



**Kangchenjunga
Landscape: Setting the
context for
conservation and
connectivity**

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Kangchenjunga landscape

Mount Kangchenjunga

Southern part of Mt. Kangchenjunga (8,586 m)- Eastern Nepal, Darjeeling and Sikkim of India and Western Bhutan

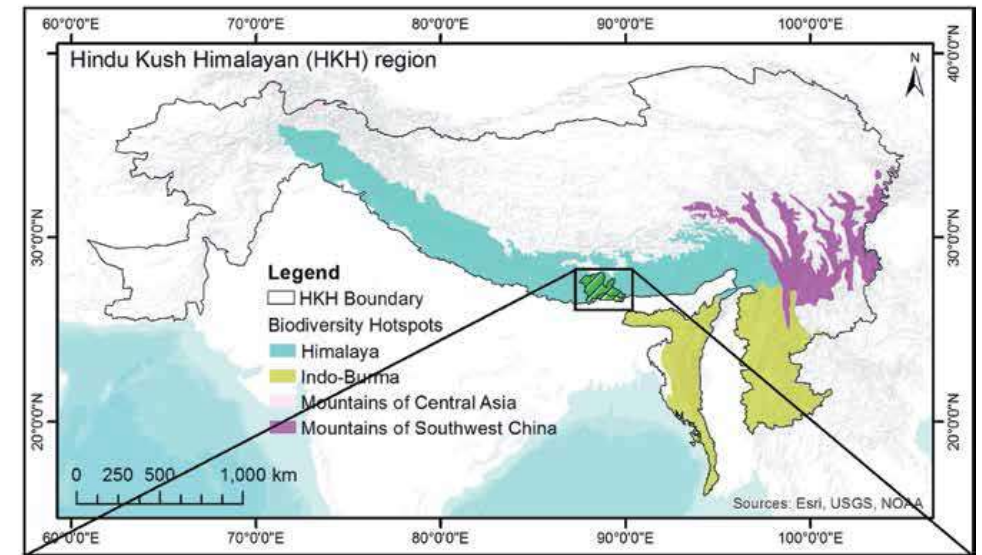
Coverage >25,000 sq km (Bhutan: 23%; India: 56%; & Nepal: (21%))

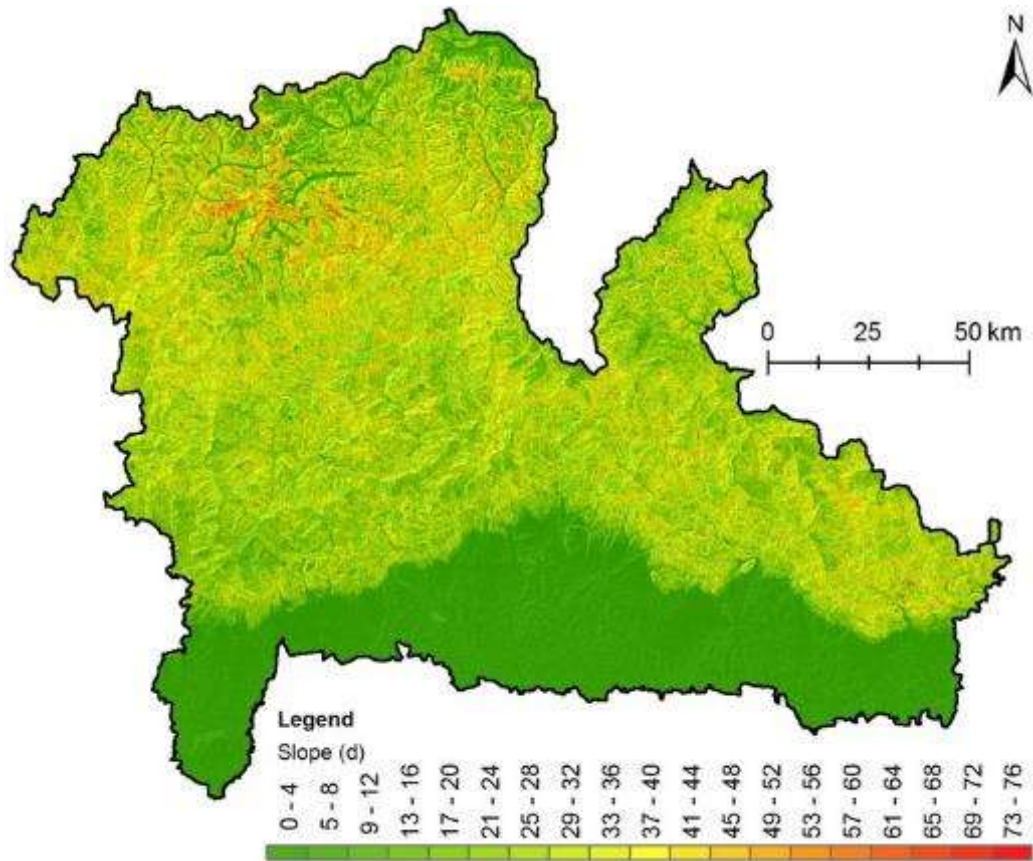
Repository of God of Snow

The Five Treasures – gold, silver, gems, grain and holy books

Diverse groups and rich culture

Limbu, Rai, Rajbanshi, Sherpa, Tharu, Dhimal, Lepcha, Brahmin, Chettri and others





Physical & cultural attributes

Elevation

From “Tarai-Duar” lowlands (40m), across midhills to Mt Kangchenjunga (8,586m)

Climate

Subtropical climate zone; tundra type climate; 80% of the annual precipitation between June-September

Five physiographic zones within 166km

Gangetic plain, Sub & Lower Himalayan, Greater Himalayan & the Tibetan Plateau

Rich culture and heritage

Rich Culture and Heritage

- 7.25 million people
- Long tradition of cross-border exchange and cooperation
- High dependence on ecosystem services
- Indigenous groups: Lepcha, Walungpa, Lhop (or Doya), Mech (or Meche)



Ecosystems & vegetation

Forests: 45% (69.5% in KL-Bhutan, 41.0% in KL-India & 26.4% in KL-Nepal)

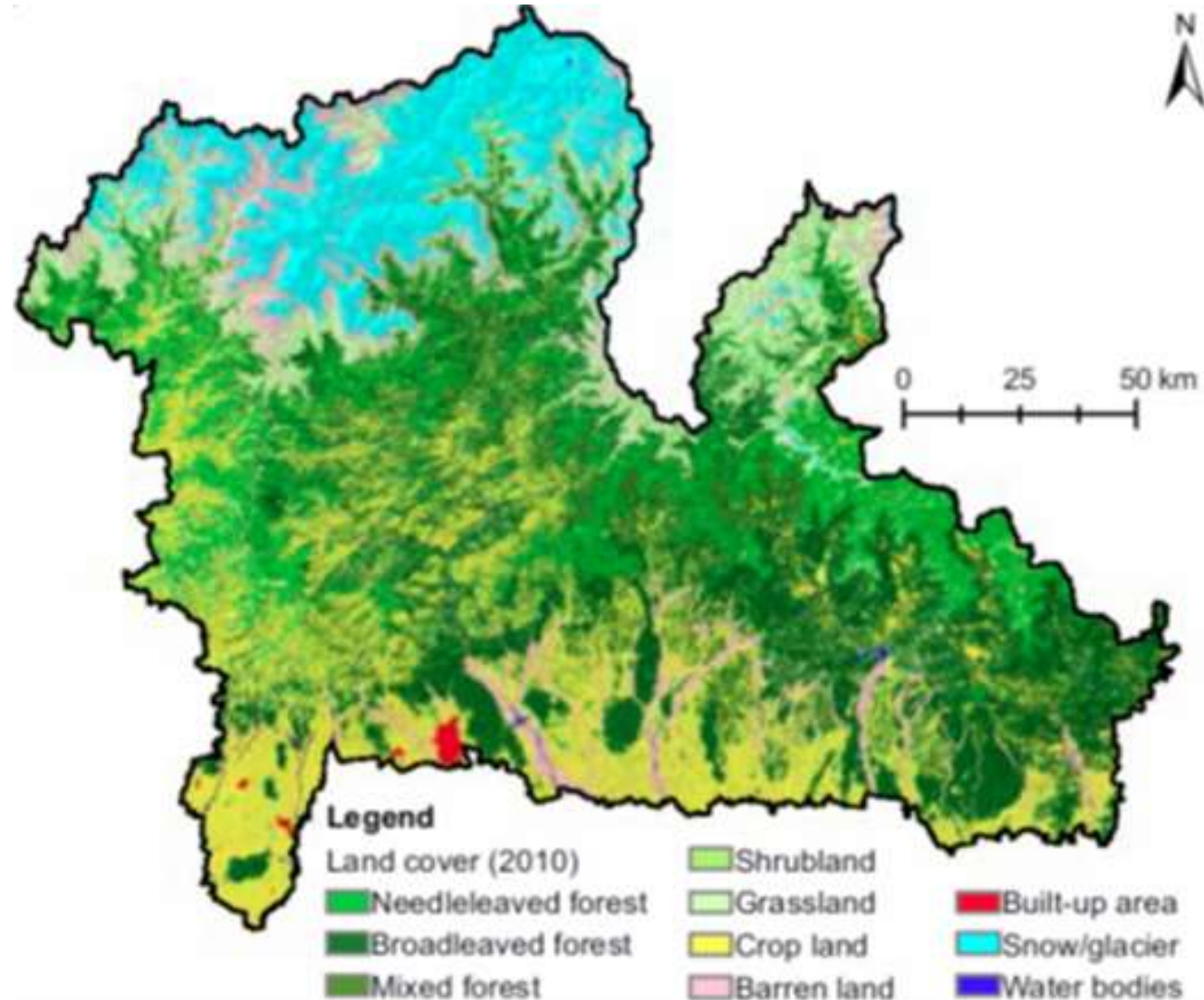
Rangelands: 20% (20.2% in KL-Bhutan, 18.0% in KL-India and 23.9% in KL-Nepal)

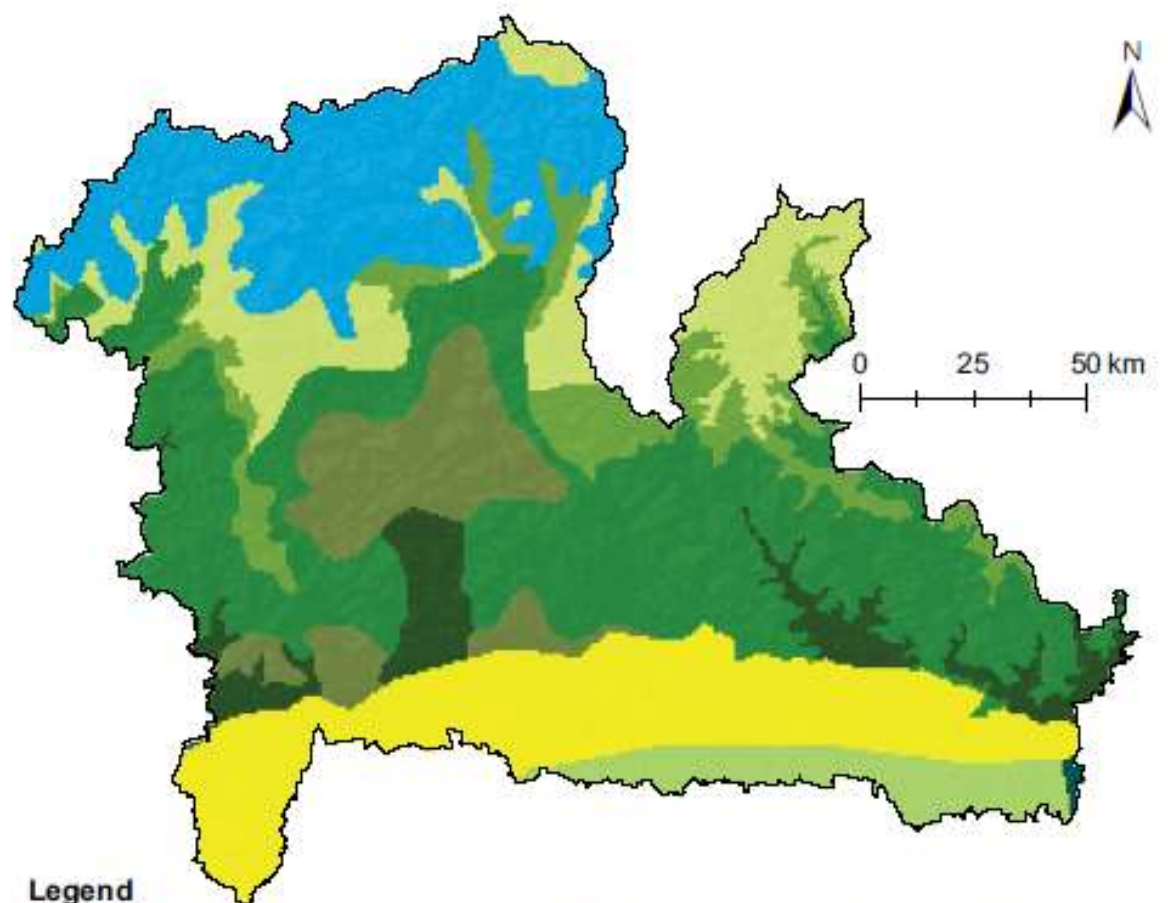
Agriculture lands: 17%

Snow and glaciers: 11%

Barren: 8%

Water bodies: <1%





Legend

- Terrestrial ecoregions
- Brahmaputra Valley semi-evergreen forests
 - Eastern Himalayan broadleaf forests
 - Eastern Himalayan subalpine conifer forests
 - Himalayan subtropical broadleaf forests
 - Himalayan subtropical pine forests
 - Lower Gangetic Plains moist deciduous forests
 - Eastern Himalayan alpine shrub and meadows
 - Terai-Duar savanna and grasslands
 - Rock and Ice
 - Yarlung Tsangpo arid steppe

Terrestrial Ecoregion	Area	
	sq.km	%
Eastern Himalayan broadleaf forests	7,662.8	30.55
Terai-Duar savanna and grasslands	3,984.3	15.88
Eastern Himalayan alpine shrub and meadows	2,698.5	10.76
Himalayan subtropical pine forests	2,152.0	8.58
Eastern Himalayan subalpine conifer forests	2,042.6	8.14
Himalayan subtropical broadleaf forests	1,474.1	5.88
Lower Gangetic Plains moist deciduous forests	1,134.8	4.52
Brahmaputra Valley semi-evergreen forests	33.2	0.13
Yarlung Tsangpo arid steppe	1.5	0.01
<i>Rock and Ice</i>	3,902.0	15.55
Total	25,085.8	100



Global significance

World Heritage Site:
**Khangchendzonga National Park,
Sikkim, India**

Ramsar Site:
**Mai Pokhari,
Illam, Nepal**

19 Protected Areas

11 Important Plant Areas

1 Biodiversity Hotspot

9 Ecoregions

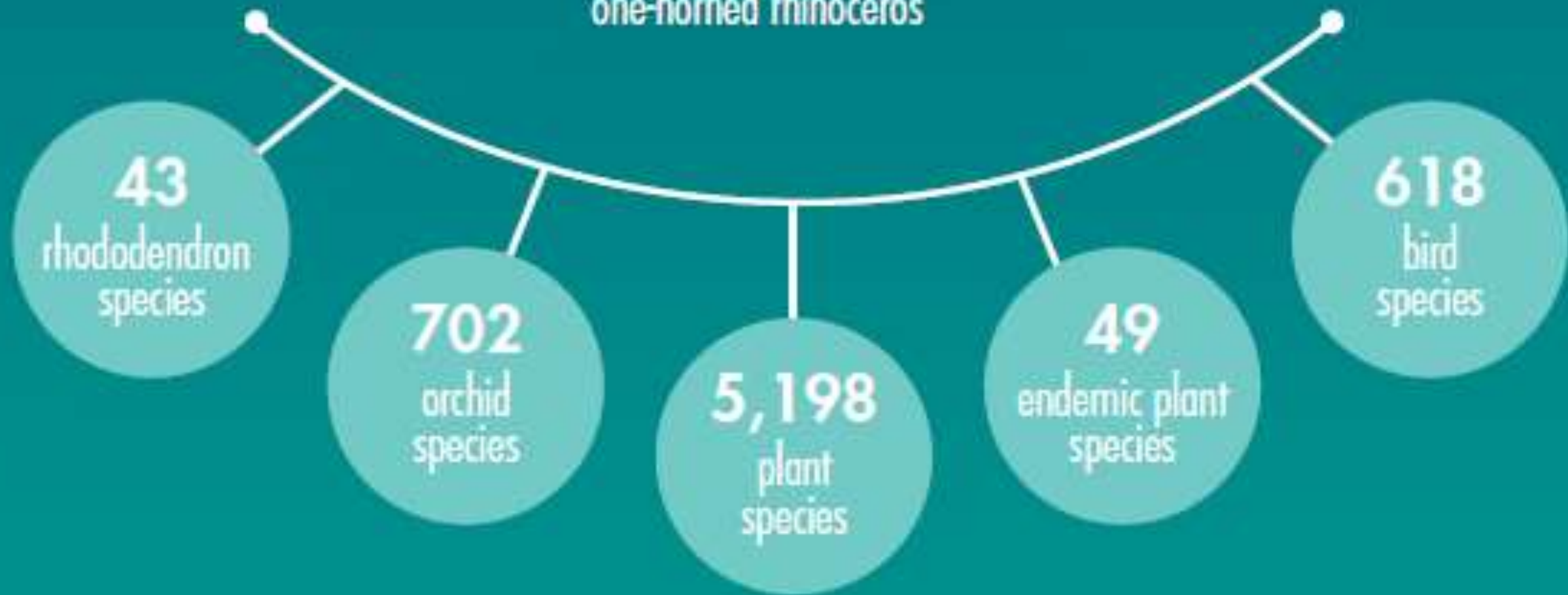
22 Important Bird Areas

Flagship animals

Highlands: snow leopard, yak

Mid-hills: red panda, takin

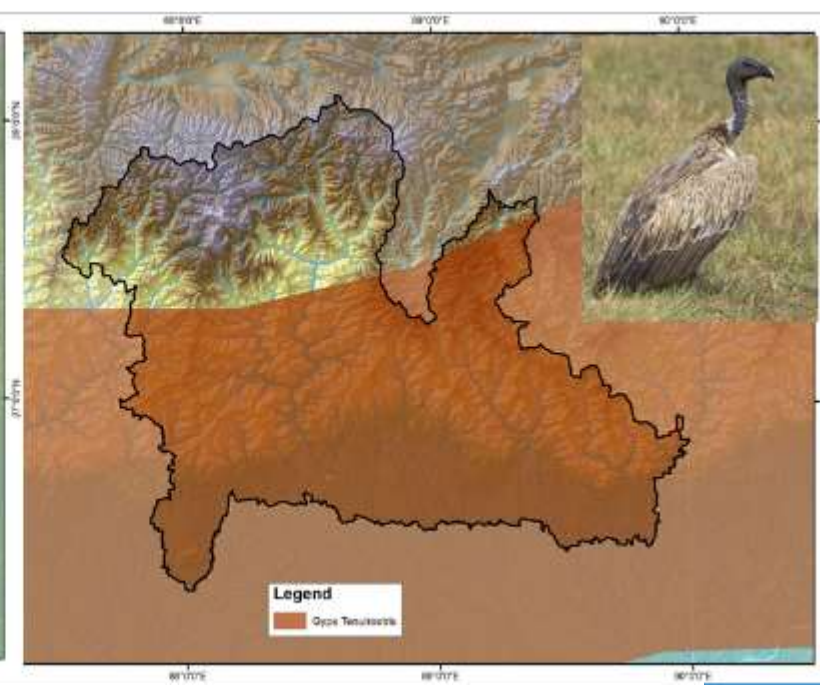
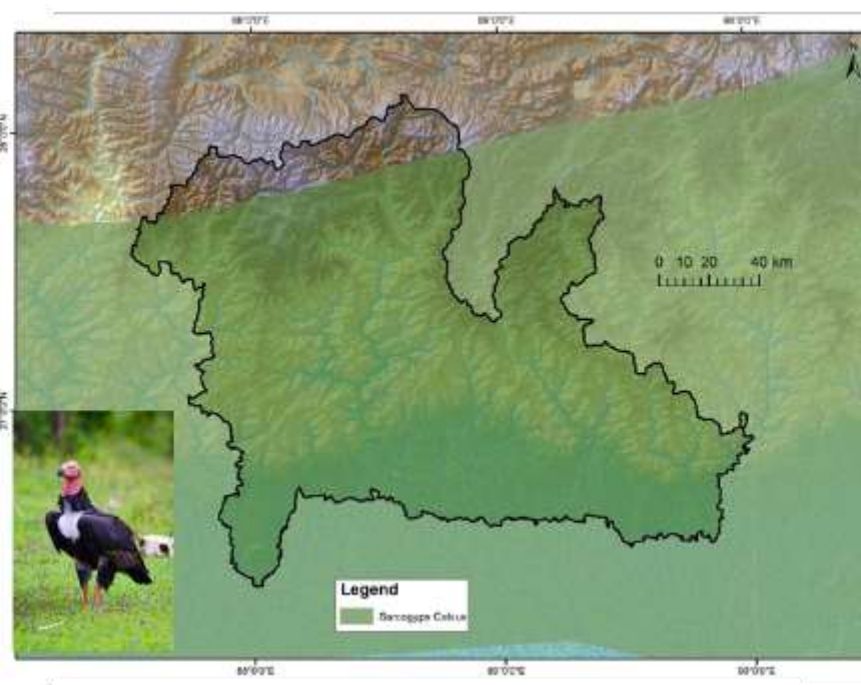
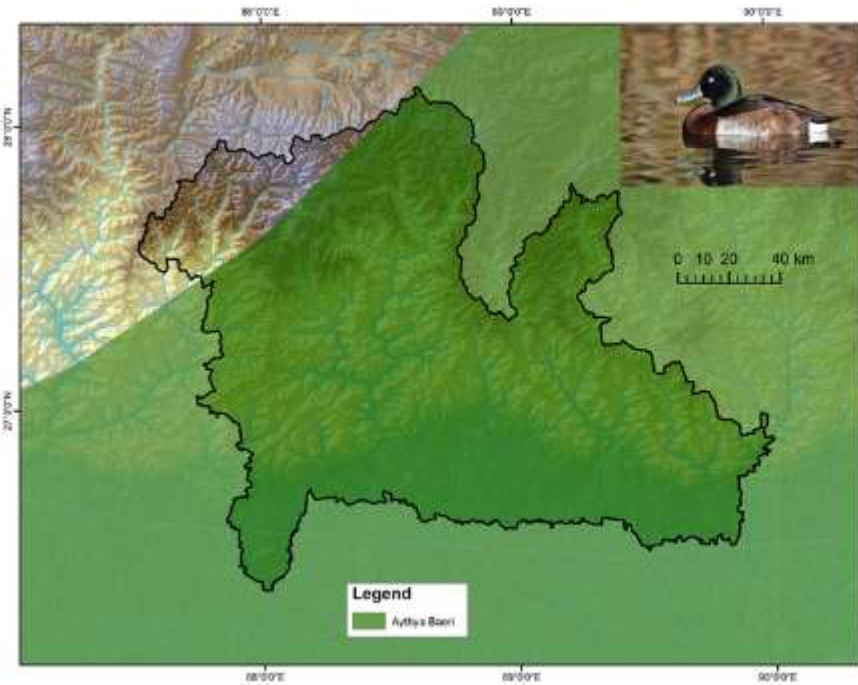
Lowlands: tiger, Asian elephant,
one-horned rhinoceros



Critically endangered bird species

Baer's pochard, white-rumped vulture, slender-billed vulture, and red-headed vulture

Habitats use: Mosaics (forest, wetlands, agriculture, river, barren land)



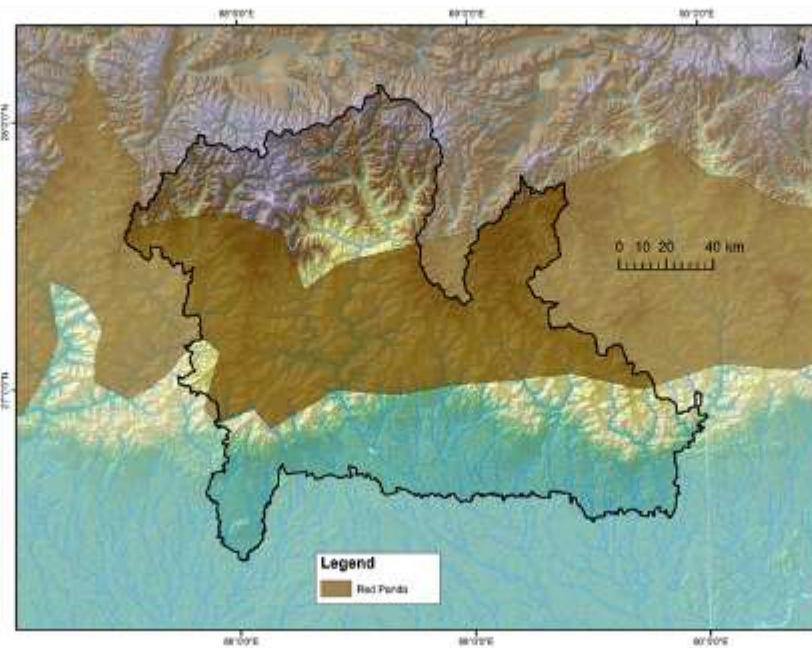
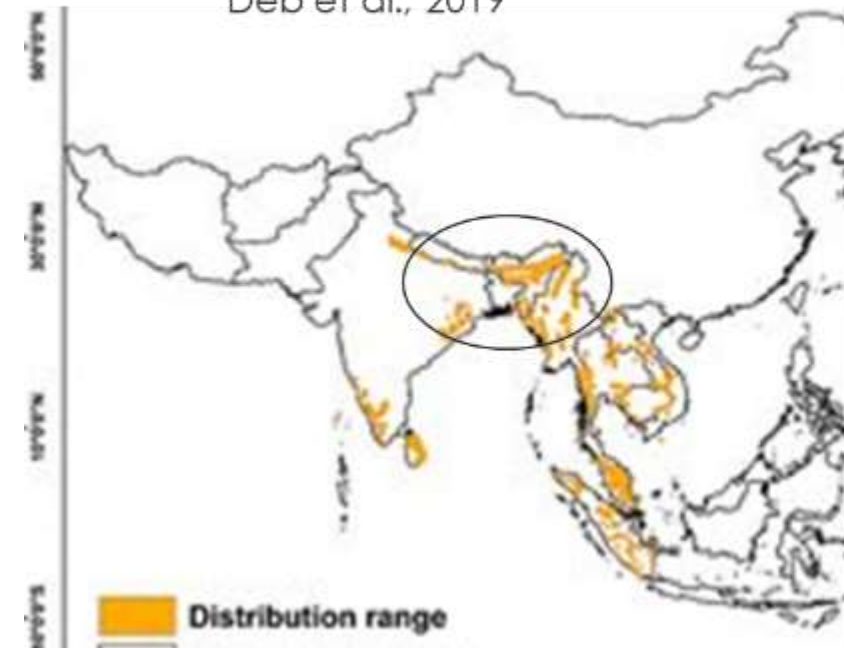
Flagship mammals

Lowland: Bengal tiger, one-horned rhinoceros and Asian elephant;

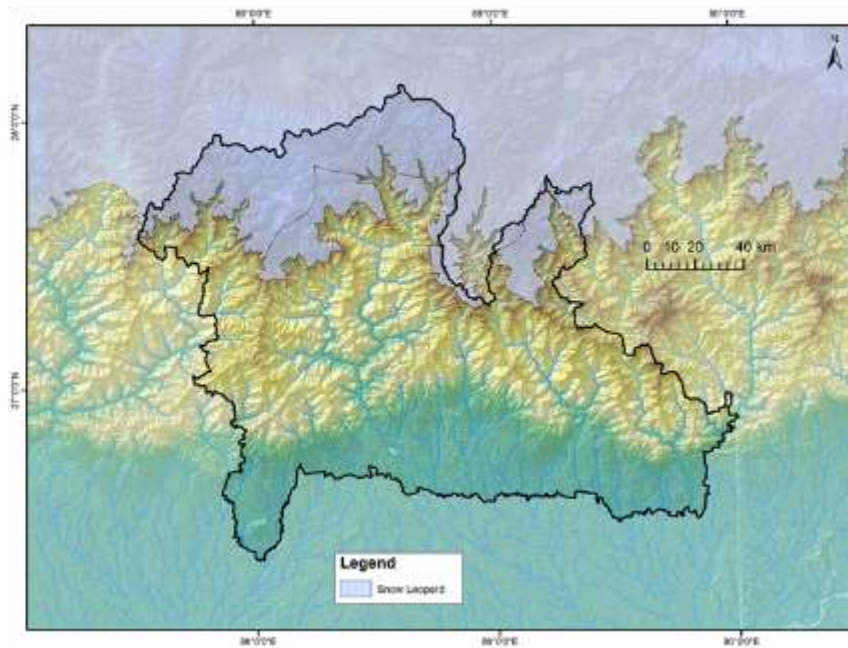
Midhills: Red panda, takin and clouded leopard;

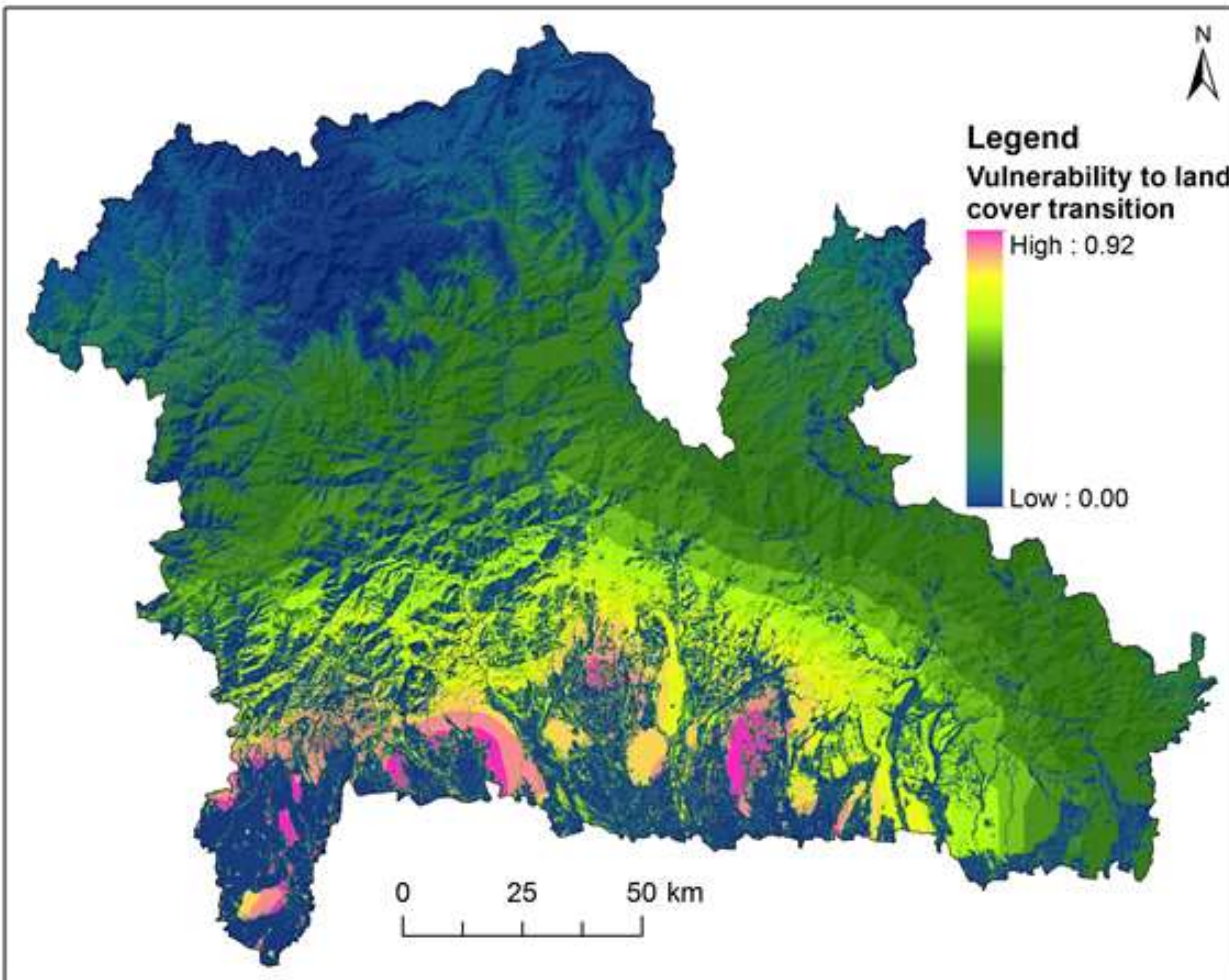
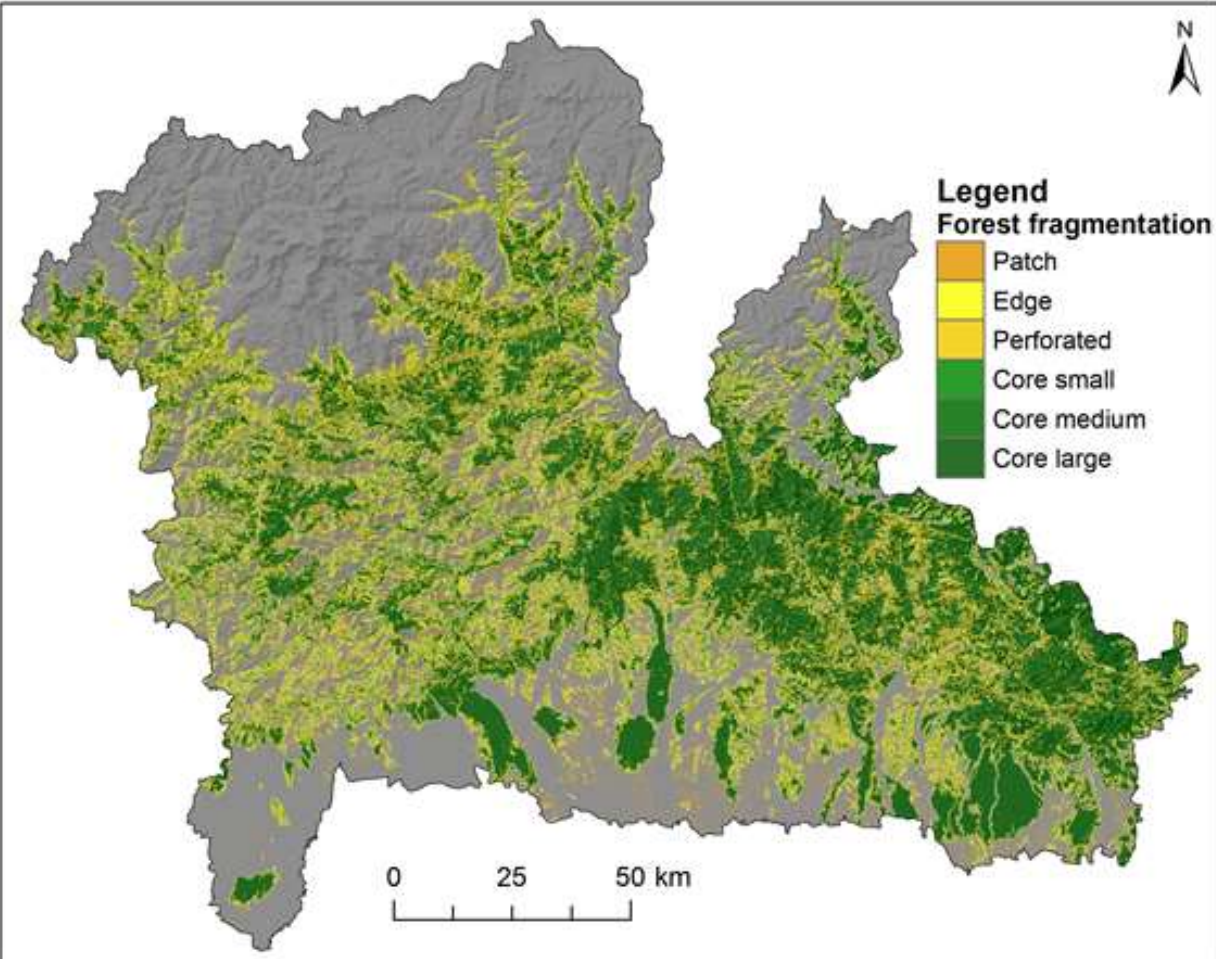
High mountains: Snow leopard, musk deer, Himalayan black bear, Tibetan antelope and blue sheep

Deb et al., 2019



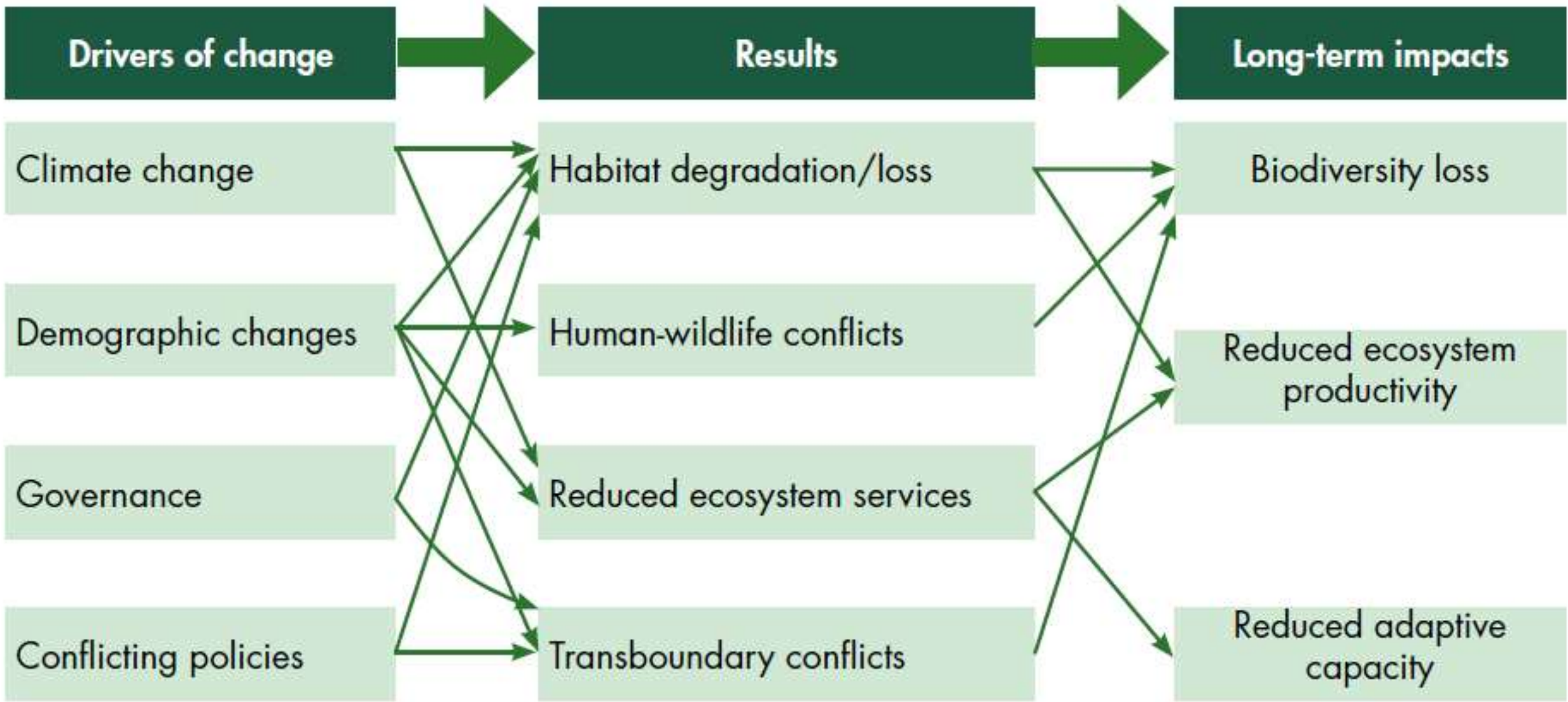
Source: IUCN Red List (2021)





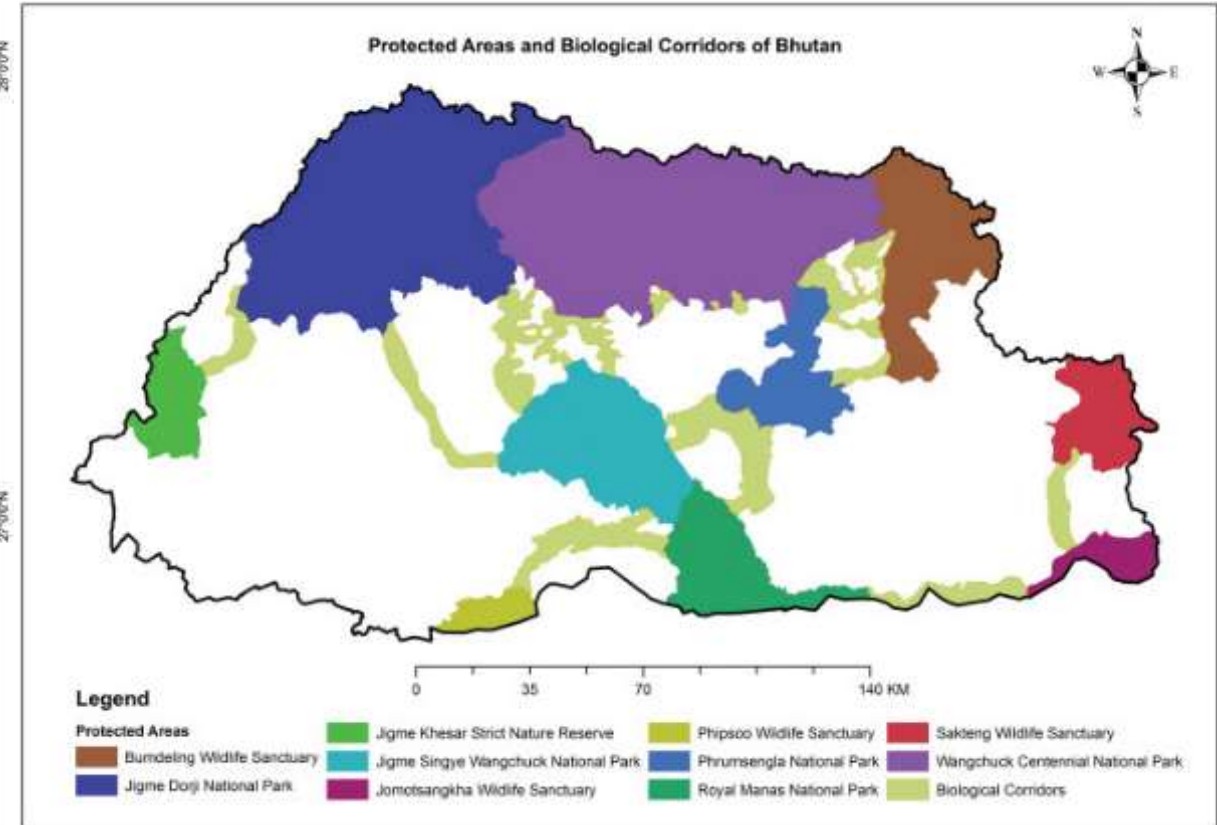
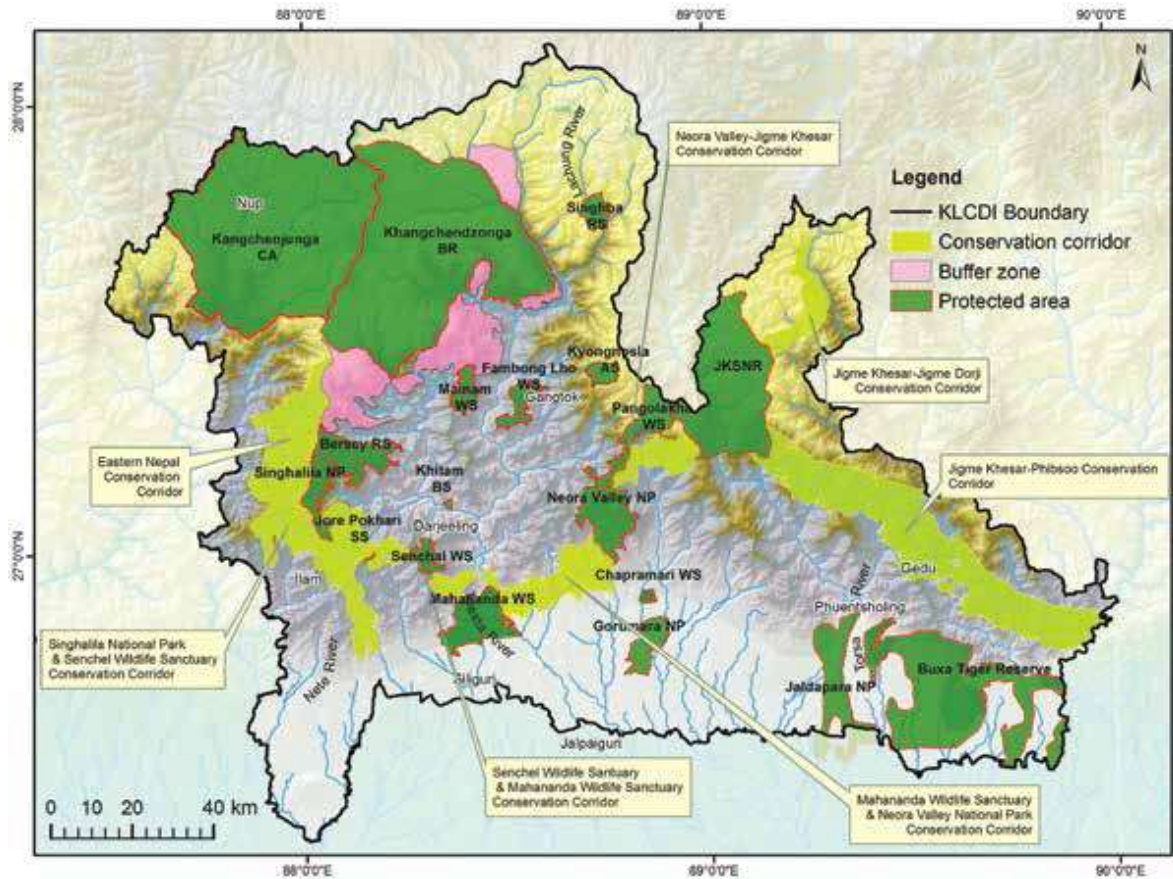
Uddin et al., 2018





Gap in knowledge
Impacts on gender equity

Corridors and connectivity



ICIMOD, WCD, GBPNIHESD, RECAST (2017)

Wangchuk et al., 2016



Thank you



Protect the pulse.