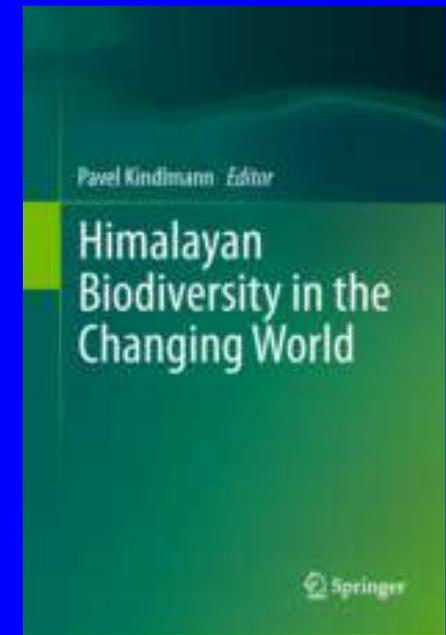
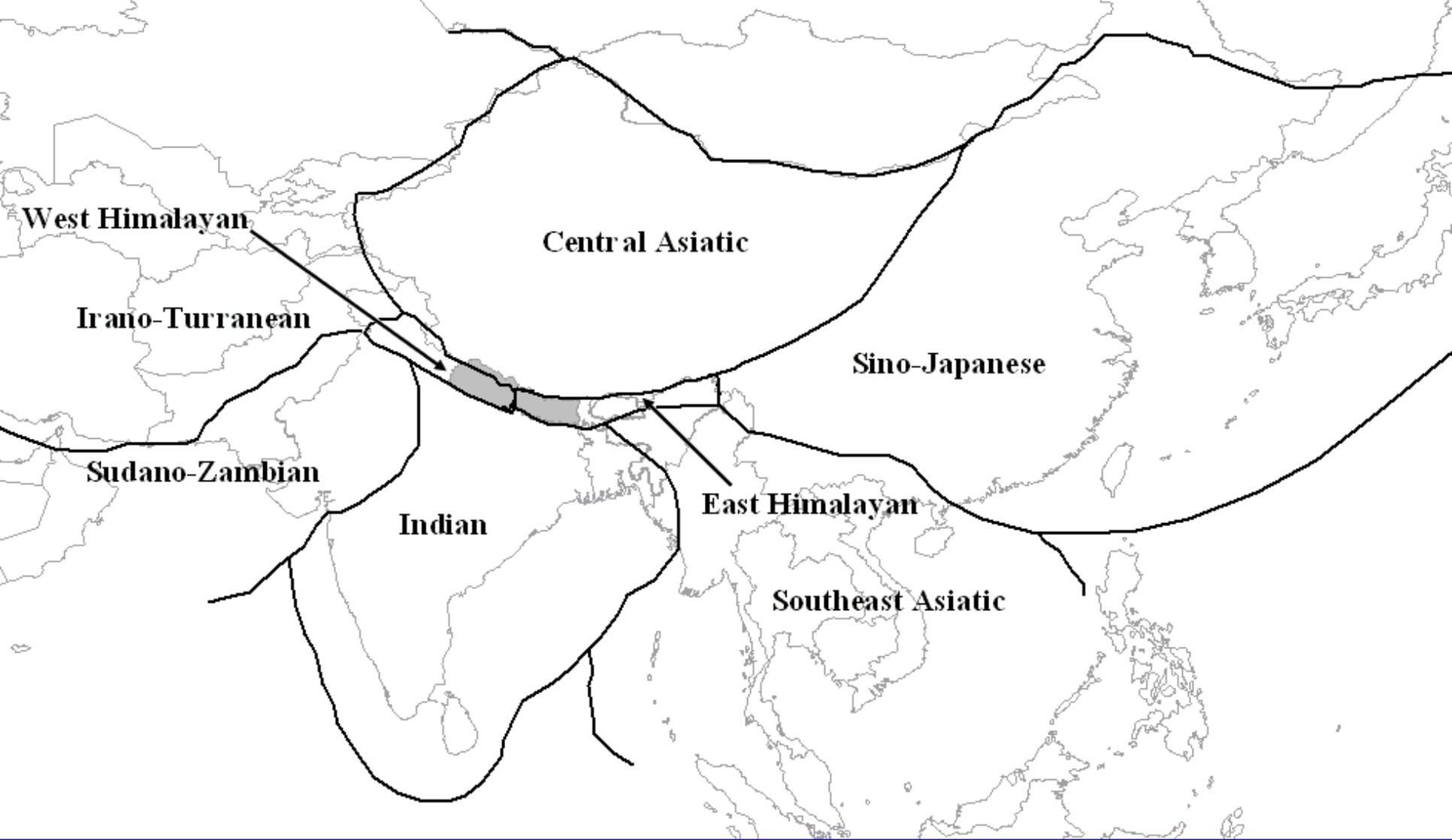


# Protected areas and wildlife management in Nepal



## Nepal - 147 181 km<sup>2</sup>, i.e., 0.1% of the global land mass

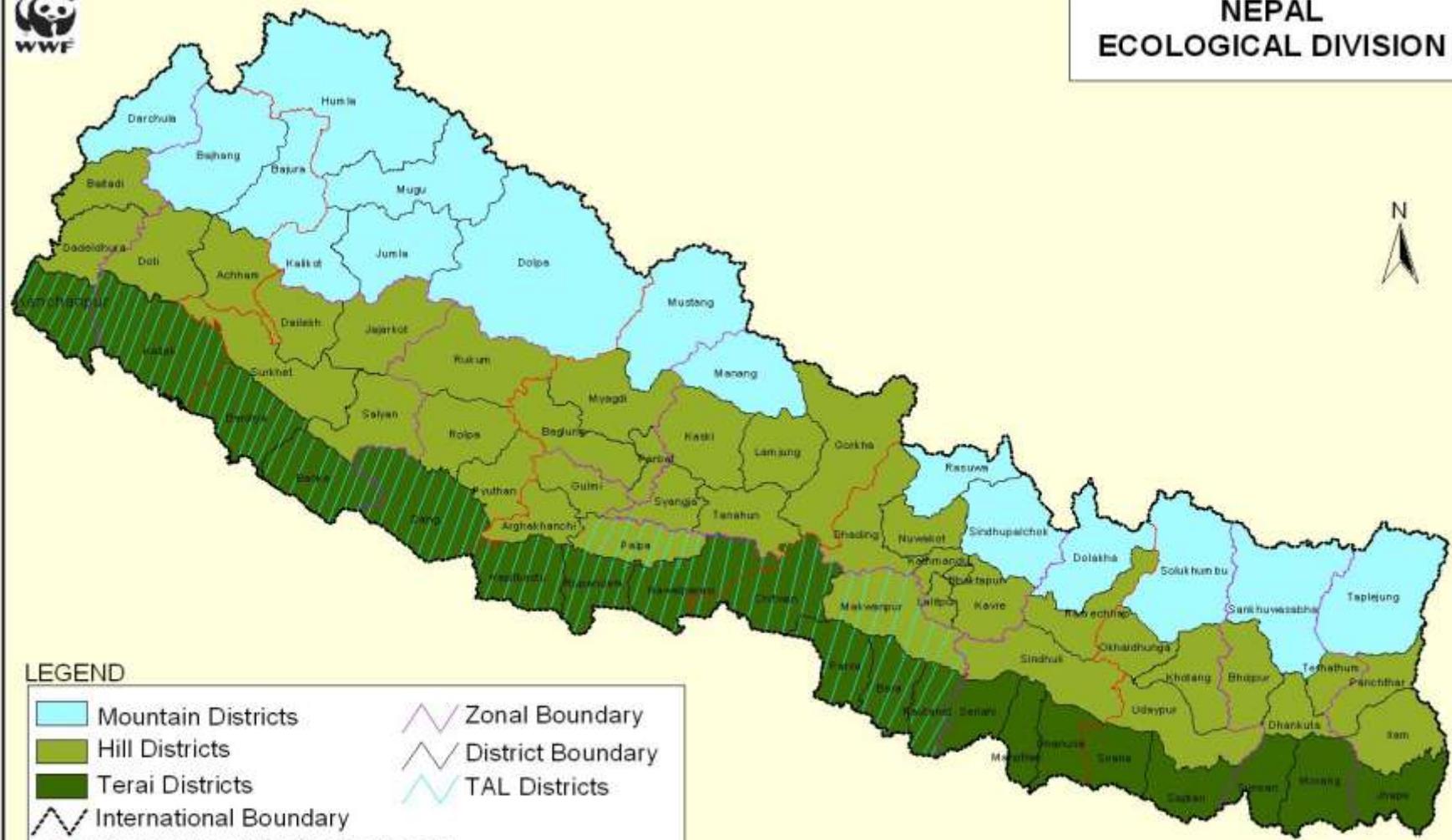
Faunal group	Global numbers	Nepal			
		Number of species	Nepal/Global x100 (%)	Endemic	Extinct
Mammals	4675	185	3.96	1	4
Birds	9799	874	8.90	2	11
Reptiles	7870	78	0.99	2	-
Amphibians	4780	118	2.47	9	-
Fish	10000	187	1.87	8	-
Butterflies	17500	651	3.72	29	-
Moths	160000	785	0.49	-	-
Spiders	39490	175	0.44	-	-



# Floristic provinces in Asia



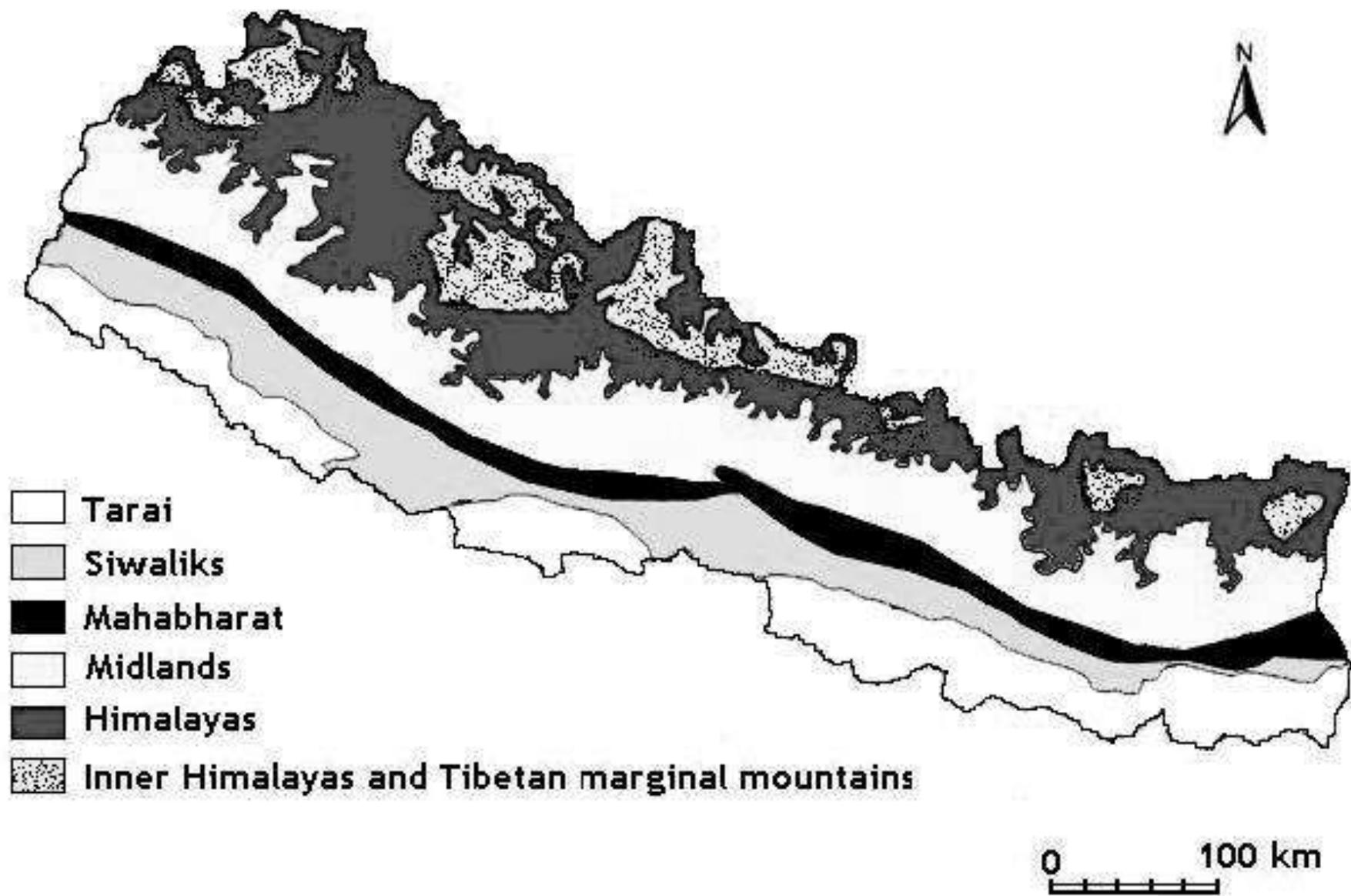
# NEPAL ECOLOGICAL DIVISION



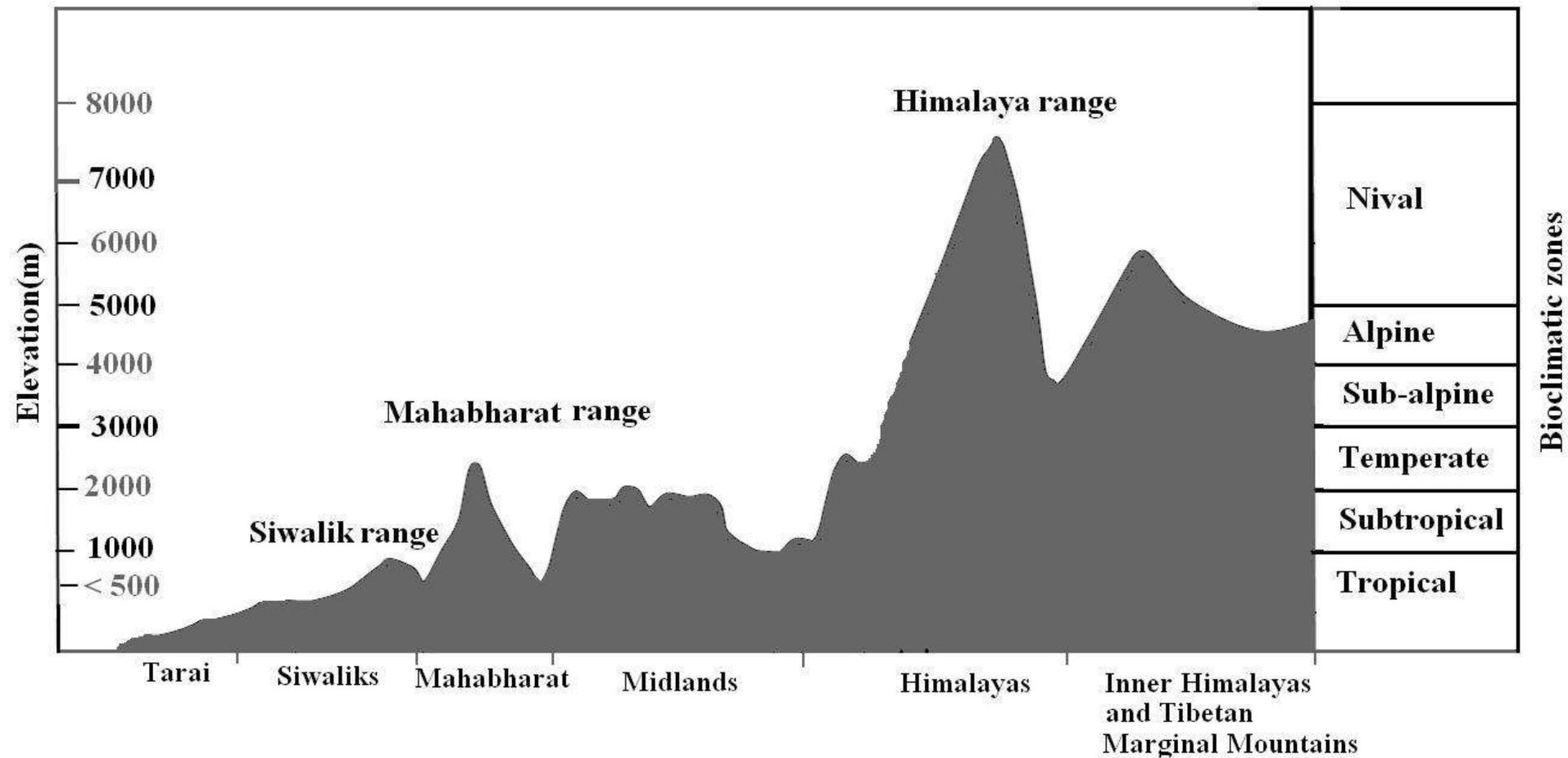
## LEGEND

- Mountain Districts
- Hill Districts
- Terai Districts
- International Boundary
- Development Region Boundary
- Zonal Boundary
- District Boundary
- TAL Districts





# Physiography of Nepal



## Biographic and bioclimatic zones of Nepal

# Terai:

- originally an uninterrupted patch of dense tropical forest
- eradication of malaria, building of roads: attractive to migrants from the hills (better livelihood)
- most of the forest destroyed
- remaining areas - intense human exploitation
- Terai covers about 17% of Nepal,
- supports nearly half of the population and the main industrial areas (Biratnagar, Birganj and Nepalgunj).

# Siwalik (Churia range)

- the youngest Himalayan range
- composed of sedimentary rock and big boulders
- not suitable for agriculture and human settlements

# Mahabharat

- composed of hard rocks of different ages
- 1500 - 2700 m
- subtropical climate at low altitudes
- temperate climate at high altitudes
- well developed in eastern and central Nepal
- underdeveloped in western Nepal
- moderately populated (except for river valleys)
- steep slopes - terrace cultivation:
  - soil erosion and nutrient loss
- forest severely exploited

# Midlands

- low-lying riverbanks & mountain slopes - extensively utilized for agriculture
- terraced steeper hill slopes
- extension of agricultural land into what used to be forest - continuous process of deforestation
- highest diversity of ecosystems,
  - not all equally well protected, even in the protected areas

# Himalaya

- name derived from the *sanskrit*, meaning house of snow (*him* – snow, and *alaya* – house)
- sub-alpine and alpine climate at the lower altitudes
- above 5000 m no vegetation (arctic desert or nival zone)
- human settlement is mostly confined to low altitudes
- mountain pastures - important resources, used for both livestock grazing and collecting medicinal herbs during summer



**Marshes: a good habitat for wetland dependent birds.**



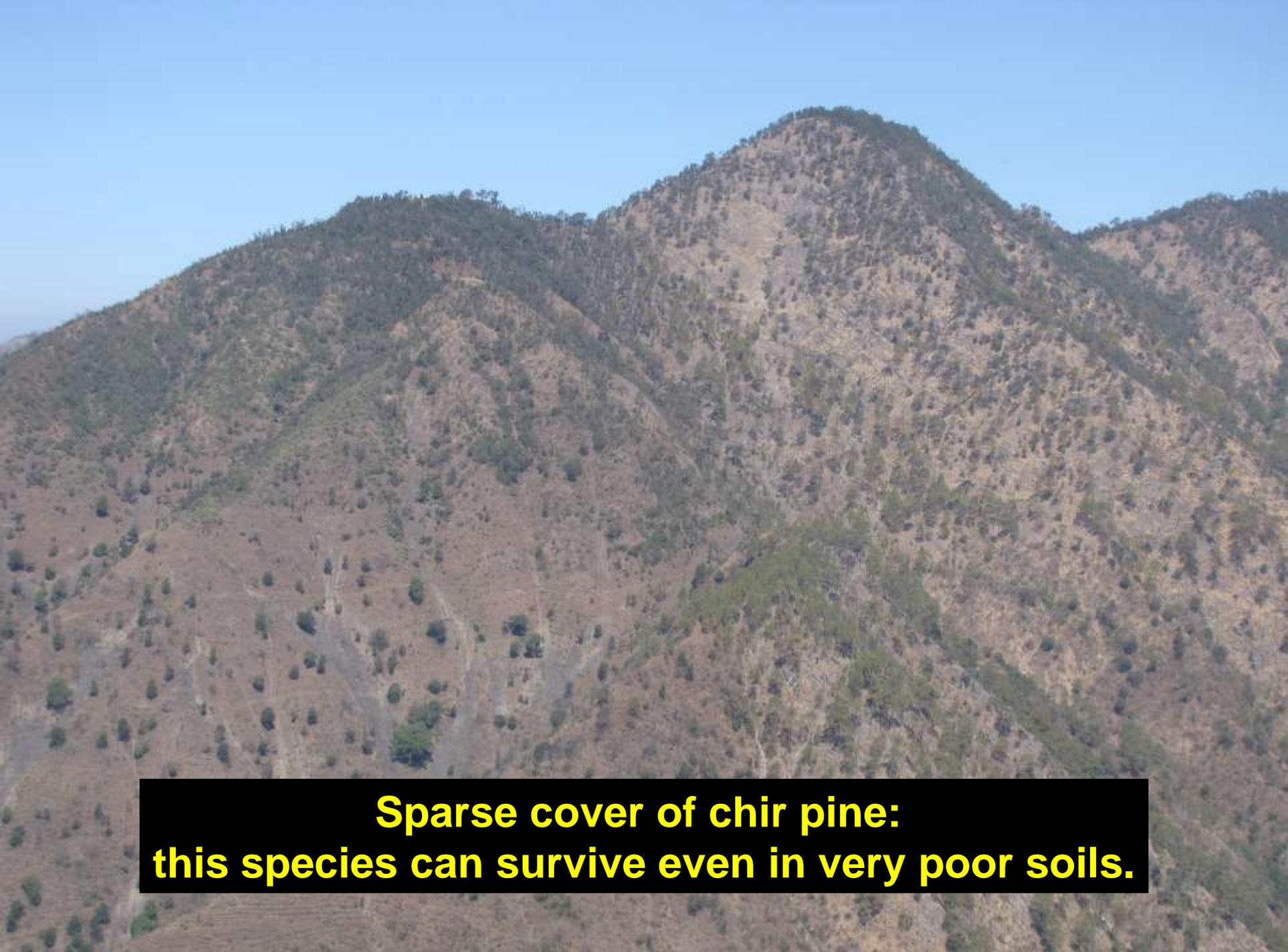
**Churia range: the youngest Himalayan mountains, made of sedimentary rocks and big boulders.**



**Churia hill gorge covered by sub-tropical deciduous sal (*Shorea robusta*) forest.**



**Chir pine (*Pinus roxburghii*) forest has little or no understory vegetation.**



**Sparse cover of chir pine:  
this species can survive even in very poor soils.**



**Oak forest mixed with rhododendron in western Nepal.**



**A dense mixed forest (rhododendron, oak and conifers).**



**Fir-rhododendron forest.**



**Fir forest with *Rhododendron campanulatum*  
(Paiga Jajarkot, 3280m).**



**Hill sal forest in the midhills of Nepal;  
mostly degraded due to timber harvesting and proximity  
to villages.**



**Oak forest in Kaigau, Dolpa.**



**Birch-rhododendron forest just below the timberline,  
Shey Phoksundo National Park, western Nepal (3662m).  
Characteristic forest of sub-alpine zone.**



**Alpine meadow (3996m), Shey Phoksundo national park, Western Nepal. Such meadows play an important role in sustaining local economy and livelihood of the people and protecting biodiversity. They provide medicinal herbs, grazing for livestock and habitat for high altitude mammals.**



**High mountains: good habitat for blue sheep.**



**Himalayan range: a perpetual source of water.**