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"Filling gaps and removing traps for sustainable resource management"

## Yak Herding Strategies on High Altitude Rangelands of Gilgit Baltistan, Pakistan

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## Abstract

To study different herding strategies of yak grazing on communal high altitude rangelands in the Gilgit-Baltistan region of Pakistan, individual interviews with 90 herders were conducted in three valleys (Hoper, Phander, Shimshal) and 10 group interviews (5–8 herders per group) in three additional valleys (Chipurson, Haramosh, Khaplu) from May to November 2018. Individually interviewed herders had a herding experience of 25 years and kept 10 yaks on average. Yak herding practices varied between valleys and seasons and were influenced by labour availability and frequentation of an area by tourists. Collective vak herding by a group of herders was widespread in Shimshal (practised by 70% of interviewees), Chipurson and Khaplu (66%), but rare in the other valleys. This system of herding continued for full seasons in Shimshal but was only used during a few weeks per season in the other valleys. Individual herding, largely by male family members (>90% overall) was widespread in Phander (93%) and Hoper (78%), intermediate in Chipurson and Khaplu (66%), of low relevance in Shimshal (37%) and non-existent in Haramosh. Family herding was found where yaks were milked, namely in Phander (both partners: 10%, other family members: 54%) and Shimshal (both: 11%, other members: 31%), while there was mixed species herding in Hoper (both: 8%, other members: 24%). Employed herding in which the community arranges for herders was common in Chipurson (53%) and Phander (20%), particularly from late spring throughout summer when farmers needed to work on their farmland. Year-round unsupervised grazing was predominant in Haramosh (100%). Khaplu (67%) and Hoper (77%) but restricted to autumn in Chipurson (67%). The different herding practices across valleys and seasons led to spatially very patchy and sometimes extremely concentrated utilisation of already depleted rangelands, herd size fluctuations through mortality, and in some areas created problems for wildlife. Moreover, support of vak-keeping families by developing local milk and wool markets, and maintenance of the genetic diversity of yak herds is challenged by the very heterogeneous herding strategies in general and the high prevalence of unsupervised grazing in particular.

Keywords: Alpine rangelands, Gilgit-Baltistan, herding, yaks, summer season

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