Rural tourism and protected areas – factors to increase resilience of rural areas

Anton PERPAR, Andrej UDOVČ

Received: September 12, 2006; accepted: June 20, 2007.

ABSTRACT

The study analysed the influence of presence of protected area on the vulnerability and resilience of the surrounding region in different socio-economic and natural shocks and perturbations. For the study two areas were selected: area of Triglav national park (TNP), as area with highly diversified rural tourism and area of Kozjansko regional park (KRP) as area with low level of rural tourism diversification. The primary data collection was conducted with use of in-depth interviews among relevant stakeholders. In each area some interviews were carried out, where some interviews were representing multiple stakeholders also. The results of the analysis mostly confirmed our hypothesis. We could recognize that the diversity of actors and social roles are essential as sources of stability, resilience, robustness and integrity in the social dimension of natural resource management, that an ecological regime shift or collapse does not necessarily result in a regime-shift or collapse of the social-ecological system, that an adaptive governance framework relies critically on the collaboration of a diverse set of stakeholders operating at different social and ecological scales, that good governance of the socio-economic domain does not necessarily imply maintaining a stable / resilient / robust / integer social-ecological system and that institutions, social networks and organisation interact across scales. On the other hand a hypothesis that more diverse tourism leads to higher stability, resilience, robustness and integrity of social-ecological systems was not confirmed.

Key words: rural tourism, protected areas, resilience, socio-ecological system, rural development, innovation, learning, vulnerability

---

1 This research was financed under the EC’s FP5, Quality of Life and the Management of Living Resources (QLK5-CT-2002-02718). The EC is not responsible for the content of this paper.
2 Assist., M.Sc., University of Ljubljana, Biotechnical Faculty, SI-Ljubljana, Jamnikarjeva 101, anton.perpar@bf.uni-lj.si
3 Assist. Prof., Ph.D., ibid, andrej.udovc@bf.uni-lj.si
IZVLEČEK

PODEŽELSKI TURIZEM IN ZAVAROVANA OBMOČJA – DEJAVNIKI POVEČANJA PROŽNOSTI PODEŽELSKIH OBMOČIJ


Ključne besede: podeželski turizem, zavarovana območja, prožnost, socio-ekološki sistem, razvoj podeželja, inovacije, učenje, ranljivost

1 INTRODUCTION

This study explores two protected areas in Slovenia with a focus on rural tourism. The main purpose of the research is to analyse a rural tourism situation in two areas and to explore the influence of tourism in rural areas on resilience of the region. The analysis focused on social, economic and environmental aspect of protected areas.

The study areas were selected upon two most important criteria presented below:

- Protected area established at least 15 years ago (selected parks: Triglav National Park (TNP) and Kozjanski Regional Park (KRP) as they were the only parks that were established more than 15 years ago in Slovenia);
- Extent of tourism diversification – TNP is characterized by highly diversified forms of tourism activities and infrastructure, while in the KPR the activities offered to tourists and tourism infrastructure are not so diversified yet.

The main research objective was to understand the interrelations between the development of the tourism in investigated regions (along with its specificity) and: stability, resilience robustness and integrity of the entire region.

The following list highlights the main elements of the analysis:

1. Analysing the functioning of social-ecological systems of two chosen regions in Slovenia is the general aim of the research.
2. The analysis focused on the key dimensions for a functioning system over time, namely: integrity, robustness, stability and resilience (Stirling, 2005).
3. The four dimensions were treated as interdependent.
4. The context for undertaking the analysis consisted of: ecosystem specificity, level of biodiversity, cultural values, actors’ behaviour and institutional context.

5. Functioning of social-ecological systems is also conditioned by internal and external factors having an influence on the system. These factors differ from each other not only by their character (biophysical vs. socio-economic), but also by impetuosity (shocks vs. shifts). As part of the research, in each case there were four variants of factors of change identified, which have an influence on the system.

6. Adaptation processes to the identified shocks and shifts were analyzed with particular focus on two processes: institutional change and social learning.

Initially, both selected regions were analysed separately, followed by a comparative analysis of both cases which permitted identifying the distinctive ways of adaptation to changing conditions on socio-economic and natural character.

This study has above all empirical character and it presents empirical material collected with adopted assumptions and aims of the examination. The most important elements of the used theoretical framework are introduced in the following.

**Regions as complex adaptive systems** – the unit of analysis will be social-ecological systems which are: (1) systems composed of biophysical and social components, (2) where individuals have self-consciously invested time and effort in some type of physical and institutional infrastructure that affects the way the system functions over time in coping with diverse external disturbance and internal problems, and (3) those that are embedded in a network of relationships among smaller and larger components (Janssen, Andersen, Ostrom, 2003: 7).

**Development patterns of complex adaptive systems**

Considering the fact that in conducted analysis the dynamics of social-ecological systems will interest us, when considering the processes of adaptation the essential dimensions of system development and their changeability should be recognized. In the process of change basic aspects of analysis will be whether (and if so - in what way) the system is able to maintain its functions. The elements of the system are not homogeneous; they have different adaptive potentials. They are conditioned with the nature of changes occurring in the system and the specificity of factors having an influence on the system. We can point to the following abilities of systems (Stirling 2005, quoted from Stagl 2006: 5-6):

**Resilience** is the ability of a system to maintain its functions in case of episodic exogenous shocks.

**Robustness** is the ability of a system to maintain its functions in case of secular external change.

**Stability** is the ability of a system to maintain its functions in case of endogenous disruptions.

**Integrity** is the ability of a system to maintain its functions in case of secular internal change.

**Institutional Analysis and Development (IAD) framework**

Institutions will be treated by us as the element which strengthens or impairs the adaptive potential of the system in a significant way. For the purpose of this research
a theoretical frame suggested by Elinor Ostrom and its partners (Institutional Analysis and Development) (2005) will be used in the context of analysis of the institution.

**Innovation and Learning Processes**

Assuming that the process of adaptation is a process whereby system element change to account for modified conditions. Effective adaptation is often only possible, when innovation and learning happen. It is the ability of the system to read signals correctly and to adjust adaptive reactions accordingly. An effective process of adaptation is a necessary condition for functional innovation to happen, whereas the appearance of the appropriate innovation is the symptom of the appropriate course of the system learning.

Referring the learning process (but also phenomenon of the innovation) to the system it is however necessary to distinguish three levels of analysis in relation to which learning/innovation will be analysed:
- individual learning/innovation,
- organisational learning/innovation,
- regional learning/innovation.

**2 RESEARCH QUESTIONS AND RESEARCH HYPOTHESES**

**Research questions:**

1. How has the tourism sector developed over the last 15 years in each region? How can the ‘action situations’ of tourism activities in rural areas be described? Does the type of tourism activities influence whether stability, resilience, robustness and integrity are promoted or reduced by tourism over time? How types of tourism activities are best characterised?
2. What where major disturbances in the selected areas in the last 15 years? How can they be classified into external/internal perturbations as well as shocks (single event) / shifts (ongoing change)? What were the main outcomes of specific disturbances in each of the in the study regions?
3. Which rural actors are capable of adapting to shocks or perturbations? How did they react to each of the specific disturbances?
4. Which rural actors are capable of shaping the adaptation processes after shocks or perturbations? Are they equipped with the skills and means that they need for this task?
5. Are there some institutions in Slovenia (measures or funds), which aim to buffer shocks or perturbations?

**Research hypotheses**

1. More diverse tourism leads to higher stability, resilience, robustness and integrity of social-ecological systems.
2. An ecological regime shift or collapse does not necessarily result in a regime-shift or collapse of the social-ecological system.
3. Good governance of the socio-economic domain does not necessarily imply maintaining a stable/resilient/robust/integer social-ecological system.
4. A diversity of actors and social roles are essential as sources of stability, resilience, robustness and integrity in the social dimension of natural resource management.
5. The main social sources of resilience are institutional redundancy, flexible social networks, social memory and organisations that bridge levels in systems of multi-level governance.

6. Institutions, social networks and organisation interact across scales.

7. An adaptive governance framework relies critically on the collaboration of a diverse set of stakeholders operating at different social and ecological scales.

### 3 METHODS AND DATA

For conducting the research in question we used a case study approach as a particular method of qualitative research. Here qualitative methods are justified because they are more suitable to capture the complexity of social-ecological systems and to identify (not to omit) non-linearity of processes (Berkes, Colding, Folke, 2003: 7).

The following methods were used in this research:

- **Desk research** – it was mainly used in the first stage of research when stakeholders, key informants and perturbations (shocks/shifts) were identified and general data about TNP and KRP were collected. Desk research was mainly devoted to legal documents, official statistics, reports, articles and publications about mentioned regions.

- **In-depth interviews** – most of the data for this study were collected by using interviews. Reason for using this technique is that its semi-structured character allows respondent to partially modify structure of interview and to touch on subjects which were not included initially.

- **Observation** – in fieldwork research also observations were important, such as conditions in study area, relations between different stakeholders, opinions one about another etc.

Primary data were collected in June and July 2006. Because of the limited time and resources we asked representatives of the local authority who know the situation and stakeholders involved in rural tourism in protected areas well to prepare a list of most important actors for interviews – for both cases TNP and KRP.

In TNP interviews were conducted with the following stakeholders:

- Representatives of Triglav National Park Board,
- Employees from Information Centre of TNP in Trenta,
- Owners of Tourist Farms in Trenta,
- Representatives of Tourist Association of Trenta, Log pod Mangartom and Kobarid,
- Representatives of Local Community Log pod Mangartom,
- Owners of Guest Houses in Log pod Mangartom,
- Majors of Municipalities of Bovec and Tolmin,
- Employees of Local Tourist Organizations and Tourist Information Centres in Posočje,
- Representative of Kobarid Museum of First World War,
- Member of the State Parliament from Posočje,
- Employee of Angling Club of Tolmin.

In KRP interviewees were the following:

- Representatives of Kozjanski Regional Park Board,
- Majors of the Municipality of Kozje, Bistrica ob Sotli and Podčetrtek,
- Representatives of Local Community of Kozje and Bizijsko and at the same time owners of Tourist Farms,
- Representatives of Tourist Farms in the area of KRP,
- Representatives of Tourist Associations working in KRP,

---

4 As TNP area is big, we concentrated our interviews only in Posočje region – mostly villages Trenta and Log pod Mangartom. The reason is that we used examples of shocks and shifts from there.
• Parish priest of the Catholic Church (cooperate also in pilgrimage tourism on Svete Gore),
• Representative of Marketing Service of Spa Olimia in Podčetrtek,
• Employee of Tourist Information Centre in Podčetrtek,
• Owners of Guest Houses in KRP,
• Representative of Hunter’s Family of Kozje.

Detailed data about interviewed persons are because of private data confidence available only from the research institution (Biotechnical Faculty).

Sources of secondary data collected were: legal documents, official statistics, reports, articles, scientific and other publications and other documents, internet resources – reports, self-government bodies and organisations websites. A crucial source of information were the following websites:
- home page of TNP (http://www.tnp.si)
- home page of Ministry of Environment and Spatial Planning (http://www.gov.si/mop/)

3.1 Description of perturbations within the social-ecological system

Table 1: Overview of perturbations

<table>
<thead>
<tr>
<th>Perturbations</th>
<th>TNP - Trenta</th>
<th>Kozjanski RP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diverse tourism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shock</td>
<td>Indepandence of Slovenia and accession to EU; Closing of mine Rabelj</td>
<td>Indepandence of Slovenia and new border with Croatia; Accession to EU</td>
</tr>
<tr>
<td>Shift</td>
<td>Political system change</td>
<td>Political system change</td>
</tr>
<tr>
<td>Shock</td>
<td>Initiatives for a new Law on TNP and initiatives for changing the borders of park</td>
<td></td>
</tr>
<tr>
<td>Shift</td>
<td>Emigrations from area</td>
<td>Emigrations from area</td>
</tr>
<tr>
<td>Internal shock arising from socio-economic sphere</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External shift</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shock</td>
<td>Earthquake in Posočje in 1998</td>
<td>Earthquake in Kozjansko in 1974</td>
</tr>
<tr>
<td>Shift</td>
<td>Growth of game (reed and roe deer, bear, wolf, and lynx)</td>
<td></td>
</tr>
<tr>
<td>Shock</td>
<td>Landslide in Log pod Mangartom</td>
<td>Drought in 2003</td>
</tr>
<tr>
<td>Shift</td>
<td>Farming land overgrowing, Decreasing of Soča trout population</td>
<td>Farming land overgrowing</td>
</tr>
</tbody>
</table>

Short description of perturbations:
• Indepandence of Slovenia and new border with Croatia – Slovenia became independent in 1991 and a consequence was also a new border with Croatia which influenced on situation in Kozjansko region also. People from area before sold their products mostly in Zagreb market, people from Zagreb were also often visitors of the area. Border changed the situation because duties and other border limitations made obstacles for free trade (except for the illegal one). Indepandence of Slovenia at the same time brought more power to local communities and their development (local self-government reform).
• Slovenian accession to European Union – after some years of adaptation Slovenia joined EU in 2004. It was necessary to adopt to EU legislation but on the other hand there were new possibilities for projects and finances from EU funds.
• Closing of mine Rabelj - happened in 1991 and had influence on life in Log pod Mangartom and surrounding area, more people lost their working places, some of them after also emigrate from the area.

• Political system change – Slovenia started with political system reforms in 1989 when more parties system changed old one party socialist system. Consequences were ex-Yugoslavian market loss, market economy instead of planning economy, problems in adoption to the new system and market economy in factories etc.

• Initiatives for a new Law on TNP – the Law on TNP is still from 1981, so still from ex system and many times also in some contrary with new objectives and systems. Even more initiatives, also experiments of new law are present, so also Slovenian government had to establish a group to prepare a new Law on TNP.

• Emigrations from area – in both study cases emigrations are present and they are mostly result of lack of working possibilities and less developed infrastructure (communal, social...).

• Earthquake in Posočje in 1998 caused a lot of damage in Posočje area. Renewal was supported, managed and organized also from national level.

• Earthquake in Kozjansko in 1974 was a natural catastrophe for less developed Kozjansko region. On the other hand it contributed a lot to a new development initiative of the region (infrastructure, new buildings, tourism development...).

• Growth of game – population of wild animals sometimes increase too much and exceed the borders, as a consequence there can be a damage in agriculture, destroyed natural balance, also big fear of local population (in case of bears for example).

• Landslide in Log pod Mangartom happened in November 2000. Approximately 1,000,000 m³ of material was displaced from an altitude of 1400 to 1600 m and mainly deposited at an altitude of 630 m. The consequences of the landslide, which, by its size (materials from an area of over 25 hectares were displaced and deposited over more than 15 hectares) is one of the largest in Slovene history, are catastrophic. 7 persons lost their lives, 6 residential and farm buildings were destroyed, and another 23 buildings in the village of Gornji Log were more or less damaged. With 2 bridges ruined, the road connection between Bovec and Predel, which is of vital importance to the area, was cut off. The road to Mangart was partially or fully buried beneath earth or destroyed, and considerable damage was also caused to power supply facilities. Direct damages are estimated at almost 2 billion SIT.

• Farming land overgrowing is typical for all Slovene remote and less favoured areas, we can find some case in flat land area also. Reasons are different: not possible use of machinery on slopes, aging farm population, stoped farming activities of land owners etc.

• Decreasing of Soča trout population was mostly a result of human intervention in natural system. Some trout breeders brought a not autochtonous brook trout which was much more aggressive as autochtonous one.

• Drought in 2003 – whole Slovenia territory was affected with longer dry which had influence mostly in agriculture, water supply and fire endanger.

4 RELATIONSHIPS BETWEEN RURAL TOURISM AND THE VULNERABILITY OF REGIONS

In the following subsections a reply to questions whether regions of two explored national parks differ in their adaptation potential given in relation to individual features of social-ecological system as: resilience, robustness, integrity and stability, is given on the basis of interviewes replies.
4.1 Influence on system stability

The stability of the system can be assessed by analyzing the reaction on the closure of the Rabelj mine in TNP and establishment of the border to Croatia for KRP.

In connection to the establishment of border and loss of markets, we can say that this event was really a shock for the region and it took some time to adopt to it, and this adoption took a kind of evolutive path from “what to do now” over smuggling to redirecting to new more distant markets and change of structure of the products (from vegetable to more fruits and wine and rural tourism). The same kind of adoption happened in touristic industry (local SPA), so that on the long the area don’t feel that the border presents a development problem.

In case of TNP and Log pod Mangartom the closure of the mine had both: positive and negative effects. The positive is that water pollution from the mine stoped, but on the other hand a lot of local inhabitants lost their jobs with little possibility to find a new one. The village itself did never really try to compensate this loss with some other activity, but over time the activities of surrounding area and the park (development of tourism in Soča valley and development programs such as organic farming in National park) have produced new opportunities. But still a number of people left the village.

4.2 Influence on system resilience

Regarding the change of political system and accession to the EU it is hard to tell which area adapted better. At the beginning the area of TNP had better chances to use the instruments available because of the accession process (EU financed projects) and also the private initiative could start to develop sooner (experience from neighbouring countries and national parks as well as more financial sources from people who were working over border), but also the KRP area did use the available possibilities well and is increasing it use nowadays (structural fonds, international cooperation on projects etc.).

4.3 Influence on system robustness

Regarding the system robustness we could somehow conclude that both areas tried to use the available opportunities (tourism development, introducing new products, engaging in rural development programs and projects etc.), where the effect of this seems to be better in the KRP than in the TNP. The reason for this might lie in the fact, that both protected areas are of different size. The KRP is smaller and more homogeneous, so also the coordination among actions and projects is easier. On the other side the TNP is generally divided on three almost not connected valleys (because of natural barriers-mountains) with different needs and visions of future development.

4.4 Influence on system integrity

With reference to the integrity of the regions if we trie to assess it over the problem of out migration than we cannot really notice the difference, because in both regions the
problem persist and for the time being also the development of tourism cannot reduce it.

But on the other hand in both regions was also mentioned, that the development of tourism is inducing the inflow of people, especially those who want to build there their second houses, what brings with a new problem: so called “black building” - building of second houses without spatial plan and permissions. Trenta valley has more development problems also because of “black buildings” and different interests of local people and weekenders.

5 CONCLUSIONS

Protected areas become one of the most important society valuableness and already now present an important part of tourist infrastructure (information centres, trails, accomodations…) and tourist offer. Data shows (Hladnik, 2005) that more as 30% of foreign tourists come in Slovenia mostly because of unspoiled nature and natural valuablenesses and also that 30% of Slovene people spend their free time in nature. In the future protected areas will be one of the top themas in tourism development. They mean »above standard offer« with peace, unspoiled nature, with nature connected activities. Slovenia has great possibilities for sustainable tourism in protected areas because of big varieties, the question is just what kind of tourism and activities are appropriate for protected areas and in what extent. It depend on each protected areas characteristics also.

The conclusions are presented in two dimensions. In the first one, we will discuss the results in relation to three issues: innovation, learning and reducing vulnerability. In the second one, we will briefly comment on answers for research hypotheses on the base of results of the research.

5.1 Innovation within the adaptive process

The appearance of the appropriate innovation is the symptom of the effective adaptation to the changing context and shocks or shifts. In the case of both investigated regions it is possible to identify the occurance of innovations.

TNP has developed its own scientific research institute which work as independant institut in frame of TNP Public Institution from 1998. The main task of institute is to collect and to arrange the results of scientific researches in park from different areas of work and to stimulate and directing the researches of research institutions and individuals and to research natural and cultural heritage. Data are useful than for natural and cultural heritage valuating. Quality informations are key importance for protection.

TNP opened also some Information Centres of TNP: one in Trenta (it helped a lot to Trenta development, mean also working places and it is a motor of development) and one in »Pocarjeva domaćija« in Radovna. TNP was selected also as a partner in pilot project »Young Ranger« - innovative way to present ranger's work to pupils and to stimulate them for nature protection and to share the awareness in local communities.
In TNP they are developing also a model of eco tourism as a way of sustainable tourism appropriate for protected areas.

In Trenta TNP Information Centre together with Tourist Association Trenta prepared also innovative tourist programme “Four easy seasons” with protected trade mark. Programme foresee development of additional offer in spring and autumn, prolong of summer season and partly also of winter season. They are preparing also a new valley web portal which will present a valley completely and make possible also a central reservations system for all offerers in valley.

The innovations for Slovene management of protected areas are also the establishment of park’s administration own research unit, as well as volunteer renger service in the park, project young renger and information centers spread across the park, which represent also kind of local development cores. Innovation resulting from natural disaster in Log pod Mangartom is also the implementation of alarming system, which is the first of its kind in Slovenia.

KRP also developed some really innovative products and projects based on natural and traditional cultural heritage of Kozjansko (based on endogenous potential). They started to evident flora and fauna and found on their area beside all 37 kind of natural orchids grow (of 60 known in Slovenia) and around 120 different birds. They also detailed evidenced rural architecture (more than 3000 units, 800 of them can have a status of cultural monument). Very innovative is also project »Kozjansko apple« and all products developed from them and trade mark SOZITJE (symbiosis) for these products. It is not every kind of apple but old autochtonous cultivars, some of them are known only in their area (for example »sevniška vošćenka«), the other are old autochtonous Slovene cultivars. Such apple cultivars are produced in traditional high trunk meadow orchards which are very important also as habitats for different kind of birds and other animals. Meadows with apple trees are late cut (not more than twice in year), so they allowe also orchids to blow. They are important also as an element in traditional cultural landscape of Kozjansko so they renewed them and also planted new ones. But it is important also how to care for such orchards so they organized also education programme how to cut the tries, how to make different products from them (brandy, vinegar, juice..). As a result of education a special group of »tree cuters« were qualified and they went around and cut the tries and learn people in area how to do that. Trade mark for products from apples was protected in Patent Office. They found also a special way of bottle filling – it enables to store a juice for two years without conservants. At the end »apple project« finished also with new traditional international »Apple festival « (professional, seminar, cultural and social event). Renewal of high trunk meadow orchards became also an international (INTERREG) project. In Kozjansko also joinery was traditional and “apple project” brought new possibility for revival also-to make some products from very colourful apple or nut tree wood. KRP together with partners from Finland, Germany and Austria established also partnership network EUREX 21 for information and experiences exchange, presenting their products, projects and culture. Innovative is also breeding of capons under meadow orchards as revival of an old Middle Ages Characteristics. Within the cultural programmes of the Kozjanski Park also Music Summer at the Podsreda Castle is innovative. Also different walking trails on area are innovative and also some new initiative for eco village. In one abandoned hamlet
with four homes they want to develop ecological village with apartments and with parallel tourist and educational offer.

5.2 Learning within the adaptive process

Summing up the issue of learning it is worthwhile mentioning that the effective process of learning must co-occur with the process involving all actors into the process of deciding and managing protected area and its surroundings (Kofinas 2003: 7). In both case such action is being taken. Main initiator of these actions in both areas is the park administration, where the TNP is much more active due to its bigger size, higher financial support from national budget and longer existence. The active learning is organized in forms of different workshops, seminars, participation in national and international projects and transfers of good practices for different kind of people. Both parks administrations are also putting a great effort on cooperation with children, so in both areas they are trying to involve actively local schools into the park activities.

As the both parks are in the moment in the process of preparing their management plan they put also a great effort to involve local actors into this process to learn what the local and interested public expect from the park, what are their needs and problems etc.

5.3 Reducing vulnerability by promoting rural tourism

All available data (primary and secondary) and also interviews with people from protected areas shows that rural tourism is seen as a very important, probably also the most important, factor for economy in area and also as a solution for lost working places in both study areas. But not mass tourism and not every kind of tourism. Both areas promote sustainable way of tourism in connection with nature protection and local area characteristics. Endogenous potentials (natural and human) of each area are most important. Tourism in park increasing and it means also important contribution in economy of individual area.

In TNP they have vision about ecotourism as an appropriate way of tourism for protected areas. Ecotourism is one way of sustainable tourism; it is an instrument for natural protection and at the same time assures sustainable economic benefits for local people (Šolar, 2005). Ecotourism can be understood as environmental, sociological and economic category. As economic category it can crucial contribute to sustainable rural development and it is at the same time a motor of development. As sociological category it can contribute to higher awareness of public about importance of nature protection, at the same time visitors have impression that with their appropriate treatment contribute to protection and maintaining. As economic category ecotourism assure promotion and marketing of products from protected areas like nature, cultural heritage, clean water, fresh air, local autentical products (also from ecological farming). But all kind of tourism activities and their development should be adjusted with local population in protected areas.

Tourism in protected areas is mostly in tight connection with agriculture also. In TNP and KRP such connections are very important and they also build their offer on them.
Agriculture maintains cultural landscape and increase attractivity of the park and products of farming are important tourist product also (Kozjansko apple case or wool products from Trenta). Tourism can also offer local produced food, prepared by local recipes for example. Extensive farming methods increase biodiversity also. In KRP Park Board want to increase number of ecological farms and to create a network between ecological farms, tourism in park and spas in surroundings.

5.4 Research hypotheses

H-1: More diverse tourism leads to higher stability, resilience, robustness and integrity of social-ecological systems.

In the case of two analysed protected areas, the region TNP has more diversified tourist offer but in the analysis we could not find a firm evidence which indicates higher stability, resilience, robustness and integrity of this area. In some cases the less divers area (KRP) proved to be better off (i.e. stability of regions).

H-2: A diversity of actors and social roles are essential as sources of stability, resilience, robustness and integrity in the social dimension of natural resource management.

On the example of two analysed cases it is possible to notice, that some actors are simultaneously performing different roles (i.e. the same person is local representative, chair person of local tourist bord and owner of biggest tourist farm in the area) what leads to the better adaptation to shocks and shifts. Such a situation is taking place in both cases. This facilitates to see at a lot of issue from different perspectives, to understand different arguments; it leads the better adaptation, higher stability, resilience, robustness and integrity.

Involving representatives of different subjects into the dialogue is also leads higher stability, resilience, robustness and integrity, what proved to be correct very evidently in the case of KRP, where with the change in the management of the park, which involved into its work more local stakeholders, increased the positive acceptability of the park by the local inhabitants.

H-3: An ecological regime shift or collapse does not necessarily result in a regime-shift or collapse of the social-ecological system.

The good example to evidence this hypothesis is KRP case with draught.

The drought had important influence in the year 2003, but rather short-lived and not causing permanent damage. Ecosystem possesses possibilities of curbing the negative influence of some process or factor, it is not a necessary interference of the man. It is possible to say for investigated region that the draught was rather "fact media" which had no notable consequences neither on behaviour of local population (no one decided for installing irrigation system afterwards) nor on the visitors.

H-4: An adaptive governance framework relies critically on the collaboration of a diverse set of stakeholders operating at different social and ecological scales.

In both cases - TNP and KRP - research demonstrated the general adaptation connected with the free market economy. In the KRP case the adaptation to the conditions of the free market economy is more obviously connected with the development of tourism as in the case of TNP, which was already before the shift
touristically developed. Now tourist businesses are developing at all communities. It is an adaptation on the regional level in frames which is the element of cooperation connected with the fact that generally the tourism is seen as one of the development opportunities for the whole country and not only for the investigated regions.

**H-5: Good governance of the socio-economic domain does not necessarily imply maintaining a stable/resilient/robust/integer social-ecological system.**

1) KRP – An excellent example of cooperation of diverse groups of actors is a situation after appointing the new director of the park. After the new director involved the local stakeholders into the park management, all the interviewed actors evaluated a park as much more acceptable for the local population.

The benefits from cooperation get not only to actors but also national park, which can more effectively realize one's objectives. In the KRP case can see very well a participatory model of park management. The new director which at the moment in the verbal phase is declaring the will of the cooperation is getting considerably bigger capital of the confidence than its predecessor which was perceived as the person throwing such a model of managing with park.

2) TNP - in this case in until now cooperated three categories of actors: the park administration, representatives of the self-government and the government as the founder of the park. The relative high interest of government and park administration in the nature protection and the lack of the consistent politics of all communities in the scope of the development caused that mostly local population saw park as limitation for the development of tourism on the national park area. At present the change can be noticed in the process of preparing a new law, where the government has involved a much wider spectres of stakeholders in its preparation.

In the context of the multilevel cooperation of diverse categories of actors we need to pay attention for the special NGOs role. In the process of developing a new law they became very active and they are becoming the actor taking aiming action to make policies of self-government bodies and the management of the park more cohesive. In other words, they are becoming the crucial subject holding the model of multilevel cooperation in this way.

**H-6: Institutions, social networks and organisation interact across scales.**

We are analysing three levels: individual, group/organisational, and regional. The shock/shift which held the most reactions in both parks is earthquake.

This shock has in both areas mobilized the higher number of both formal and informal institutions on local and national level. The local level institutions were mostly active at very beginning at helping people to rescue their lives and property, and they started to reduce their activities as the eminent threat to this reduced or finished. On the other hand the national level institutions became more active in next phase in reconstructing the caused damages.

At the beginning the activity of all this institutions was very high and different cooperations between them were established, but when the time passing these interactions started to weaken and with the time even broke or were re-established on the lower level as before the shock. In illustration to this can be a comment from one inhabitant of Log, who said that just after the quake and landslide everybody was connected to other, but after rebuilding the village, when bigger distances between houses were made, the people even became less linked together as before the disaster.
H-7: The main social sources of resilience are institutional redundancy, flexible social networks, social memory and organisations that bridge levels in systems of multi-level governance.

In the TNP regions the social memory and social networks could be recognised as the important factor enhancing the adaptive potential of governance, as the national park has a long lasting tradition (over 80 years) and because of closed alpine communities also process of social memory transmission is still present.

In the case of KRP this is not so evident; as the region is more open and less developed so the out migration was much higher.

6 REFERENCES


