

Original Research Article

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## Environment and Living Condition of Zaskar Ladakh

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### ABSTRACT

#### Keywords

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The natural environment of Zaskar presents a very harsh and fragile system. The villages are mostly situated along the two main tributaries of Zaskar River. Zaskar range is the most important mountain range of Zaskar tehsil. There are varieties of domesticated animals which are used for different purposes in Zaskar. These domestic animals include ponies, asses, horses, sheep, goats, yaks, dogs, and fowls. Yak is another important animal of Zaskar, and is also known as the “ship of snow”. The herders depends on highland pastoralism and kept temporary settlements locally called doksa. In doksa they rear yak, cow, zhomo, zho. The doksa produce around milk, butter, churphay (dried cottage cheese).

### Introduction

Zaskar comes from the local word “Zangskar” meaning white copper. Zaskar is basically a Buddhist area with a small Muslim population. It covers area of some 7000 Km<sup>2</sup> and is situated at an elevation between 3500 and 7000 meters above the mean sea level. Its climate is very severe and it remains cut off from the rest of the world from November to June when only limited helicopter service is its only link with outside world. The region remains snow-covered during winters and movement of people comes to nearly standstill even within the region. Winter is severely cold and nearly no outdoor activity is possible for

three to four months. People live in small houses build of stone, mud and wood. Human beings and domestic animals share the same cooking-cum-sleeping room on ground floor during winter months. Domestic animals are grazed on natural pastures in summers but have to be stall-fed during winters.

The climate of Zaskar valley is extremely dry and cold. Annual precipitation is only around 100 mm/ year and humidity is very low. In this region, above 3,000 meters elevation, winters are extremely cold. The average January temperature of the valley is – 20 °C which drops as low as – 40 °C. The vegetation of Zaskar mainly consists of alpine and

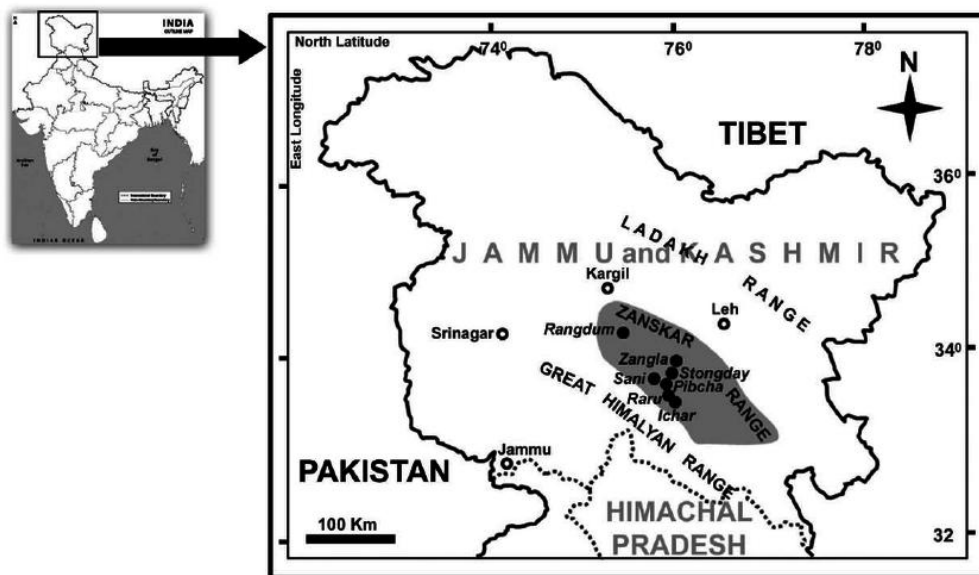
tundra plant species, which are mainly confined on the upper slopes which receive more precipitation. Many species of Hippophae - the sea-buckthorns are found in the region with minimal soil humidity. The alpine meadows are covered with edelweiss (*Leontopodium alpinum*). Landuse by the local human population is mainly semipastoral agriculture based on livestock grazing and agriculture. Cultivated crops including barley, lentils, and potatoes which are grown by farmers at the lower elevations. At higher elevation livestock are major source of livelihood. Domesticated animals consists of yak, dzo, sheep, horse, and dog. The wildlife in Zanskar is represented by marmot, bear, wolf, snow leopard, kiang, bharal, alpine ibex, wild sheep and goats. (Chhering Tandup) In the mountainous region like Zanskar, agriculture is the mainstay of the people. 95% of the population are engaged in this activity through sedentary cultivation and pastoral animal rearing. Agricultural implements used by farmers are crude and primitive. Zho, a hybrid between yak and cow is deployed in drawing the small plough. The subsistent farming is still practised because of

unfavourable climatic condition and highly fragile mountain ecosystem. The agriculture season sometimes gets delayed due to accumulation of snow in fields in great depths, particularly in lower altitudes (basin region) due to avalanching in spring season results in late sowing of seeds. To clear the snow from fields and to melt the snow, the farmers spread stored soil that enhances albedo by absorbing warmth from the sun. The region supports the cultivation of selected crops like wheat, Grim (barley) Pea, fodder and Vegetable that grow in a short period.

### Materials and Methods

Zanskar, Zahar (locally) or Zaskar, is a tehsil of the Kargil district, which lies in the Indian union territory of Ladakh. The administrative centre is Padum (former Capital of Zanskar). Zanskar covers an area of some 7,000 square kilometres (2,700 sq mi), at an elevation of 3,500-7,135 metres (11,500–23,409 feet). Zanskar is among the cold arid inhabited highlands of the world. In zanskar valley, cropland is less than 2% of the geographic area.

Fig.1



## Result and Discussion

Total farm land holdings were about 1221.43 km sq cropped land were 100% irrigated, zanskar people totally depend upon farming and livestock husbandry were the major food and income sources and people were engaged

year around. single cropping system in zanskar that is April to September, after that they were preparing to manage winter, gathering or collecting food, fuel, wood, cow dung and other resources and fodder to feed the livestock for long winters.

**Table.1** Basic information of the zanskar valley

<b>Average land holding</b>	<b>1221.43 km sq</b>
Population of the valley	14450
Irrigation	100% irrigation farming
Cropping season	April - September

**Table.2** Living Condition of Zanskar valley Respondents

### House

<b>Kaccha(mud house)</b>	<b>55%</b>
<b>Semi pucca</b>	<b>30%</b>
<b>Pucca(cemented)</b>	<b>15%</b>

### Drinking water

<b>Pipe</b>	<b>24%</b>
<b>Hand pump</b>	<b>20%</b>
<b>Spring /Stream</b>	<b>56%</b>

The above table show that (55%) of the respondents had Kaccha House (Mud House) because of poverty and lack of heating facilities and unbearable cold in winter they had kaccha house,30% had semipucca house and also had well wood constructed within the house because of cold climate, whereas 15% of the respondents had pucca that is cemented house.

### Doksa System in Zanskar

Herders move with their Stock in first week of may to high pastures stayed there for three month in summer some of they returns to their villages at the time of crop harvest in ending

September and most of the doksa people come down during thrasher time. The study investigate that in Mid summer the herders depends on highland pastoralism and kept temporary settlements locally called doksa. In doksa they reare yak, cow, zhomo, zho. The doksa produce around milk, butter, churphay (dried cottage cheese). The climate of Zanskar valley is extremely dry and cold. single cropping system in zanskar that is April to September, Cultivated crops including barley, wheat and potatoes which are grown by farmers at the lower elevations. At higher elevation livestock are major source of livelihood. Domesticated animals mostly consist of yak, dzo, sheep, and cow.

## References

Anup raj, 2020 Livelihood Dependence on Highland Pastoralism (Doksa) In Trans-Himalayan Region of Zaskar, Ladakh, International Journal of Environment and Climate Change 10(12):67-76,issn:2231-4784

Chhering Tandup, 2014 International Journal of Scientific and Research Publications, Volume 4, Issue 8, ISSN

2250-3153 www.ijsrp.org Natural Environment of Cold Desert Region Zaskar (Ladakh) <https://en.m.wikipedia.org>

John crook henry osmaston,(1994) Himalaya Buddhist Villages, Environment, Resources, Society And Religious Life, In Zaskar, Ladakh, Motilal Banarridas Publishers Limited, New Delhi.

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