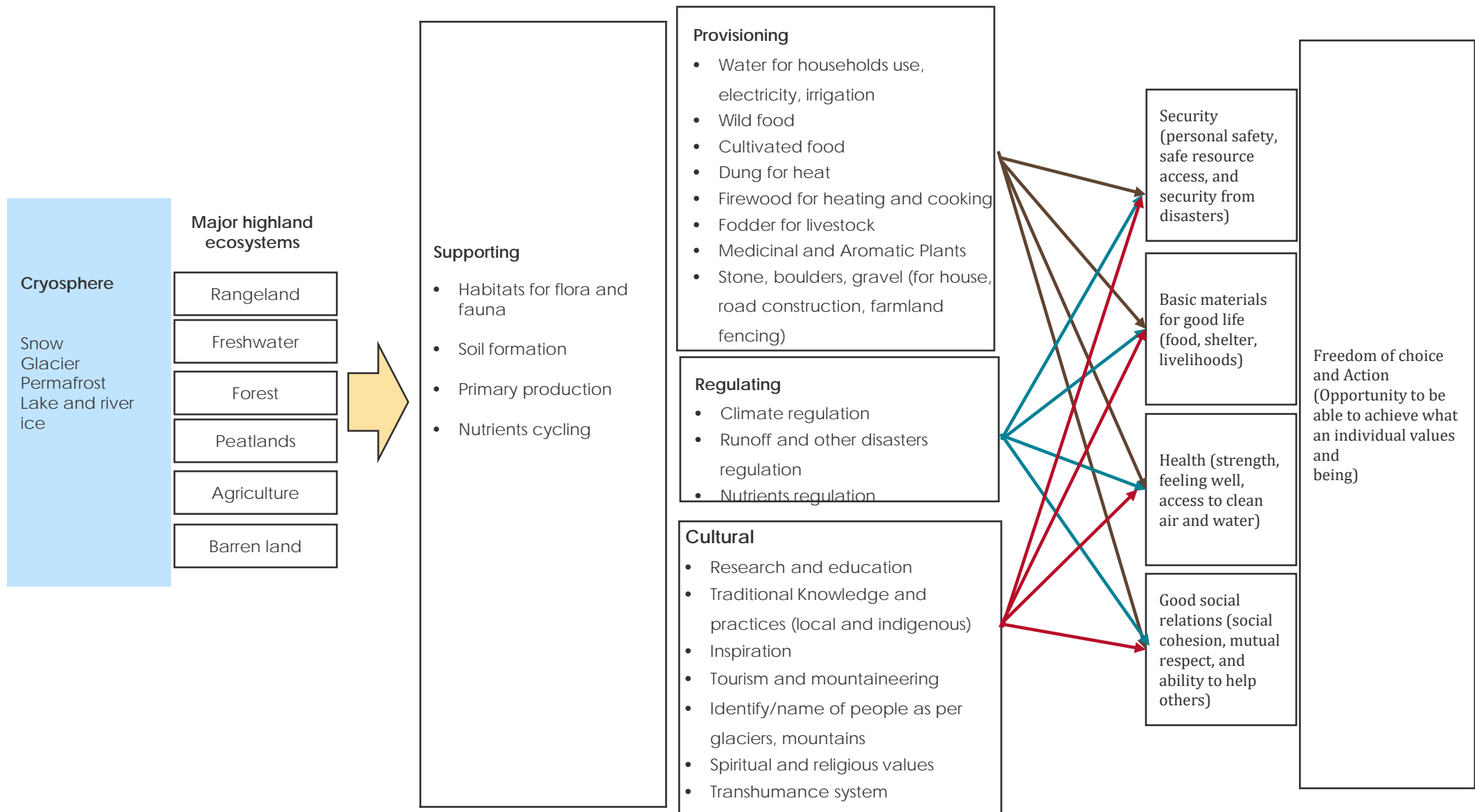


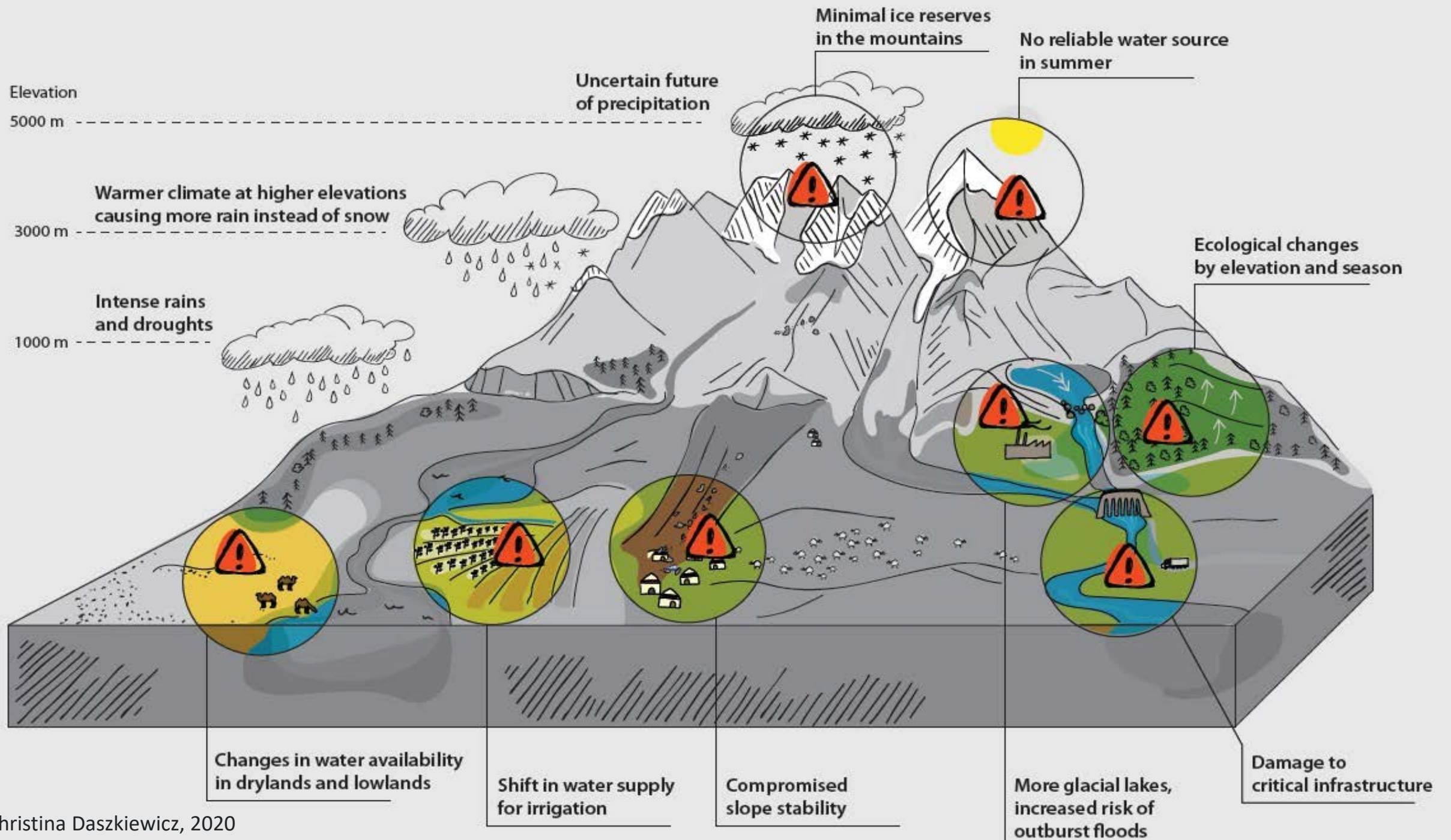
# Impacts of changing cryosphere on biodiversity and ecosystem services: case study from Langtang National Park

Sunita Chaudhary

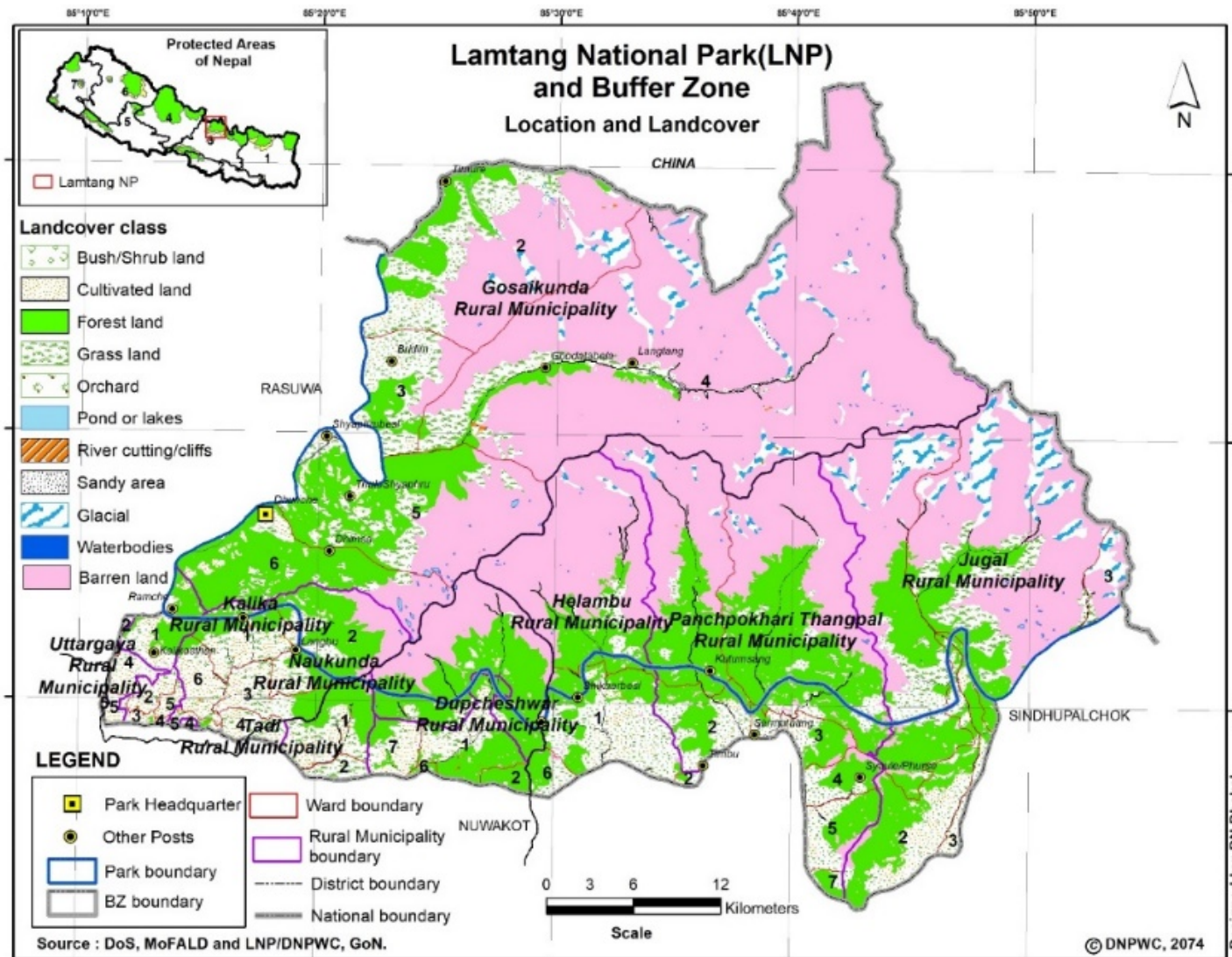
February, 2023





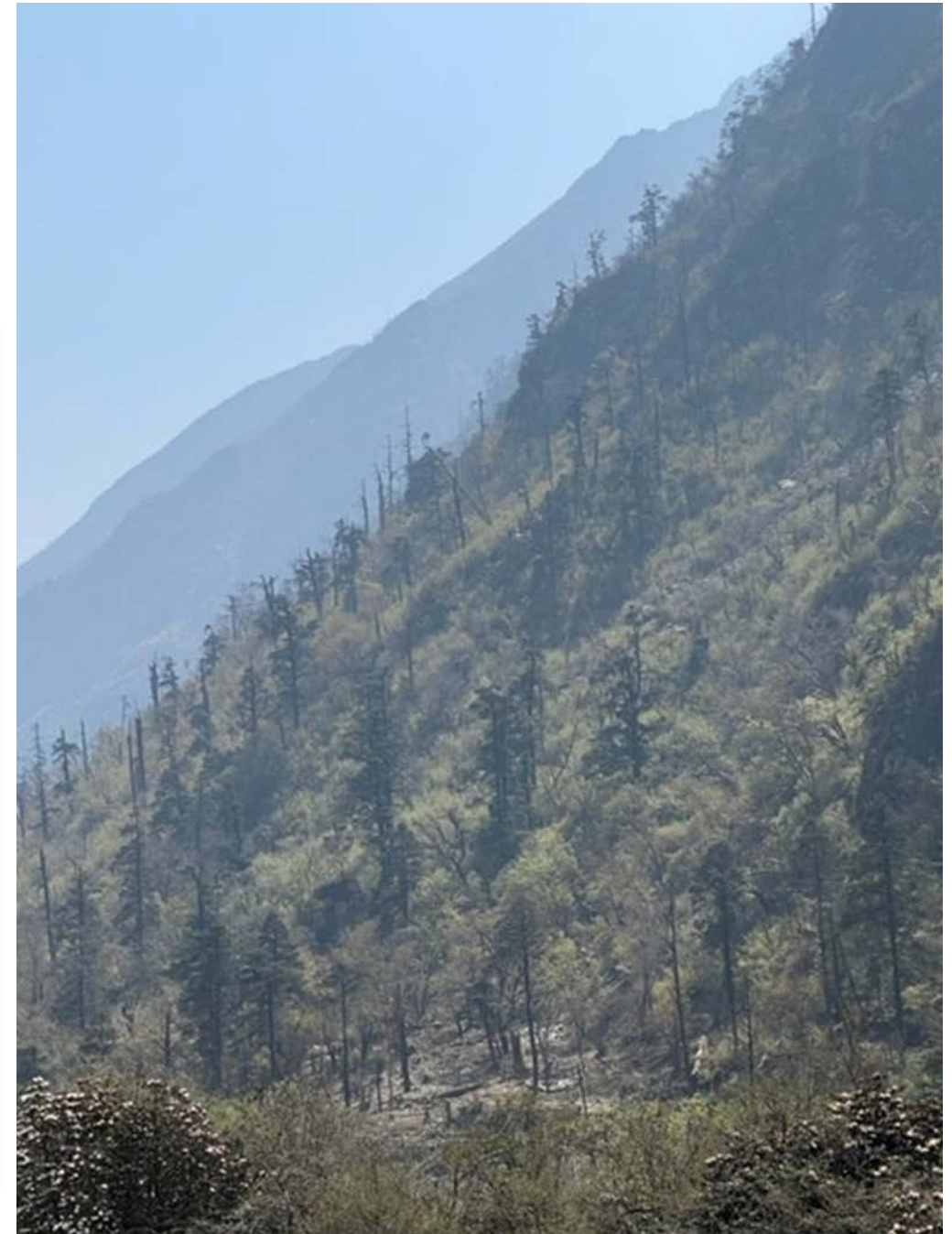
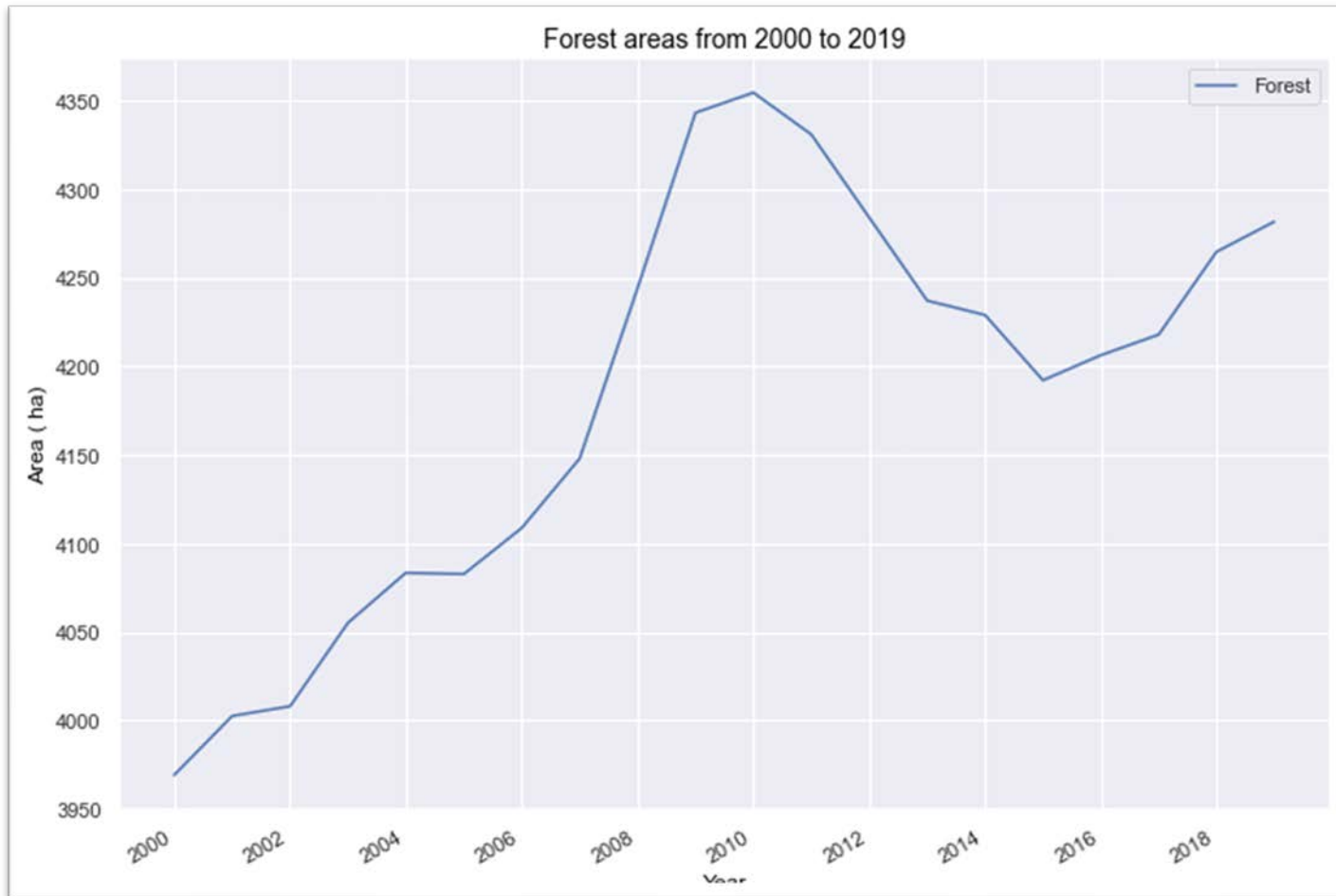


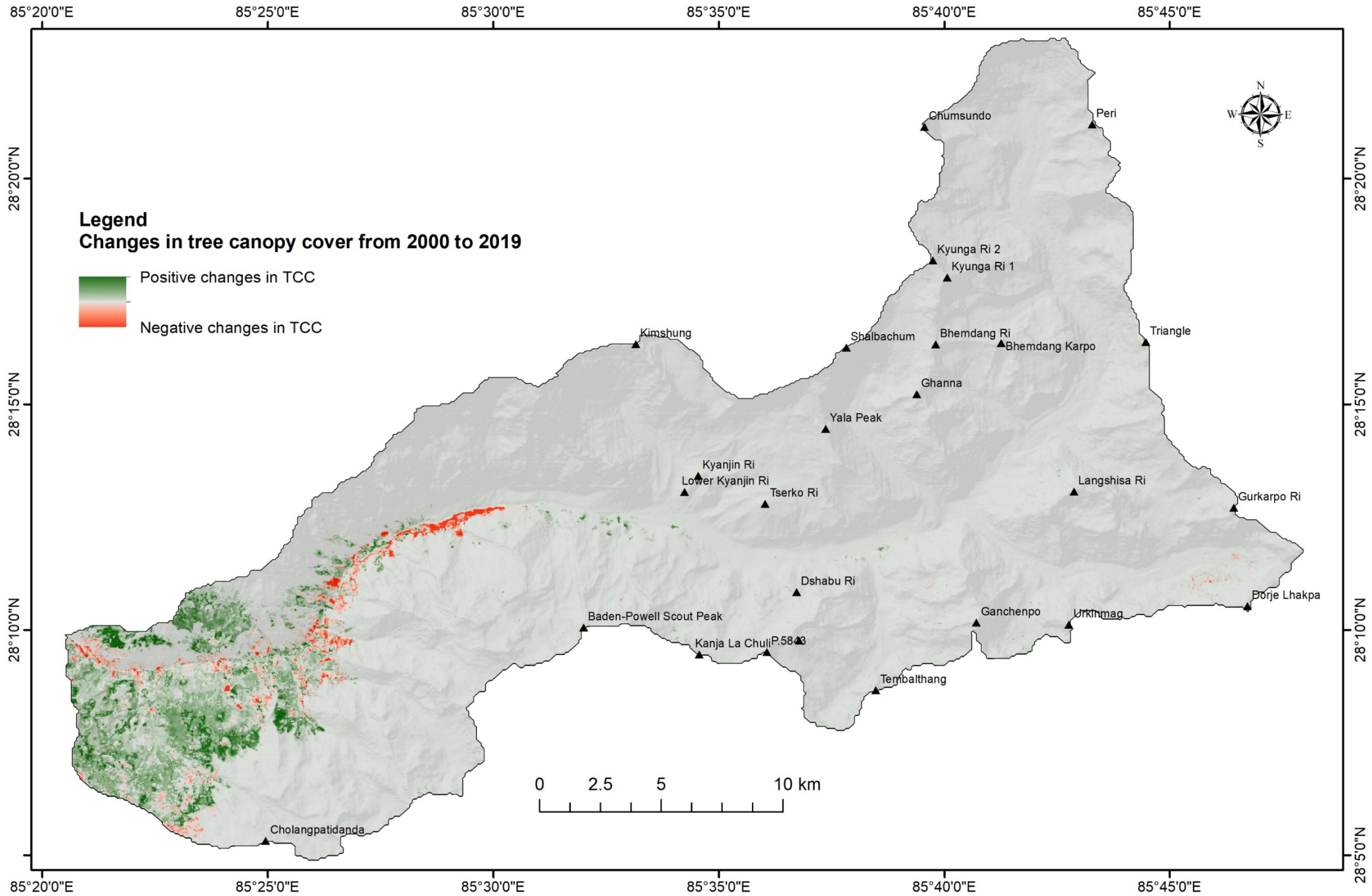
# Langtang National Park: a case study





# Impacts on ecosystems









# Treeline shift

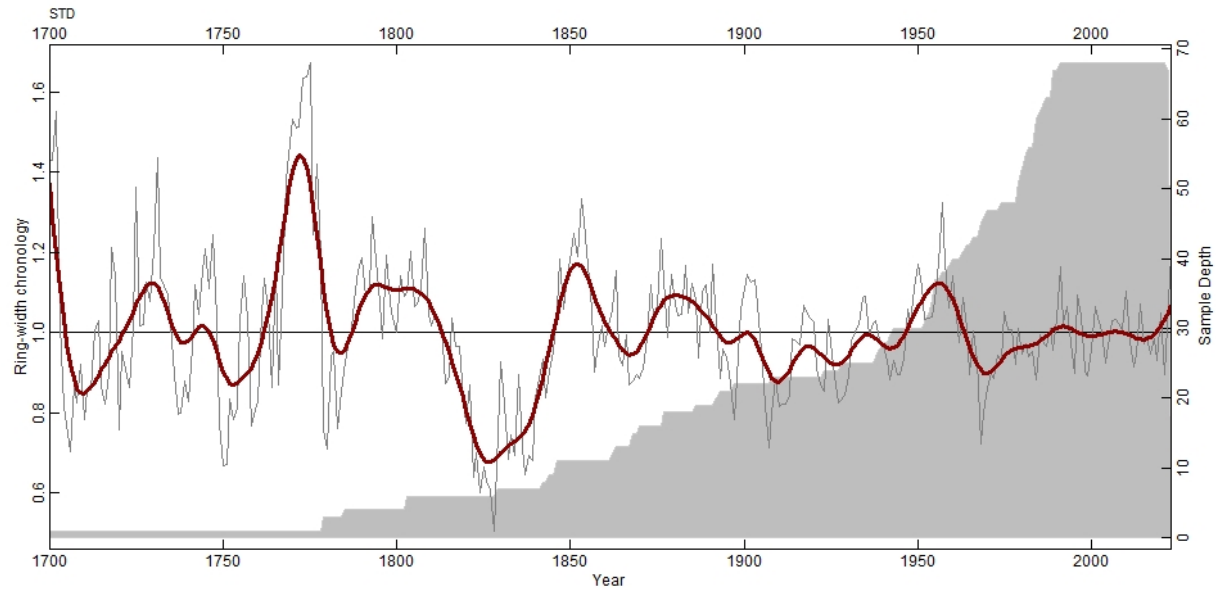


Gaire et al., 2010, Chaudhary et al., (analysis)

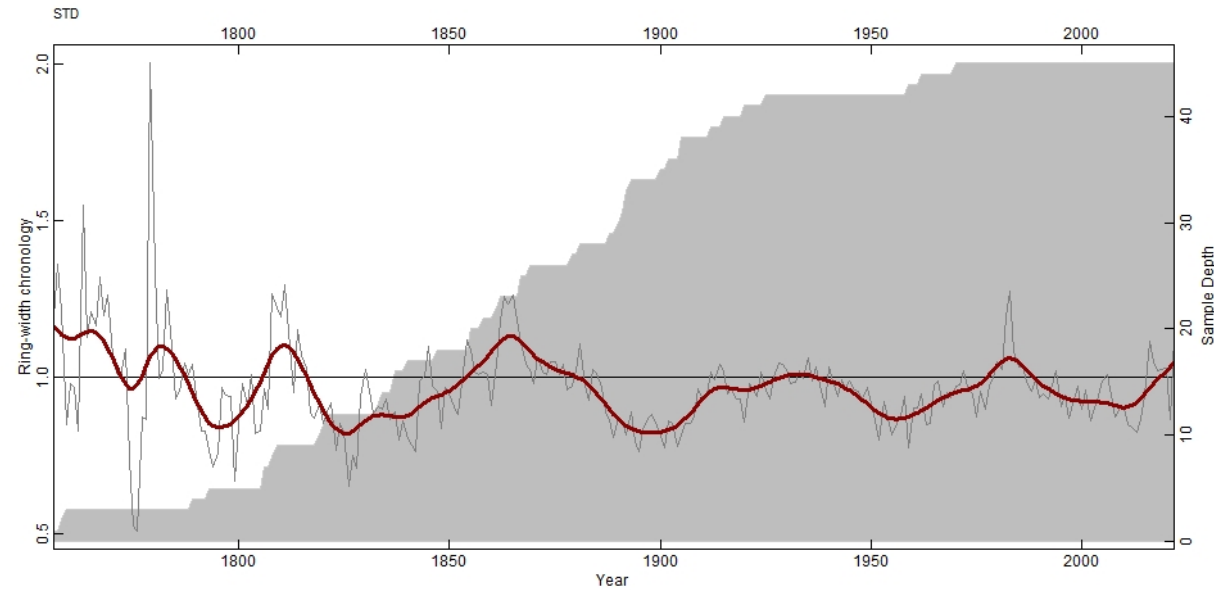




# Climate-tree growth analysis



*Abies spectabilis*



*Betula utilis*

# Mammals

- Habitats shift analysis – Red panda, Black bear
- Population decline with decreased suitability in habitats
- Pest and diseases
- Conflicts (Common leopard sighted around 3000m nearby Ghoda Tabela)





# Conflicts – wild boar

- Sighted upto langshisha around 4000m
- Destruction of farm lands





# Birds

Ibisbill breeding habitat



Baral , 2020







Baral , 2020



# Impacts on yak chauri herding

Heavy snow can lead to starvation and diseases

Deaths with extreme events

Decreased availability of food with rangeland degradation





Thank you

Protect the pulse.

