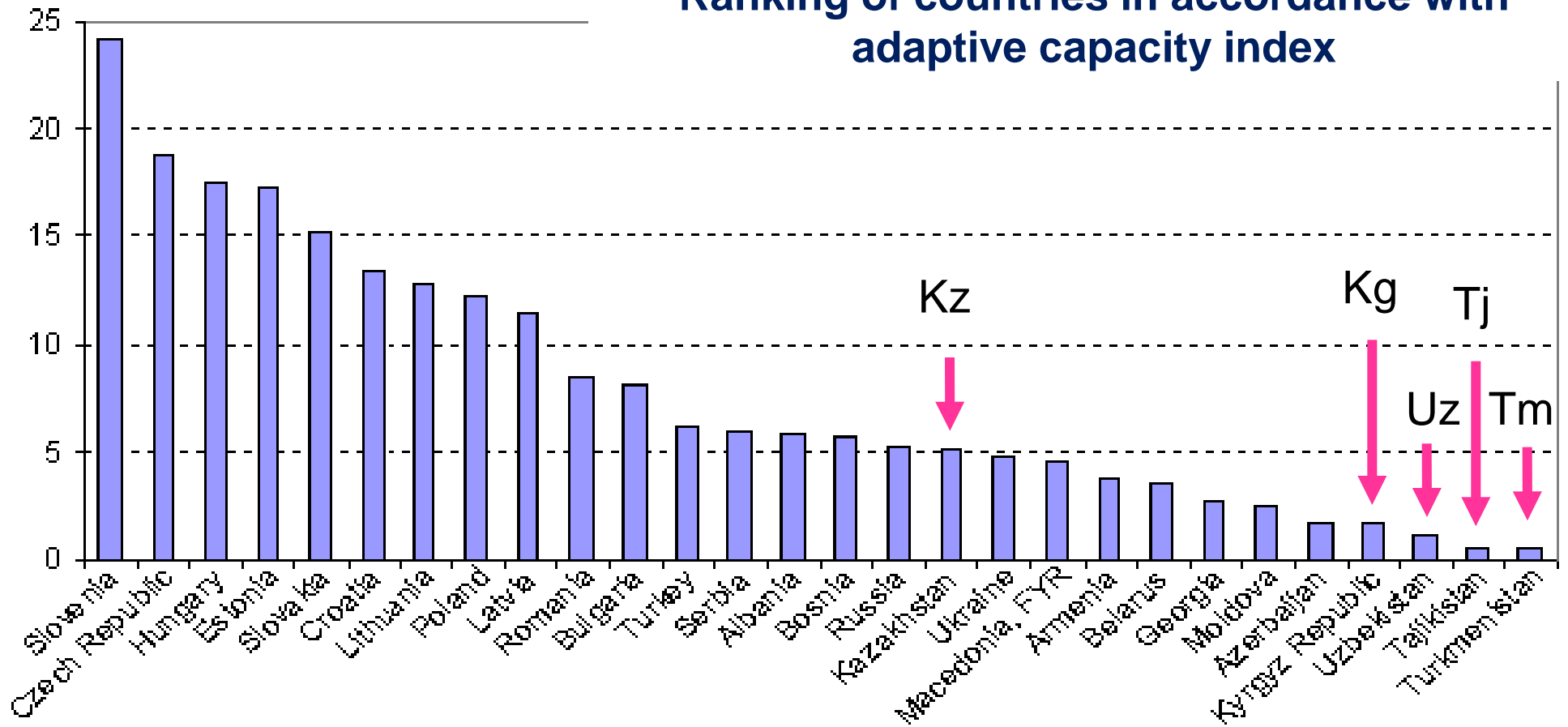
#9





Source: World Bank.2009. Adapting to climate change in Europe and Central Asia Report. Washington DC. WB

Ranking of countries in accordance with adaptive capacity index



Source: World Bank.2009. Adapting to climate change in Europe and Central Asia Report. Washington DC. WB

Why the problem of natural risk disasters is so important?

Economic loss as a % of GDP in case of natural disasters of 0.5% likelihood (once in 200 years) :

- 1. Tajikistan – 20.9%**
- 2. Turkmenistan – 12.1%**
- 3. Uzbekistan – 9.5%**
- 4. Kyrgyzstan – 4.6%**
- 5. Kazakhstan – 1.1%**

Source: Инициатива по управлению риском бедствий в Центральной Азии и на Кавказе (ИУРБ ЦАК), Сводный отчёт об оценке риска бедствий в странах ЦАК (2009г.)

Multiplicative effect of climate change

- **1st order factors:**
 - Increased temperature and GHG emissions/greenhouse effect
- **impacts/2nd order factors:**
 - changed precipitation and hydrograph patterns, glacier degradation, floods/droughts, ecosystem degradation, disturbed ground/surface balance, climate aridisation, deforestation, sand storms, heat/cold waves, more frequent natural disasters
- **impacts/3rd order factors:**
 - Food security, economic security energy supply, drinking water supply, hygiene/sanitation, vulnerability/exposure to risks of disasters

Compound Risks/Crises

What's innovative about & features of CA-CRM

- Cutting edge thematic focus: CRM = DRR + CC Adaptation
- Cross-sectoral nature of interventions
- New implementation modality – country specific approach: National Projects have country-specific thematic and geographic focus
- UNDP comparative advantage –close cooperation with CA governments through UNDP Country Offices

Regional Project

1. Strengthened technical capacity for CRM at regional level

2. Establishment of a regional technical web-based platform for CRM to exchange data/information/lessons and experience

3. Improving knowledge on the glaciers degradation in Central Asia



National CRM Projects in CA countries

1. Strengthening capacity for CRM at systemic, institutional, and individuals levels

2. Demonstration of CRM approaches at local level

3. Knowledge Management and Lessons Learned

Kazakhstan

Water use efficiency in agriculture(Almaty region)

Kyrgyzstan

Pasture/livestock management (the Suusamir Valey)

Tajikistan

Agroforestry (the Gissar Range)

Turkmenistan

More effective risk assessment and information exchange (high-mountains agriculture (Nohur), oases irrigation (Sakar Chaga) and desert livestock management (Er bent))

Uzbekistan

Droughts management (the Kashkadarya river basin)

Improving knowledge on the glaciers degradation in Central Asia

What has been done.....

A Series of Studies

- “Central Asia Glaciers Study - Current state of knowledge and recommendations” (UNEP/GRID Europe, 2010)
- Brochure “The Glaciers of Central Asia: A Disappearing Resource”
- Analytical Report “State and Development Needs for Glaciosphere Monitoring in Central Asia” (Zoë Environment, 2010)
- Digitisation and publishing of Shetinnikov’s catalogue of Pamir and Hissaro-Alay glaciers



Trainings and Education



- Regional Workshop on Monitoring Glacier Retreat in CA (Almaty, June 2010)
- Regional Workshop “Modern problems of glaciology in CA and prospects of scientific cooperation on the basis of Central-Asian Regional Glaciological Centre Category II” co-organized with UNESCO (November 2010)
- Training on socio-economic assessment of climate change impacts (Bratislava, November 2010)
- Regional CRM training (Almaty, Feb 2011)
- Training of CA young professionals on glaciological monitoring and glacier mass balance monitoring co-organized with UNESCO and Institute of Geography of AS) (Almaty, August 2011)
- Support to GIZ Trainings of Trainers on climate change and environment in 5 countries (ongoing)



Field work and Conference



- Glaciological Expedition to the Garmo and Skogach Glaciers (the Obikhingou River basin, Tajikistan, July 2011)
- 1st International glaciological Expedition to the upper stretches of the Vakhsh and Pyanj rivers (Tajikistan, August 2011)
- International Conference „MOUNTAIN HAZARDS 2011“ (Dushanbe, 19-21 September 2011)

International Conference „MOUNTAIN HAZARDS 2011“

- Over 100 abstracts submitted, 70 – included in Conference proceedings, articles being finalised for publication
- Over 85 participants from 16 countries
- 43 presentation within 7 thematic sessions:
 - Session I: Natural Hazards in Mountains
 - Session II: Results of the First Complex International Research Expedition on Assessment of the Situation of Glacier Cover, Environment and Socio-Economical Conditions at the Upper Catchment of Vakhsh and Pyanj Rivers
 - Session III: Climate change and natural hazards
 - Session IV: Climate Changes and Water Resources
 - Session V: Natural Hazards, Research Studies and Methods
 - Session VI: Natural Hazards, Management and Adaptation
 - Session VII: International collaboration in CRM and natural hazard research

www.mountainhazards2011.com



Thank you!

