

Human-Nature Linkages in Mountain communities and their adaptation

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Cryosphere via Human-Nature Links

- * Visible seasonal melting of mountain snow and ice supplies freshwater for more than half of humanity (Milner et al., [2017](#); Qin & Ding, [2010](#); Xiao, Wang, & Qin, [2015](#))
- * **Cryosphere**, although less visible, together contributes to climatic conditions ...

Water supply, quality
availability

Health and human
security

Economic models i.g crop
agriculture, livestock,
horticulture, forestry, fishery,

Culture and cultural
services

Settlement planning
and infrastructure

Hazards Prevention and
Disaster Risk
Management

... and beyond ...

Nutrition, Diets and
Cuisines







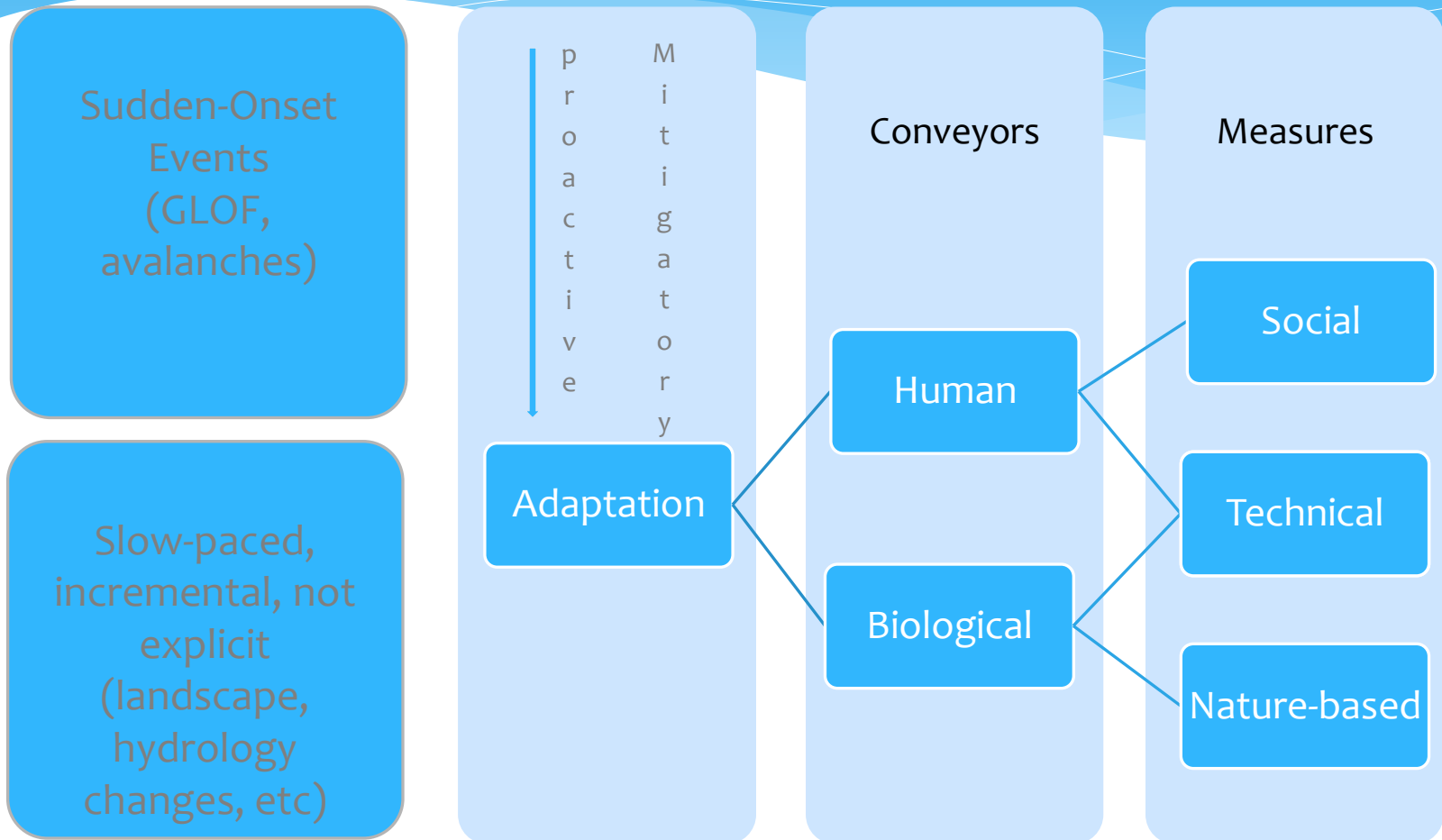
photo: pixabay.com

'The process of adjustment
to actual or expected
climatic and its effects'
(IPCC, [2007](#), [2014](#))

- * Adaption in mountainous communities is ongoing
- * Mountain communities are diverse, however have in common vital influence of nature to livelihood and wellbeing
- * Mountain environment is multihazardous, uncertain, complex
- * “sociohydrological interactions” (Nusser et al 2012)

*What if scientists take all-
encompassing understanding of
community lenses on cryosphere?*

Multidimensional Conceptual Framework



Mountains ADAPT

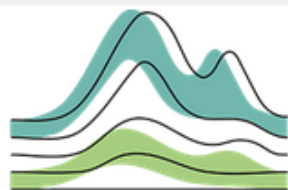
Solutions from East Africa



Mountains ADAPT

Solutions from the South Caucasus





ADAPTATION
AT ALTITUDE

Taking Action in the Mountains

About the portal 

Contribute a solution 

Join the community 

 **Выбрать язык ▼**

SOLUTIONS PORTAL

ABOUT US

EVENTS

RESOURCES



Detailed solution ☐



Short solution ☐

Reset

Scales

Select option(s) ▼

Ecosystem Types

Select option(s) ▼

Solution Types

Select option(s) ▼

Sectors

Select option(s) ▼

Impacts Addressed

Select option(s) ▼



Detailed solution

STRENGTHENING CRITICAL INFRASTRUCTURE AGAINST NATURAL HAZARDS PROJECT: TAJIKISTAN

The objectives of the Strengthening Critical Infrastructure Against Natural Hazards Project for Tajikistan are to strengthen Tajikistan's disaster risk management capacities, enhance the resilience of its critical infrastructure



Detailed solution

WOMEN-CENTRIC APPROACH TO ENHANCE RESILIENCE IN KAVRE DISTRICT, NEPAL

This solution is based on The Resilient Mountain Villages (RMV) approach, which was developed by the International Centre for Integrated Mountain Development (ICIMOD). Since 2014, the approach has been applied in a pilot project in eight



Detailed solution

SEIZING LOCAL OPPORTUNITIES

The project "Strengthening adaptation capacities for communities close to the protected areas of Khosrov Forest State reserve and Dilijan National Park" is ongoing initiation to strengthen the communities' availability to adapt to climate change in Armenia. The project is financed by the Adaptation Fund and the

When planning Your next Adventure of Science:

- * Aim for genuine friendship with a community
- * Identify and strengthen local knowledge bases
- * Think what accessible scientific methodologies can be shared with a community for monitoring and measuring cryosphere processes
- * Do stakeholder mapping and apply your scientific knowledge it for linking issues with the solutions
- * Be inspired and understand that big things are result of many small steps!



* Thank you!