

Mountain Biodiversity and the SDGs

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Kick-Off Workshop

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Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC



Swiss Programme for Research
on Global Issues for Development



SWISS NATIONAL SCIENCE FOUNDATION

What is the project's main aim?

Provide policy-relevant knowledge towards opportunities for the **sustainable management and conservation of mountain biodiversity** (SDG15.4) that address competing sustainable development goals and complex governance structures across scales and social-ecological systems

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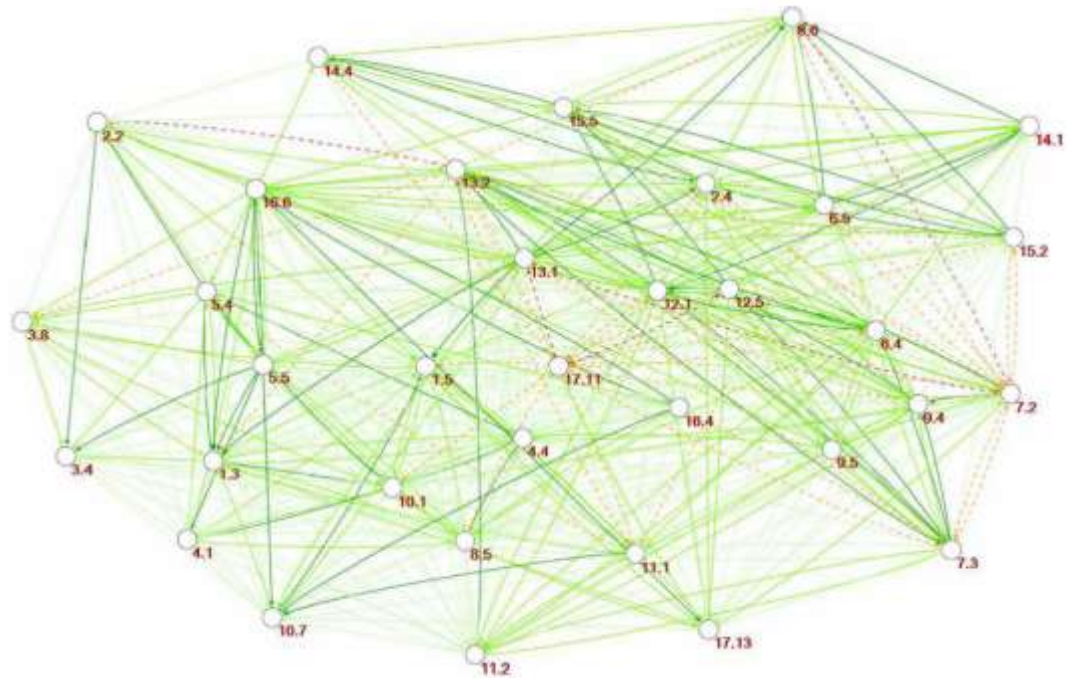
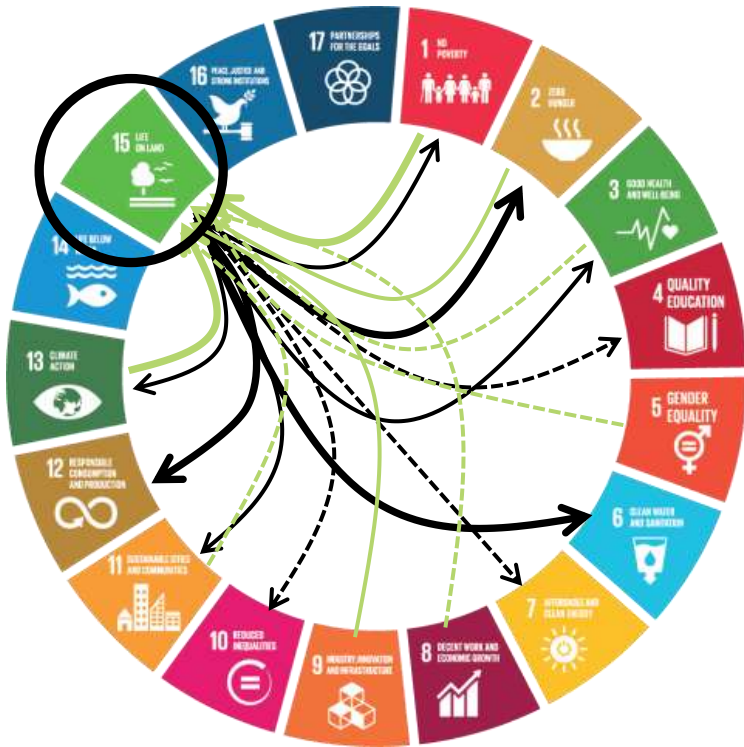
Background

2030 Agenda: Sustainable Development Goals

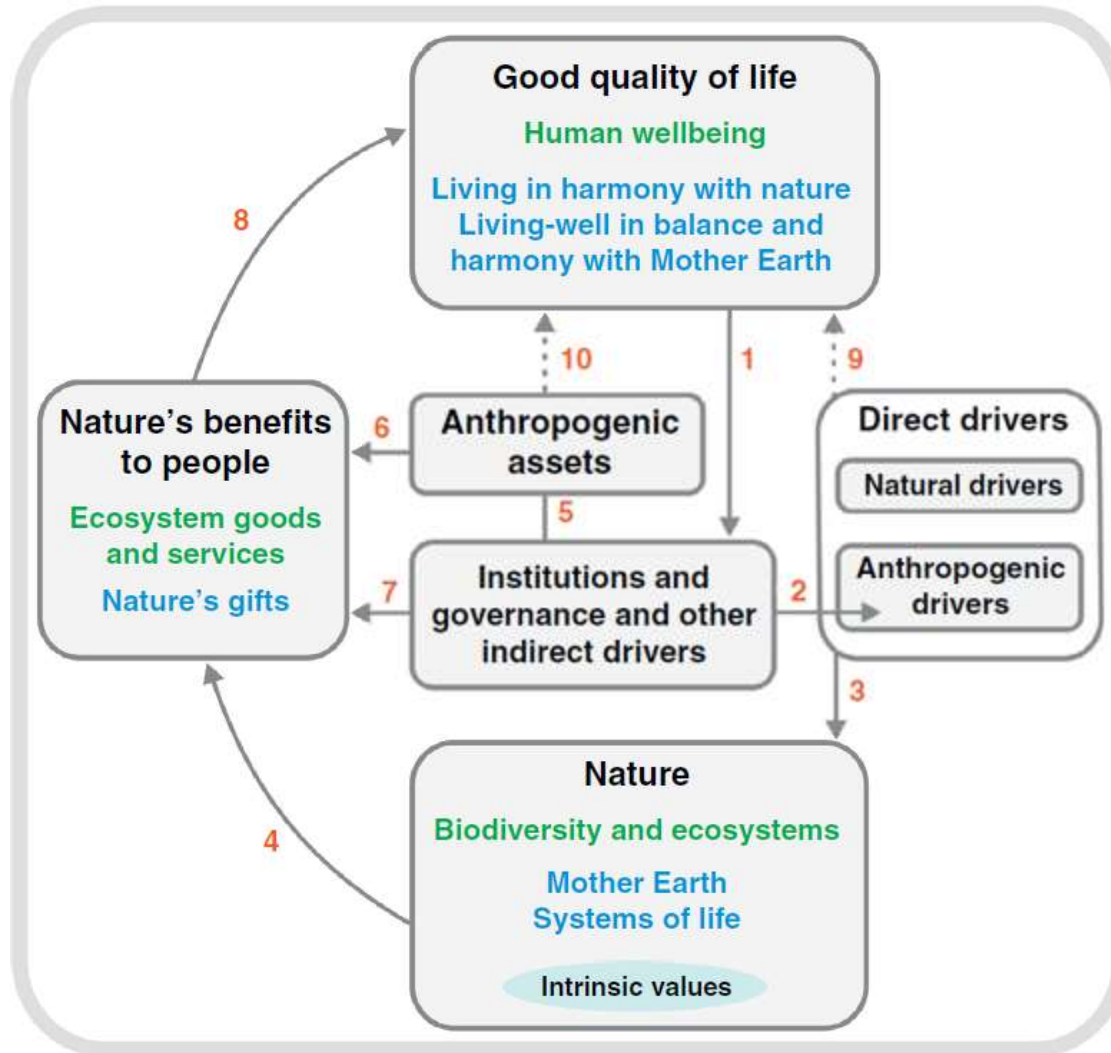


15.4 conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development

Background: interactions between SDGs

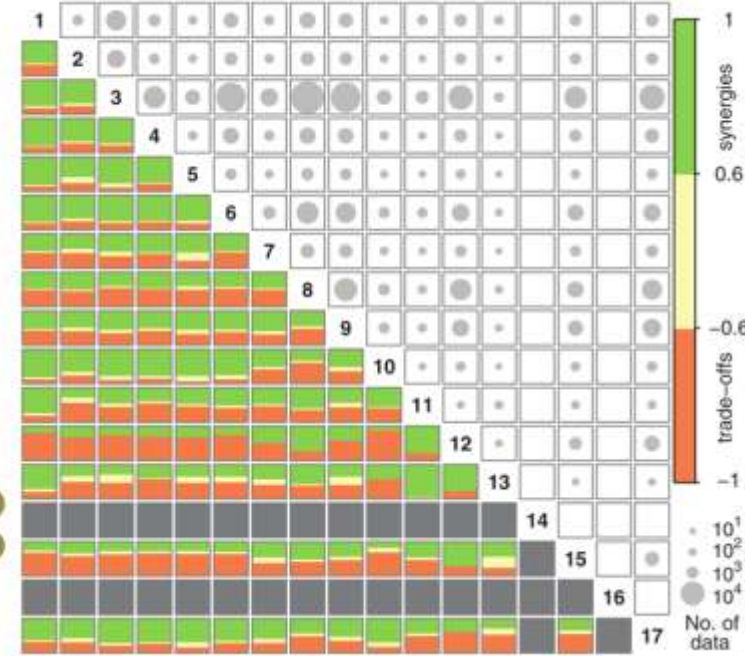
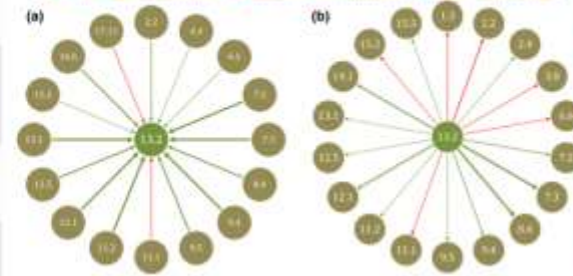
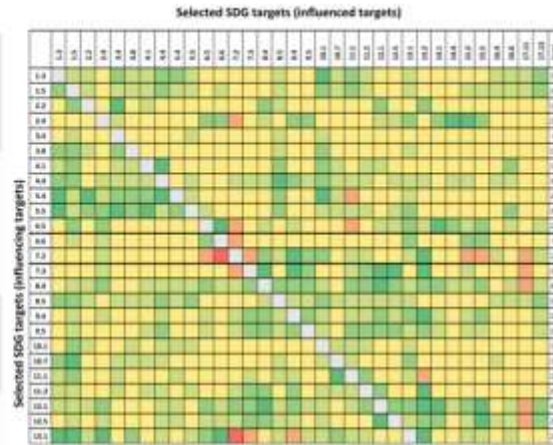


Background: mountain social-ecological system



Background: SDG interactions analysis

Interaction	Name	Explanation
+3	Indivisible	Inextricably linked to the achievement of another goal.
+2	Reinforcing	Aids the achievement of another goal.
+1	Enabling	Creates conditions that further another goal.
0	Consistent	No significant positive or negative interactions.
-1	Constraining	Limits options on another goal.
-2	Counteracting	Clashes with another goal.
-3	Cancelling	Makes it impossible to reach another goal.



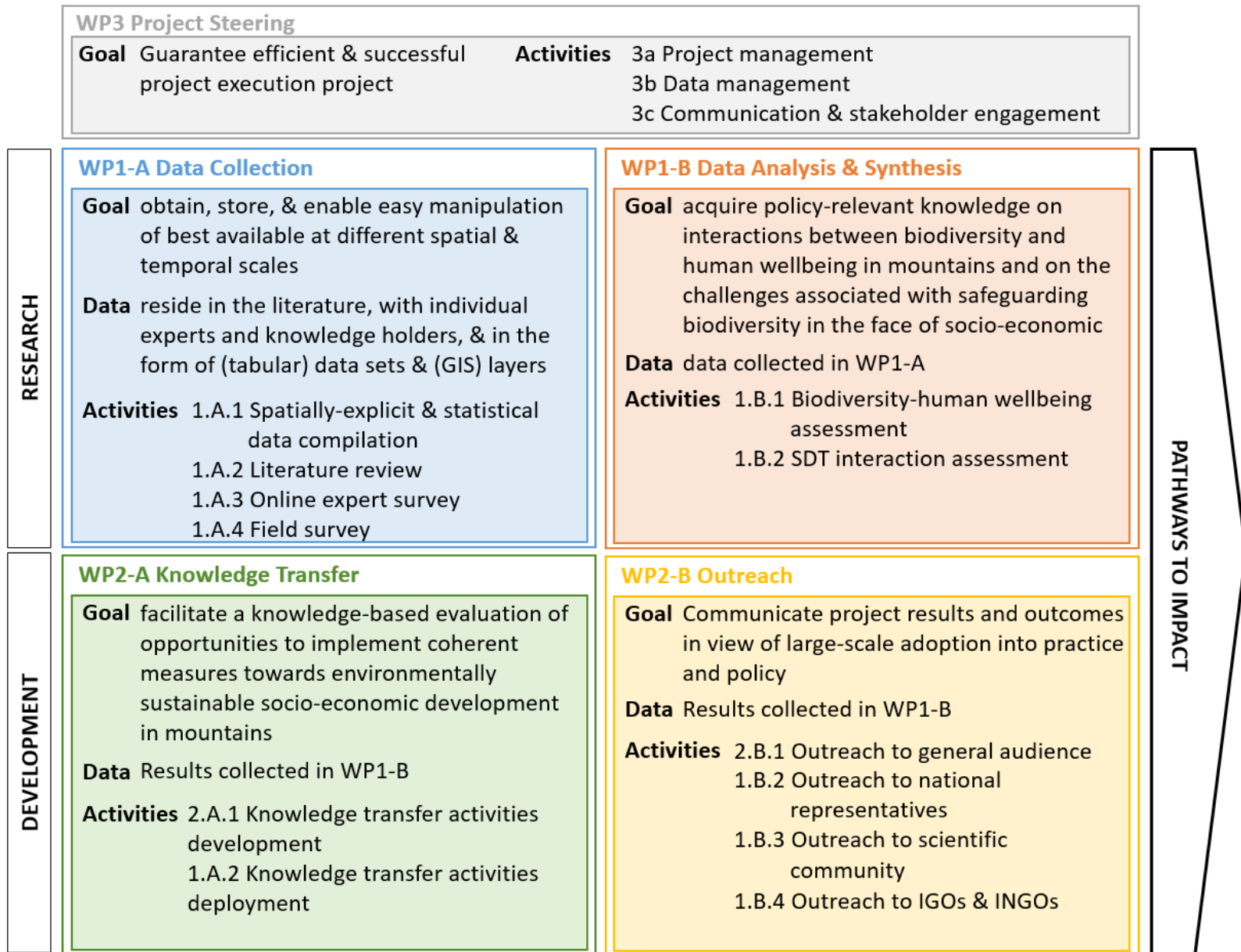
Nilsson et al., 2016; Pradhan et al., 2017, Weitz et al., 2017

Proposal: objectives

1. To assess the status & trends in human wellbeing, biodiversity, ecosystems, and ecosystem services in mountains at global, national, and subnational level using the IPBES assessment framework
2. To study the strength and directionality of interactions between biodiversity-explicit SDG targets and other SDG targets in mountains at global, national, and subnational level, and identify synergies
3. To identify the role of the context provided by governance, economic, technological, social-ecological, cultural, and environmental factors in forming these interactions
4. To provide the acquired knowledge to key stakeholder groups and enable a knowledge-based evaluation of opportunities to implement coherent measures towards environmentally sustainable socio-economic development

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Proposal: work packages

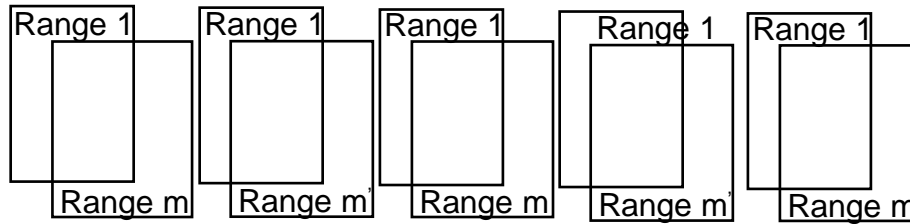


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Proposal: deliverables

	WP1-A Data Collection	WP1-B Data Analysis & Synthesis	WP2-A Knowledge Transfer	WP2-B Outreach	WP3 Project Steering
Year 1	Q1				M _{3.1} Inception workshop (partners)
	Q2	M _{1A.1} Study sites & CAB selected M _{1A.2} Literature review started			M _{3.2} Website & data repository ready M _{3.3} Video #1
	Q3	M _{1A.3} SDT selected at all scales M _{1A.4} Literature review for SDTs started		M _{2B.1} Information session #1	M _{3.4} SDT selection & inception workshops (national & local)
	Q4	M _{1A.5} Online & field surveys ready			
Year 2	Q1				
	Q2	M _{1A.6} Additional data collected			
	Q3	M _{1A.7} Online & field surveys done			
	Q4	M _{1A.8} Literature review done	M _{2A.1} Methods for participatory tool selected		
Year 3	Q1				
	Q2		M _{1B.1} Comparative online & field results		
	Q3				
	Q4		M _{1B.2} Comparative literature results Statistics-based & advanced results	M _{2A.2} Knowledge transfer activities ready	M _{2B.2} Policy/practice brief & report #1
Year 4	Q1		M _{2A.3} Knowledge transfer workshop (local)		M _{3.6} Participatory workshop
	Q2		M _{2A.4} Knowledge transfer workshop (regional /national)		M _{3.7} Participatory workshop
	Q3			M _{2B.3} Information session #2 M _{2B.4} Policy/practice brief & report #2	
	Q4			M _{2B.5} Publications & thesis M _{2B.6} Project symposium	M _{3.8} Closure workshop

Proposal: Design

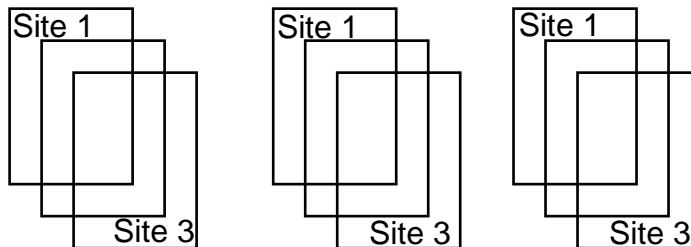


Data collection
Data analysis
Knowledge transfer
Outreach

National



Subnational / local



WP1	UoA and boundaries	Explanatory variables		IPBES CF Components	SDGs / SDG targets
		Biophysical	Socioeconomic		
Global GIS based-assessment	Mountain (sub)range & administrative division: Intersection between GMBA and GADM polygons	Location (area, latitude, altitudinal range) Climate (temperature, precipitation) Physiography (geomorphology, ruggedness, slope, hydrography, bioclimatic belt) Parent material (lithology) Land cover (ecosystems habitats, %wild habitat)	Demographics (population density, life expectancy) Economic activity (GDP) Inequality (GINI) Land use Governance	Biodiversity (habitat extent, habitat condition, species richness, species conservation) Ecosystem services (material, regulating, non-material) Human wellbeing (food, energy, water, health, education, income, rights, security, identity) Indirect drivers (institutional, economic, demographic, scientific, technological) Direct drivers (land use change, climate change, overexploitation, pollution, invasives)	Interactions between biodiversity-explicit & other SDG targets
Literature review	Research area / site: Variable: depends on research / assessment unit: country, mountain range, mountain, watershed, protected area, etc)				
Online questionnaire					
Socio-ecological field survey	Project field site: Municipality, mountain, watershed, transect and landscape				

Project: requirements & expectations

- Strict data collection design (including study site selection)
- On time delivery
- Cooperation & Coherence
- PhD theses
- Satisfactions

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