

Mountains Matter!



Environmental Services

Over **half of humanity** depends on mountains for fresh water—drinking, sanitation, irrigation and industry.

Mountain forests, wetlands and peatlands are **critical** for carbon storage and sequestration.

Mountains are key to regulating the global climate.





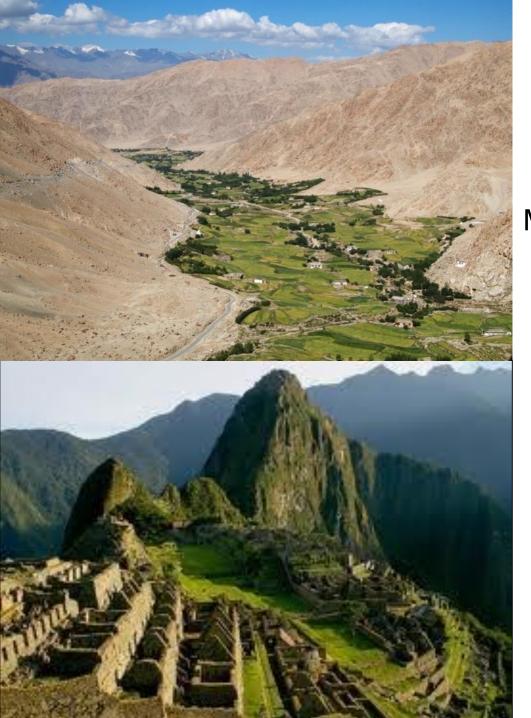


Mountain Biodiversity

An amazing variety of wild animals and plants depend on mountains to survive.

- Nearly a quarter of global forest cover is in mountain regions.
- Of the planet's 34 terrestrial biodiversity "hotspots," 25 are in mountains.
- 60% of all Biosphere Reserves are in mountains.





Cultural, Sacred & Historic Sites

Mountains are home to a wealth of traditional knowledge and practices.

- Mountain population = 915 million
- 1,000+ languages
- Mountains as sacred
- World Heritage Sites
- Mountain recreation: US\$
 70-90 billion/year, 15-20%
 of global tourism





Climate Change Impacts Mountains warming faster than lowlands!

- Climate extremes, glacier retreat, landslides, floods, droughts, pathogens
- Risks of ecosystem collapse
- But also: new options for agriculture, etc.





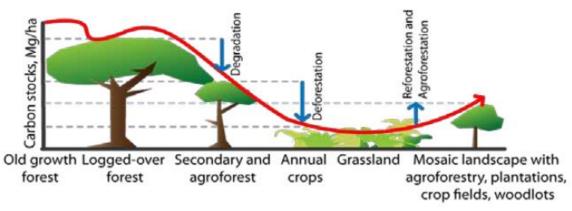


Figure 1.4 Forest and land use transition curve

Environmental Degradation Local to Global Drivers

- Mountains are inherently vulnerable to natural hazards and are ecologically fragile.
- Is there a lesson to be learned from the Forest Transition Curve?





The Mountain Paradox resource rich – income poor

- 329 million mountain people are food insecure (up 30% from 2000)
- Half of rural mountain people live in developing countries
- Onslaught of lowland culture and values: from school to social media
- Changing human settlement patterns: urbanization, end of nomadism?
- Massive out-migration: gender and age dimensions



Policy, Governance and Security

- Policies designed by/for lowlanders
- Weak governance, tenure, rights, services and capacity
- "Frontier" people in the way of resource extraction
- Epicenters for conflict: natural resources, transportation, ethnic



A "typical" mountain landscape faces many challenges.





We partner with mountain people to transform their livelihoods, protect their cultures and thus conserve vital natural resources for the planet.





TMI helps mountain communities respond to modern challenges through the integration of traditional knowledge and science