

13th AOGEO SYMPOSIUM

Sectoral Meeting

TG9: Himalayan GEOSS

22 February 2021 #online

ICIMOD

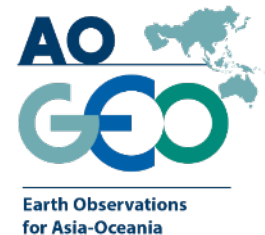
GO GROUP ON
EARTH OBSERVATIONS

AO
GO
Earth Observations
for Asia-Oceania

Himalayan
GOSS



Himalayan GEOSS: efforts on EO applications for sustainable mountain development in the HKH



Birendra Bajracharya
ICIMOD



The Hindu Kush Himalaya

Global asset for food, energy, water, carbon, and cultural and biological diversity

Source of 10 major Asian river systems supporting some of the world's most populated areas

Himalayan GEOSS

- **Initiated as GEO Community Activity in 2017**
- **Merged with AOGEO as Task Group 9 during GEO Summit 2019, Canberra**
- **Hosted by ICIMOD**



Objectives



- Develop capacities of the HKH countries on the applications of EO and geospatial information for mountain specific issues;
- Aligning with the national needs and priorities, develop and implement innovative EO and geospatial solutions and services;
- Provide a regional platform for sharing EO and geospatial information to promote research and development in the region; and
- Foster regional cooperation among the HKH countries and contribute to global knowledge on the mountain systems.

Ongoing Activities

- SERVIR-HKH as the main contributor
 - Amazon Web Services Cloud grants through GEO being used for regional drought monitoring and outlook system
 - Applications on land cover monitoring, crop mapping, and disaster are major areas of contributions
- Capacity building collaborations with AIRCAS
- Linkages with GEOGLOWS, GFOI, GEO Mountains

Agriculture & food security

Weather & climate services

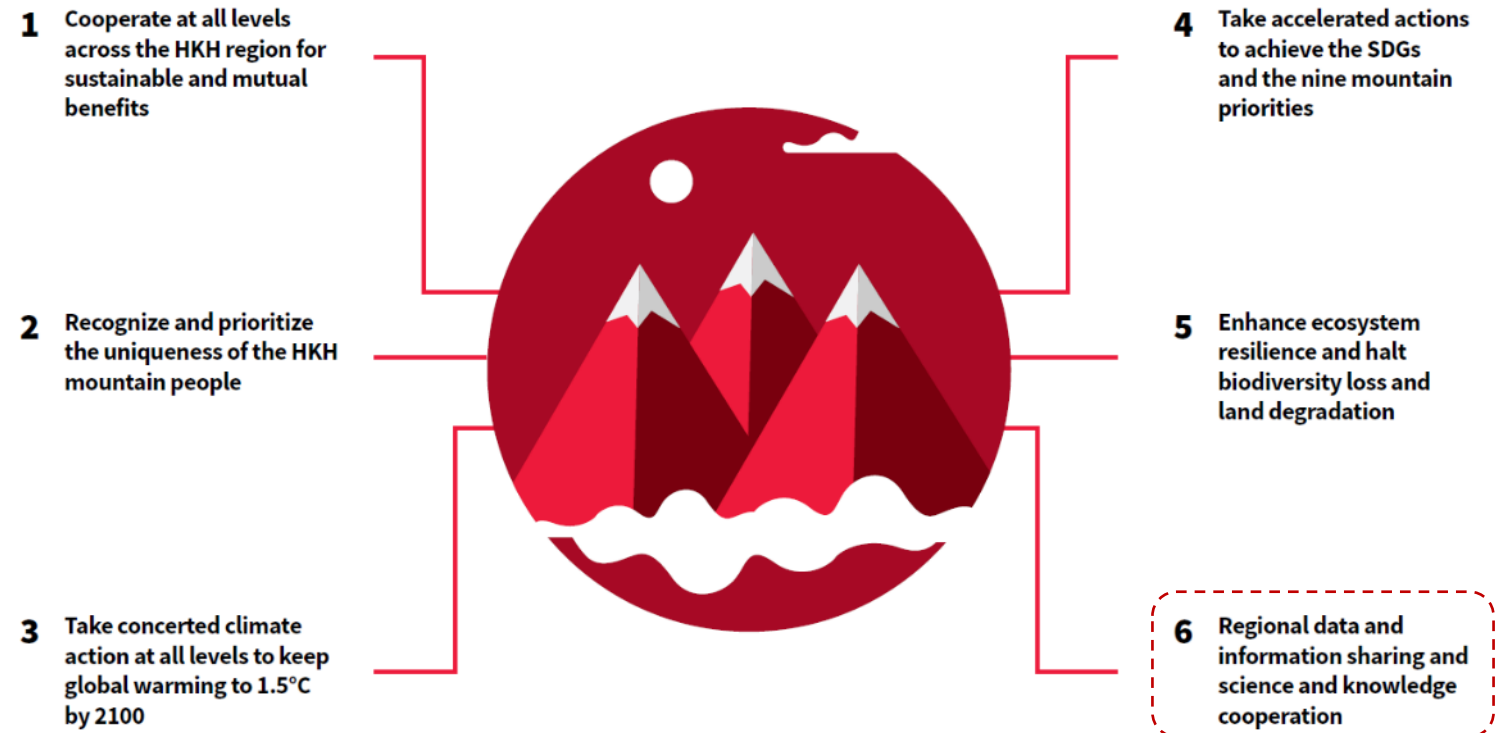


Land use land cover & ecosystem services

Water & related disasters

Ongoing Activities

- Himalayan GEOSS Web page (Community Portal?) – link with ICIMOD’s RDS
- Collaborative proposals with AIRCAS
- Exploring out-scaling of services from SERVIR-HKH
- Linkages to ICIMOD’s “Call to Action”



Integrated Pilot Study in Eastern Himalaya

- Assess LULCC and estimate forest AGB using space borne SAR and multispectral data in the Eastern Himalayan landscape
- Support documenting impacts of land cover change to biodiversity, ecosystem, and carbon cycle in the region

- Compilation of data going on
- Working on methodologies
- Delays due to to COVID 19
- communications with AfriGEO/ RCMRD exploring implementation of Open Data Cube

