



## The Mountain Adaptation Gap in other mountain regions

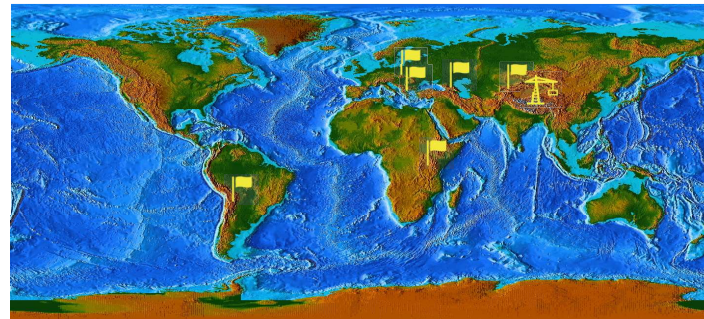
Carpathian Convention Climate Change Working Group, 15 May 2020  
Matthias Jurek, Programme Management Officer, UN Environment Programme

# Inter-regional climate change project

**Project:** Climate change action in developing countries with fragile mountain ecosystem from a sub-regional perspective, **Duration:** 2014-2019

**Objective:** Support to mountainous developing countries to integrate climate change adaptation into relevant development policies/plans/strategies (adaptation tailored for the mountain context)

1. Assessment
2. Regional policy development
3. Interregional cooperation



# Review: Global mountain environment

## Mountain Adaptation Outlooks

- Current state of knowledge and information related to climate change and adaptation in mountainous regions:

**2015:** Balkan, Caucasus, (Tropical) Andes

**2016:** East Africa (World Mountain Forum)

**2017:** Central Asia, Carpathians

**2018:** Synthesis Outlook+ Hindu Kush Himalayas (UNFCCC COP 24 in Poland)

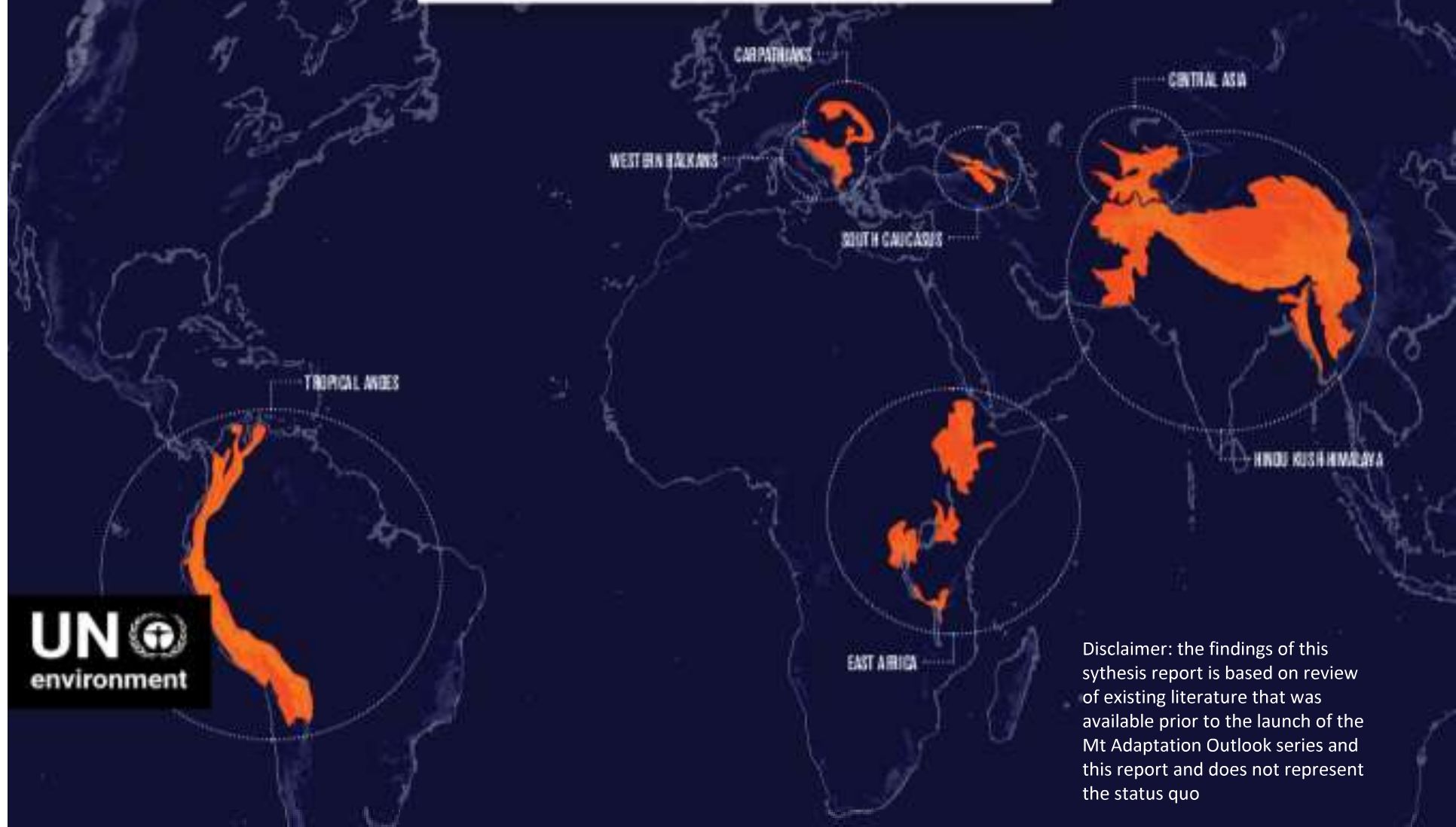
- Identified priorities for promoting/developing of **mountain agenda** on the sub-regional level (implementation of Rio+ 20 outcome) : successful work in Andes, East Africa etc.
- **Participation of governments** in the elaboration of the Outlooks (East African Community, Interstate Commission for Sustainable Development, etc.)



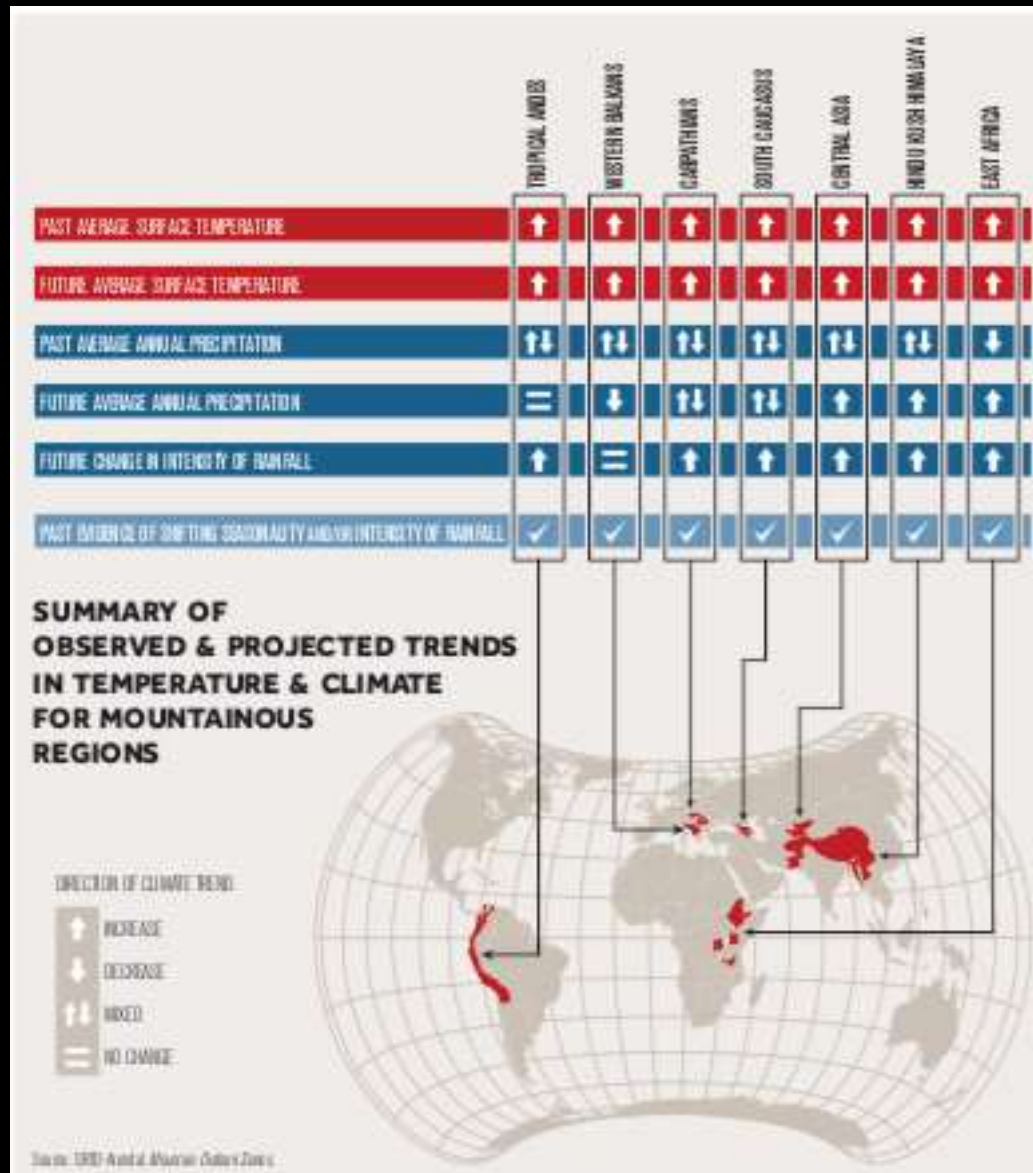


MOUNTAIN ADAPTATION OUTLOOK SERIES

# Synthesis Report



Disclaimer: the findings of this synthesis report is based on review of existing literature that was available prior to the launch of the Mt Adaptation Outlook series and this report and does not represent the status quo

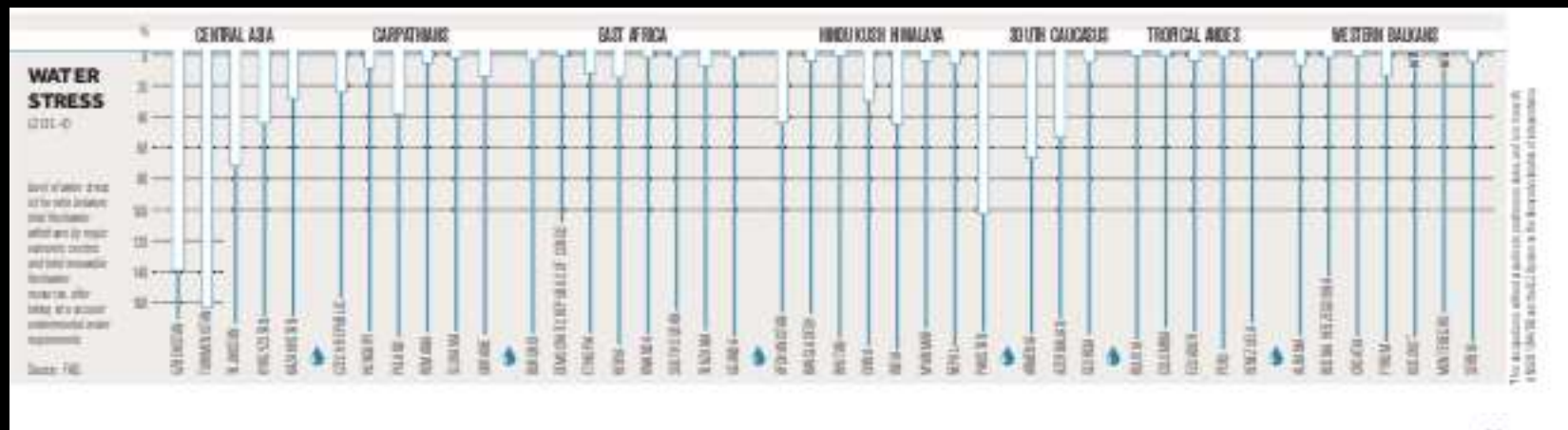


## National Adaptation Policies

- With few exceptions very limited focus on on cc adaptation in mountains in current policies
- Mt countries recognize importance of mountains but lack of strategies
- Many mountain countries in process of developing NAPs under GCF readiness: Bhutan, Georgia, Nepal, Pakistan, etc.
- Efforts to develop plans and programmes, but mechanisms and strategies for implementation missing

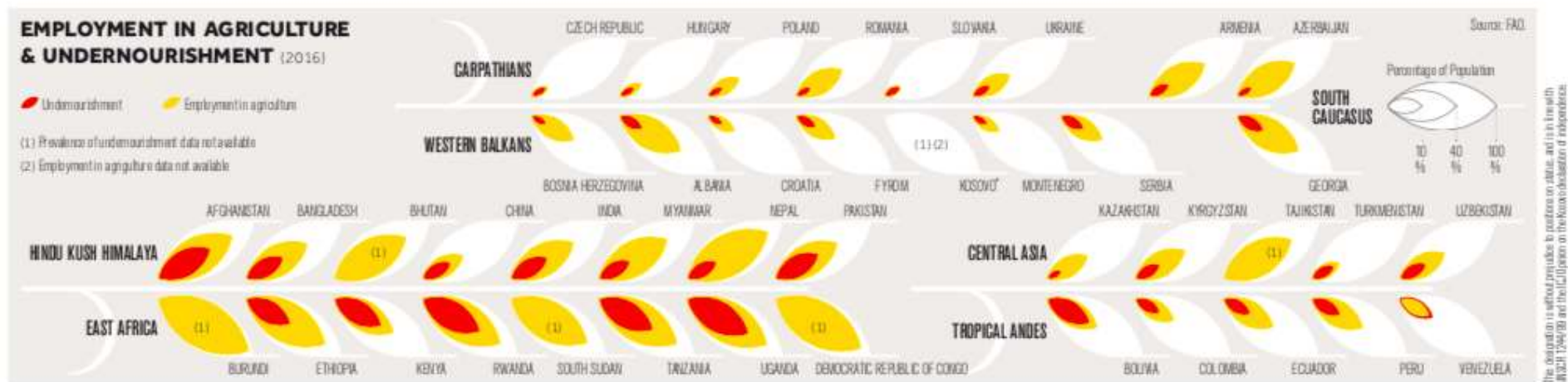
# WATER

- Promotion of „water towers“ across East Africa (e.g. Mau Forest)
- EU Water framework directive for Carpathians
- Water policies in Western Balkan less focus on mountains and cca but focus on national disasters (e.g. floods)
- Andean countries have adaptation goals in water sector policies, predominantly guided by Integrated Water Resources Management Approach
- HKH: water acts and policies (river basin and watershed) acknowledging cca and disasters, but more focused on urban areas
- CA long-term strategies including cca limited or still under development, Kyrg: specific adaptation programme for agriculture and water



## AGRICULTURE AND FOOD

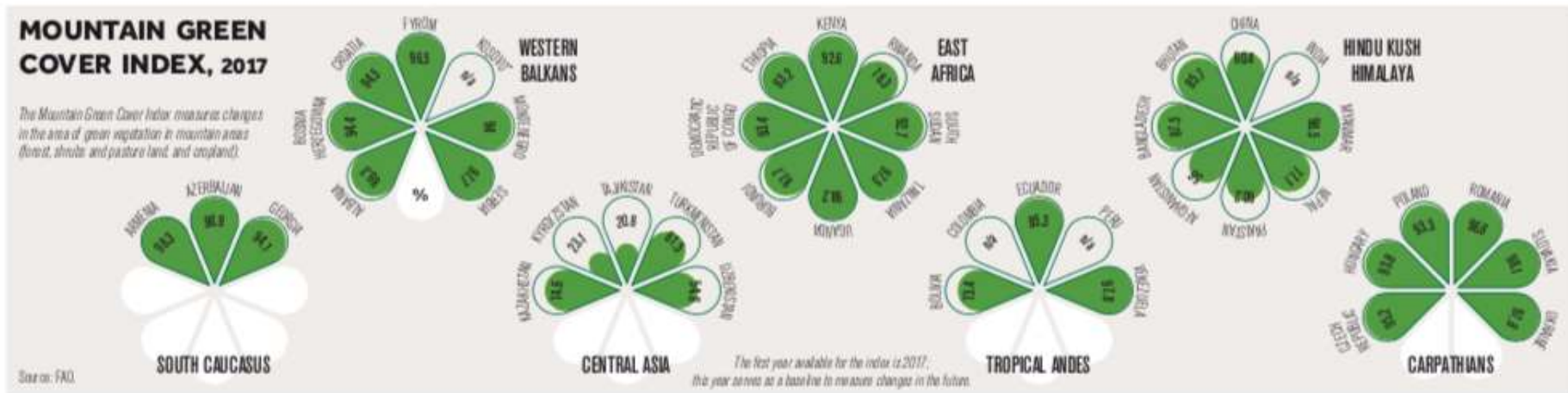
- Responsiveness of policy makers vary across the regions
- Growing momentum in East Africa for climate-smart agriculture
- Sustainable land management in Balkan, however agriculture legislation has not yet integrated cca
- Limited strategies in Central Asia
- Food and agriculture policies in HKH but less focus on cca
- Policies on food and agriculture in Tropical Andes limited on cca





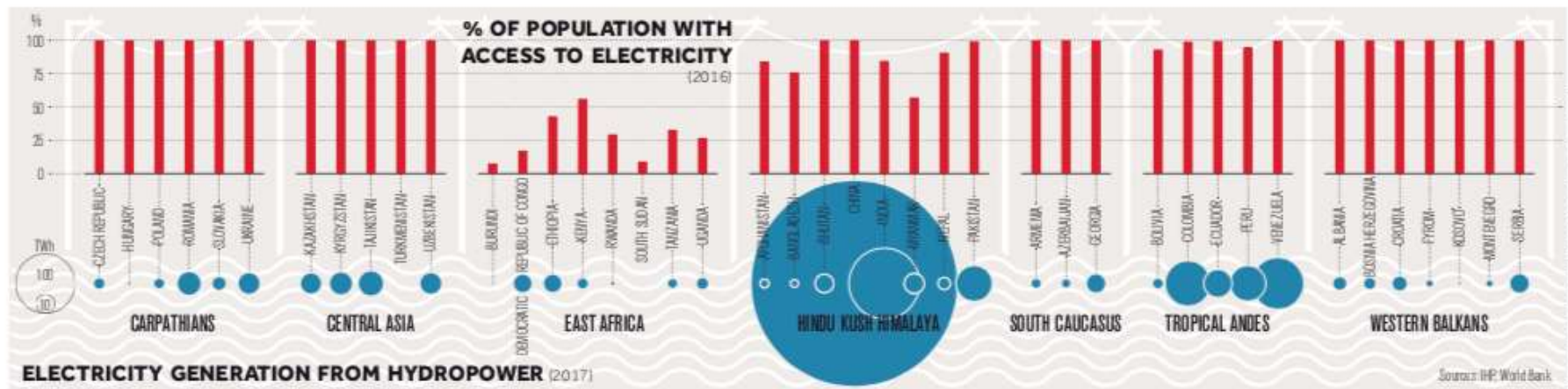
# FORESTS, ECOSYSTEMS AND BIODIVERSITY

- Adaptation measures achieved indirectly through forest initiatives
- Adaptation and mitigation included in sustainable forest management in Balkan
- Forest and conservation policies in Himalayas but not address cca
- EbA being promoted across Andean region (Peru), Colombia addresses cca in forest sector
- Cca not considered as priority in relevant sector of CA countries



# INFRASTRUCTURE AND ENERGY

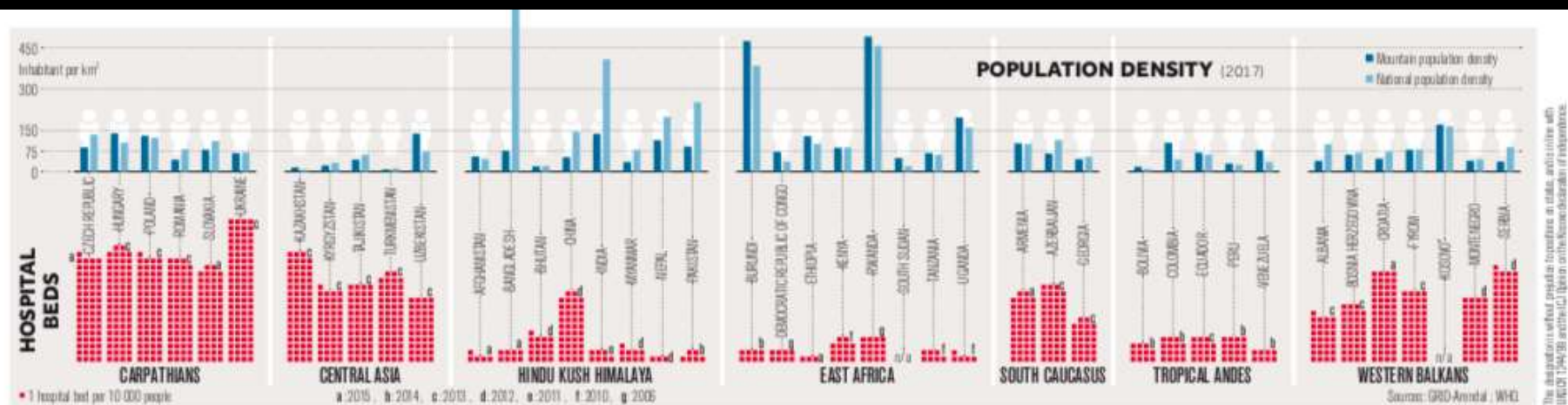
- Potential hazards for mountain regions not addressed
- Little/no mention of cca in infrastructure policies in Balkans, more focus on mitigation (energy)
- transport and accessibility policies in HKH region but need for more focus on hazards
- Less knowledge about vulnerability of hydropower in Andes
- Limitation of cca adaptation in energy sector in CA (more focus on energy efficiency)



\*The designation is without prejudice to positions on status, and is in line with UNCTAD 1990/99 and the UNCTAD/UNEP in the context of consideration of independence.

# HUMAN HEALTH

- Connection between cc and health needs proper attention: HKH
- Few consider cc as priority: Andes (Colombia, Ecuador)
- Cca not considered priority in CA countries sectoral policies
- Western Balkans consider environmental issues but not cca (exception Albania, Northern Macedonia)



# TOURISM

- Consideration of cc limited in tourism sector, significant gap in cca
- Beginning recognition in HKH countries
- Sustainable tourism promoted in Carpathians (e.g. Diversification of tourism in Romania and Slovakia)
- Increasing recognition relevance of cc for tourism in Western Balkans
- Ecotourism in East Africa (Mt Kilimanjaro)



# Regional cooperation in Central Asia

- **The Interstate Commission on Sustainable Development (ICSD)** was established in 1994 by a Decision of the Interstate Council for the Aral Sea.
  - Main goal: to coordinate and manage regional cooperation on environment and sustainable development in countries of Central Asia.
- In 2008, the ICSD supported the creation of the **Regional Mountain Centre for Central Asia (RMCCA)**
  - Promotes cooperation in the Central Asian region for mountain ecosystem conservation and sustainable development
- Development of a “Strategic Guidance on Climate change adaptation in Central Asia mountain regions” to be integrated into Regional Environmental Action Plan under ICSD



# Regional cooperation in the East African Mountains

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- Cooperation with the East African Community (EAC) and Albertine Rift Conservation Society (ARCOS) on the development of a shared African Mountain Agenda African Mountains Regional Forum in Arusha 2014
- EAC, ARCOS and UN Environment working on integrating the commonly developed Agenda for the East African Mountains
  - Incl. at meeting back-to-back with the African Mountain Forum Kigali, Rwanda 2018



# Regional cooperation in the Andes Mountains

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- **Reinvigorated Andean Mountain Initiative**
  - Regional meetings organized in the context of the global Mountain Adaptation project in 2015, 2016 and 2017
- The Strategic Agenda on Climate Change Adaptation in the Andes Mountains
- EUROCLIMA funded meeting in Quito, Ecuador November 2018
  - To discuss institutional designs for improved regional governance in the Andes
  - Addressing the goals of the Strategic Agenda through regional project development



# Climate change action in developing countries with fragile mountain ecosystem from a sub-regional perspective

## Regional policy development

### Example from the Andes:

- The Strategic Agenda for Climate Change Adaptation in the Andes Mountains
  - To guide regional cooperation and climate change adaptation efforts in the Andes
  - 10 Adaptation Goals – with ca 10 Concrete measures each to achieve the goals
  - Finalized in Bogotá, Colombia in July 2017

<b>Objetivo 3</b>	<b>Adaptarse a los efectos del cambio climático en la gestión y manejo de los recursos hídricos</b>
<b>Medidas:</b> <ol style="list-style-type: none"><li>1. Promover el manejo integrado del recurso a agua bajo una perspectiva de cuenca;</li><li>2. Proteger los ecosistemas claves en las áreas de montaña que proveen o regulan la disponibilidad de agua;</li><li>3. Aumentar la investigación y el monitoreo de los vínculos entre el cambio del uso de la tierra, el cambio climático y los procesos hidrológicos a nivel de cuenca;</li><li>4. Expandir el monitoreo de la hidrología en las montañas, incluyendo el monitoreo de páramos, glaciares, bofedales, humedales y bosques de montaña entre otros, con acuerdos de la gestión de información interinstitucional;</li></ol>	





# Strategic Agenda for Climate Change Adaptation in the Andes Mountains

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measures per goal):

1. Vulnerable groups
2. Agriculture
3. Water resources and hydrology
4. Ecosystems and biodiversity
5. Health
6. Disasters
7. Industry
8. Research
9. Capacity and awareness
10. Regional cooperation

more detailed



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THE GOVERNMENT  
OF THE GRAND DUCHY OF LUXEMBOURG



# VANISHING TREASURES

PROTECTING ENDANGERED MOUNTAIN SPECIES

# New global programme on mountain & cc adaptation

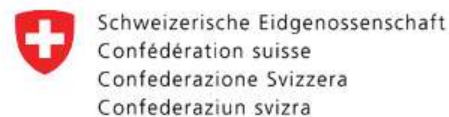
Donor: Swiss Agency for Development and Cooperation

Duration: 2019 – 2023

Coverage: global /inter-regional and regional (Andes, South Caucasus, HKH and East Africa)

Partners: MRI, ICIMOD, CONDESAN, UNEP, Zoi Environment & partners (UniGe, IPU, Stockholm Environment

Outcome: Mountain climate change adaptation is integrated into planning and policy processes of regional bodies/frameworks/bodies/initiatives and their national constituencies through strengthened science policy platforms

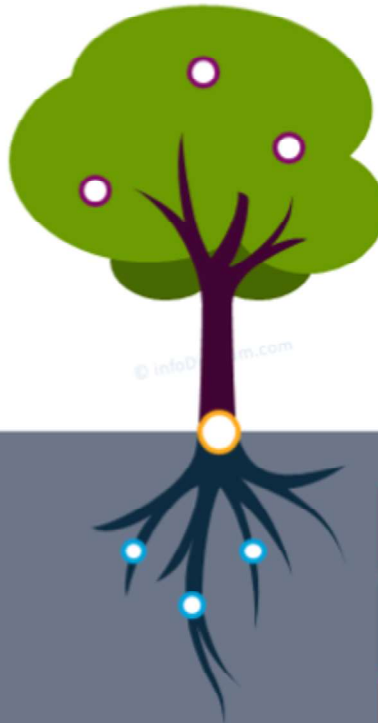


Swiss Agency for Development  
and Cooperation SDC



## CORE PROBLEMS

- Gaps in understanding of mountain specific climate change induced processes still limit the capacity to adequately inform decisions on effective adaptation solutions
- Sustainable mountain development and climate change adaptation are still not sufficiently integrated in policy making, neither at national, regional or sectoral levels
- Lack of exchange platforms for dealing with complex challenges and sharing evidence of practical solutions and policies among mountain countries



## EFFECTS

- Opportunities for ecosystem-based adaptation and sustainable responses to changing climatic conditions are not sufficiently exploited, shared and transferred
- The lack of policy integration hinders development and implementation of urgent adaptation responses
- Many of the already ongoing regional mountain policy processes are mostly isolated from each other, thus inter-regional action learning is missing

## CAUSES / DRIVERS

- **Fast changing climatic conditions: above-average warming, declining low-elevation snow cover, glaciers, permafrost**
- **Degradation of environmental goods and services**
- **Poverty and food insecurity**
- **Isolated populations and high dependence on natural resources**
- Changed amount and seasonality of runoff in snow-dominated and glacier-fed river basins
- Altered frequency, magnitude and location of most related natural hazards
- Changes in species composition and abundance
- Increased exposure of people and infrastructure to natural hazards
- Compromised adaptive capacity of mountain societies to sustain key ecosystem services

## BARRIERS

- Limited awareness for mountain specific pressures and lack of joint commitments of countries sharing a mountain region to strengthen their efforts
- Limited capacity to develop and implement practical solutions for climate change adaptation and pathways for sustainable mountain development
- Insufficient institutional memory due to governmental changes
- Deficiencies in regional and sub-national governance structures for transboundary cooperation and consistency of climate change adaptation practices

# 4 Outcomes

- Outcome 1 Improved connection and access to mountain earth observation related data and information services support regional and global dialogues on climate change impacts and adaptation in mountains
- Outcome 2: Mountain climate change adaptation is integrated into planning and policy processes of regional bodies/frameworks/platforms/initiatives and their national constituencies as the result of strengthened science-policy dialogue platforms
- Outcome 3: Knowledge on climate change adaptation solutions in mountains is strengthened and capitalized at the regional and global level
- Outcome 4: Major global policy processes are taking climate change adaptation in mountains into account

# Activities relevant to the Carpathian Convention

- **Output 2.4 Promising approaches for regional cooperation on climate change adaptation are analysed and shared with stakeholders from different mountain regions for inter-regional action learning and strengthening of inter-regional exchange**
- **Activity 2.4.a (inter-regional, UNEP) Review of other regional processes and undertake a comparative analysis.** Undertake a comprehensive assessment providing options to foster regional approaches in mountain regions considering also other regional initiatives
- **Activity 2.4.b (inter-regional, UNEP) Foster inter-regional action learning.** Present the preliminary assessment done under activity 2.4.a and organize a **comprehensive workshop (3 days)** inviting representatives (mountains and climate change adaptation focal points) from various targeted regions (Andes, East Africa, HKH and Caucasus) targeting in particular policy makers, involving also other regional bodies and conventions (Carpathian and Alpine Convention, Arctic Council, etc.). The workshop will possibly be held back-to-back to a meeting of the Alpine Climate Board of the Alpine Convention in Vienna (dates and venue to be confirmed). Furthermore, **organize study trips** to the different mountain regions to support action learning between the Secretariats (of conventions, regional hubs etc.).



Thank you

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