

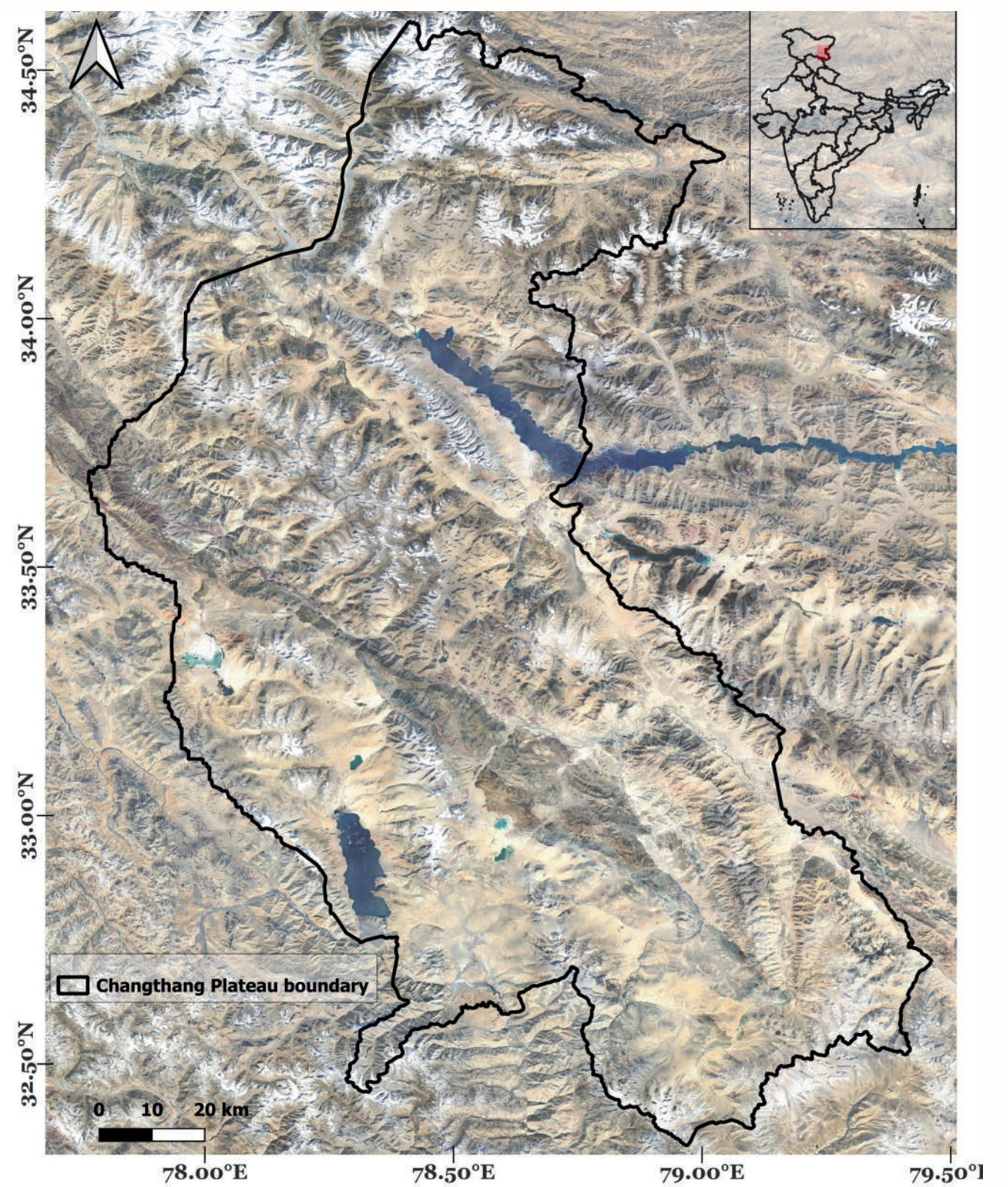
A Mosaic of Habitats in Changthang

Changthang is a high-altitude plateau that is the extension of the Tibetan plateau. The plateau is important for the local communities, primarily the herder pastoralists known as Changpas. These communities move across Changthang driven by various factors such as access to resources like forage and water, based on local governance systems.

Often, Changthang is thought of as a vast barren desert.

This leads to Changthang being labelled a “wasteland”

However, this unique region hosts various different habitats that have been understudied and underappreciated. Through this output we aim to highlight these varied habitats with the hope to spread awareness and further studies into them.



WET BOG SEDGELAND

This habitat occurs along flat wetland surfaces, either near lakes or where river branches split into multiple tributaries with slow or stagnant flow across the plains. It exhibits a gradient of vegetation and soil profiles, transitioning from the main water body to the drier edges. Such habitats are dominated by *Carex sp.*, *Pedicularis longiflora* and other herbs.



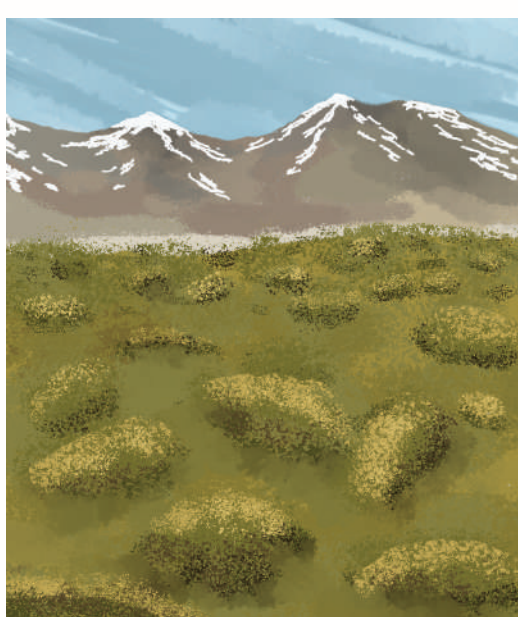
BARE GROUND

A major proportion of the Changthang landscape is an expanse of flat plains and slopes with no vegetation cover. This also includes slopes and glaciers covered by snow round the year. The major area under this land class is dominated by flat sandy plains with rock boulders and rough terrain.



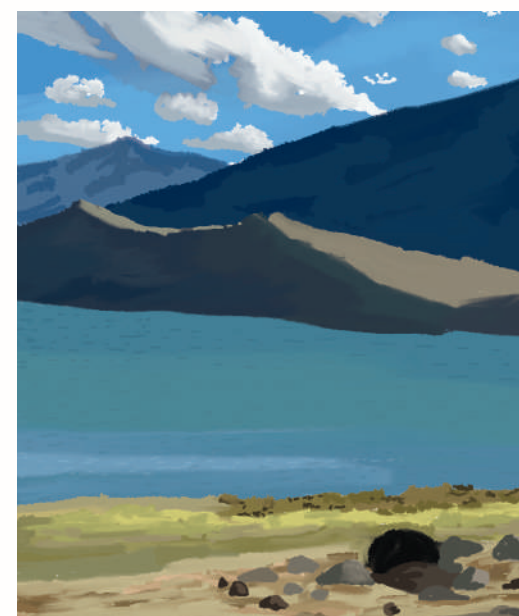
SHRUBLAND

The distinct shrub patches are part of Changthang. Most abundant species include *Caragana versicolor*, *Myricaria elegans*, *Eurotia ceratoides*, and *Artemisia sp.* *Caragana* bushes prominently occur at slopes, in a mosaic with grass patches and around sandy plains. Alternatively, *Myricaria* bushes are tall shrubs with very few patches across Changthang.



BOG MEADOW

Found along freshwater streams, bog meadows experience seasonal dryness and have a short growing season. However, they can quickly regenerate above-ground biomass following rainfall or snowmelt in summer. There are typically three distinct bog structures: i) *Kobresia* tussock bog; ii) Irregular bogs; and iii) Foothill or glacial melt bogs



PERMANENT WATER SOURCE

This land class includes prominent rivers like the Indus and freshwater lakes such as Startsapuk Tso, Tso Moriri, Pangong Tso and Kyagar Tso among others in the Changthang Plateau. These serve as essential water sources for both livestock and wildlife as well as support different ecosystems. According to local herders, humans primarily rely on stream water for their needs.



SPARSE VEGETATION

Trans-Himalayas are resource limited with the major landscape covered by very low vegetation cover. This land class majorly includes a mosaic of thinly distributed floral species belonging to herbs, grasses, shrubs and flat sand bars. Majorly areas are dominated by infrequent clumps of herbs and grasses.



GRASSLAND

The grass dominated patches of the Trans-Himalayas are critical habitats for the wild herbivores of the landscape such as Kiang, Argali, Tibetan antelope, Blue sheep among others. Grasses such as *Stipa* dominate the high plateaus, often mixed with herbs, while *Leymus* species are more common on lower, flat plains, mixed with other sedge species.



This poster is designed and illustrated by Manini Bansal