



THE GOVERNMENT  
OF THE GRAND DUCHY OF LUXEMBOURG



**UN**  
environment  
United Nations  
Environment Programme

**VANISHING TREASURES**  
PROTECTING ENDANGERED MOUNTAIN SPECIES

**CMS First Range State Meeting for the Persian Leopard**

Tbilisi, Georgia, 20 – 22 September 2022



# AT A GLANCE

**DURATION:** 2018 – 2022 (4 years) including inception phase



**CENTRAL ASIA**  
Kyrgyzstan, Tajikistan

**HIMALAYAS**  
Bhutan

**VIRUNGA MOUNTAINS**  
Uganda, Rwanda



# OVERALL PROJECT OUTCOME

Ecosystem-based adaptation to climate change and climate smart wildlife conservation integrated into planning and policy processes of developing countries with fragile mountain ecosystems based on successful pilot demonstration



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Knowledge generation

Tools & Methods

# Central Asia

## Desktop study on climate change, snow leopards, their prey and influence of human activities

For the programme "Vanishing Treasures - Climate resilient mountain ecosystems for resilient livelihoods and mountain flagship species" – Component "Snow Leopard in

A SPECIES AND CLIMATE CHANGE BRIEF FOR  THE VANISHING TREASURES PROGRAMME

GETTING CLIMATE-SMART WITH THE

# SNOW LEOPARD

IN CENTRAL ASIA



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UNEP environment programme

GRID ARENDAL A UNEP Partner

BOU

SNOW LEOPARD TRUST

ANCOT

UNIVERSITY OF BERLIN



### CLIMATE RISK ASSESSMENT FOR MOUNTAINOUS COMMUNITIES OF TAJIKISTAN AND KYRGYZSTAN

IMPLICATIONS FOR HUMAN-WILDLIFE CONFLICT  
FOCUS ON SNOW-LEOPARDS



For the programme "Vanishing Treasures - Climate resilient mountain ecosystems for resilient livelihoods and mountain flagship species" – Component "Snow Leopard in Central Asia"

**eurac**  
research

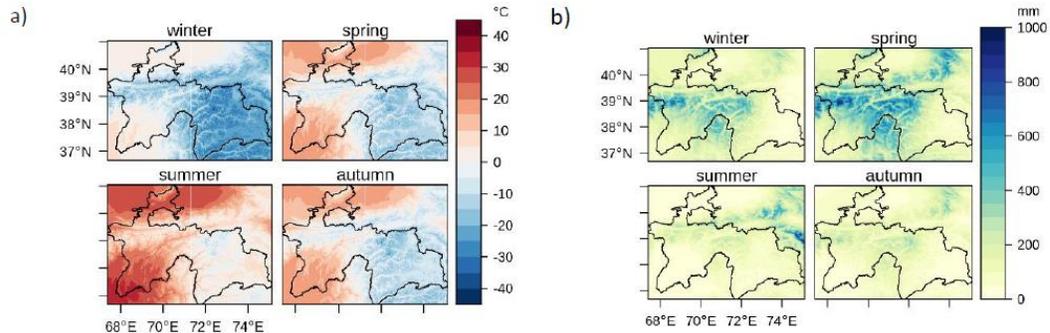
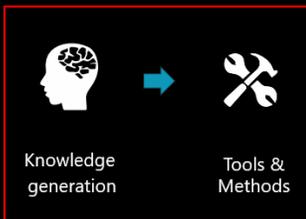
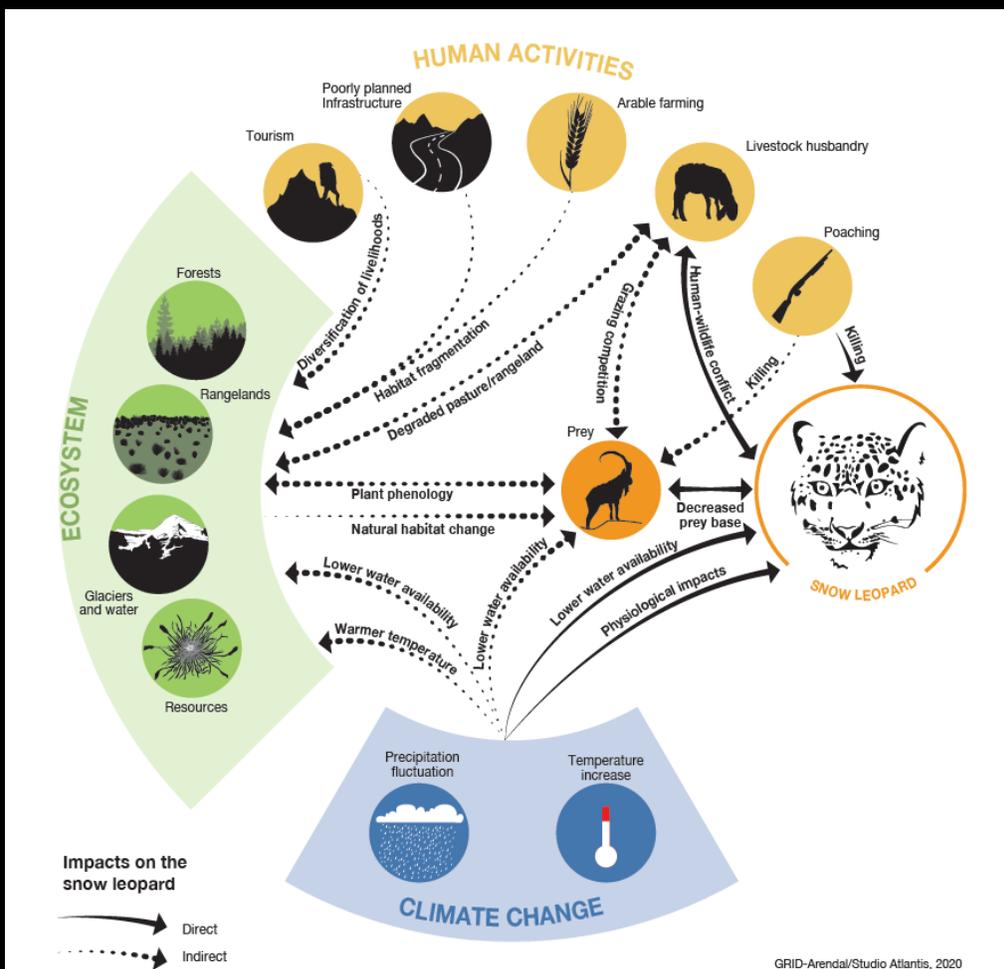
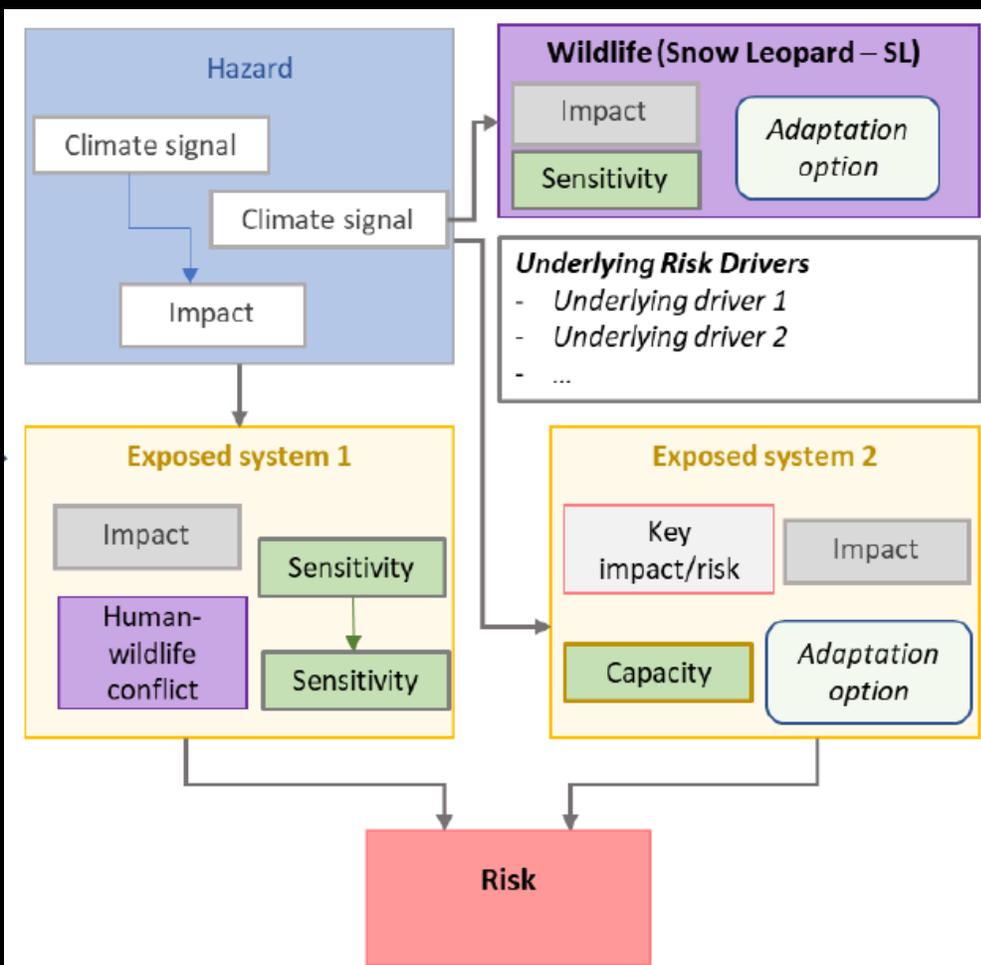


Figure 12: 1981-2010 seasonal climatologies of a) mean temperature and b) total precipitation for Tajikistan. The maps are based on the 1-km downscaled ERA5 reanalysis from CHELSA database.

# Central Asia



GRID-Arendal/Studio Atlantis, 2020





Knowledge generation



Tools & Methods

# Central Asia



Suitable habitat for Ibex (*Capra sibirica*) in Tajikistan for future projections with ssp585 until 2070

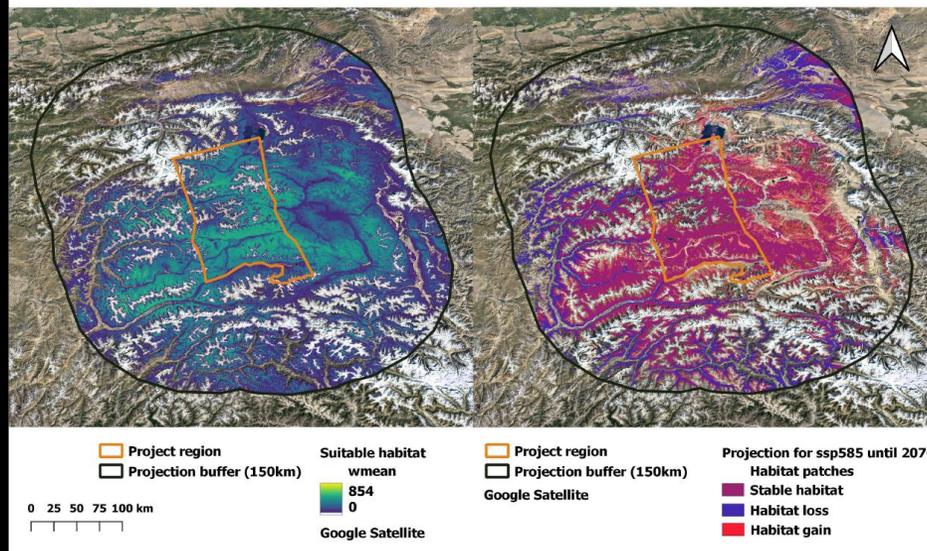


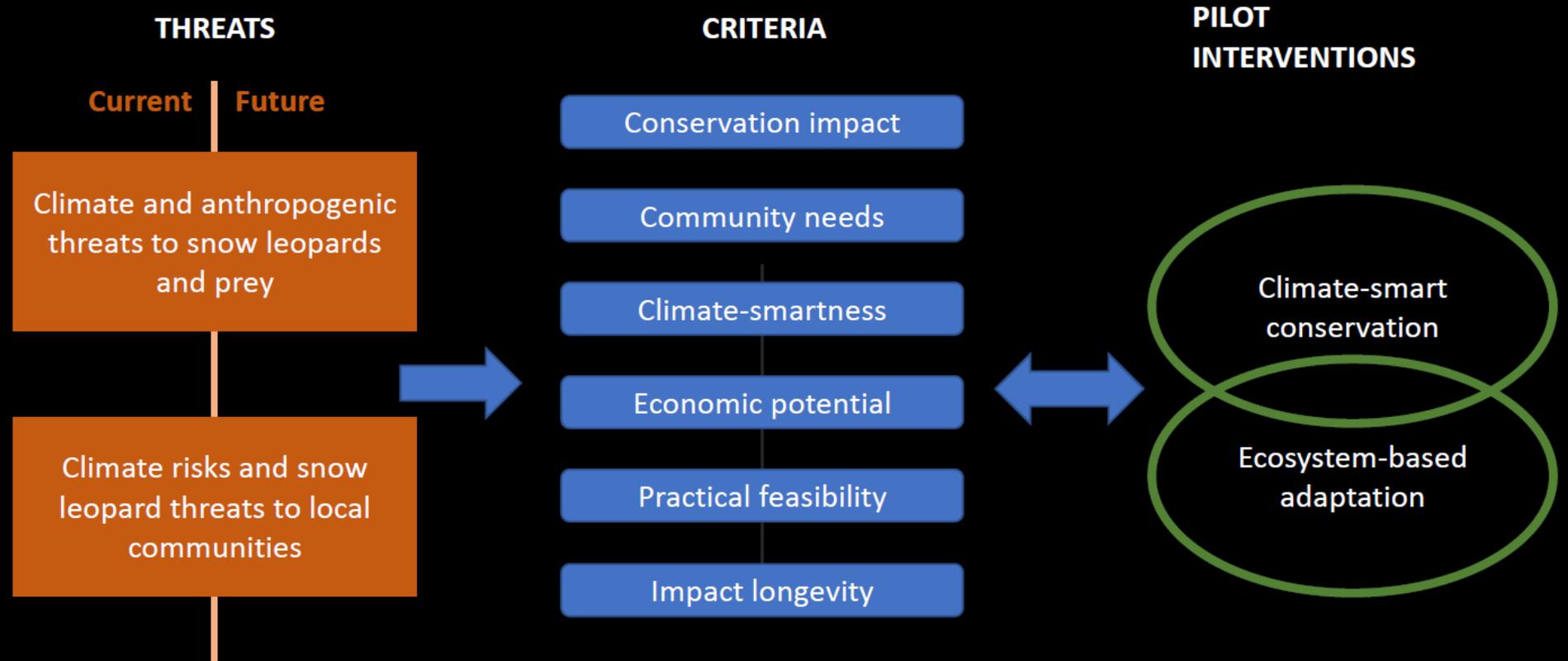
Table 5 Comprehensive Risk Assessment for Barchidev village

Risk of loss of livelihoods (income, subsistence) for livestock owners in Barchidev village				
	Current situation		Future (2030-2050)	
	Pasture degradation (drought/low soil moisture)	Lack of fodder (drought/lack of surface water)	Pasture degradation (drought/soil moisture)	Lack of fodder (drought/lack of surface water)
<b>Hazard</b>	Moderate	Moderate	High	High
<b>Exposure</b>	Moderate	Moderate	Moderate	Moderate
<b>Vulnerability</b>	Moderate	High	Moderate	High
- Exposed systems	Moderate		Moderate	
- Community	Moderate		Moderate	
<b>Risk</b>	Moderate	High	High	High



# Central Asia

## Interventions





# Climate-smart conservation

# Central Asia



- Increased population monitoring efforts (+ equipment) throughout the Kyrgyz Alatau range and Bartang basin in Tajikistan
- Establishment of new Community-based Conservancy across several neighbouring communities in Toktogul region, Kyrgyzstan
- Construction of predator-proof corral in Gudara, Tajikistan to avoid retaliatory killings of snow leopard



Photo: Ilbirs Foundation

Photo: ANCOT @tajwildlife



Pilot interventions

Dialogue & strengthened capacities of communities

# Ecosystem-based adaptation

- One Health: livestock vaccination/tagging funnels in two village districts in Kyrgyzstan
- Livelihood diversification (incl. equipment, training, mentoring, peer-to-peer learning, market development) through
  - Beekeeping
  - Small scale fruit plantations. Some run by women's groups.
  - Eco-tourism development, tourse, homestays and a visitor center



# Central Asia





Policy uptake

Incentives for  
long-term  
investment

# Policy adoption

## Central Asia

### Local level:

- Community-based conservancy in Toktogul

### Landscape level:

- Climate-smart landscape management plan for the Kyrgyz Alatau range

### National level:

- Snow Leopard Conservation Action Plan revision in Tajikistan

### Regional level:

- Inclusion of climate-smart conservation and EbA in the Global Snow Leopard and Ecosystem Protection program strategic documents (GSLEP)

### Global level

- Integration of climate change and mountain biodiversity monitoring in Post-2020 framework



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# THANK YOU

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