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Knowledge, parks and cultures – Protected area management and intergenerational learning

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Abstract

Modern protected areas are widely recognized as a major tool for sustainable development and the tasks they fulfil go far beyond conservation only. They are often in charge of regional development, provide environmental education and try to strengthen complete regions. Their management bodies document, apply and share knowledge and generate often innovative knowledge by combining state-of-the-art scientific knowledge with practical local experiences. Protected area managements can therefore be considered knowledge-based organisations.

Consequently, knowledge exchange and intergenerational learning are fundamental. Traditional knowledge, experiences of local residents and regional expertise are invaluable assets for protected area management bodies. However, this knowledge is often in danger of being lost due to out-migration or because it appears to have become obsolete or out-fashioned knowledge, particularly in remote protected areas.

Four protected areas in Austria and Nepal and the knowledge systems of their management bodies were analysed in the course of an interdisciplinary project. This project was aimed to support the international MSc programme "Management of Protected Areas" in Klagenfurt (Austria). By linking elements of knowledge management, cultural theory and protected area management systems a framework for a transcultural exchange of knowledge was elaborated.

In the course of this project the relevance of the intercultural contents for intergenerational learning in protected areas became evident. Different generations can be considered different "sub-cultures". Every generation shares specific features, such as language, values or lifestyles. Consequently, intercultural approaches may provide an interesting impulse for intergenerational learning, which is highly connected with the sharing of tacit knowledge.

This paper depicts some selected results of the project, such as the role of cultural translators and protected area managements as drivers for regional development. Evidently, there is a symbiotic relationship between protected area management bodies and the process of intergenerational learning. Practical examples emphasize the important role of protected area managements to foster intergenerational learning and to preserve ancient knowledge. On the other hand, they also depend on the tacit, regional knowledge of local residents.









Introduction

The global number of protected areas has increased dramatically over the past century. By 2011, 177 000 protected areas covered 23 million square kilometres of land and sea (Bertzky et al. 2012). Managed protected areas like national parks often address issues related to sustainability (Getzner & Jungmeier 2014). Their understanding is illustrated by the sustainability egg model (IDRC 1997; Fig 1). Biosphere reserves, for instance, are considered "model regions for sustainable development" (UNESCO 1996).

Within the last twenty years there was a major shift from pure nature conservation towards a comprehensive and participative approach (IUCN 2005; Getzner et al. 2010). Protected areas, managed in a modern way, follow a "Protection and Use Integrated Approach" (Mose 6 Weixlbaumer 2007). Nature conservation is increasingly perceived as opportunity to enhance tourism (Huber 2011). Protected areas are even considered "landscapes of hope" to boost economic development (Mose 2006).



The dealing with these issues forces the management to find new solutions. Consequently, protected areas are considered drivers for innovation and sustainability in rural areas (Getzner & Jungmeier 2014) forming a new generation of protected areas (Jungmeier 2014). Management bodies have much knowledge about the practical and theoretical implementation of sustainable development.

Figure 1: Sustainability egg model (Huber et al. 2013)

However, the integration of local knowledge is critical to develop locally viable and sustainable solutions. Management bodies often fulfil the role of a "bridging organisation" transferring knowledge from outside the region (e.g. universities or other protected areas) into the region. Protected areas are also learning organizations benefiting from experiences of residents. Knowledge in protected areas is being generated in several ways (Gibbons et al. 1994):

- The synthesis of practical know-how and theoretical, academic or scientific knowledge
- The synthesis of local knowledge and international experiences
- The synthesis of "old", local or traditional" and "new" knowledge
- The synthesis of knowledge of different disciplines and subjects

Cultural diversity is diversity of knowledge

Protected areas are cultural achievements and man-made instititions, which shape and preserve natural and semi-natural areas, sometimes even cultural features. They have to deal with different cultures, approaches and values. They are part of a complex system of interacting cultures (Fig. 2). The understanding of Hofstede & Hofstede (2006), who define culture as "the collective programming of the mind, which differentiates the members of a group or category from people of another group" emphasizes the role of cultural diversity in protected areas. Different generations, for instance, can be considered different (sub)cultures having different perspectives, experiences and knowledge possibly beneficial for protected areas.









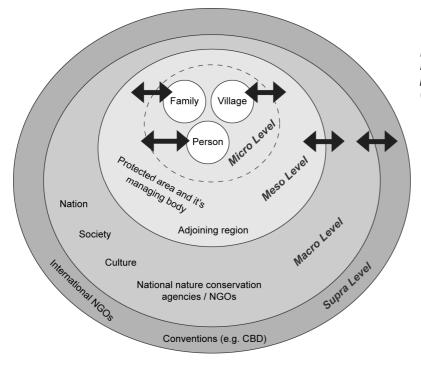


Figure 2: Cultural influences and interaction in protected area regions (Huber et al. 2013)

Research questions

Questions regarding similarities and differences in protected area knowledge and intercultural characteristics in the management of protected areas between Austria and Nepal were answered in Huber et al. (2013). Additionally, the following questions can also be answered by the data collected.

Which role do protected area managements play in knowledge creating and sharing processes and can they contribute to a process of local knowledge exchange and intergenerational learning?

Which aspects of a transcultural exchange can be of interest for an intergenerational exchange?

Methods

The management bodies of Hohe Tauern National Park and Donau-Auen Nationalpark in Austria and Chitwan National Park and Annapurna Conservation Area in Nepal were analysed by using a new analysis tool based on the intellectual capital reporting (ICR) of Austrian universities (Brandner et al. 2006; Huber et al. 2013; Fig. 3). Knowledge assessments for all case study areas were prepared by analyzing existing data and holding workshops with the management. Additionally 20 semi-standardized in-depth interviews in Austria and Nepal and several expert workshops were carried out.









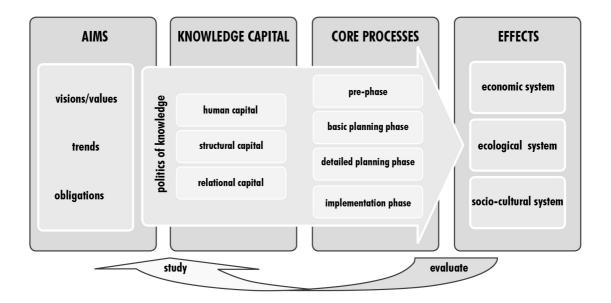


Figure 3: Model for a knowledge assessment for protected area managements (Huber et al. 2013)

Results

Available resources for knowledge sharing processes

Protected area managements are in a unique position. Although being mostly located in remote areas, the results show that management bodies have a number of highly qualified, well-educated and rather young staff, who are able to combine externally gained knowledge with local knowledge and apply it in place (Fig. 5).

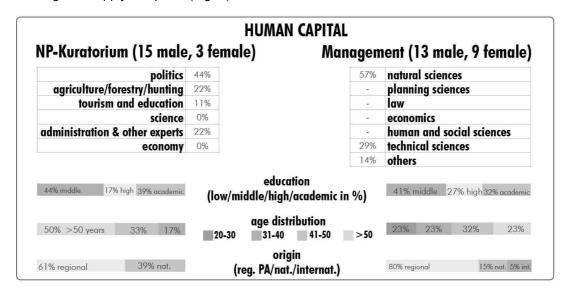


Figure 4: Human capital of the management body of Hohe Tauern National Park (Carinthian part) (Huber et al. 2013)









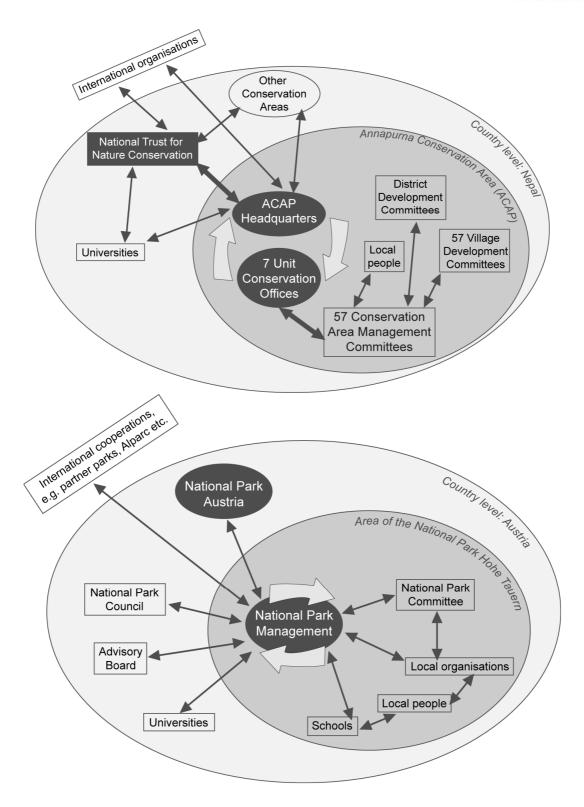


Figure 5: Different organizational relations of management bodies in Annapurna Conservation Area in Nepal (left) and Hohe Tauern National Park (right) (Huber et al. 2013)









Protected area management bodies are important institutions for sustainable development in remote areas, where not much investment is to be expected. The organizational structure of Annapurna Conservation Area is a global best practice example for integrating local knowledge of stakeholders and different social groups and its combination with international expertise (Fig. 6). It allows for self-governance and involvement of local residents. Whilst an umbrella organization provides financial and technical assistance, committees and decision-making bodies of residents develop and implement projects (Baral et al. 2007).

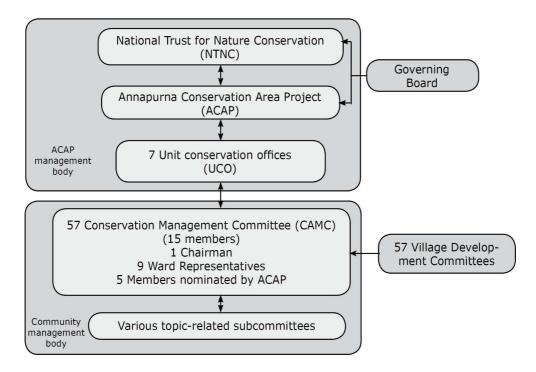


Figure 6: Organizational structure of co-managed Annapurna Conservation Area (Huber et al. 2013, based on NTNC/ACAP 2009). The relevance of "old" knowledge for modern protected areas

Developments such as outmigration often put traditional local knowledge in danger of being lost. However, this knowledge may provide the basis for local management activities and impulses for sustainable development. Three relevant contexts emphasizing the stimulating role of traditional knowledge are identified:

- 1.) Old knowledge in a new context: Protected areas support activities aiming at the reinterpretation of old traditions and thus make traditional knowledge (economically) valuable. An illustrative example is the traditional crossing of the Alps by horses along old mule treks in Hohe Tauern National Park. This tradition and related knowledge was in danger of being lost. However, now horseback-riding along these treks became an attraction for visitors of the national park.
- 2.) Old products and handicraft in a new context: Many protected areas focus on traditional products and encourage their marketing. Visitors of protected areas often appreciate these products and provide a possible market for them (e.g. *Tauernschecken* goats in Hohe Tauern National Park, traditional Tharu handicraft selling in Chitwan National Park).









3.) Yesterday's landscapes in a new context: Traditional pastures and meadows are important for biodiversity conservation (e.g. high alpine pastures). Traditional terracing (e.g. in Annapurna Conservation Area) does not only provide land for agriculture, but also supports the protected area managements' efforts to reduce erosion and loss of soil. In Austria, compensation schemes for farmers to stick to traditional ways of farming to enhance biodiversity provide new sources of income.

Thus, traditional knowledge can be beneficial for protected area managements as well as for the surrounding region. Additionally, protected areas use different methods to spread awareness and knowledge about sustainability. These initiatives can actively contribute to intergenerational knowledge sharing:

- 1.) Junior Snow Leopard Scouts in Annapurna Conservation Area and Junior Rangers in Hohe <u>Tauern National Park:</u> Local children participate in the monitoring and location via traces of snow leopards supporting researchers for a population count. The integration of children into research activities makes nature conservation tangible and interesting for the next generation and knowledge about environmental issues is additionally indirectly transferred to the families. Similarly, the "Junior Ranger programme" in Hohe Tauern National Park in Austria offers a short term training for children, educating them for being "Junior Rangers", who accompany park rangers. Thus, a practical hands-on sharing of knowledge between generations is facilitated.
- 2.) <u>National Partner Schools in Austria:</u> Many schools in national park regions in Austria established formal partnership with the management. Frequent activities such as excursions and projects allow active integration of children into the work of protected areas and increase the awareness of children for their home region.

Facilitating knowledge sharing and exchange on an intercultural level

The project also aimed at approaches for exchanging experiences of protected areas in different cultural contexts. Two are presented here:

Cultural translators— Active facilitators for exchange

Exchange of knowledge between different cultures requires active stimulus. Therefore the involvement of "cultural translators", who are familiar with both cultures, can facilitate the process of exchanging knowledge. They are aware of cultural implications and able to interpret statements or actions based on respective cultural contexts. Cultural translators act as an mediators between social groups (e.g. different age groups). In Nepal protected areas, for instance, employ "community mobilizers" acting as an interface between communities and protected area managements. The skills required to fulfil these tasks are similar to those of cultural translators.

A code of conduct or common principles

If members of different cultures or social groups interact, a code of conduct and basic principles for communication are indispensable. Different cultures have different rules for communication, which might collide and result in misunderstandings. Thus, a code of conduct, meaning agreeing on common rules for interaction such as mutual respect are fundamental. Currently, many organizations or guidelines address this issue (e.g. code of conduct for research or interacting with indigenous communities; e.g. Persoon & Minter 2011).

Discussion

Protected areas are knowledge-based organizations focusing on knowledge on sustainability (Huber et al. 2013; Jungmeier 2014). They seek to integrate local knowledge into the design of measures and programmes. They are able to pick-up local knowledge and combine it with academic or international knowledge to enhance sustainability. This is a symbiotic process.









Protected areas such as Hohe Tauern National Park or Annapurna Conservation Area do not only use the knowledge of residents, but also trigger processes of sustainable development by supporting the combination of old and new knowledge (Chettri et al. 2012).

Considering the network and the human capacity of protected areas, they might be valuable partners for programmes for intergenerational learning. Concluding, it can be stated that protected areas may trigger a process of intergenerational learning by:

- putting old knowledge in a new context
- drawing public attention to old knowledge about the area
- providing a platform for local exchange
- providing an economic perspective for the younger generation

Societal changes and technological progress accelerate the process of losing local knowledge. Protected area managements can create an atmosphere of appreciation for this knowledge and provide stimulus to reinterpret knowledge for new developments. This is a fruitful ground for programmes aiming at intergenerational learning. Protected areas have resources and a vital interest to support these processes.

Regarding the intergenerational aspect, intercultural and intergenerational exchange both require active stimulus via platforms, incentives or programmes. Protected areas are critical interfaces for knowledge sharing by bringing together different organizations, people and stakeholders in the region.

It seems that intergenerational and intercultural exchange have a common basis, which could inspire an exchange of approaches and methods.

Recommendations

Four recommendations are made to enhance intergenerational learning in areas, where protected areas are present. These are as follows:

- If trying to realize programs for intergenerational learning, it is indispensable to develop enduring local platforms. Based on their similar intentions and interests, protected area managements can be valuable partners to support projects or initiatives.
- Different generations can be considered different cultures, which provides a direct link to "diversity management" (Grasenick 2012). The protected area's region and natural resources can provide a common basis for intergenerational understanding.
- Intergenerational and intercultural exchange have a common basis. It is recommended to take a look at intercultural techniques to provide impulses for innovative approaches to intergenerational learning (e.g. mediators similar to cultural translators)
- Involvement of children into protected area management can be a contributor to spread understanding of the children's' origin and connect them with the preceding generation.

Background of the project

The project "Transcultural Exchange of Knowledge about Sustainability" was supported by the research programme proVISION of the Austrian Ministry of Science and Research (Bmwf). The project explored, which type of knowledge is relevant for protected area management bodies in different cultures and if or in which way an exchange of knowledge can be facilitated. The results serve to clarify if the concept and contents of the international master programme "Management of protected areas" at Klagenfurt University are applicable outside Europe. The results were published in the series "Proceedings in the Management of Protected Areas" entitled "Knowledge, Parks and Cultures".









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