



## **Preventing Himalayan Brown Bear conflict by installing cautionary sign boards in Drass, Ladakh**

**Presented by: Muzammil Hussain**

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**SUPPORTED BY**



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## Executive Summary:

This report reflects on the progress made under the 2024 Memorandum of Understanding (MoU) with the WTI - RAP.

The project focuses on the Drass Valley in Kargil district, Ladakh, renowned as the second coldest inhabited place globally. Nestled at 3,230 meters above sea level, Drass has a population of 22,000 spread across 20 villages. Its unique geography—located at the confluence of the Lower Himalayas, Greater Himalayas, and Karakoram range—makes it a critical ecological region characterized by temperate and alpine forests. Drass endures harsh winters with temperatures plummeting to -40°C and heavy snowfall.

The valley faces significant human-wildlife conflict, particularly involving the Himalayan brown bear. Its population is estimated at 25 to 35 individuals. These bears frequently stray into villages, army camps, and highways, leading to livestock depredation and scavenging at dumping yards. Highways, especially the Kargil-Srinagar route, pose another threat, as wildlife crossing these roads often suffer from vehicle collisions. This issue is compounded by the absence of cautionary signage, increasing risks for both humans and wildlife.

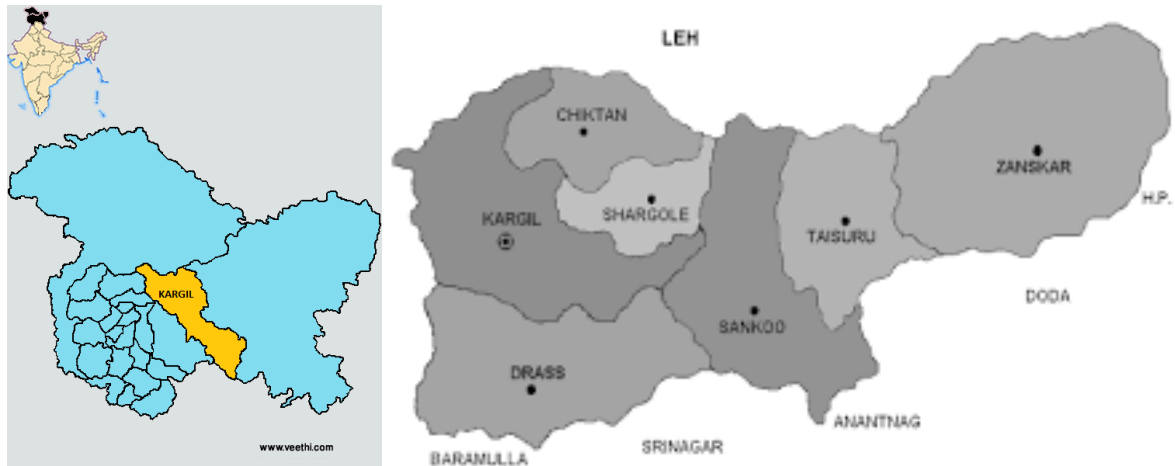
Given the ecological and socio-economic importance of Drass, the project emphasizes mitigating human-bear conflicts and ensuring wildlife safety. Proposed interventions include installing cautionary boards along highways to reduce accidents, alongside broader awareness campaigns and conflict management strategies. These measures aim to foster coexistence, safeguard biodiversity, and protect the livelihoods of local communities while preserving the delicate balance of Drass Valley's ecosystem.

## Introduction:

The Himalayan brown bear (*Ursus arctos isabellinus*), a Critically Endangered species, has fewer than 800 individuals left in the Indian Himalayas. Drass Valley, a key hotspot, holds a large concentration of these bears, serving as a vital breeding ground due to its proximity to the Deosai National Park in Baltistan, Pakistan. During mating months, many males are observed to migrate to Drass, highlighting the region's ecological significance. However, frequent human-bear conflicts and road accidents along highways threaten their survival.

Addressing these challenges through conservation efforts, habitat protection, and conflict mitigation is critical for preserving this species and the fragile ecosystems of Drass.

Installation of cautionary and informational boards is a vital step in promoting coexistence between humans and wildlife in Drass Valley. These measures aim to reduce accidents, raise awareness about the Himalayan brown bear, and equip local communities with knowledge on mitigating conflicts. Proactive education and awareness are known to be essential for long-term conservatio



**Image1: Are of study – Drass, Kargil – UT of Ladakh, India**

### **Objective:**

The primary objective of this study was to install 20 cautionary boards across the Srinagar – Kargil Highway – NH1. This was implemented to create awareness of the movement of Bears in the region for speeding trucks.

### **Methods:**

To achieve the objectives, the team surveyed the landscape and marked important crossing zones on the NH1. The locations were shared with the Wildlife Warden and the Sub-District Magistrate and considerations were taken on the locations and designs of the boards along with necessary permissions for the installation.

The designs were made using reflective medium stickers to also ensure they remain visible in the night and were restricted to one liner to allow the passersby to read them. The boards were also weatherproofed to withstand the harsh winters of Drass.





**Image 2: Boards Installed along the NH1 Highway.**

### **Discussion & Conclusion:**

The installation of cautionary boards along the Srinagar-Kargil Highway represents a practical and significant intervention to mitigate human-wildlife conflict in Drass Valley. By strategically marking key crossing zones and collaborating with local authorities, the project has addressed a critical need to reduce accidents involving Himalayan brown bears. The reflective, weatherproof design ensures visibility during harsh winters and night travel, enhancing their effectiveness. However, awareness among local communities remains vital for reinforcing these measures. Efforts will be taken to monitor impact in the beginning of next season, expanding to additional high-risk zones, and integrating community-based workshops to foster coexistence and strengthen long-term conservation outcomes in the region.