# Saving rangelands from Pastoralists? Understanding the long-term socio-ecological consequences of the current rangeland conservation model in the Indian Himalaya

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**Key words**: Khangchendzonga National Park, Grazing ban, State- exclusion, social conflict, wildlife conservation, pastoralists participation

## **Abstract**

Following the mainstream narrative of biodiversity conservation, state-led policies of pastoralist removal from protected areas have been a common practice across parts of Asia and Africa. In the Himalayan region, restrictive access and removal of pastoralist communities from protected areas have been assumed to be the best remedy for rangeland conservation. But does this practice translate into any benefits for conservation? This paper critiques the current conservation model adopted in the Indian Himalayas. I argue that this model simply recreates a landscape favouring the state's interests, produces exclusions, and may also negatively affect both society and ecology. I build on a case study of a grazing ban implemented in the state of Sikkim in the year 1998. Livestock herding in protected areas was restricted, and pastoral evictions were carried out across the state between 2000–2002. Fifteen years after the ban, I conducted a mix methods study to understand the long- term social as well as ecological implications of the prohibition on grazing as well as that of the pastoral evictions in and around Khangchendzonga National Park (KNP). My methods included both semi structured interviews as well as ethnographic survey in addition to the secondary data analysis between the year 2015-2019.

My results show that pastoral evictions result in the further impoverishment of weaker sections of the pastoral community while powerful pastoralists appropriate benefits from conservation policies. Additionally, evictions do not necessarily aid in "biodiversity conservation"; instead, they give rise to social conflicts within the local community and lead to the emergence of new conservation challenges. I conclude that instead of pastoral displacement, a successful conservation plan could be co-opting local knowledge and local institutions in identifying ways of cultural and conservation co-existence in the pastoral landscape of South Asia, paying closer attention to questions of equality and sustainability.

#### Introduction

Conservation-induced displacement and eviction of indigenous communities from protected areas have been the understory of biodiversity conservation and protected area management practices in South Asia and Africa (Agrawal & Redford, 2009; Brockington & Igoe, 2006; Kabra, 2018). There is an emerging recognition of the role of pastoralists in managing and restoring rangelands, combatting climate change, and fulfilling sustainable food goals. Ecologists continue to explore the role of livestock grazing in rangeland management (Briske et al., 2003; Ellis, 1998; Retzer, 2006; Vetter, 2005), and recent studies have increasingly shown a positive correlation between traditional pastoralism and rangeland health (Ingty, 2021; Kohli et al., 2021; Pozo et al., 2021). However, colonial legacies of conservation and the spectre of "overgrazing" in the political narratives of pastoral landscapes have led to the curtailing of pastoralists' access to their pastures, sedentarization, and even the removal of pastoral communities from their traditional pastures across Africa, Asia, Inner Mongolia, and China for the sake of "biodiversity conservation" (Behnke & Scoones, 1992; Caravani, 2019; Gonin & Gautier, 2015; Mortimore, 1998; Schmidt & Pearson, 2016; Singh et al.,

2022; Weber & Horst, 2011; Weldemichel, 2020; Yeh, 2005; Zhizhong & Wen, 2008). Scholarly engagements have showcased a wide range of social, cultural, and ecological outcomes of such stateled political interventions in the pastoral landscapes (Conte & Tilt, 2014; Ichinkhorloo & Yeh, 2016; Li et al., 2013). These results include violation of pastoral rights through unlawful encroachments of pastures by the state and private actors(Mwaikusa, 1993), the transformation of pastoral communities to agriculture(Schmidt & Pearson, 2016), and loss of access to pastures and pastoral livelihoods through state violence and territorialization (Caravani, 2019; Gonin & Gautier, 2015; Korf et al., 2015; Weldemichel, 2020; Yeh, 2005).

Following the similar chain of conservation events in the Himalayan region, a grazing ban was implemented in Sikkim in the year 1995 and evictions of herders were done between 2000-2002. After 15 years of the eviction, this study was conducted to understand the genesis of the ban, and its long term social and ecological implications. This paper focuses on exploring the social and ecological implications of the grazing ban and conservation induced displacement of pastoralists from one of the largest national parks of South Asian high-altitude region- the Khangchendzonga National Park (KNP), Sikkim, situated in the Eastern Indian Himalayan region.

## Methods

This study was conducted around KNP, Sikkim and primary data collection was done between October 2017 and November 2019. Four village clusters in the study site were identified during the pilot survey conducted in April 2017. Methods used for the study included semi-structured interviews, focus group discussions, and key informant interviews. A list of ex-herders with the help of village elders and members of the Eco-Development Committee, Joint Forest Management Committee, and Khangchendzonga Conservation Committee was made to understand the long-term implication of the grazing ban. 40 semi-structured household interviews, primarily with household heads were conducted. Since the ex-herders were mostly males who spent a lot of time alone inside the park, most of the interviews were conducted with males (n = 32). However, in cases where females had lived inside the park or had experienced eviction, they were interviewed as well (n = 4). In some cases, where the ex-herders were either too elderly or had died, interviews were conducted with their family members (n = 4).

## **Results and Discussion**

Long-term implications of grazing ban and pastoralists eviction of KNP included economic impoverishment of pastoralists, loss of livelihood due to loss of access to the park, cultural loss of pastoral practices, the transition of pastoralists to farming and other small, private, and tourism-related jobs, and a widening economic gap between the small and big herders. All these repercussions, in turn, resulted in social conflicts between community members along with the emergence of new conservation challenges. The grazing ban and evictions had questionable benefits for the ecology of the park and have not necessarily helped in solving the issue of perceived "overgrazing". The involvement of some ex-herders in the evictions resulted in social conflicts; ex-herders faced hostility and social exclusion for breaching the trust of their own community members. Ex-herders who had shifted to farming mentioned that incidents of crop depredation by wild boar and black bears had increased in the recent past after the implementation of the grazing ban. They also attributed the more frequent instances of human—wildlife conflicts to the lack of any open expanses inside the forests, as herders used to maintain empty spaces around their goaths. The frequency of these incidents has created new conservation challenges in and around KNP. Even the ex-herders noticed that their forced absence had negatively influenced the ecology of the region, especially of high-altitude summer pastures, noting instances of delayed flowering and increased domination by non-palatable species in the rangelands (Singh et al. 2021). A small percentage of the ex-herders now worked in tourism within KNP in the lowest-paying jobs and explained how the evictions had resulted in their economic impoverishment and marginalization. Further, they reported that unlike the rotational grazing that they

used to practice, pack animals were kept in one area during the non-tourist seasons, resulting in negative impacts on the ecology of the pastures. Big and wealthy herders gained exclusive access to the park, and, therefore, their herd sizes have doubled over the last 15 years, which has further widened the gap between small and big herders. Overall, the long-term implications have been economic impoverishment, emergence of new conservation challenges, social disparities, and a wider economic gap between the small and big herders.

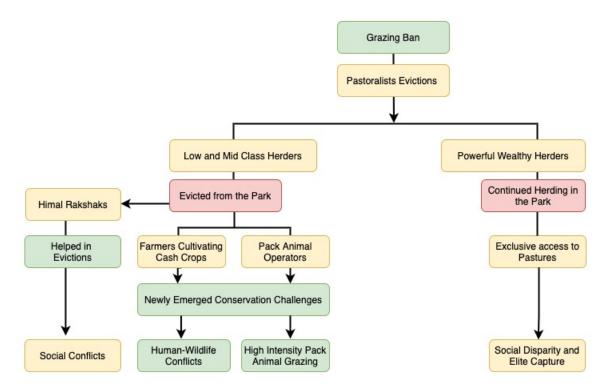


Fig 1: Long-term Implications of the Grazing Ban: Social Conflicts, Emergence of New Conservation Challenges, and Social Disparity

The most acute impacts of the ban for ex-herders were loss of livelihood and income, following their restricted access to grazing grounds (for majority of herders from lower and middle wealth class) and transition of pastoralists to farming. While legal recourse was sought through an alliance between the ex-herders of the middle and high wealth classes, only the powerful and elite became the face of this political tussle. Additionally, even after losing the legal battle, the powerful herders continued to use the pastures inside KNP and have doubled their herd sizes over the past 15 years. However, the low and middle-class pastoralists were severely impacted and were further marginalized after losing access to the park.

#### **Conclusions**

Given the wide variety of flora and fauna in KNP, biodiversity conservation inside the park is absolutely critical, and efforts must certainly be made in this direction. However, it should not be undertaken at the cost of social and economic losses or in the absence of systematic studies and planning. Instead, conservation efforts should involve rural locals from lower wealth classes to identify how local livelihoods like pastoralism can co-exist with conservation agendas in the region.

Instead of removing the pastoralists, a successful conservation plan could be co-opting local knowledge and institutions and identifying ways of co- existence in the pastoral landscape of India

while paying closer attention to questions of equality and sustainability. Government agencies must engage with local formal and informal institutions to re-initiate rotational grazing practices, help deal with wildlife crimes, monitor livestock, and maintain equity among local herders. Pastoralists' knowledge and pastoral institutions can be extremely helpful in co-evolving mechanisms to ensure biological conservation, as well as sustainable livelihood options in and around the protected areas of South Asia.

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