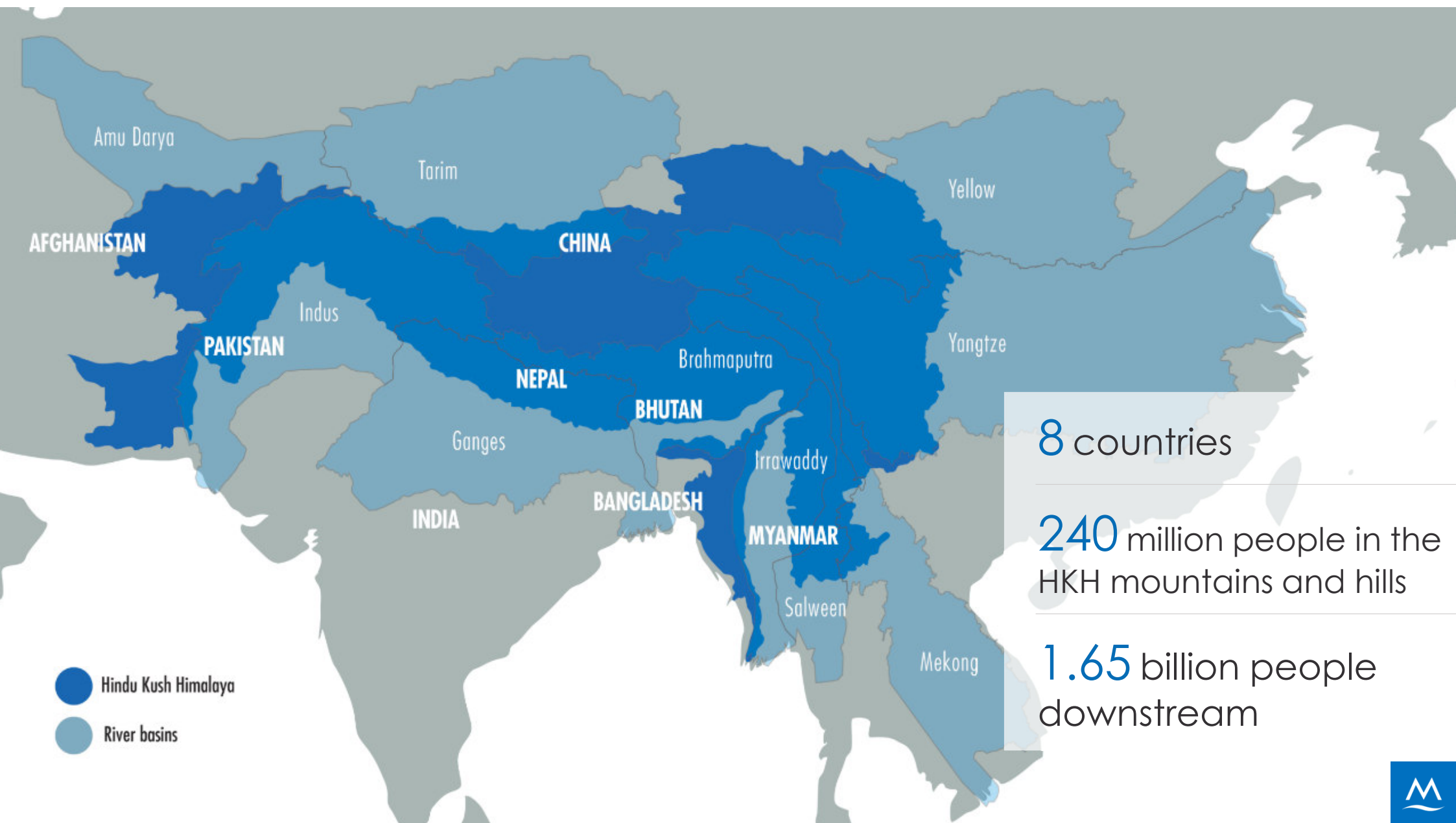




ICIMOD

The Hindu Kush Himalaya: A repository of biocultural diversity and global biodiversity hotspots

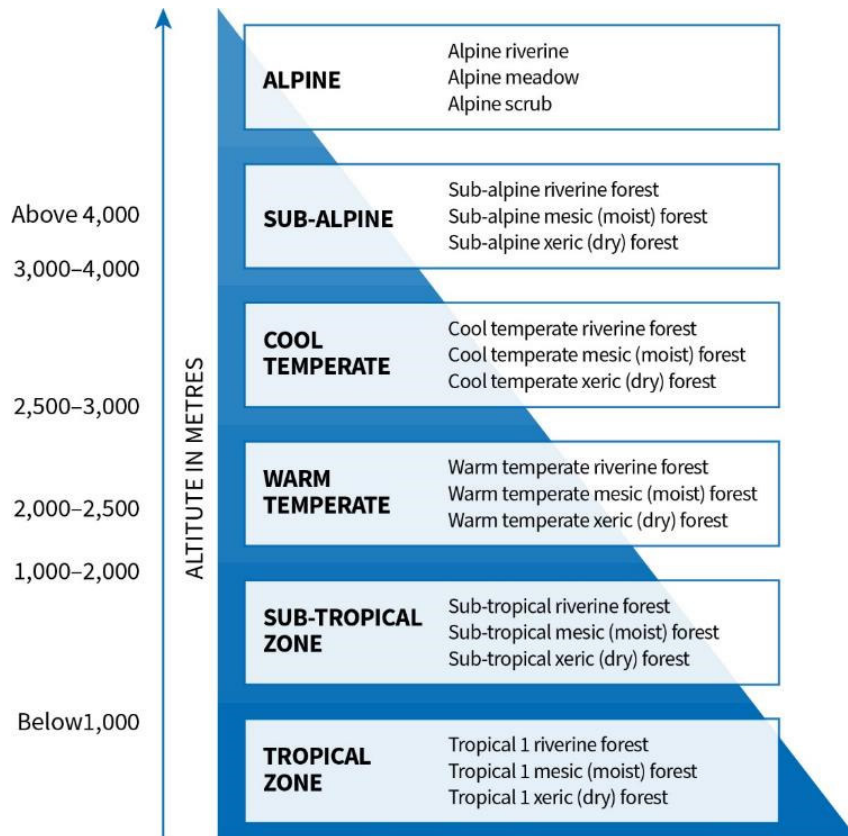
Srijana Joshi
ICIMOD





Diversity in the HKH
Over 1,000 living languages

Vegetation zones and dominant forest types



Species discovery in the Himalaya



Leaf deer
Myanmar (1999)



Smith's litter frog
Assam, India (1999)



Orange spotted
snakehead
Assam, India (2000)



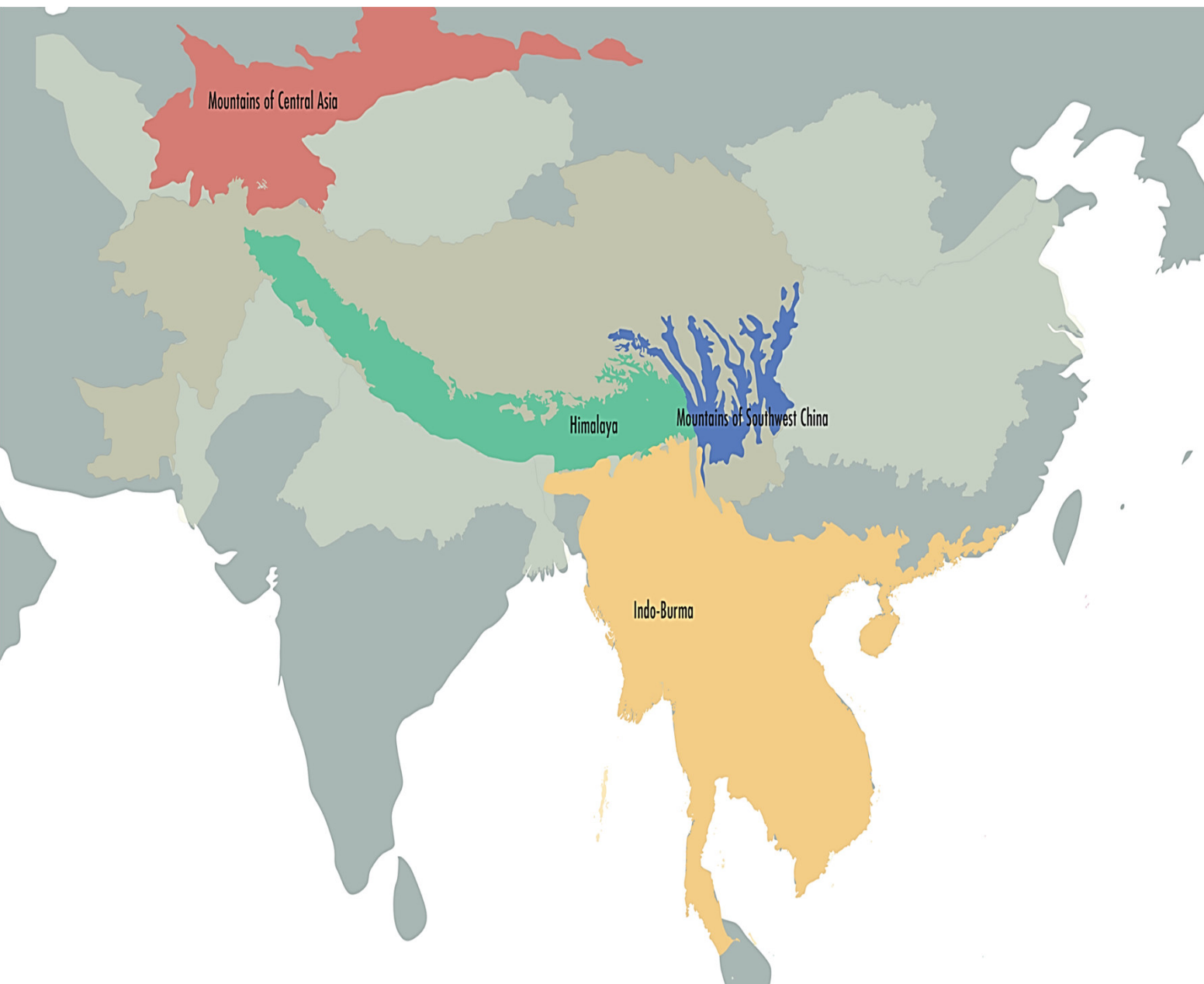
Bugun liocichla
India (2006)



Dracula fish
Myanmar (2009)



Saussurea
ramchaudharyi
Humla, Nepal (2018)



Biodiversity



+35 new species

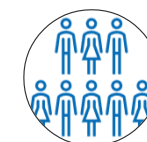
discovered each year in the Eastern Himalaya (Between 1998 and 2008, but



70 to 80% original habitat in the biodiversity hotspots of the HKH already lost (relative to 1500)



1/4 of endemic species in the Indian Himalaya could be wiped out by 2100



60-85% of rural population in HKH directly or indirectly depend on biodiversity for subsistence

Species diversity and endemism in the four biodiversity hotspots

Biodiversity	Himalaya	Indo-Burma	Mountains of Southwest China	Mountains of Central Asia
Plants	10,000 (3,136)	13,500 (7,000)	12,000 (3,500)	5,500 (1,500)
Mammals	300 (12)	433 (73)	237 (5)	143 (6)
Birds	977 (15)	1,266 (64)	611 (2)	489 (0)
Reptiles	176 (48)	522 (204)	92 (15)	59 (1)
Amphibians	105 (42)	286 (154)	90 (8)	7 (4)
Freshwater fish	269 (33)	1,262 (553)	92 (23)	27 (5)

Note: Number of endemic species highlighted in blue



Direct drivers of biodiversity loss

Land use and land cover change

Pollution

Climate change

Invasive species

Rapid urbanization

Habitat degradation

Overexploitation of resources

Source:  *Wang et al. 2019; Xu et al. 2019*





Traditional and local knowledge in the HKH



Languages



Songs



Handicrafts



Folklore



Cultural values



Agricultural practices

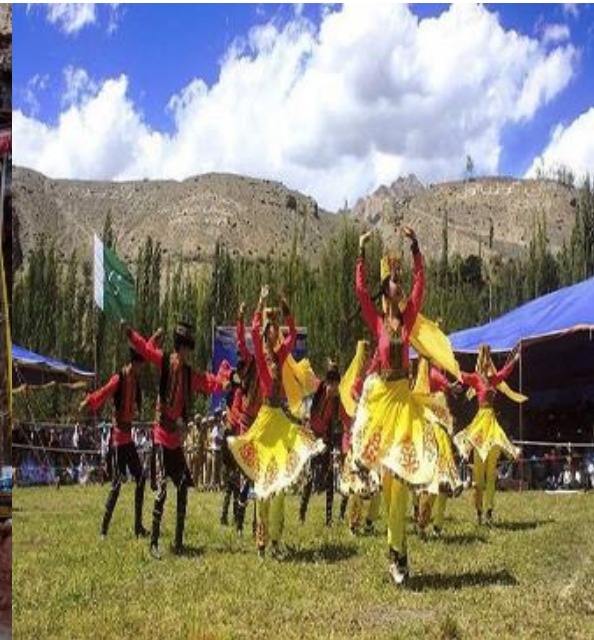


Health practices

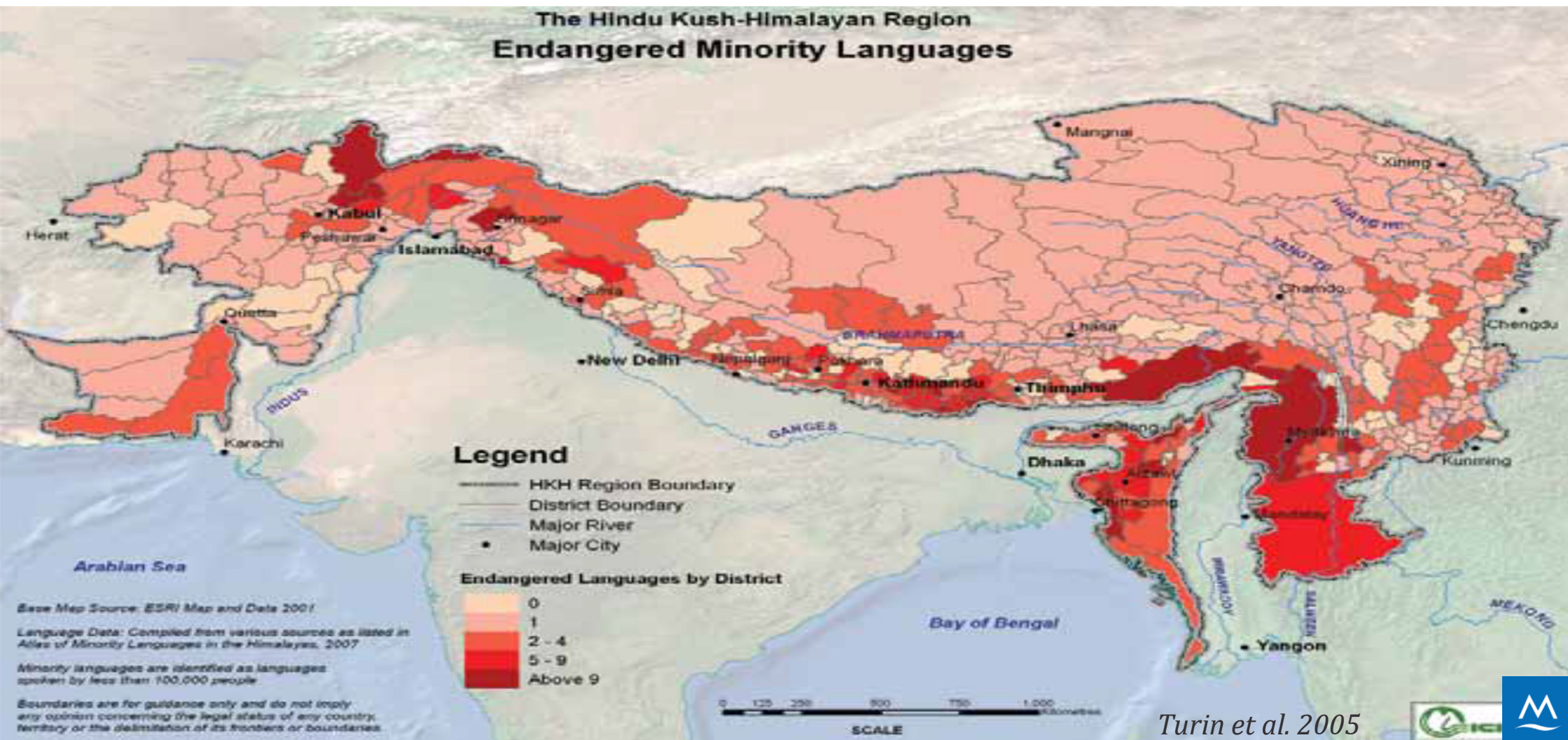


Natural resources management

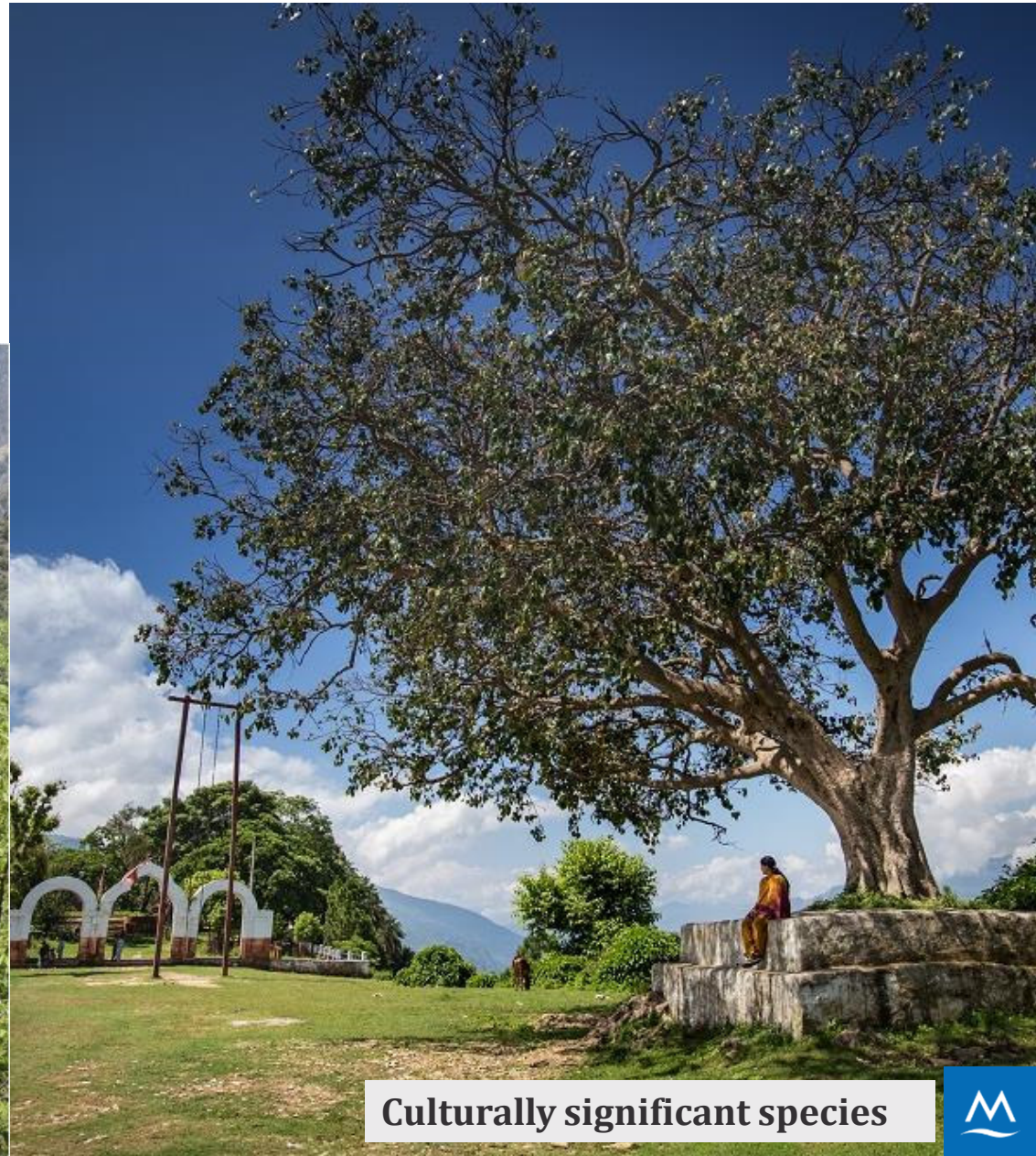
The blending of cultural, religious, and traditional knowledge systems has contributed substantially to the conservation of species, ecosystems, and genetic diversity in HKH



Linguistic diversity in HKH



TLK in forest conservation



TLK related to health practices



Ayurveda



Traditional Chinese
herbal medicine



“Amchi” traditional herbal
healer

TLK in pasture and livestock management



“Dzumsa system” Traditional self governance system for managing pasture in North Sikkim, India and **“Hipsing system”** in Limi Humla, Nepal



“Ubhauli” (upward movement of herds) and **“Udhauli”** (downward movement of herds) festival in Eastern Nepal

TLK in agricultural practices



Zhum (Shifting) cultivation



Terrace farming



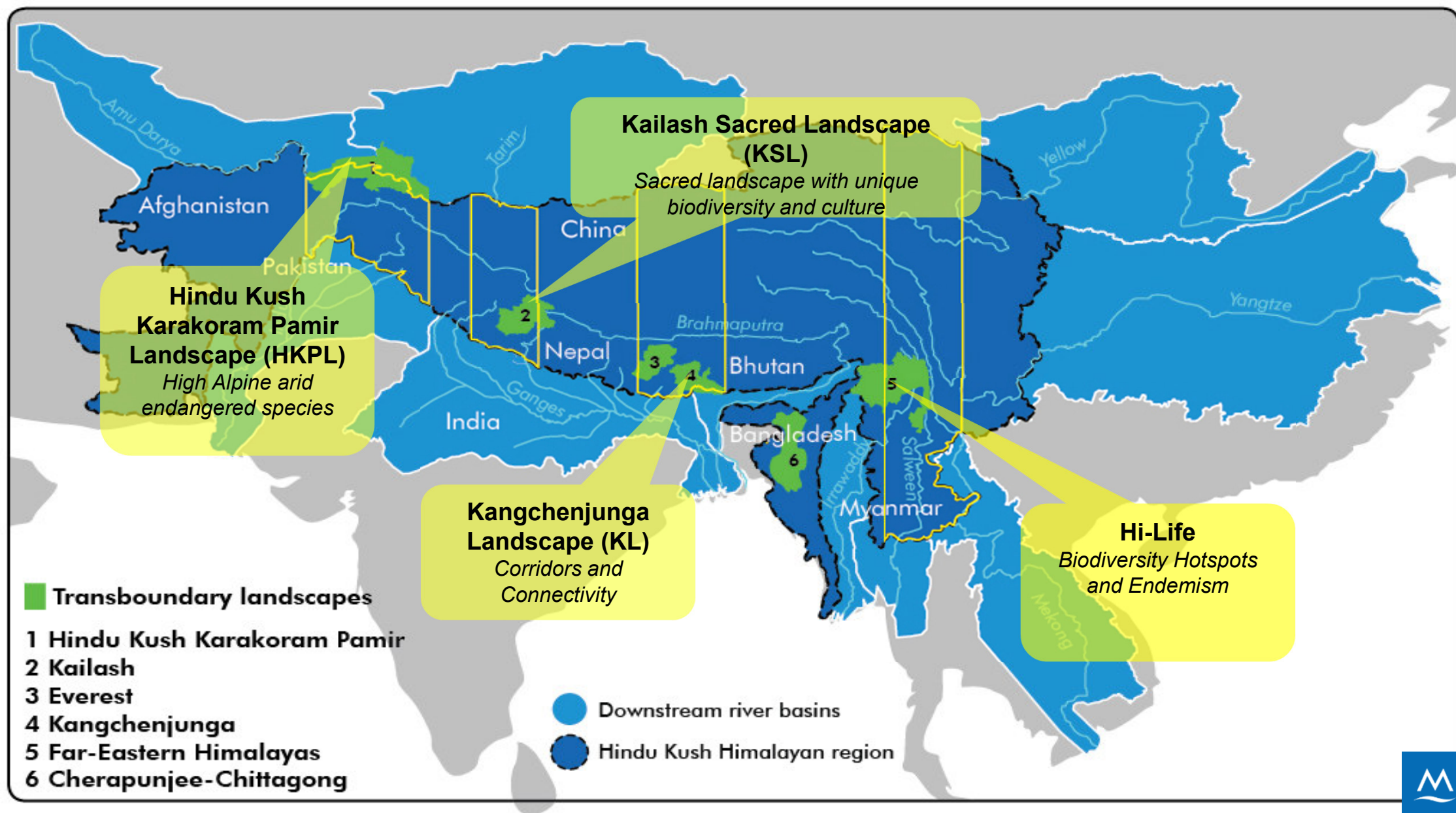
Community seed bank



'Apatani' irrigation system



Water harvesting system



An aerial photograph of the Hindu Kush Himalaya mountain range. The mountains are rugged and covered in green vegetation, with some peaks appearing snow-capped. The surrounding landscape is a mix of green fields and brown, arid hills. The sky is a pale blue with some light clouds.

The Hindu Kush Himalaya

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



A scenic landscape of a mountain valley. In the foreground, a river flows through a rocky bed. The middle ground shows a valley floor with sparse vegetation. In the background, steep, rocky mountains are partially covered in snow. The sky is a clear, vibrant blue with a few wispy clouds. A large, white, zigzag graphic is overlaid on the left side of the image.

Thank you

Let's protect
the pulse.