

# Investigation of Human-Animal conflicts in North-Eastern Kargil, Ladakh Trans-Himalaya (India): Mitigations and Future Prospective



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## Introduction and Background

- Wild mammals population is declining in Kargil (Ladakh), India.
- Facing threats like illegal poaching, retaliatory killings and habitat disturbances and destructions.
- Wildlife is an integral part of the socio-cultural, folklores and traditional sport of the local inhabitant people of this district.
- The region was badly affected by the infamous Indo-Pak Kargil war—1999.
- Less research literatures available from the Area.

## Objectives and Methodology

### 1. To assess the level and magnitude of carnivore – human conflicts.

- Information gathered by interviewing local residents through questionnaire surveys (Image 1).
- 215 (20% of the total) household heads were interviewed.

### 2. To estimate relative abundance of prey species using Vehicle survey, Vantage point and Trail sampling methods.

#### A) Vehicle Survey-

- To generate a baseline information about the presence and absence of different wild mammals in the study area.
- 172 Km route was covered at an average speed of 20km/h and Direct Sightings were recorded

#### B) Vantage point and Trail sampling method-

- Vantage points were selected to estimate abundance of prey species — 7 vantage points.
- Observations were also recorded while surveying by trail sampling method — 8 trail paths.
- Observations for direct sightings were recorded.



Image 1. Interviewing people at a village.

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## References

- Behera, M.D., Matin, S., & Roy, P.S. (2014). Biodiversity of Kargil Cold Desert in the Ladakh Himalaya. *Integrative Observations and Assessments*. Doi: [https://doi.org/10.1007/978-4-431-54783-9\\_13](https://doi.org/10.1007/978-4-431-54783-9_13).
- Bhatnagar, Y. V., Wangchuk, R., & Jackson, R. (1999). A survey of depredation and related wild-life-human conflicts in Hemis National Park, Ladakh, Jammu and Kashmir, India. *Unpub. Rept., International Snow Leopard Trust*. 20 pages.
- Maheshwari, A., Takpa, J., Sandeep, K., & Shawl, T. (2010). An investigation of carnivore- human conflicts in Kargil and Drass areas of Jammu and Kashmir. *Report submitted to Rufford Small Grant*.
- Sathyakumar, S. (2003). Brown Bear – Human conflict in Zaskar and Suru Valleys, Ladakh. *Wildlife Institute of India*.

## Study Area

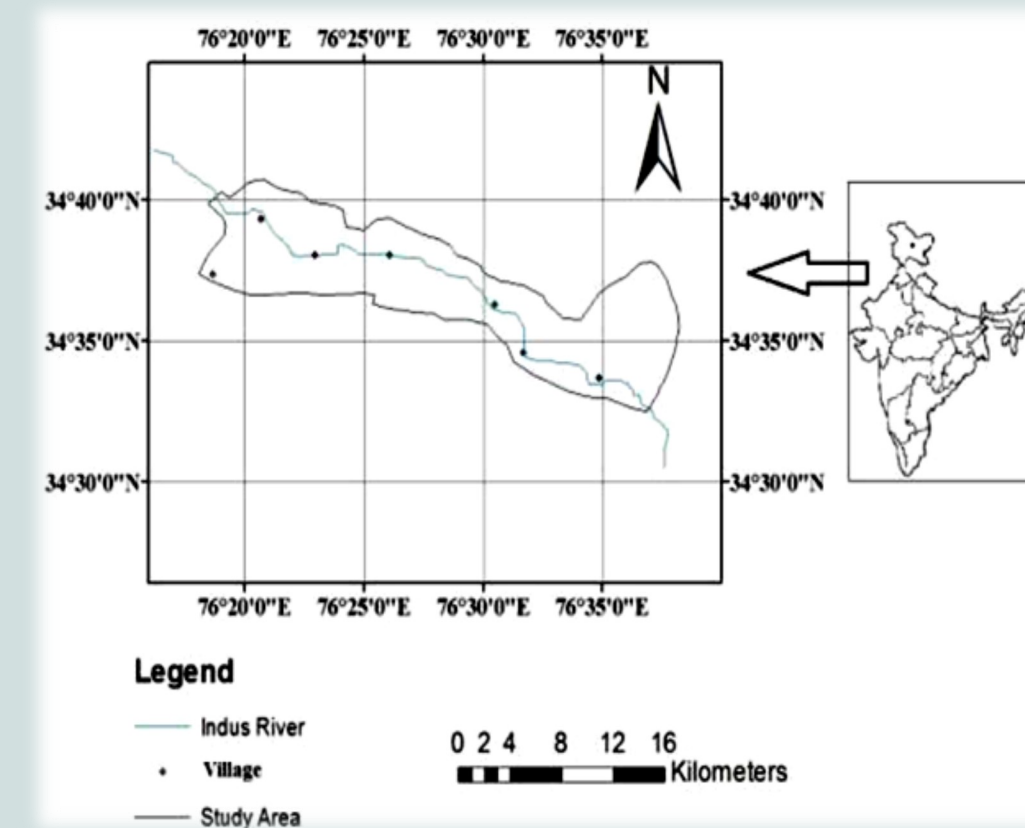


Fig. I The study area

- Area — ~205 km<sup>2</sup> (Fig I), average elevation — ~3230m (10597ft.) above mean sea level.
- Also known as the ‘Cold desert’, due to its geographical characteristics.



Image 2. a) Study Area in winters, (b) A local women in her traditional dress.

## Results

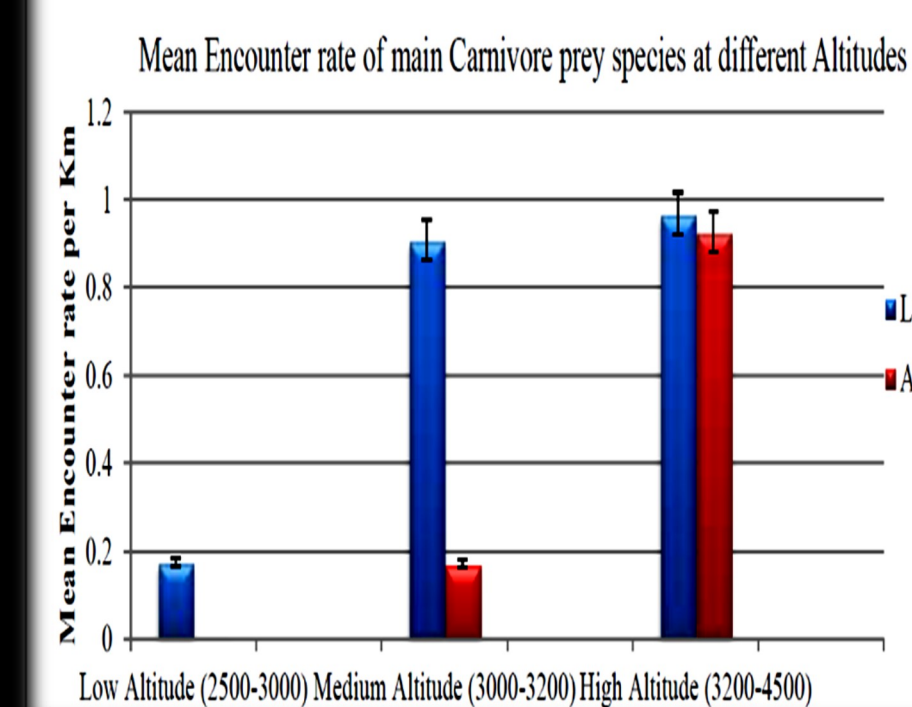
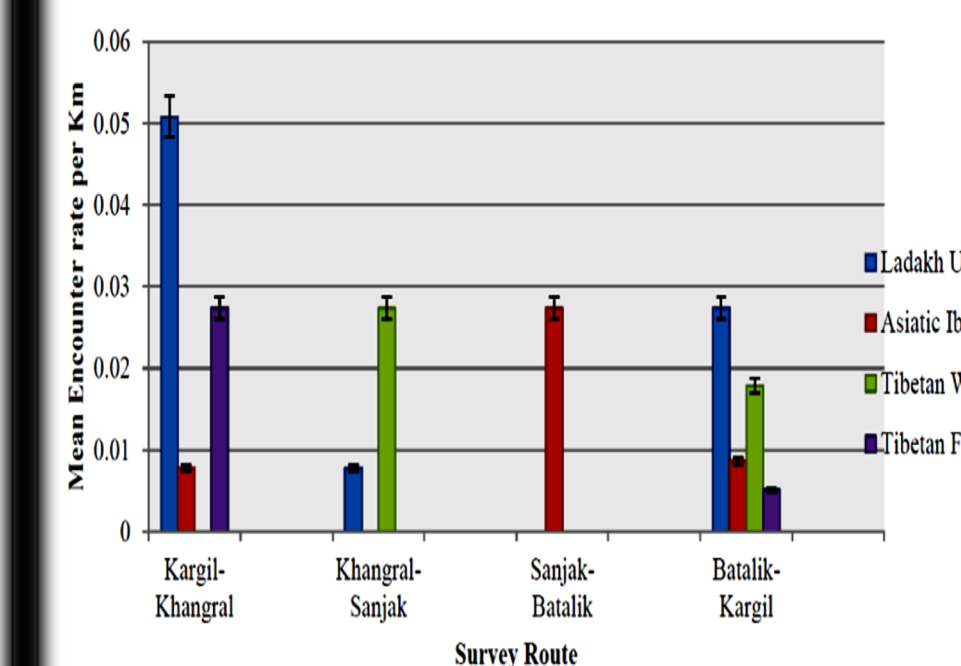


Fig. II (a) Mean encounter rate for Prey species at different altitudes.



II (b) Mean encounter rate for different species during the vehicle survey.

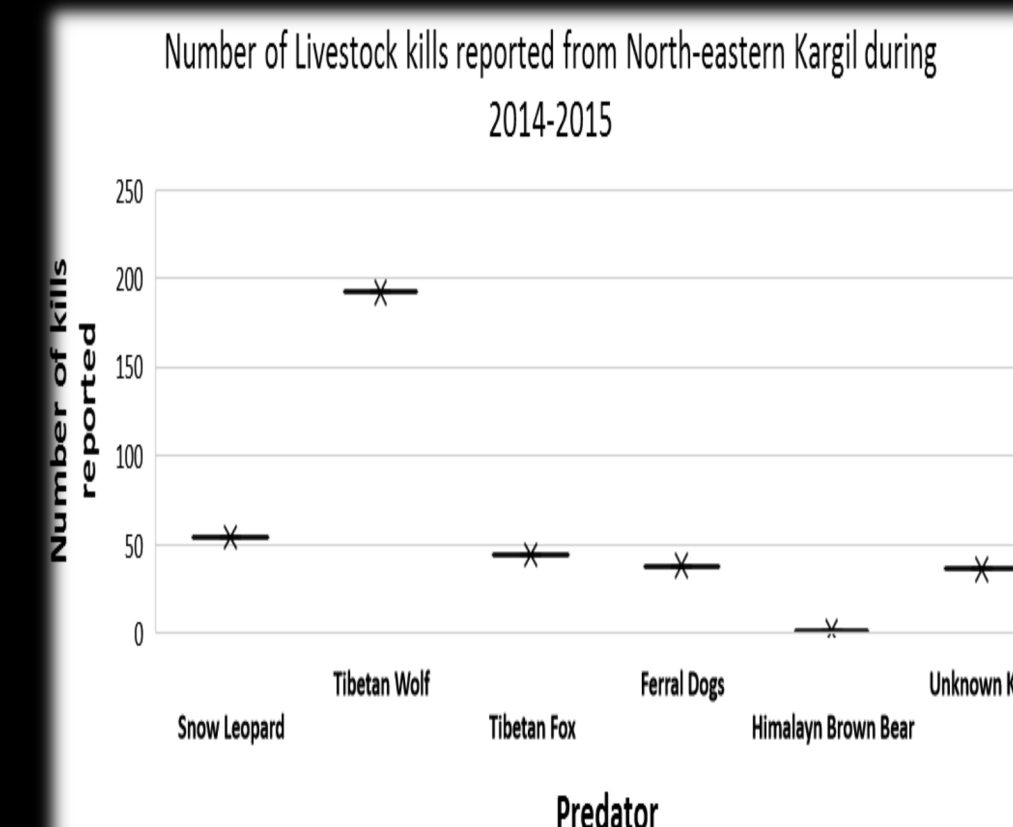


Fig. III Loss of livestock reported due to different carnivore attacks.



Image 3. A Himalayan brown Bear being attacked by a Local mob.

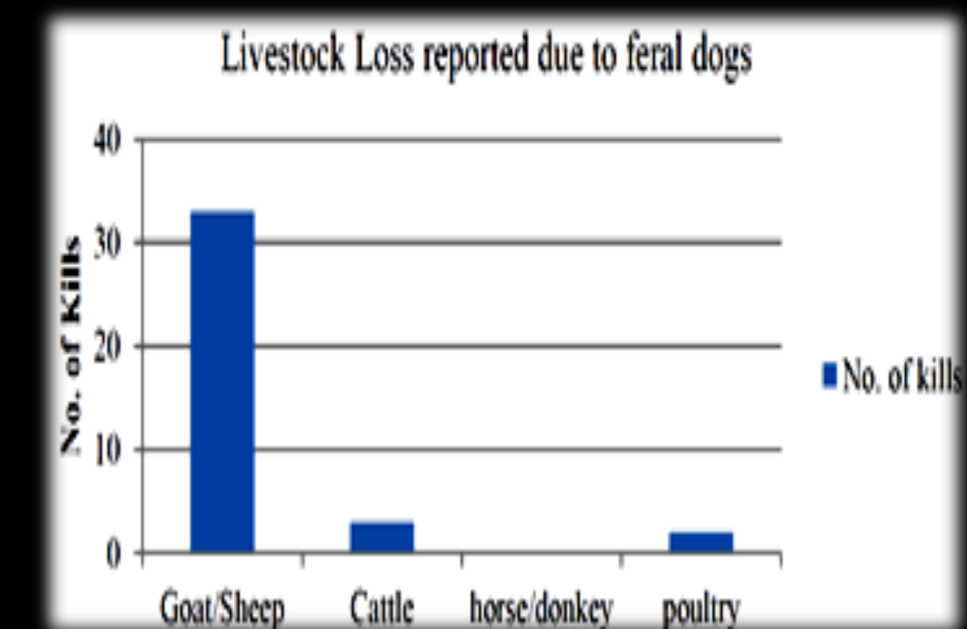
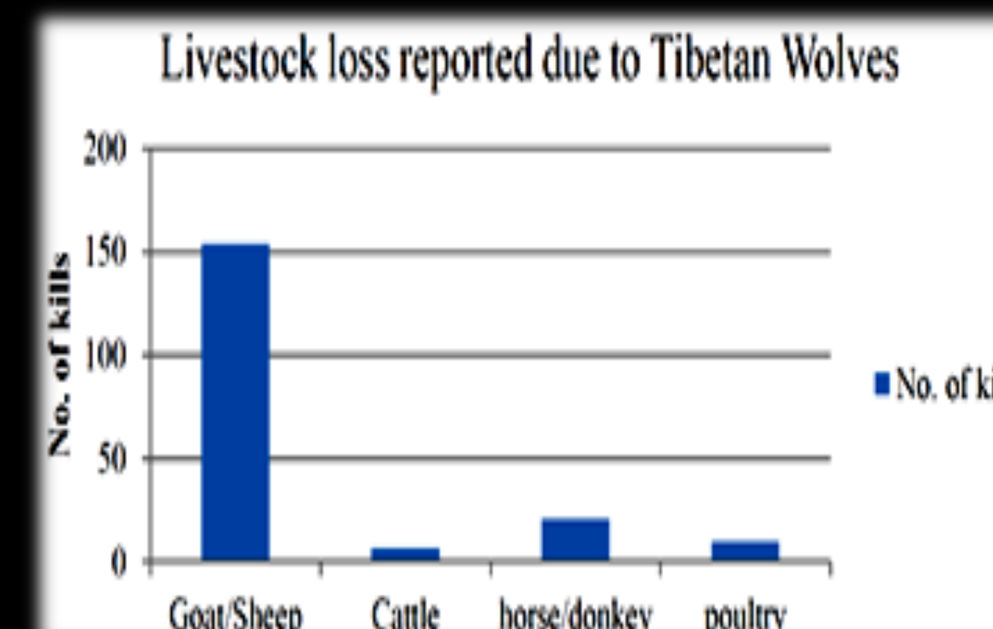
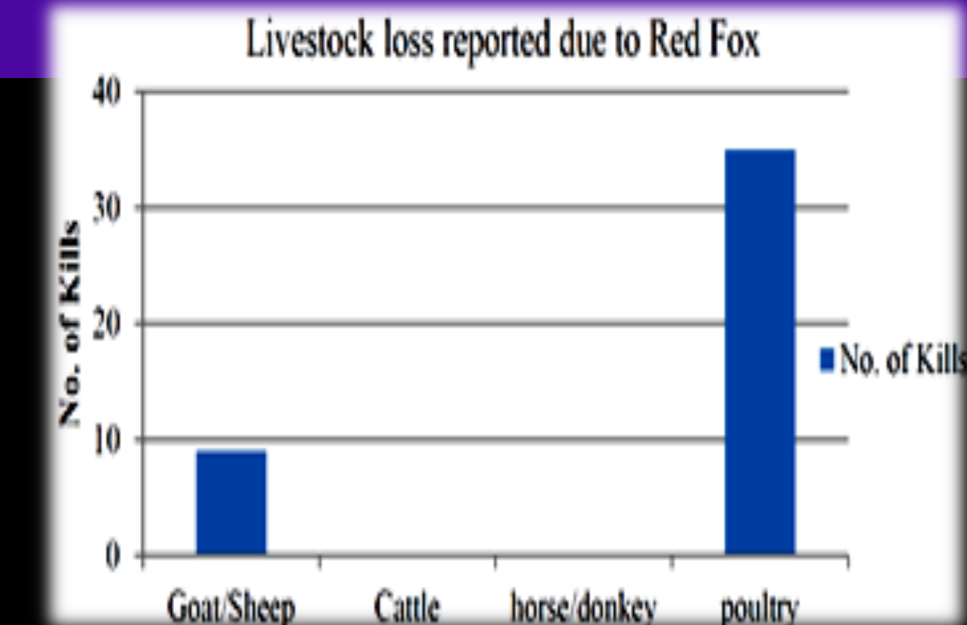
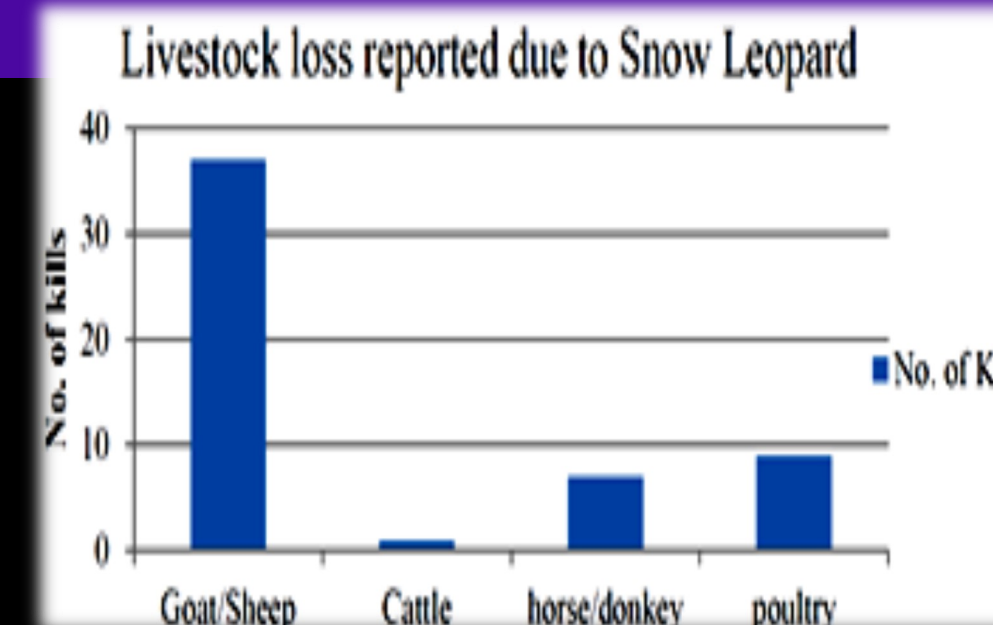


Fig. IV Livestock loss caused by different carnivores.

## Current Project and Future Plans

- Examining the Anthropogenic pressure on Wild Carnivores (vice-versa) in Kargil Trans-Himalaya, India. This study aims at understanding the human-animal conflict in Kargil intensively, with a larger study area (figure V). **Status:** Ongoing.
- Implementing and study of Wildlife Tolerance model in Kargil. **Status:** Ongoing.
- Wildlife management & conservation action Plan. **Status:** Future Action.

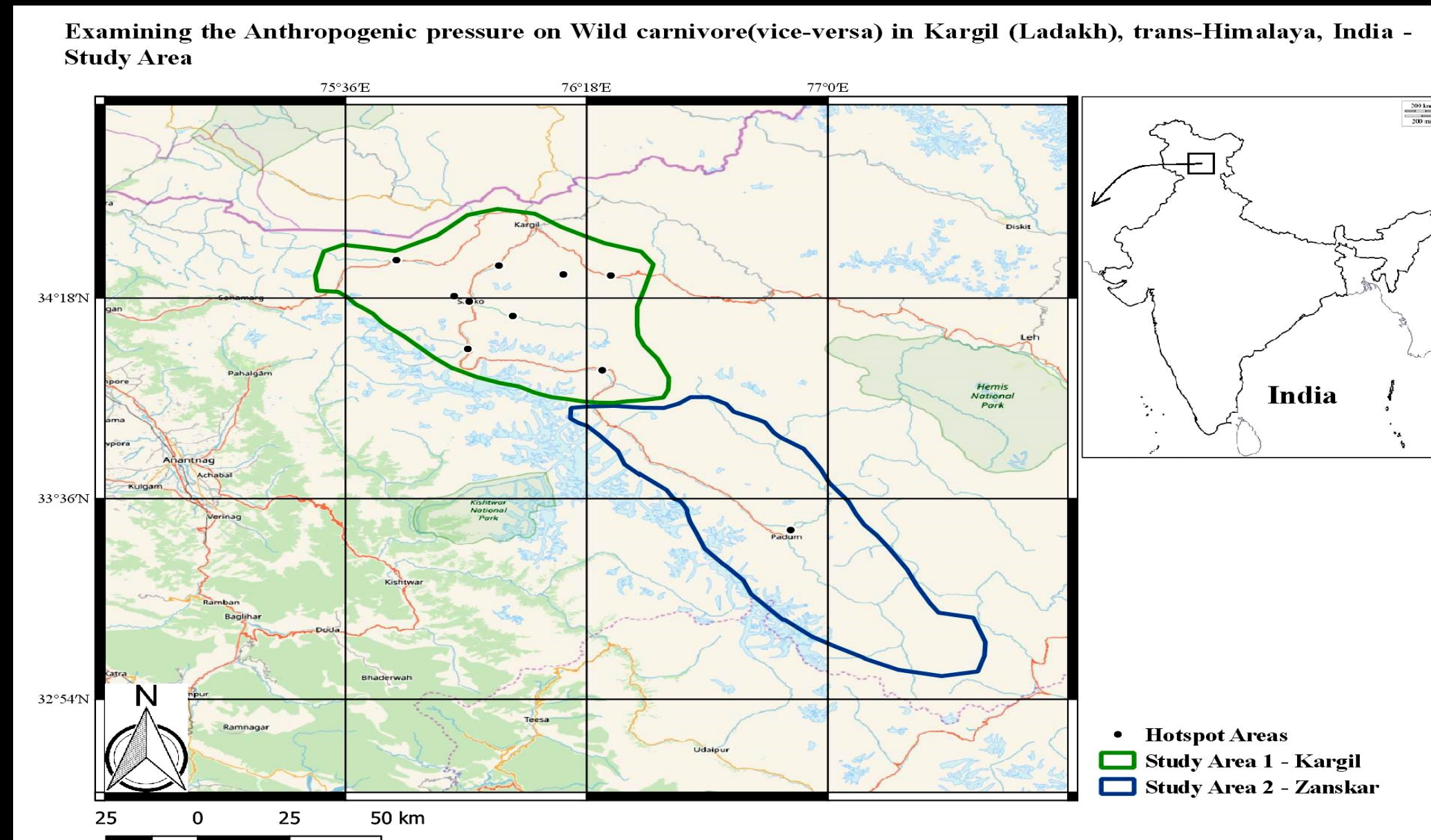


Fig. V Proposed Area to study the Anthropogenic Pressure on Wild-Carnivores (Vice-versa) in Kargil Trans Himalaya, India.

**Dedicated to the Wildlife of Kargil –India**