

BAM-E-DUNYA WEBINAR SERIES EPISODE III

Conservation challenges on the roof of the world



Human–wildlife conflict in Wakhan:

Looking to the past and anticipating future challenges –

Peter D. Smallwood, Associate Professor of Biology,

University of Richmond, USA



Outline of talk

I. The Players:

A. Humans

B. Wildlife

II. Human Wildlife Conflicts

A. *P. uncia*: Hunting -- to protect livestock, pelts for sale

B. *O. ammon polii*: Hunting for meat, competition for grazing

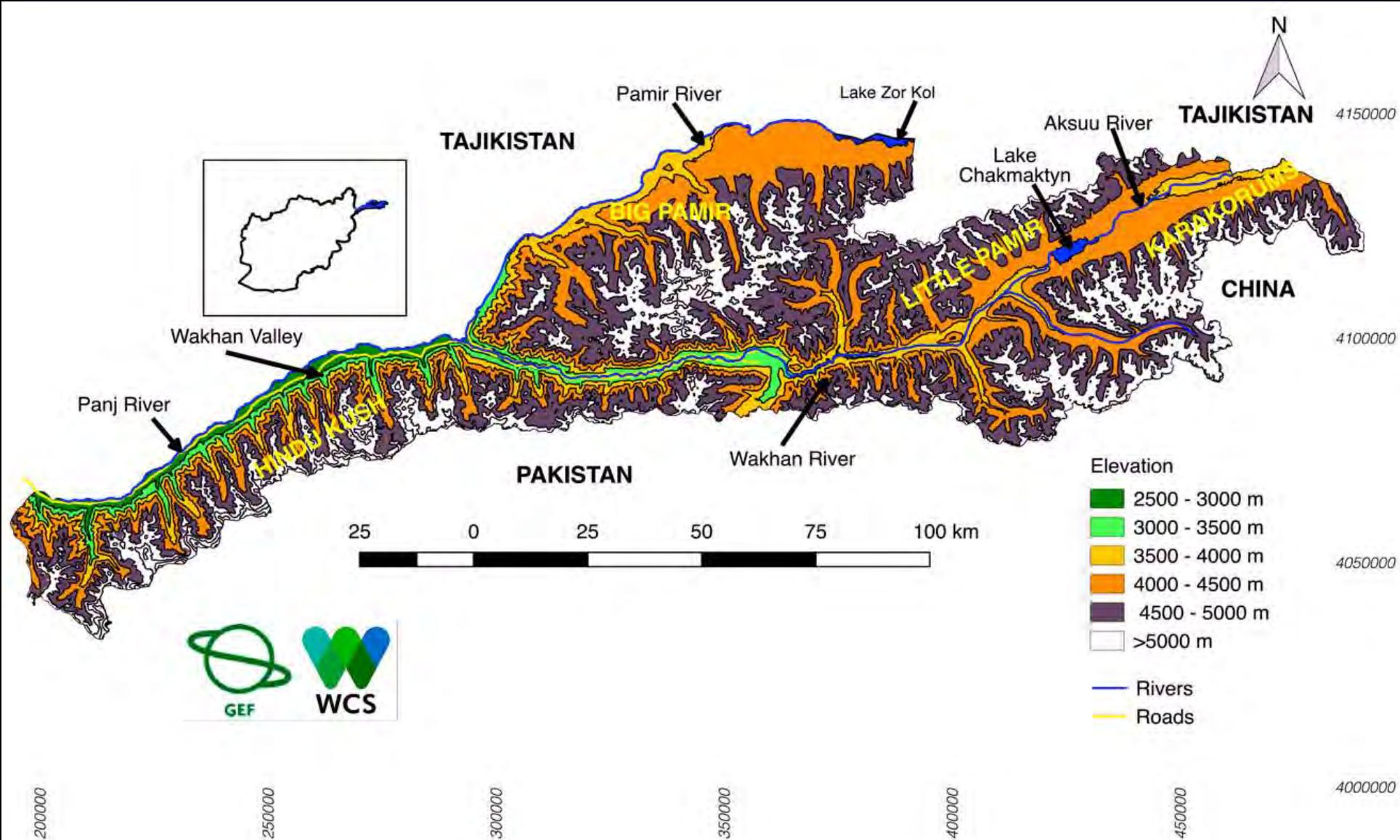


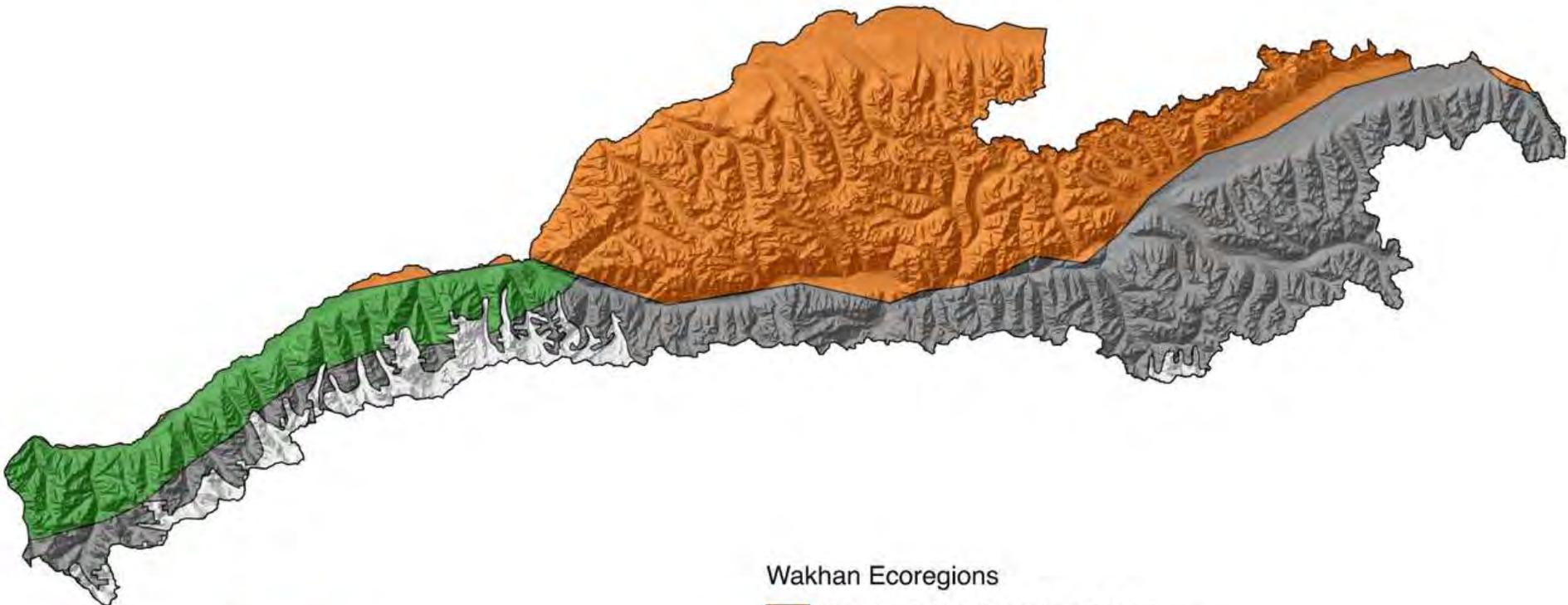
Outline of talk

III. Anticipating Challenges: Instability of Afghan government, and border fencing

A. Direct effects: Likely to be limited

B. Indirect effects: potentially larger, more difficult to deal with





Wakhan Ecoregions

-  Pamir alpine desert and tundra
-  Paropamisus xeric woodlands
-  Rock and Ice
-  Karakoram-West Tibetan Plateau alpine steppe



Data from <http://www.worldwildlife.org/publications/terrestrial-ecoregions-of-the-world>





Outline of talk

I. The Players:

A. Humans

i. Wakhi

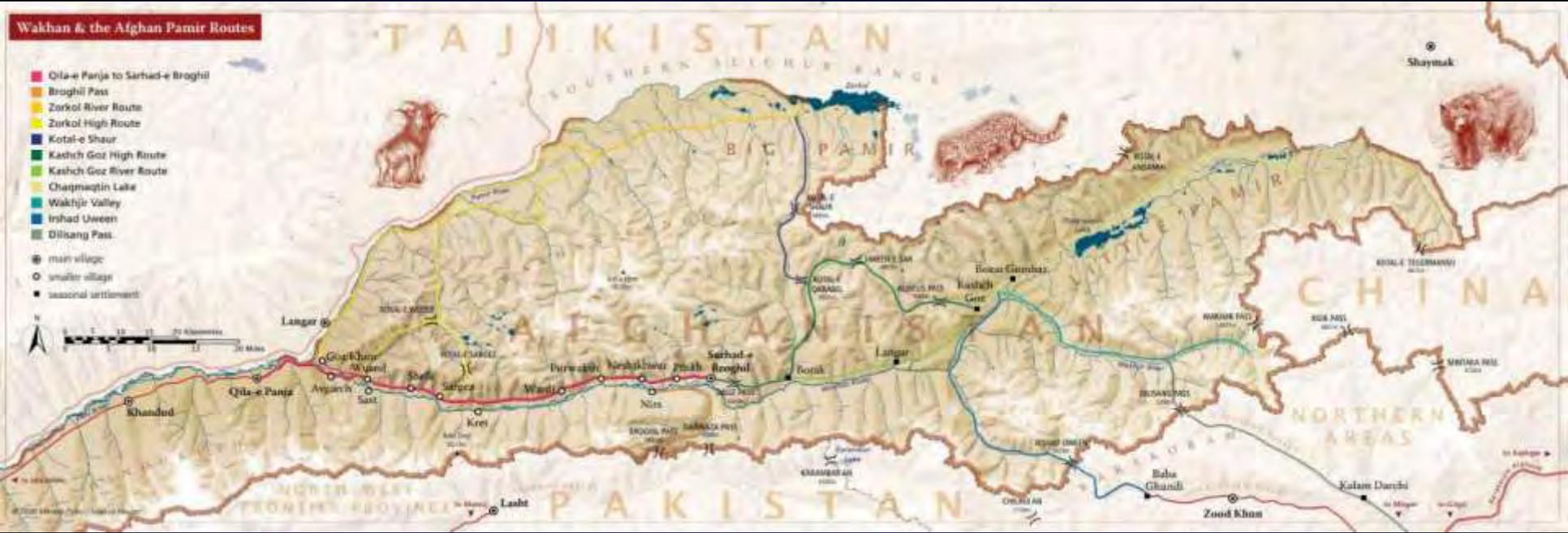




Wakhan & the Afghan Pamir Routes

- Qila-e Panja to Sarhad-e Broghil
- Broghil Pass
- Zorkol River Route
- Zorkol High Route
- Kotal-e Shaur
- Kachch Goz High Route
- Kachch Goz River Route
- Chagmaqin Lake
- Wakhtjr Valley
- Inshad Uween
- Dilisang Pass

- main village
- smaller village
- seasonal settlement





Outline of talk

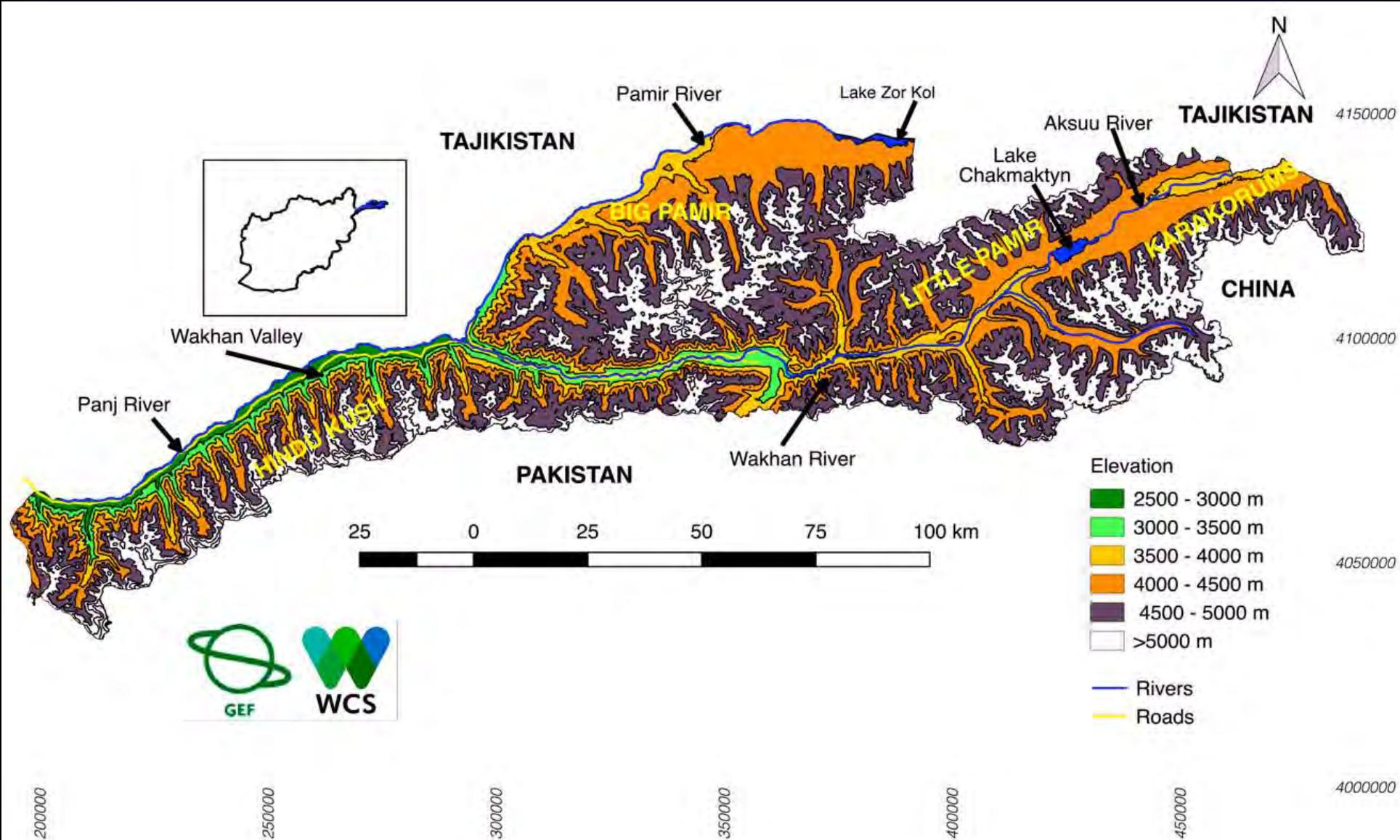
I. The Players:

A. Humans

i. Wakhi

ii. Kyrgyz







Outline of talk

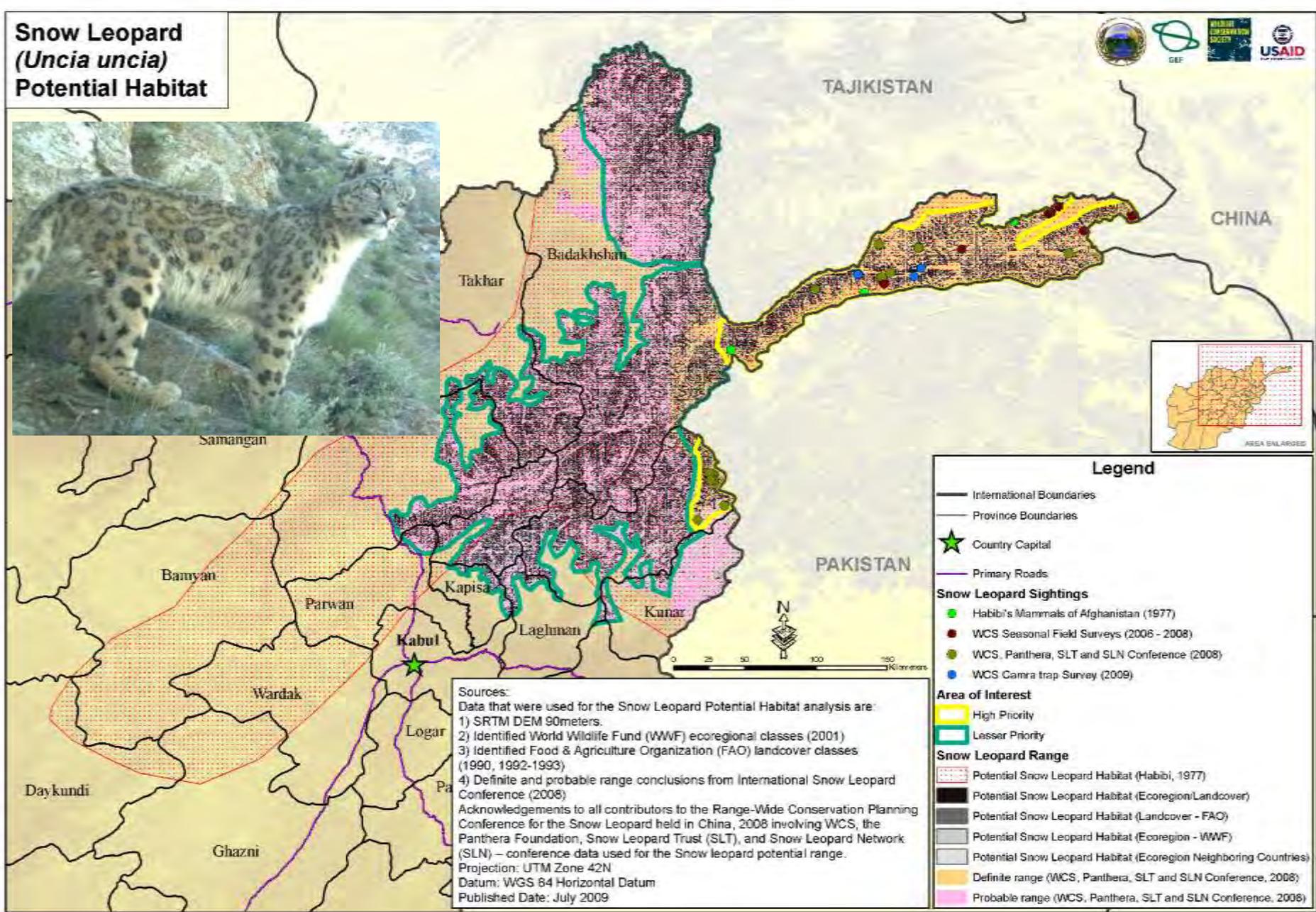
I. The Players:

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Snow Leopard (*Uncia uncia*) Potential Habitat



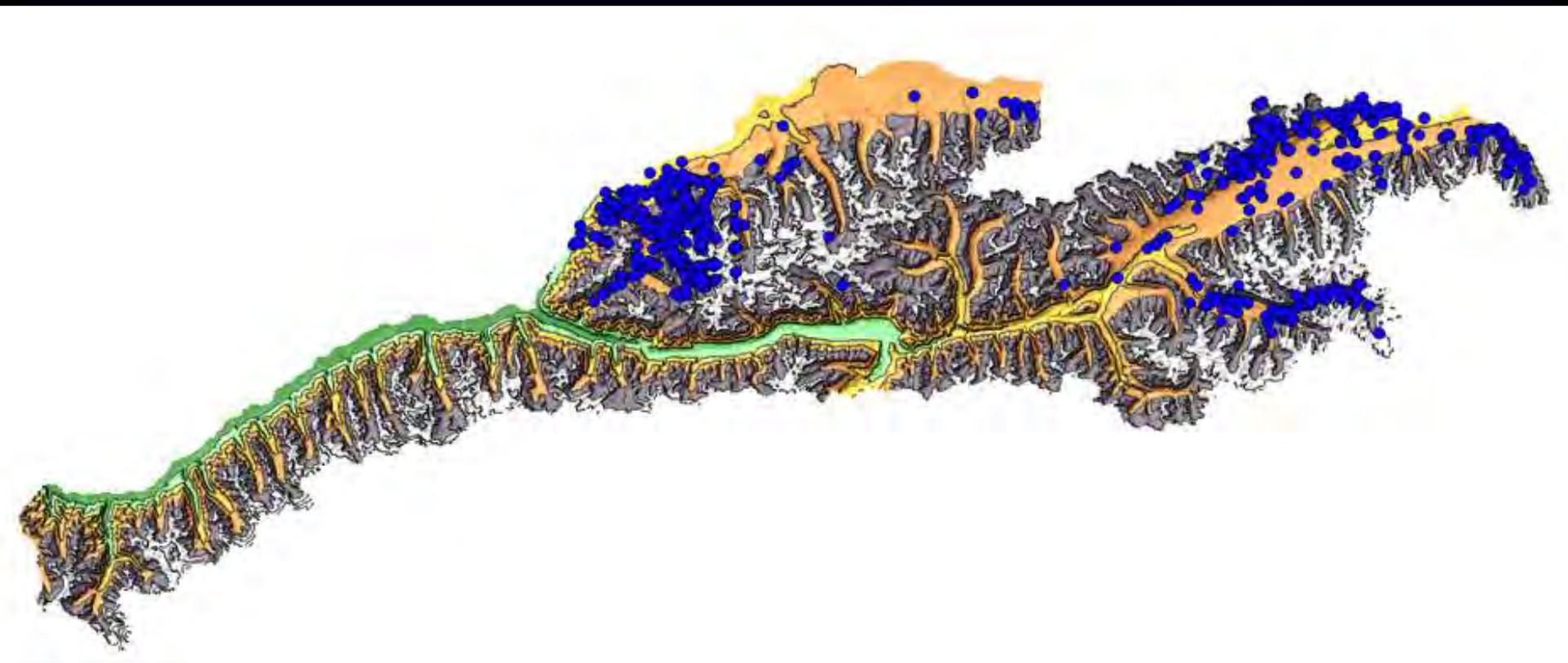
Sources:
 Data that were used for the Snow Leopard Potential Habitat analysis are:
 1) SRTM DEM 90meters.
 2) Identified World Wildlife Fund (WWF) ecoregional classes (2001)
 3) Identified Food & Agriculture Organization (FAO) landcover classes (1990, 1992-1993)
 4) Definite and probable range conclusions from International Snow Leopard Conference (2008)
 Acknowledgements to all contributors to the Range-Wide Conservation Planning Conference for the Snow Leopard held in China, 2008 involving WCS, the Panthera Foundation, Snow Leopard Trust (SLT), and Snow Leopard Network (SLN) – conference data used for the Snow leopard potential range.
 Projection: UTM Zone 42N
 Datum: WGS 84 Horizontal Datum
 Published Date: July 2009

- ### Legend
- International Boundaries
 - Province Boundaries
 - ★ Country Capital
 - Primary Roads
- #### Snow Leopard Sightings
- Habibi's Mammals of Afghanistan (1977)
 - WCS Seasonal Field Surveys (2006 - 2008)
 - WCS, Panthera, SLT and SLN Conference (2008)
 - WCS Camera trap Survey (2009)
- #### Area of Interest
- High Priority
 - Lesser Priority
- #### Snow Leopard Range
- Potential Snow Leopard Habitat (Habibi, 1977)
 - Potential Snow Leopard Habitat (Ecoregion/Landcover)
 - Potential Snow Leopard Habitat (Landcover - FAO)
 - Potential Snow Leopard Habitat (Ecoregion - WWF)
 - Potential Snow Leopard Habitat (Ecoregion Neighboring Countries)
 - Definite range (WCS, Panthera, SLT and SLN Conference, 2008)
 - Probable range (WCS, Panthera, SLT and SLN Conference, 2008)

Beth Wald



Ovis ammon polii. Marco Polo sheep



**O. Ammon polii sightings, 2008-2014
(WCS community rangers)**



Beth Wald



Persian leopard



Marco Polo sheep



Snow leopard



Urial

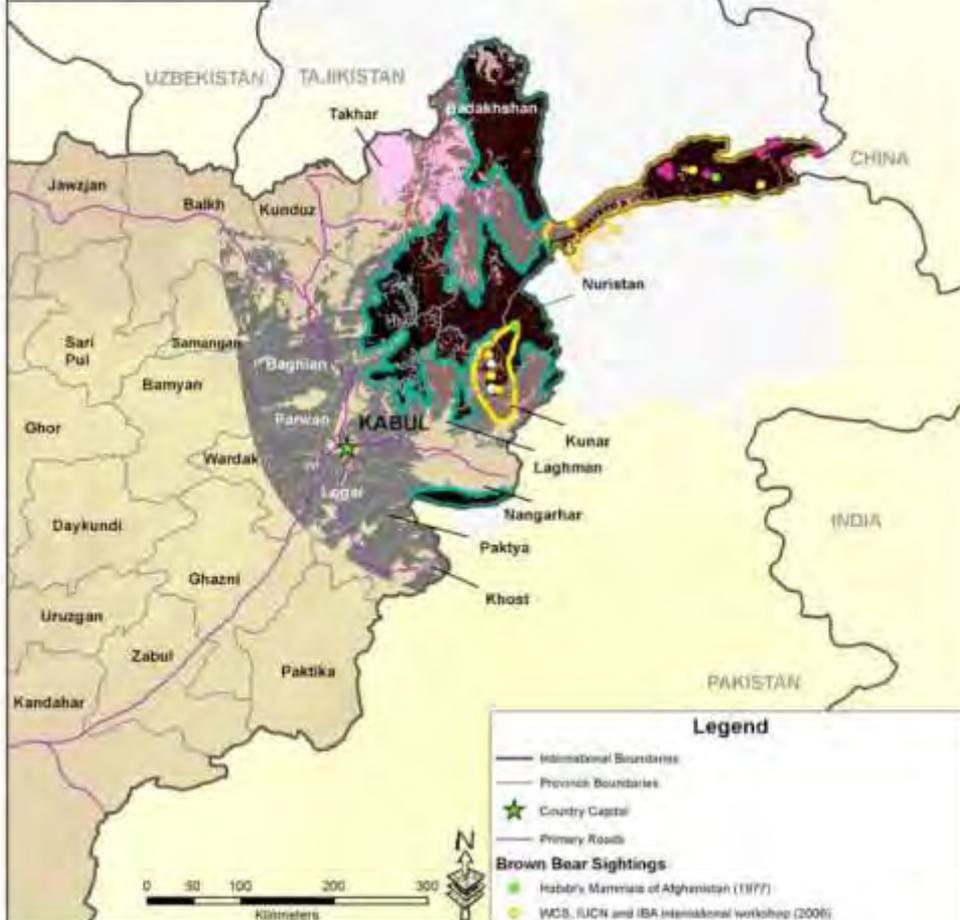
High Altitude Mountain Ecosystems

Siberian Ibex



Ibex (*Capra ibex*)

Brown Bear (*Ursus arctos*) Potential Habitat



Sources:
Data that were used for the Brown Bear Potential Habitat analysis are:
1) SRTM DEM 90meters.
2) Identified World Wildlife Fund (WWF) ecoregional classes (2001)
3) Identified landcover classes Food & Agriculture Organization (FAO 1990 & 1992-1993)
Habibi's Potential Brown Bear habitat was expanded by 200km to include all potential Brown Bear habitat according to identified Landcover & Ecoregions in that area.
Acknowledgements to all contributors to the Range-Wide Priority Setting Workshop for Asian Bears held in Japan, 2005 involving WCS, the IUCN Bear Specialist Group and the International Bear Association (IBA) - data from workshop used for the Brown bear range and sighting data.
Projection: UTM Zone 42N
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Legend

- International Boundaries
- Provincial Boundaries
- ★ Country Capital
- Primary Roads

Brown Bear Sightings

- Habibi's Mammals of Afghanistan (1977)
- WCS, IUCN and IBA International workshop (2006)
- WCS assessed field surveys (2006 - 2008)
- Direct bird sightings from WCS/NEPA observation questionnaire (2008)

Area of Interest

- High Priority
- Lesser Priority

Brown Bear Range

- Definite (WCS, IUCN & IBA International workshop, 2006)
- Probable (WCS, IUCN & IBA International workshop, 2006)
- Potential Brown Bear Habitat (Habibi, 1977)
- Potential Brown Bear Habitat (Ecoregion/Landcover)
- Potential Brown Bear Habitat (Landcover - FAO)
- Potential Brown Bear Habitat (Ecoregion - WWF)
- Potential Brown Bear Habitat (Ecoregion Neighboring Country)



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Beth Wald



Marco Polo sheep





RESEARCH ARTICLE

Responses of snow leopards, wolves and wild ungulates to livestock grazing in the Zorkul Strictly Protected Area, Tajikistan

Khalil Karimov ^{1,2*}, Shannon M. Kachel ^{3,4}, Klaus Hackländer¹

1 University of Natural Resources and Life Sciences (BOKU), Institute of Wildlife Biology and Game Management, Vienna, Austria, **2** Academy of Sciences of Tajikistan, Institute of Zoology and Parasitology, Dushanbe, Tajikistan, **3** University of Washington's School of Environmental and Forest Sciences, Seattle, WA, United States of America, **4** Panthera, New York, NY, United States of America

PloS One. (2018) 13(11):e0208329



Outline of talk

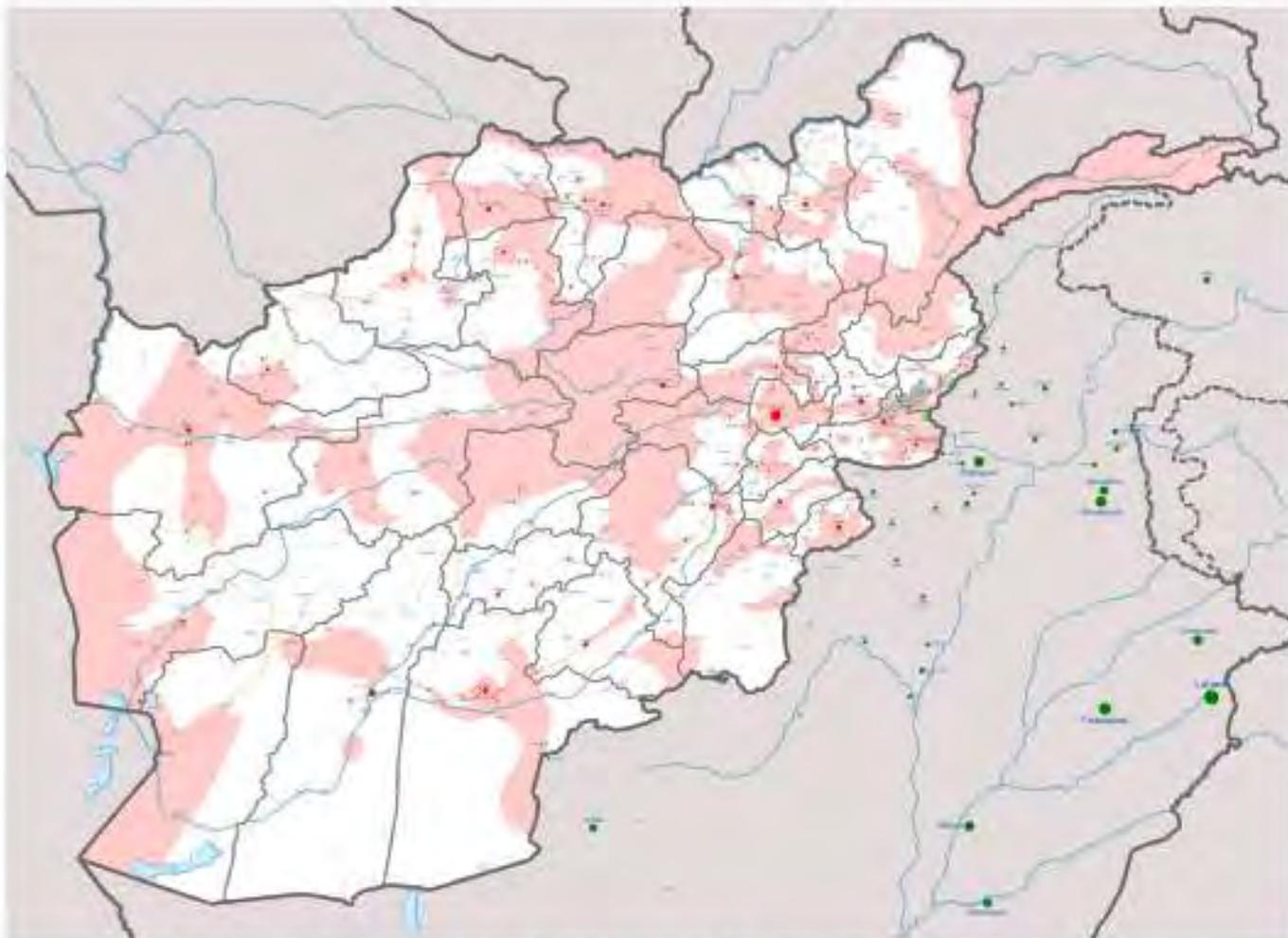
III. Anticipating Challenges: Instability of Afghan government, and border fencing

A. Direct effects: Likely to be limited

The New York Times

Biden to Withdraw All Combat Troops From Afghanistan by Sept. 11 April 13, 2021





Military situation in Afghanistan on April 14, 2021

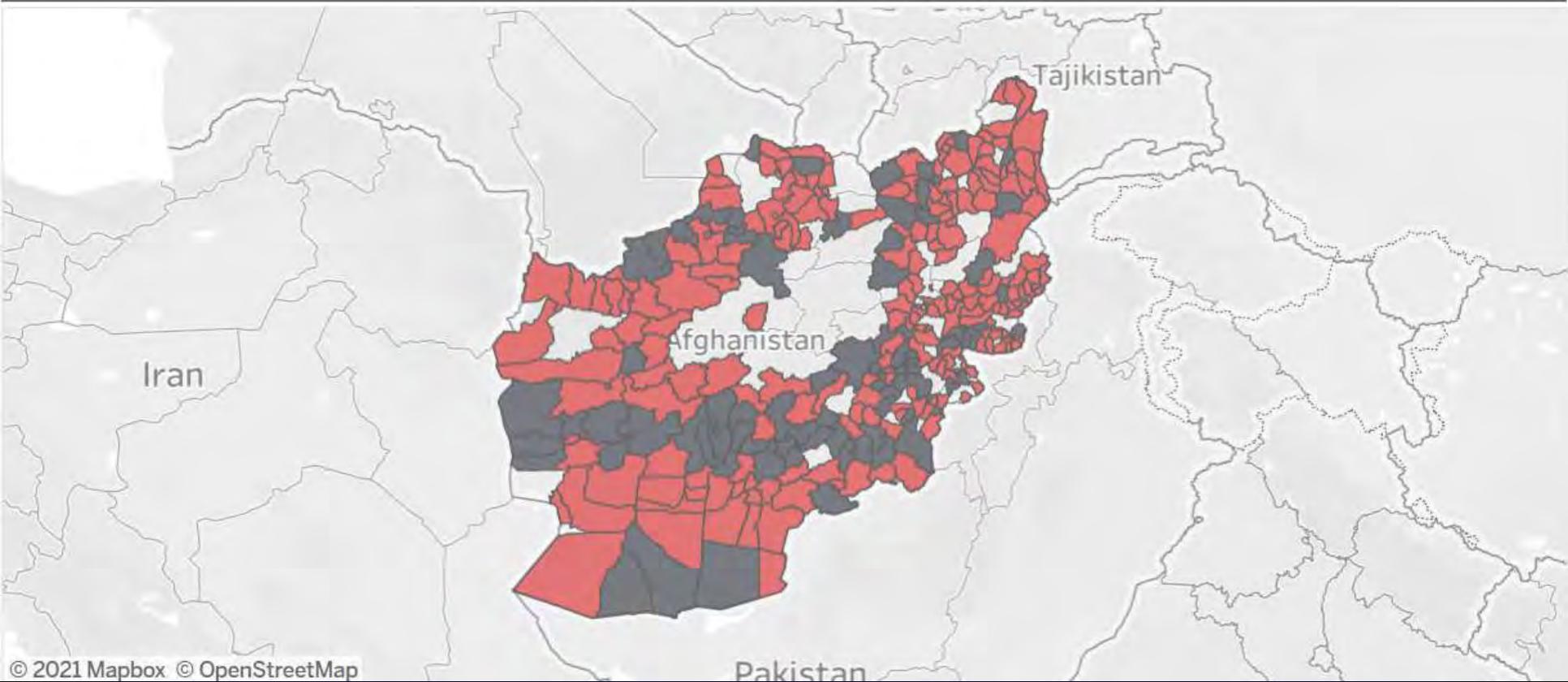
- Under control of the **Afghan government, NATO and allies**
- Under control of the **Taliban, Al-Qaeda and allies**
- Under control of the **Islamic State of Iraq and the Levant (ISIL) and allies**

Control of Afghanistan districts heavily contested by the Taliban



Map of Afghanistan shows which districts are controlled by the Taliban, contested or under government control

Taliban Control in Afghanistan



INTERNATIONAL

A corner of Afghanistan untouched by Taliban

Created in the 19th century, the Wakhan Corridor has neither seen any government, nor any invasion

“Taliban – what’s that?” asks Sultan Begium shyly from her freezing home in Afghanistan’s mountainous Wakhan Corridor, a region so remote that its residents are untouched by the decades of conflict that have devastated their country.

Asia

Jan 2nd 2021 edition >

The
Economist

A big beautiful wall

Pakistan has fenced itself off from Afghanistan

But the border defences may affect families more than fighters



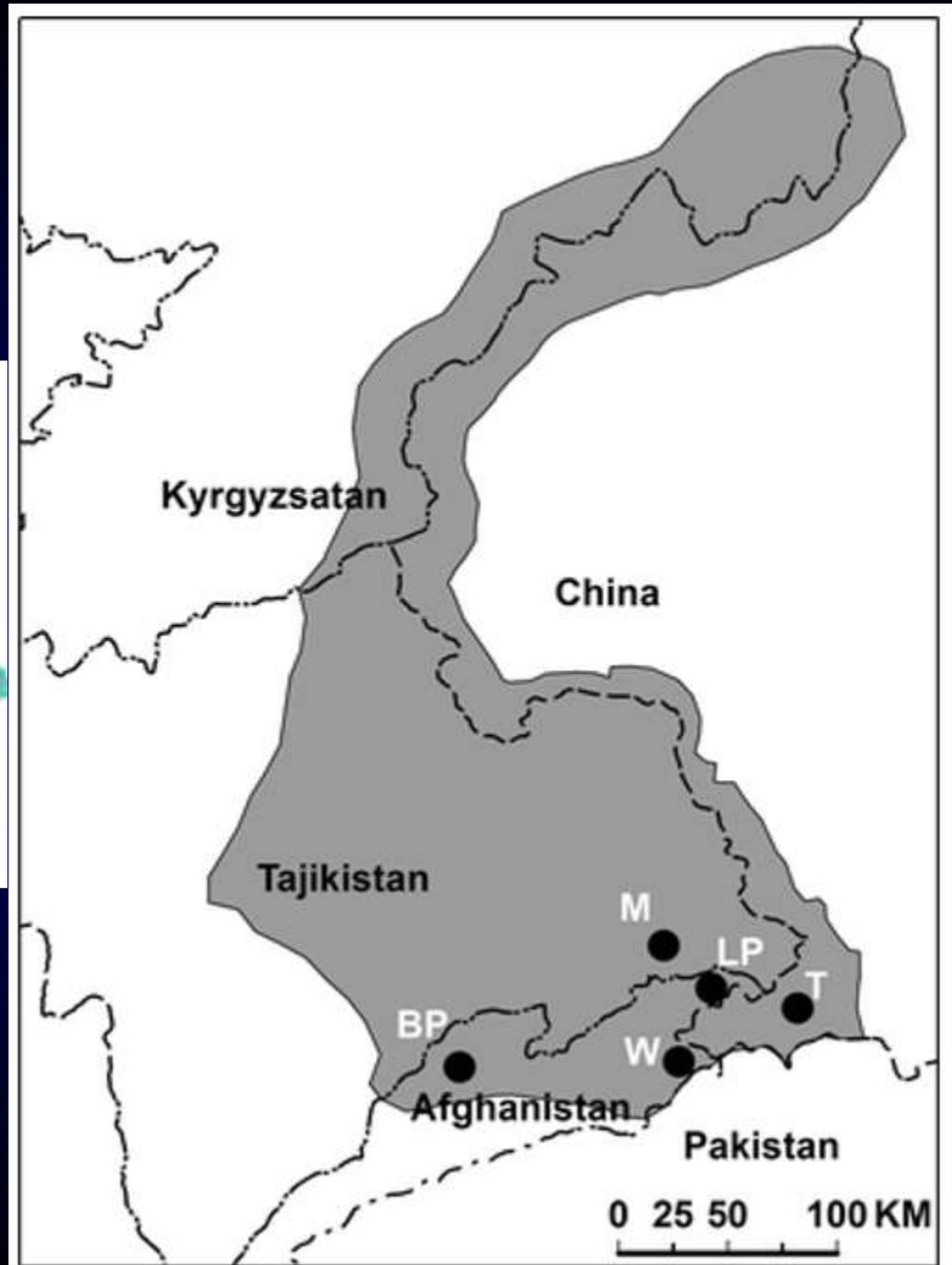
A big beautiful wall

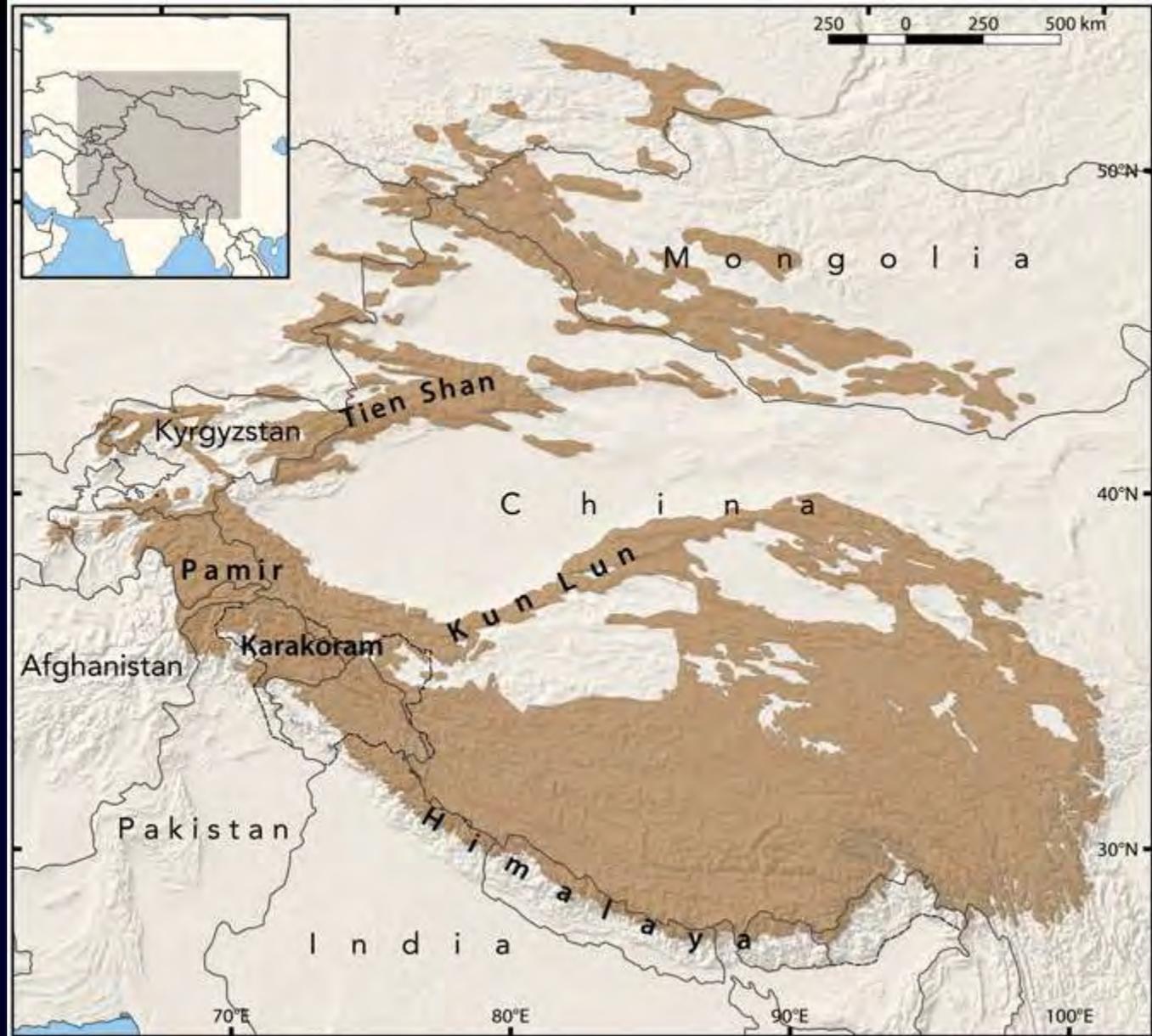
Pakistan has fenced itself off from Afghanistan

But the border defences may affect families more than fighters



Ovis ammon polii range





The global distribution (shaded) of the snow leopard *Panthera uncia*. (Courtesy of Panthera, Wildlife Conservation Society, Snow Leopard Network, and Snow Leopard Trust)



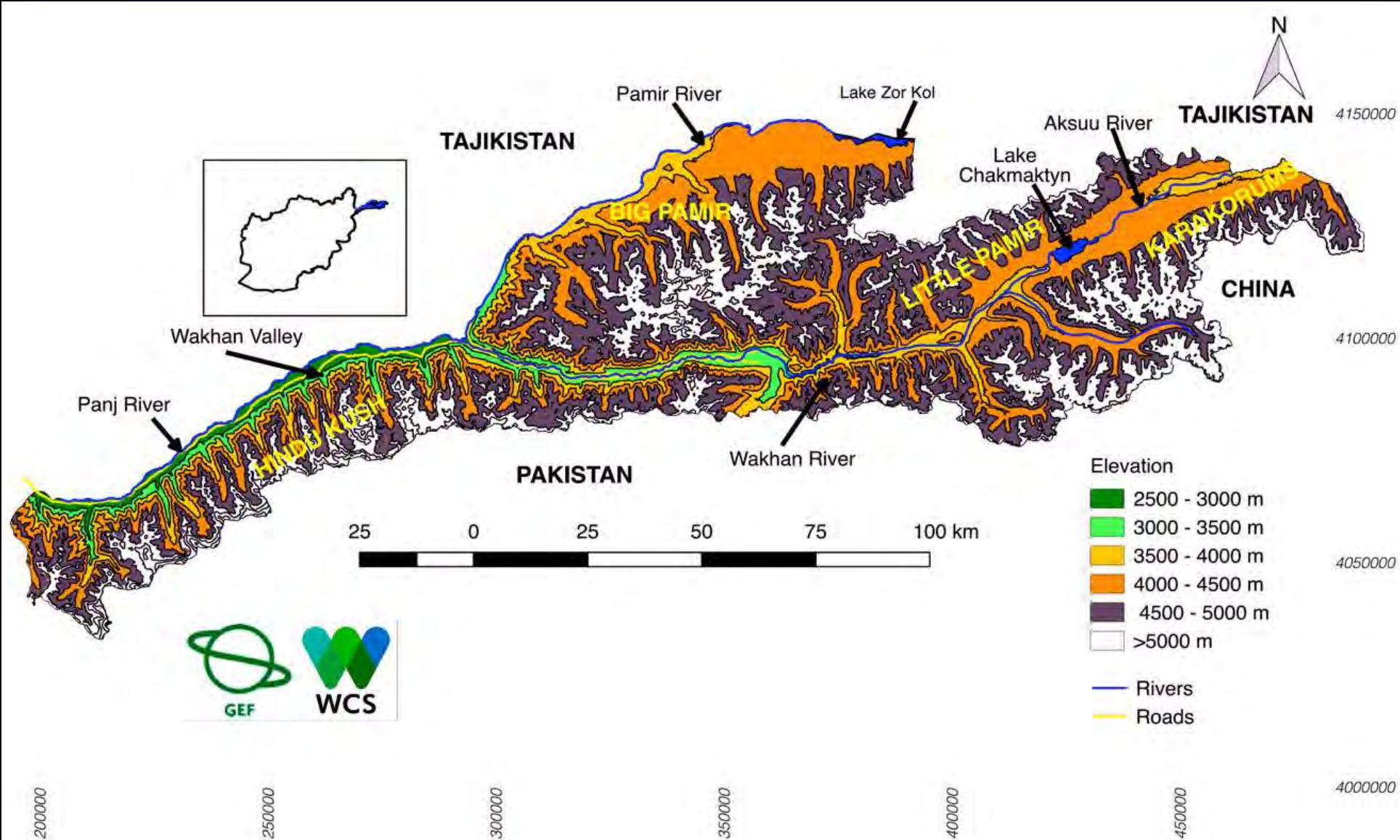




Fig. 10.3 Traditional Pashtun areas of Afghanistan and neighboring countries. Afghanistan's southern border (shown here as a heavy line) roughly follows the Durand Line, established in the 1890s. It passes through majority Pashtun areas, dividing majority Pashtun areas between Afghanistan and Pakistan



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Community Conservation

Conservation Education, Institution Building, Training,
and Capacity Building



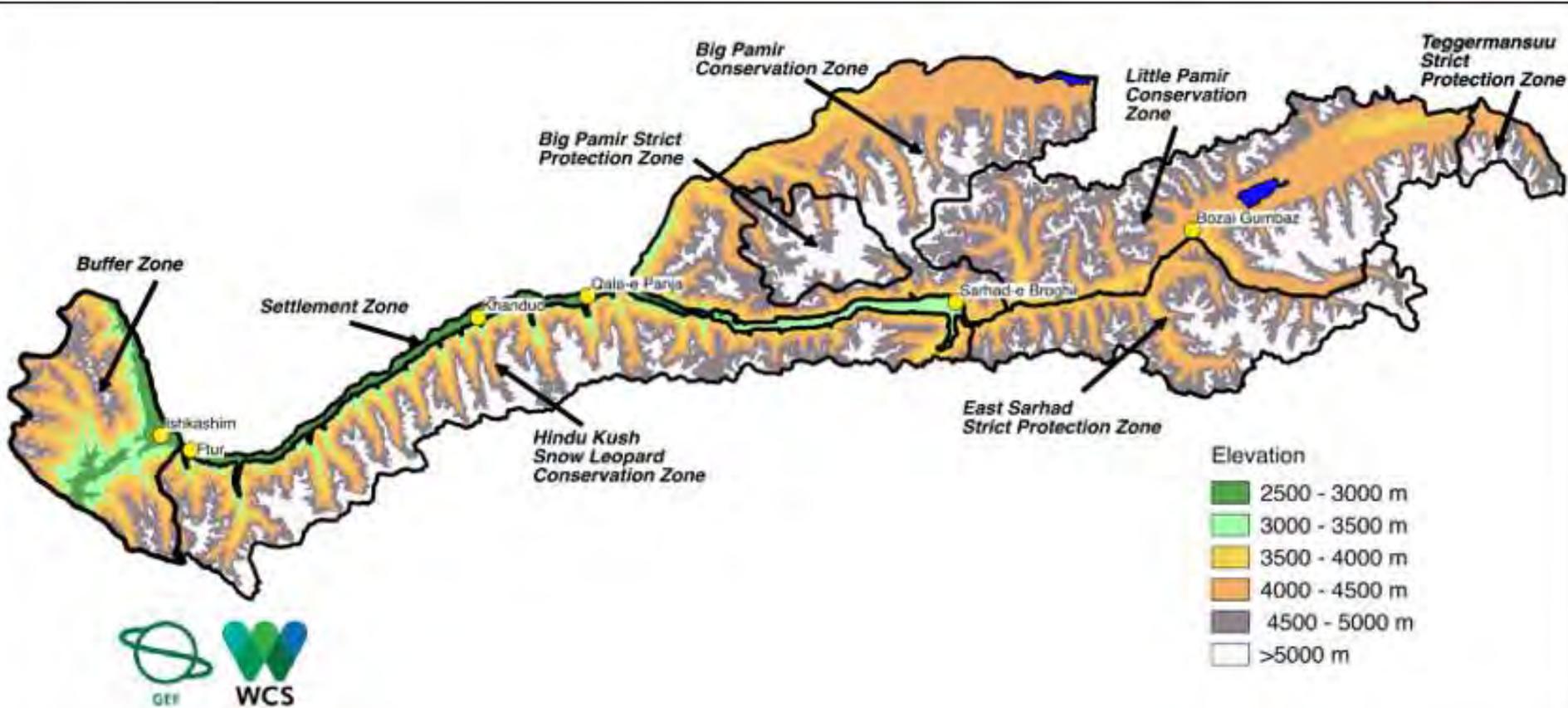
Technical Training



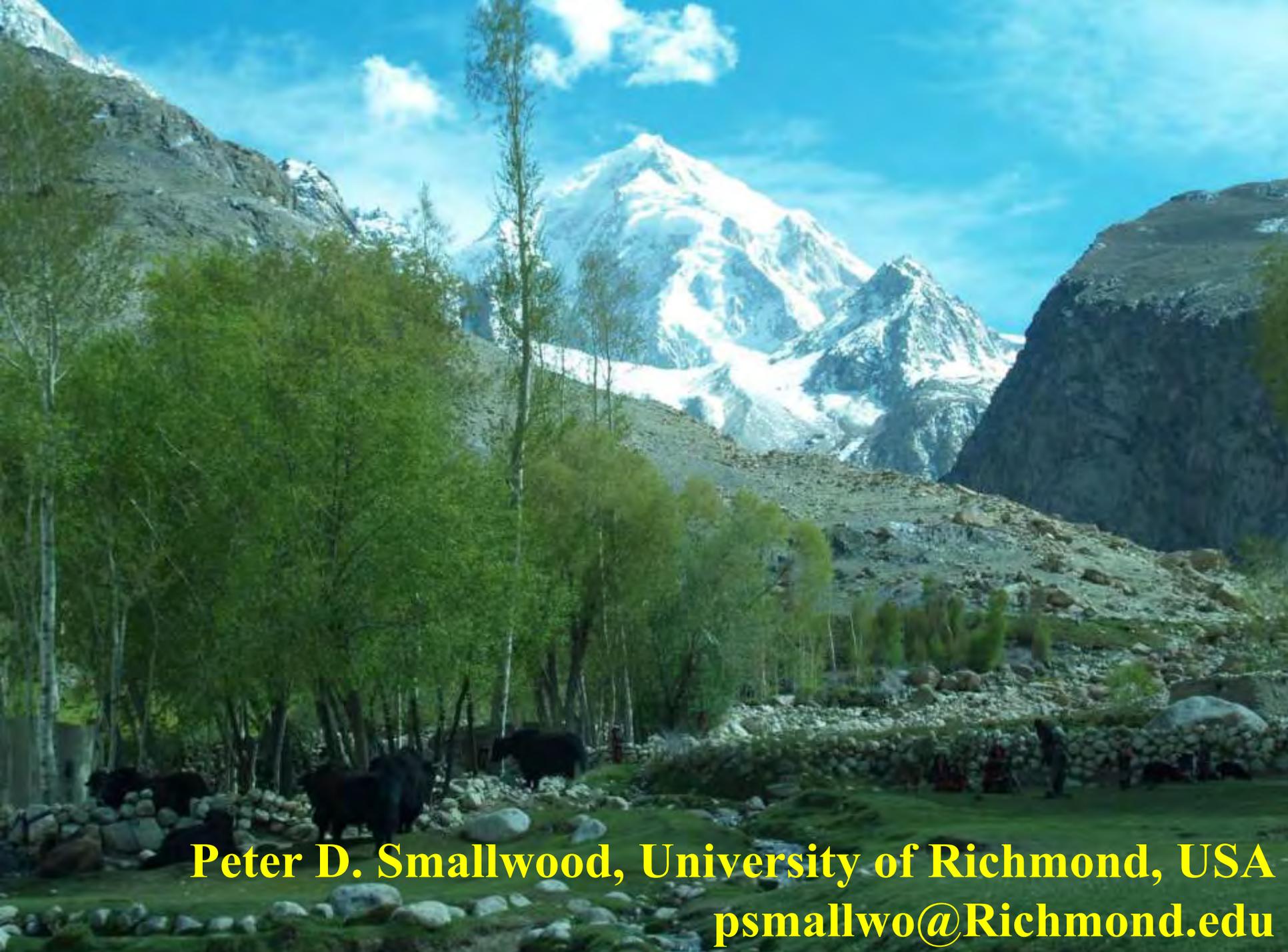
Community & MAIL Rangers



Proposed zonation for Wakhan National Park







Peter D. Smallwood, University of Richmond, USA
psmallwo@Richmond.edu