

Institutional Issues, Power Struggles and Local Solutions – Governance Systems of Yarshagumba Collection in the Kailash Landscape

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Introduction

Ophiocordyceps sinensis (English: caterpillar fungus), locally known as *yarshagumba*, is a fungus, which grows in the body of a larva of a moth in the high alpine grasslands of the Himalayan region between 3200 and 5000 meter above sea level. It is found in some parts of the Tibetan Plateau and in the Himalayan Mountains of Bhutan, India and Nepal (Shrestha and Bawa 2014; Winkler 2009). Collected from May to July, this non-timber forest product is traded as medicinal product mainly to China. The price increased tremendously in the late 1990s (Winkler 2008; Yeh and Lama 2013), which triggered a “gold rush” and led to the development of new collection sites in the Himalayan Mountains (see pictures 1 to 4). A product unknown by local communities has transformed into a high value resource changing livelihood strategies of entire villages within only ten to fifteen years (Shrestha and Bawa 2014). These developments have evoked institutional issues and power struggles in the rural communities. New and old actors have increasingly questioned existing governance systems regulating livestock grazing and the access to these high alpine grasslands.



Figure 1: Yarshagumba collectors with camping luggage (May 2017)

The tremendous increase of people accessing the grasslands for the collection of yarshagumba, related conflicts, and the high dependency of collectors on yarshagumba harvest for cash income are challenges faced in most of the collection sites in the region. Additionally, the local population perceives that their habitats are degrading the yarshagumba harvest per collector is declining. These are all aspects analysed by several scholars (cf. Cannon et al. 2009; Negi et al. 2016; Pant et al. 2017; Shrestha and Bawa 2013; Weckerle et al. 2010).



Figure 2: Yarshagumba (*ophiocordyceps sinensis*) (May 2017)

Yet, while most of these studies focus on the analysis of the socio-economic and ecological situation and/or management structures in one particular valley or collection site, the institutional frame of yarshagumba collection is rarely examined. Governance systems of different collection sites are hardly ever compared in the literature.

Theoretical considerations and methodical implementation

Using the conceptual frameworks of “the governance of commons” (Agrawal 2003; Dietz et al. 2003; Folke et al. 2005; Ostrom 1990; Pahl-Wostl 2009) and “hybrid governance” (German and Keeler 2010) we compare the governance systems of yarshagumba collection in two different legal settings of Nepal and India in the border region of the Kailash Landscape.



Figure 3: Yarshagumba campsite in Nepal (May 2017)

We analyse governmental actors and institutions in the two countries, and focus on actual communal arrangements regulating the access to and management of yarshagumba collection on the ground. The comparative study provides insights into the dynamics, changes and limitations of the governance systems established since the discovery of yarshagumba.

The empirical fieldwork was conducted in four valleys of the Kailash Landscape. In total, we assessed seven collection sites in two valleys of the Api Nampa Conservation Area (Nepal) and two valleys in the Kumaon Region (India). The qualitative empirical research comprised mainly key informant and in-depth interviews, focus group discussions and participatory field observations.

Results

Yarshagumba is a common pool resource. This kind of resources is defined through subtractability – if the resource is consumed by one person it cannot be consumed by another one anymore – and the difficulty to exclude other people to have access and use the resource (Ostrom 1990). The key concern with commons is that users try to maximize their benefit per unit, while ignoring involved costs per unit imposed on others. Users tend to pursue their short-term interests, which results in outcomes that are not in anyone's long-term interest, like the complete exploitation of the resource (Agrawal 2003; Ostrom 1990).

Dietz et al. (2003) argue that local communities can manage common pool resources effectively, while they usually fail when sudden changes occur. Therefore, researchers plead for more complex governance systems (Dietz et al. 2003; Folke et al. 2005), linking and combining governmental actors, research facilities and communal institutions to overcome challenges that are the result of depending only on one single governance regime (German and Keeler 2010; Pahl-Wostl 2009).



Figure 4: Yarshagumba collectors in Nepal (May 2017)

Governmental actors are likely to face challenges regarding the enforcement of rights or resentments by holders of customary rights. At the same time, communal arrangements have usually difficulties with applying sanctions and adjusting to rapid changes when new drivers and actors are introduced. Thus, hybrid natural resource governance systems are needed, which are characterized by a balance between local self-organization and governmental regulations as complementary instruments of governance (German and Keeler 2010).

Before yarshagumba was discovered in the Himalayan Mountains, the collection sites were common grazing grounds for the local population. Well-defined boundaries, conflict resolution mechanisms, monitoring and graduated sanctions (Acheson 2006; Ostrom 1990) were principles integrated in the local governance systems managing grazing. Additionally, social homogeneity of users, community sense and social capital made rule devising and enforcement possible. However, these local systems now struggle with new and old actors demanding access to the yarshagumba collection sites, and with community members ignoring social norms to increase their own benefits.

In Nepal the collection and sale of yarshagumba is legal for local communities, whereas in India the extraction of yarshagumba is happening in a legal grey zone. Government institutions in India and Nepal have formulated guidelines, but struggle with their implementation and often neglect local contexts. Communities have created site-specific arrangements since the late 1990s to deal with the pressure and to control and limit access for people from other communities. The limited formalisation of these arrangements leads to disputes and makes collectors vulnerable to criminal elements and ambiguous institutional and individual behaviour. Additionally, it encourages unsustainable

harvesting of the resource and rapid habitat degradation.

In sum, our data shows that the governance systems in India and Nepal regulating yarshagumba collection are a complex blend of governmental actors and institutions on various scales and local communal arrangements adapted to the characteristics of each site. Against this background, we argue that neither the sole existence of governmental actors and their formal institutions nor community arrangements alone are sufficient for the effective governance of yarshagumba collection in the remote high alpine grasslands. Instead, they need to be complementary (German and Keeler 2010). New actors and drivers stimulate changes and, thereby, put pressure on the existing governance systems. It requires more complex and adaptive governance systems to be flexible and robust to sudden changes.

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Conclusion

Yarshagumba collection sites in the Himalayan mountains of India and Nepal have experienced a "gold rush" in recent years, which has evoked institutional issues and power struggles in the rural communities. In this context, there is a need to create a system to govern these collection sites that builds on trust, open communication and cooperation between the community and the government. We recommend, as a starting point, to establish common platforms for stakeholders from different levels and sectors from the government, relevant research facilities and communities on the regional level in both countries. Joint meetings could encourage exchange and understanding, create awareness and provide the opportunity to share local and scientific knowledge among relevant stakeholders. Establishing learning loops is important to be able to adjust to uncertainties and changes in the future – today, yarshagumba has a high market price; tomorrow it might be another natural resource.

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