Protected Areas in the Slovak Carpathians as a Contested Resource Between Metropolitan and Mountain Stakeholders
On the Road to Local Participation

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AUTHOR’S NOTE

Acknowledgements

The present article emerged at the interface of transdisciplinary research and practice with the Slovak State Nature Conservancy (SNC) and local stakeholders. The authors would therefore like to thank the many initiative people for their engagement for local action on the ground. While we cannot list them all, we would like to mention the mayor of Ubla, Nadeshda Sirkova, and the mayor of Zboj, Ladislav Ladomirjak, both in Poloniny National Park, as well as farmer Jan Bariak from Snohy, in Poľana Biosphere Reserve. We thank Zusana Okániková of Slovak NGO “pronatur” as well for developing a spin-off i.e. a twinning between Entlebuch Biosphere Reserve in Switzerland and Poľana Biosphere Reserve in Slovakia. The process of adapting the Swiss baseline methodology to the needs of large protected area management in Slovakia benefitted crucially from our excellent collaboration with the University of Žilina. We extend our heartfelt thanks to Prof. Dr. Marián Janiga and Dr. Jaroslav Solár of the Institute of High Mountain Biology in the High Tatras. The authors thank the coordinator of this Swiss Contribution programme at SNC, Ivan Koubek, for networking and fostering exchange between conservationists and local stakeholders in the Slovak pilot regions, as well as between Slovak and Swiss colleagues, mayors, farmers, and researchers of CDE at the University of Bern.
“Ultimately conservation is about people. If you don’t have sustainable development around these (wildlife) parks, then people will have no interest in them, and the parks will not survive.”
Nelson Mandela, former President, Republic of South Africa

“Mandela goes Green” – A hunting trip converts the ANC leader to conservation. Mail&Guardian Online, 5 April 1991.

Introduction: Large protected areas in the Slovak Carpathians as suppliers of biodiversity versus vital needs of the local population

1 Local populations were – and still are – frequently deprived of access to resources on which their livelihoods depend. This has inevitably led to conflicts. Taking the example of the Slovak Carpathians, this article describes first innovative steps towards mitigating and resolving the conflicts of interest between conservation policies and local residents’ vital needs by means of participatory negotiations. The living conditions of people in and around such large protected areas (LPAs) are substantially poorer than in the regional (kraj) centres. Baseline studies on the project’s pilot LPAs provide detailed evidence (Solar et al. 2014; Svajda et al. 2014).

2 National Parks and other categories of large protected areas have been a standard approach to preserving biodiversity worldwide. Since 1990, the involvement of local people in conservation activities in large protected areas has become a major feature of national and local protected area management. The value of strict reserves and the usefulness of involving local people in wildlife management has been increasingly debated for a long time (Abbot et al. 2001). Many conservation professionals agree that local people should capture at least some of the benefits of biodiversity conservation (Norton-Griffiths and Southby 1995).

3 Meanwhile, in mountain regions worldwide, efforts are being made to balance the objectives of biodiversity conservation with the socio-economic interests of local populations. These efforts are particularly advanced in the European Alps. In Switzerland, for example, there are area-based instruments to compensate individual mountain farmers for the greater difficulties they experience in production and in their efforts to maintain the cultural landscape compared to their lowland colleagues.

4 At a more comprehensive level, the Swiss government took a fundamental political decision to conserve mountain areas already in the middle of the 20th century. The goal was and still is to preserve their important functions as tourist destinations and as refuges for the conservation of cultural and natural landscapes. The state (at the national and subnational levels) supports conservation by means of financial contributions for infrastructure development in all sectors, and especially in tourism. Of course, this development strategy for mountain areas cannot be transferred from a small and wealthy country like Switzerland to the fairly new EU member state of Slovakia. But despite the differences between the two countries, we argue that the approaches to local participation applied in Swiss mountain areas are well-suited for adaptation to the Slovak...
transition context, provided that this happens in a joint learning process. Accordingly, such adaptation and joint learning was the aim of this on-going Slovak–Swiss cooperation project.

In this paper, a Slovak–Swiss team of authors describes this action research project and the resulting adapted approach to managing governance conflicts between endogenous and exogenous stakeholders. In doing so, we reflect on disparities between urban and mountain areas in an Eastern European country which has a very large share of sparsely populated mountain territory. Drawing on project results, we seek to enrich the debate about divergences in regional development, growing regional disparities, and strategies to overcome conflicts of interest and regional divides.

**Research aims and methodological overview**

Transdisciplinary research brings together academic researchers and non-academic stakeholders to work towards a common goal and create new knowledge and theories. Transdisciplinary research is defined as interdisciplinary research with stakeholder groups (stakeholders) involved in all phases of the endeavour (Trees et al. 2006, Mollinga 2010).

Transdisciplinary research tries to grasp the complexity of problems. It aims to take into account the diversity of life-worlds and scientific perceptions of “problems, to link abstract and case specific knowledge” and to develop knowledge and practices that promote what is perceived to be the common good (Pohl and Hirsch Hadorn 2007). All participants provide their own, unique perspective, complementing each other and jointly forming a more complete description of knowledge than any single individual could achieve. (Miller et al. 2008). Concerning knowledge production, we clearly understand the form of knowledge produced during participatory research on LPA management as transformation knowledge according to the definitions by Wiesmann and Gallati (2011). Moreover, we follow the characterisation of transdisciplinary research proposed by Habermann, B. et al. (2013) and Smith (2007). These authors defined transdisciplinary research as having four main properties:

- reaching beyond disciplines;
- reaching out to other stakeholders;
- action-oriented;
- dynamic and reflexive.

These principles seemed highly adequate in view of the Slovak transition context, and we used them as a basis for developing research questions and organising the transdisciplinary process into research steps (see Box 1 below).

**Box 1: Four main properties of transdisciplinary research; they are required of research aiming to balance the needs of LPA management with those of local populations in the Slovak Carpathians, and corresponding research questions.**

- **a) Reaching beyond disciplines**: How can we involve other disciplines beyond those related to nature conservation? How can we best create a socio-economic baseline for the LPA regions? What causes conflict between sectoral nature conservation – which is supported by the international conservation community – and local
people’s vital needs? How can land use conflicts at the interface of conservation interests and sustainable local development be made transparent and, together with the local population, tackled or even solved?

b) Reaching out to other stakeholders: How can transdisciplinary research methods help to mitigate conflicts between the vital needs of rural populations living in or near LPAs, national and international conservationists’ efforts to protect wilderness, and – in some cases – the ambitious development visions promoted by planning authorities in the kraj centres?

c) Keeping research action-oriented: What “hands-on” tool might help to promote local initiatives that use the natural resources of protected areas without harming nature?

d) Keeping research dynamic and reflexive: Research-to-practice and research-to-policy communication is crucial. What stakeholders currently influence planning in and around LPAs, and who should do so in the future? What stakeholders need to be involved a priori in the action research described here?

Fig. 1: Map of Slovakia’s recent (2014) large protected areas (LPA in dark green). The action research described in this paper was conducted in the Pofana Protected Landscape Area (PLA), the Vihorlat PLA, and the Poloniny National Park (NP).

The project started out with the clear purpose of managing conflicts between the Slovak State Nature Conservancy, NGOs, and local resource users. Its detailed methodological procedures and results are described in another publication. However, this case study has more general implications. The above conflicts can be read as a latent conflict between urban decision centres and mountainous peripheries with the vital interests of its inhabitants. This conflict and efforts to overcome are subject of this article. To aid its understanding, we begin with a brief history of how environmental issues have been managed in Slovakia over the past century.
A brief history of nature conservation in Slovakia

Despite its small size, Slovakia spans diverse abiotic and biotic conditions, and the Slovak State Nature Conservancy (SNC) has succeeded in preserving a fairly rich biodiversity. The present system of nature protection evolved gradually over the past century (Vološčuk, 2005). The national network of LPAs was largely created after 1948, in the former state of Czechoslovakia, which was a member of the Eastern Bloc’s Council for Mutual Economic Assistance (COMECON) and had a monocentric urban system in place, headed by the capital city of Prague. In 1993, Czechoslovakia split up into the Czech Republic and the Slovak Republic. Both countries joined the European Union in 2004. More than 90% of today’s protected areas were established between 1970 and 1990. LPAs were established according to functional, sectorally defined criteria, meaning that areas which were deemed unsuitable for productive agriculture, heavy industry, military uses, or other strategic functions – in short, areas that offered little value added – potentially qualified as protected areas. Funding was planned centrally and distributed through ministries having influence on spatial planning such as forestry, agriculture, nature conservation and so called “regional planning”. Thus, organisations for nature conservation were established only to provide professional supervision and define technical requirements for nature protection. Effective tools for actually managing protected areas were lacking. The basic criterion for defining a protected area was its integrity and naturalness; the measure of “performance” for nature conservation was the total area of protected areas and not their representativeness. This approach led to a concentration of protected areas in Slovakia’s mountain areas and unequal representation of different types of ecosystems – mainly overrepresentation of forest and mountain ecosystems and underrepresentation of lowland and aquatic ecosystems (Urban, 2005).

The early establishment of a considerable number of LPAs between 1930 and 1992 is one of the most valuable nature conservation outcomes of the first Czechoslovak Republic (1918–1938) and socialist Czechoslovakia (1945–1989) (see Box 2 below).

Box 2: History of Slovak Nature Conservation periods since 1918

<table>
<thead>
<tr>
<th>Period</th>
<th>Years</th>
<th>Nature conservation approach</th>
</tr>
</thead>
</table>
| First Czechoslovak   | 1918–1938   | **Game and mountain reserves**  
First acknowledgement of the only remaining primary beech forests in Europe; species protection and game preservation for trophy hunting |
<p>| Republic             |             |                                                                                                                                                           |
| World War II         | 1939–1945   | <strong>Activities interrupted by war</strong>                                                                                                                        |</p>
<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialist Czechoslovakia (ČSSR)</td>
<td>1945–1989</td>
<td>“Fortress approach” in representative LPAs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creation of a national network of LPAs and national parks after 1948, 90% of protected areas established between 1970 and 1990.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Declaration of LPAs (21 of 23) that are more or less representative for nearly all major ecosystem types; focus on mountains and forest, deficits in lowlands and wetlands.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of effective tools for actual management of protected areas. “Fortress approach”: no participation of local residents.</td>
</tr>
<tr>
<td>Peaceful proclamation of the Czech and Slovak Federative Republic</td>
<td>1 January 1993</td>
<td>Nature and landscape protection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In 2002 - nine years after independence – the National Act No. 543/2002 on nature and landscape protection came into force; categories and subjects of conservation (at the level of ecosystems, habitats, and species) were not specified.</td>
</tr>
<tr>
<td>Slovak nature conservation and protected areas under pressure</td>
<td>1993–2003</td>
<td>Forest logging and mining</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increased logging and mining activities in and around mountain protected areas.</td>
</tr>
<tr>
<td>Accession to the European Union</td>
<td>1 May 2004 – now</td>
<td>Adaptation to EU legislation and international labelling of LPA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adaptation to EU legislation ongoing since 2004. LPAs included in Natura 2000, recognised as UNESCO Biosphere Reserves or World Heritage sites, or awarded diploma of the EU Council.</td>
</tr>
</tbody>
</table>

At the end of 2014, according national legislation, Slovakia had 23 LPAs – 9 national parks and 14 protected landscape areas – covering 22.65% of the country’s territory (Fig. 1). Several of these LPAs are also protected under Natura 2000 according EU legislation, recognised as UNESCO Biosphere Reserves or World Heritage sites, or hold a diploma of the EU Council. Efforts to obtain these various labels were led by the Slovak Ministry for the Environment and, after its foundation in the late 1990s, by the SNC. Dedicated entirely to nature and species conservation, this organisation participated in all major labelling processes proposed by EU and worldwide conservation agencies. Today, this double or even triple labelling of protected areas proves challenging when it comes to participation: The implications of the various protection statuses for participatory management in the concrete local context is difficult to understand both for the general public and for local populations following and engaging in national to local political discussions about LPAs.

Nevertheless Slovakia’s current network of LPAs is of paramount importance for nature conservation throughout Central and Eastern Europe; among other things, the Eastern
Carpathians in Slovakia, Poland and western Ukraine host Europe’s only remaining primary beech forests.

Recent changes and new approaches for protected areas

In more recent decades, the concept of nature conservation has been evolving from a strict conservation approach to a more active approach that takes into account not only ecological interactions but also economic and sociocultural aspects. Some authors have described this as a paradigm shift from “protected areas without people” to “protected areas for people” (Phillips, 2003). Shifting concepts in the management of protected areas are connected with changes in society and are providing new instruments and approaches which are characterised by managerial control of the areas, protection of spaces and processes, and the linkage of nature conservation and economic development (Jungmeier et al., 2008).

In the transition countries of Central and Eastern Europe, institutional changes undertaken in the late 1980s reflected a massive political, economic, and social transformation (Kluvánková-Oravská et al., 2010). Protected areas in Slovakia were established during the post-World War II period. This happened in a top–down fashion, with no or only very poor discussion processes among relevant stakeholders (Švajda, 2008). In addition, the situation is complicated by complex and varying patterns of landownership and land tenure in protected areas. These are key reasons why local people’s support of nature conservation has remained so low.

One of the critical issues is insufficient communication and participation: there is no platform for involving all stakeholders in planning processes for protected areas. Meanwhile, a wealth of effective strategies for communication, education, and creating public awareness have been developed around the world to motivate people and engage them in biodiversity conservation and sustainable use of natural resources (Hesselink et al., 2007; Getzner et al. 2010). The main goal of protected area management should be to achieve an optimal balance between biodiversity conservation and adequate socio-economic development in and around protected areas. The main tool for achieving this goal is a methodology for participatory management of protected areas (Švajda & Fenichel, 2011).

Key questions in participatory processes include which stakeholders to involve when, and how to identify stakeholders in the first place (“reach out to other stakeholders”). The Slovak–Swiss project’s core team – consisting of representatives of SNC headquarters (external strategic expertise), local LPA administrations (internal local expertise), and the partner universities (external strategic and methodological expertise) – discussed and answered these questions in detail, depending on the local situation in the pilot areas:

• Does it make sense to involve stakeholders from national institutions (especially the Ministry of Environment and Ministry of Infrastructure and from spatial planning institutions), who have an academic background and do not represent the rural population? – Yes, but only in meetings with the core team.
• Does it make sense to involve powerful local stakeholders (forestry practitioners, representatives of large-scale farming and other regionally important industries)? – Yes, but mainly by the local LPA administration.
• Does it make sense to involve active local stakeholders and local politicians who are known to the LPA administration? – Yes, but mainly by the local LPA administration.
• Does it make sense to involve stakeholders who are not engaged in conservation activities or who are in conflict with the LPA administration (logging companies, hunters, large-scale farmers, representatives of cultural organisations, the Church, and minority groups)? – Yes, this is important and should be done with the core team’s practical and methodological support.

Latent land use conflicts and efforts to mitigate through participation: Methodological test on the ground

The three pilot LPAs for testing this action research approach were the Poľana Biosphere Reserve, the Poloniny National Park, and the Vihorlat Protected Landscape Area (see Fig. 1). Together with our main partner, the SNC, we introduced our transdisciplinary approach in the pilot areas under the label of “forum process”. Our research focused not only on the LPA itself but also on the surrounding region, and comprises three core elements (Fig. 2):

1. **Assessment (baseline)** of development **status and trends**: What is the economic, social, and environmental situation within the larger region? This also includes the identification of key development stakeholders (government, private sector, local population, and civil society).
2. **Hearings** with key stakeholders: Taking the **baseline** as a point of departure, stakeholders present their opinions, visions, and expectations, and **negotiate desirable futures**.

3. **Forum process** for identifying and implementing concrete actions on the ground: This process addresses questions such as what the main stakeholders consider to be the key development issues, and which concrete activities in and around protected areas (called **Seed Money Actions, or SMAs**, in the context of this project) can help to address these issues.

This forum process helps to mitigate conflicts between the interests of natural-science-based academic (and in Slovakia fairly strict) conservation stakeholders and local populations' participation and benefits. The state of the art on the methodology of such transdisciplinary processes was reviewed comprehensively by Wiesmann et al. 2005.

**Assessment of the socio-economic baseline situation**

An assessment of the socio-economic situation in and around the three pilot LPAs was conducted on the ground, including discussions with representatives of the municipalities in the region and with the LPA managers (Švajda et al., 2014; Solár et al., 2014).

In socio-economic terms, the most important development observed is the marked loss of population in the settlements within Poľana Biosphere Reserve over the last 40 years, which is mostly due to outmigration. The number of people living in the 3 settlements declined from about 750 in 1970 to just above 200 in 2011 (Fig. 3B), while the total population of the Biosphere Reserve region – defined as the municipalities having a share of territory in the Reserve – remained constant, decreasing only slightly from 43,000 to 42,000 over the same period (Švajda et al. 2014). The population decline in the Biosphere Reserve is accompanied by increased ageing. These developments are the most important drivers of forest encroachment: the open grazing areas are simply no longer in use, as the few remaining farmers focus on managing the land located closer to the settlements (Fig 3A). Land tenure arrangements in the Biosphere Reserve were found to be highly diverse. Unlike in the socialist era, today there are as many as ten categories of landowners, including state agencies such as the forest authority, which owns the largest share; local municipalities; large-scale farm cooperatives; the Church; and private owners (Fig. 3C). This last category consists mostly of small-scale farmers, but it also includes tourism enterprises such as the hotel at the top of Poľana mountain. All these parties hold diverse specific stakes in the protected area and hence need to be consulted when it comes to negotiating a sustainable future for Poľana.

In terms of regional development, the question remains what local initiatives could be promoted to strengthen the livelihoods of the remaining population in the Biosphere Reserve and prevent further outmigration, and to support local small-scale farming.
Fig. 3: Baseline data from Pofana Biosphere Reserve. Changes in the area of permanent grassland in Pofana Biosphere Reserve between 1956 (green) and 2003 (red)

Fig. 4: Depopulation in Pofana Biosphere Reserve

Facilitating the transition to participation: the format of hearings as negotiation platforms at the municipality level

The centrepiece of the participatory negotiation processes conducted in the pilot LPAs (see Fig. 2) by the local LPA administrations were hearings and expert panels. They lasted from spring 2013 to fall 2014 and were moderated along the four research aims defined in chapter 2. The setup of the processes was based on experiences from Switzerland.
Accordingly, in a preliminary step, the Swiss concept (Wiesmann et al., 2005) had to be adapted to the very different Slovak transition context. This included redefinition of the objectives of the process, resulting in four main objectives:

- Identify urgent local development needs
- Prioritise activity lines and measures
- Develop and shortlist possible pilot projects (so-called “Seed Money Actions” or SMAs)
- Identify innovative transboundary projects for cooperation with Poland and Ukraine

**The “forum process”: advancing implementation of locally driven pilot projects (Seed Money Actions)**

24 The final and most important part of the participatory process is the “forum”. In parallel to this negotiation and decision-making process, the LPA administrations financed and implemented small pilot projects together with local stakeholders – the so-called Seed Money Actions or SMAs. SMAs implemented in the pilot LPAs included landscape conservation efforts, such as mowing of pastures, and projects to improve tourism infrastructure. Experience from the pilot LPAs indicates that SMAs could be a promising new form of cooperation between the SNC and local LPA administrations, on the one hand, and local populations, on the other, to achieve a more grounded approach to conservation. The local beneficiary implementing the project or the local state administration were required to contribute half of the required funds.

25 The SMAs completed in the three Pilot LPAs can be categorised into the following types:

- Compensation of farmers’ work on remote and marginal land serving either the sole purpose of protecting the landscape or re-establishment of the traditional use of open meadows (pot’anas) in the forest lands
- Development of small-scale infrastructure, for example for ecotourism, forest protection, environmental education, or bike and hiking trails
- Cooperation of LPA administrations with local community groups to obtain professional advice on local product marketing
- Subcontracting to obtain expertise (e.g. on funding instruments) with a view to ensuring project sustainability and exploring options for continuing and scaling up SMAs (see Section 5.5)

26 An additional goal of participatory SMA development was to mitigate conflicts by facilitating more systematic communication. This contributed to the overall aim of our transdisciplinary research endeavour to prevent potential conflicts and foster cooperation at the interface between economic development and nature conservation.

**Results and recommendations identified during the forum process**

27 The negotiations during the forum processes and the implementation of SMAs led to formulation of the following recommendations for the local level:

- Mitigate remaining top–down approaches to LPA management.
- Introduce a regime of LPA governance through institutional development: Slovak legislation on LPA management allows for so-called participatory “councils”.
- Identify and manage issues arising from changes in local land tenure after 1992.
- Reduce competence splitting and mitigate privileges for individual (agricultural or forestry) stakeholders.
A set of recommendations was also derived for decision-makers at the national level, that is, at the SNC and the Ministry of Environment:

- Mitigate or even abolish splitting of LPA management competences at the ministerial level in Bratislava between the domains of regional development, agriculture, forestry, and nature conservation (currently, in most LPAs the LPA administration holds only 10–15% of the land).
- Enhance and promote participation and cooperation, especially among stakeholders from forestry and agriculture in and around LPAs.

**The challenge of ensuring continuation and scaling up successful local pilot projects (SMAs)**

The action-oriented nature of our transdisciplinary research approach raises two crucial questions: How can it be ensured that local stakeholders’ innovative projects continue on beyond completion of the SMAs? And how can we strategically foster their replication in other communities in and around the LPA?

The aim is to empower farmers and especially small farmers’ cooperatives in and around LPAs to successfully apply for agriculture and conservation funding. This empowerment is based on a mechanism where LPA administrations support the farmers in and around their LPA in applying for funding from EU development programmes, and LPA administrations and farmers then jointly invest the funds according to a scenario of “conservation for development”. The SNC has commissioned a consultancy to prepare an action plan for identifying EU and other funding instruments available for scaling up different types of SMA (Galvanek 2014).

Related to the three pilot LPAs the following SMAs have been implemented and are considered suitable for scaling up:

- **Pol’ana Biosphere Reserve**: Projects on landscape protection, compensation of farmers for agricultural services such as mowing, targeted pasturing, or targeted cutting of encroaching trees
- **Poloniny National Park**: Broad range of development and infrastructure projects in the areas of tourism, nature promotion, forestry, information and awareness raising, construction of bridges, and others
- **Vihorlat Protected Landscape Area**: Community-based projects to develop tourism infrastructure, raise awareness, foster nature recreation, and develop other small-scale infrastructure

**Lessons learnt**

**Achievements and challenges of the transdisciplinary approach**

The learning process analysed in this article clearly showed that one main challenge is the disagreement between local and national stakeholders on how to bring together strict nature conservation in Carpathian LPAs and sustainable benefits and better living conditions for local populations. With regard to the four properties of transdisciplinary research (see Section 2), we identified the following achievements and challenges:
Reaching beyond disciplines

Achievements: Action research in the pilot LPAs included a baseline assessment including, for example, sociological and market research on local products, an inventory of land tenure, and scenario development on migration. The LPAs’ possible economic impacts and the potential for developing innovative local products were also assessed. The aim of this approach was to identify options for developing a closer market-oriented cooperation between mountainous LPA regions and regional kraj centres like Košice and Prešov in this underdeveloped area of Eastern Slovakia. A similar baseline method was applied in a study of the northern Caucasus (R. Gracheva, Th. Kohler, J. Stadelbauer, and H. Meessen. 2012).

Challenges: The main challenge was the heterogeneity of the LPAs assessed. Power relations differed strongly depending on the roles of the various relevant national ministries (agriculture, forestry, defense, and regional development) and the SNC. Another challenge was the differences between the LPAs and their surrounding municipalities in terms of geographic location, economic wealth status, and complexity of land tenure.

Reaching out to other stakeholders

Achievements: Diverse state, local, and private institutions and individuals for the first time entered negotiations focusing on a specific biodiversity hotspot region during the forum process. First steps were taken to mitigate latent conflicts, which helps to strengthen common regional development.

Challenges: Analysis of the stakeholder processes showed that all steps depend heavily on who identifies and invites the stakeholders. In the process described in the procedure scheme (Fig. 2), stakeholder selection and invitation was done by the directors of the given LPAs. In one pilot area this led to a focus on landscape protection, whereas in another pilot area measures focused more on cultural heritage and tourism. A second round of stakeholder involvement was needed to integrate these two fields of cooperation into a common procedure.

Action-oriented

Achievements: The results achieved on the ground through locally driven Seed Money Activities (SMAs) show that SMAs are a fruitful new form of cooperation between protected area managers and local inhabitants. Such activities may increase the acceptance of LPAs among locals by enabling them to obtain more tangible benefits. A high impact was achieved because the SNC adapted the methodological procedure of SMAs and invested additional funds into 17 SMA for the Poloniny and Vihorlat pilot LPAs.

Challenges: The greatest challenge was the sustainability – in both ecological and economic terms – of the SMAs implemented. This means mainstreaming concrete actions within the specific LPA itself, but also within other LPAs in the area of the Carpathian Convention. Many good practices exist in Polish and Slovak (and Ukrainian) LPA regions to foster integration of nature conservation and sustainable regional development. A specific project component is working on linking this SMA approach to relevant EU instruments, such as the EU–LEADER approach for local development initiatives in remote and
mountain regions, which seeks to develop LPA regions’ touristic assets and their potential for local product marketing.

Dynamic and reflexive

**Achievements:** First steps have been taken towards opening up the “fortress approach” (strict nature protection in LPA) and creating dynamics for locally based concepts of sustainable regional development. After decades of top-down definition of protected areas, followed by the privatisation of agricultural land and pastures (as of 1990), the SNC has become more open to participation in order to better balance nature conservation and local benefits.

**Challenges:** The main challenge will be to disseminate our transdisciplinary research approach to education institutions in forestry, agriculture, rural infrastructure development, and conservation. It will also be essential to initiate, jointly with the SNC and active communities, a bottom-up policy dialogue, building on examples of successfully implemented Seed Money Activities, with ministerial and spatial planners and decision-makers in the kraj centres and in Bratislava.

Nature conservation in the Slovak Carpathians: Specific interests of urban and mountain stakeholders

Regarding the topic of “mountains as suppliers”, this study is of particular interest in terms of how stakeholders expressed their interests depending on their position as urban skilled researchers, as decision-makers at the national ministries involved in spatial planning, and the local rural population. This should reflect the relationship between national agglomerations and the countryside. (Stakeholder involvement and mountain focus see: Ariza C., Maselli D., Kohler T., 2013)

Analysis of the forum process with regard to the various stakeholders’ perspectives and main interests shows that this relationship is complex and greatly depends on institutions that developed over time, as well as on unequal population density.

In view of this complexity, the stakeholder analysis summarized in Table 1 was based on the following guiding questions: (a) How strongly do stakeholders focus on nature conservation and/or local development? (b) Do they have a rural development perspective focusing on their specific mountain area or rather a general planning perspective based on conceptual considerations?

**Table 1.** Stakeholder categories and their interests: how strong is their mountain or rural perspective?

<table>
<thead>
<tr>
<th>Stakeholder category</th>
<th>Focus on nature conservation (assessment + to ++++)</th>
<th>Focus on local development of LPA region and income generation (assessment + to ++++)</th>
<th>Main perspective (local versus national)</th>
<th>Comments on specific stakeholder perspectives</th>
</tr>
</thead>
</table>

*Journal of Alpine Research | Revue de géographie alpine, 103-3 | 2015*
<table>
<thead>
<tr>
<th>Category</th>
<th>Importance</th>
<th>Context</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>State forest management</td>
<td>+</td>
<td>+++</td>
<td>Both</td>
</tr>
<tr>
<td>Local forest enterprises</td>
<td>+</td>
<td>+++</td>
<td>Both</td>
</tr>
<tr>
<td>Small private forestry cooperatives</td>
<td>++</td>
<td>++</td>
<td>Local</td>
</tr>
<tr>
<td>Small businesses (not including rural tourism)</td>
<td>+</td>
<td>+++</td>
<td>Local</td>
</tr>
<tr>
<td>Rural “soft” agro-tourism enterprise</td>
<td>+</td>
<td>+++</td>
<td>Local</td>
</tr>
<tr>
<td>Larger-scale tourism and resort enterprises</td>
<td></td>
<td>++++</td>
<td>National</td>
</tr>
<tr>
<td>Local mayor or community representative</td>
<td></td>
<td>++++</td>
<td>Local</td>
</tr>
<tr>
<td>Resident / active farmer in village</td>
<td>+</td>
<td>+++</td>
<td>Local</td>
</tr>
<tr>
<td>Three LPA directors</td>
<td>+++</td>
<td>+++</td>
<td>Both</td>
</tr>
</tbody>
</table>

- General planning perspective, benefits from state-owned forests, export orientation; large forest divisions.
- Local and regional development perspective, rarely export-oriented. Active on small to medium forest parcels.
- General interest to use unified development approaches for mass tourism resorts – especially ski resorts.
- Openness to re-thinking, depending on sectoral education before 1990 or knowledge of recent nature conservation approaches.
<table>
<thead>
<tr>
<th>Role</th>
<th>Level</th>
<th>Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodiversity expert from LPA Administration</td>
<td>Local</td>
<td></td>
</tr>
<tr>
<td>National Nature conservation NGO’s local branch office</td>
<td>National</td>
<td>Urban intellectual orientation</td>
</tr>
<tr>
<td>Local biology teacher</td>
<td>Local</td>
<td></td>
</tr>
<tr>
<td>District pope</td>
<td>Local</td>
<td></td>
</tr>
<tr>
<td>Representative of a local “EU-LEADER” group</td>
<td>Both</td>
<td>Integrated mountain and general planning perspective, conceptual level</td>
</tr>
<tr>
<td>University partners from the 2 partner countries</td>
<td>Both</td>
<td>Integrated mountain and general planning perspective, conceptual level</td>
</tr>
<tr>
<td>Project implementer of other international or Swiss sustainable regional development projects</td>
<td>Both</td>
<td></td>
</tr>
<tr>
<td>Representative of SNC, management level</td>
<td>Both</td>
<td></td>
</tr>
</tbody>
</table>

**On the road to local participation**

Analysis of recent Slovak conservation approaches, especially those of the State Slovak Nature Conservancy (SNC) and of the national conservation NGO VLK (Slovak for “wolf”), showed that a sectoral approach banning human use of protected areas prevailed until about a decade ago. It involved strict central state control over protected areas and proved unpopular, inefficient, and costly. Around 2000, this sectoral conservation approach began to shift towards “participatory” or “community” conservation, which aims to return power and decision-making to the local level and to involve communities in a bottom-up, participatory way (Meessen 1992; Meessen et al. 2003; Svajda, 2008). Through the impact of this on-going SNC project “fortress approaches” are changing, but slowly, or as one key official of the Slovak State Nature Conservancy put it: “After decades of top-down definition of protected areas, followed by privatisation of agricultural land and pastures as of 1990, we really need a transition to participation to better balance nature conservation and local benefits.”

The approach discussed in this paper supports innovative combinations of sustainable regional development and nature conservation in LPAs involving relevant stakeholders...
with focus on nature conservation and/or local development. It does so by moderating and facilitating joint development of recommendations and tools for their implementation on the ground inviting multi-level stakeholders as well which bring in an external general planning perspective.

49 This perspective at the local and Kraj levels has developed from a medley of the historical possibilities of a top-down approach (no private landownership in Slovakia before 1990 to hinder LPA creation) and the similarly top-down functioning of current EU funding instruments. Both institutional settings and their instruments were and are hardly adapted to the needs of the Carpathians’ remote mountain areas.

50 Based on the results of our transdisciplinary research experience, we argue that LPA management in such regions needs to become more integrative. Spatial development at the kraj level must show greater awareness of the value of LPAs. It needs to harness the touristic potential and attractiveness of both their wilderness and their cultural landscapes to promote local sustainable development integrating the needs of locally thinking stakeholders having a “Carpathian” mountain perspective, for example in the districts of Košice and Prešov.

51 At the same time, there is a continued risk of expansive tourism development – especially in light of the diverse financing opportunities provided by EU Structural Funds clearly developed from a kraj or even national level. In particular, efforts are being made to develop ski resorts that are poorly adapted to future climate change, with oversized hotels and holiday homes. Such speculative investments often depend on outside – not local - capital along with EU development funds. Neither of these funding mechanisms take account of the option of less invasive agro tourism, which could be offered and developed by the local population.

52 The participatory process presented in this paper – with its hearings, forum process, and implementation of SMAs with multi-level stakeholder participation (see table 1) – contributes to mitigating such conflicts and disparities between remote Carpathian regions in the border region between Slovakia (Košice and Prešov), Poland (Rzeszów), and Ukraine (Uzhhorod) and the kraj and oblast centers. Especially the approach of “Action-orientation” on the ground, implementing concrete pilot projects jointly with and for the local population (“Seed Money actions”) the first time was conducted with lead by a State Nature Conservation Agency and contribution and cooperation with the local population. Thus it was possible to join sectoral conservation approaches developed from an “urban” perspective and local needs on the ground.

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NOTES

1. This article presents some of the results of a project entitled “Nature Conservation in the Slovak Carpathians” in the framework of Switzerland’s Enlargement Contribution for the new member states of the European Union. A joint Slovak-Swiss financing mechanism enabled Slovak project partners to implement small innovative projects proposed by local stakeholders – so-called Seed Money Actions (SMA).

ABSTRACTS

In Eastern Europe’s westernmost mountain region, the Carpathians, the Slovak State Nature Conservancy is preserving a unique biodiversity in line with directives of the European Union. This is being done in large protected areas (LPAs). In this paper, we discuss current challenges of LPA management with a particular focus on contradictions between local people’s views and nationally to internationally determined sectoral planning strategies. We take stock of the benefits LPAs offer local populations, analyse the reasons for conflict between conservation interests from outside the region and local people’s vital needs, and explore ways of uncovering, tackling, and solving land use conflicts at the interface of national or international conservation interests and sustainable local development. Slovak and Swiss universities (Banská Bystrica, Žilina, and Bern) and nature conservation partners adapted, tested, and analysed a transdisciplinary research approach to mitigate land use conflicts in and around LPAs. A joint Slovak–Swiss financing mechanism enabled Slovak project partners to implement small innovative projects proposed by local stakeholders – so-called Seed Money Actions (SMAs). First results show that this might be a fruitful new form of cooperation between protected area managers and local populations, as it may ultimately lead to a higher acceptance of nature conservation among locals while offering Slovak mountain farmers more tangible benefits from nearby protected areas.

INDEX

Keywords: large protected areas, centre–periphery conflicts, functional specialisation, wilderness, transdisciplinary research bottom-up policy dialogue, Seed Money Actions (SMAs), Slovak Carpathians

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