

The International Journal of Biodiversity Science and Management

ISSN: 1745-1604 (Print) 1745-1590 (Online) Journal homepage: www.tandfonline.com/journals/tbsm20

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To cite this article: Ivana Grujčič, Vojislav Milijić & Dragan Nonič (2008) Conflict management in protected areas: The Lazar Canyon natural monument, Eastern Serbia, The International Journal of Biodiversity Science and Management, 4:4, 219-229, DOI: [10.3843/Biodiv.4.4:5](https://doi.org/10.3843/Biodiv.4.4:5)

To link to this article: <https://doi.org/10.3843/Biodiv.4.4:5>



Published online: 23 Apr 2010.



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Conflict management in protected areas: The Lazar Canyon natural monument, Eastern Serbia

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Key words: Forest owners, nature conservation, management, protected areas, conflicts

SUMMARY

In recent decades, increasing utilisation pressure on forests and emphasis on the need for nature conservation has resulted in numerous conflicts between local communities and the institutions responsible for implementing nature conservation policy in Serbia. One example of these conflicts occurs in the Lazar Canyon natural monument in Eastern Serbia. This contains exceptional floristic and animal diversity as well as landscape diversity and beauty. After presenting the conservation policy in Serbia, the organisational structure of the institutions related to this case study, and the relevant stakeholders, this paper presents an approach to participatory management planning and conservation. It discusses potential solutions to the problem, and the feasibility of applying them. The study is based on a small survey with relevant stakeholders to explore their attitudes towards forests as natural resources and nature conservation policy. Findings suggest that these conflicts could be overcome through the involvement of all stakeholders and jointly agreed activities.

INTRODUCTION

Within its relatively small territory, the Republic of Serbia contains great biological and landscape diversity, including a large number of endemic species, 29% forest cover (Grujičić *et al.* 2008), and natural and semi-natural ecosystems in good ecological condition. To protect this diversity, a variety of protection categories have been developed (Table 1). These have been applied to 464 localities covering 542,684 ha, or 6.3% of Serbia's area. In addition, 797 plant and animal species are protected. Over 65% of the protected areas are forests

and forestland, and many are of international importance (Amidzic *et al.* 2007).

Current concepts of nature conservation in Serbia try to meet numerous interests, both economic and non-economic. The main problems in the field of nature conservation, in relation to other sectors, relate to the lack of basic strategic documents; non-harmonised and inconsistent legal provisions (acts); insufficient implementation (or absence of implementation) of laws; conflict of interests; unsatisfactory intersectoral cooperation;

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Table 1 Natural protected areas in the Republic of Serbia (Source: Aleksic and Jancic 2006)

No	Type of natural protected areas	Republic of Serbia	
		number	area (ha)
1.	National park	5	158,986.36
2.	Nature park	10	228,055.02
3.	Regional nature park	4	5902.98
4.	Forest park	1	19.65
5.	Landscape with outstanding features	11	33,638.00
6.	Special nature reserve	21	86,714.00
7.	Nature reserve	51	1400.00
8.	Landscape of extraordinary beauty	6	15,564.99
9.	Natural monument	312	8399.00
10.	Memorial natural monuments	28	2328.00
11.	Area around irremovable cultural assets	16	1676.00
12.	Protected plant species	215	–
13.	Protected animal species	426	–
14.	Species under the trade and use control	156	–
	Total 1-11	464	542,684

weak flow of information; lack of awareness of the existence of protected natural areas from the local to the governmental level; and insufficient engagement of managers (Grujičić *et al.* 2006). In recent decades, increasing utilisation pressures on protected forests and greater emphasis on the need for nature conservation have resulted in numerous conflicts between local communities and the institutions responsible for nature conservation policy measures. These conflicts can be clearly seen in the Lazar Canyon natural monument, the deepest and longest in south-eastern Europe, located on the territory of Bor and Boljevac municipalities. The canyon is under state protection because of its beauty and exceptional floristic and animal diversity, and is one of the most important sites of Serbia's natural heritage.

This paper presents the results of a survey conducted in this natural monument. It is based on interviews with stakeholders and draws on recent professional and scientific literature, legal regulation, personal experience and knowledge. In addition, results from a survey of private forest owners are included.

SERBIA'S NATURE CONSERVATION FRAMEWORK

Six basic types of protected natural areas (PAs) are defined in Serbia: national park, nature park, landscape of outstanding features, reservation of nature

(general and special), natural monument and natural rareness. The valuation and designation of PAs are performed by the Institute of Nature Conservation of the Republic of Serbia, based on criteria in the *Rulebook on natural protected areas categorization* (Anon 1992). In line with this regulation, three categories of PAs can be distinguished:

1. I category: protected areas of extraordinary importance
2. II category: protected areas of great importance
3. III category: important protected areas.

A protection regime has to be established for each PA within the mentioned national categories. These regimes can be of the first, second or third degree, and consist of a group of measures and conditions that determine the means and level of protection, use, management and improvement of the protected areas. Unfortunately, the national categories (Table 2) defined in the Law on Environmental Protection (2004) have not yet been harmonized with the internationally adopted categories of IUCN (1994).

Political and legislative framework

The *Spatial plan of the Republic of Serbia* was adopted in 1996 and defines basic goals in the field of nature conservation and environmental protection (Anon

Table 2 Relation between IUCN and national categorization of protected areas (Source: Stanisić *et al.* 2006)

IUCN categories	National categories
Ia Strict nature reserve	1st degree of protection
Ib Wildlife area	(Protected areas of
II National park	extraordinary
	importance)
III Nature monument	2nd degree of protection
IV Habitat/species	(Protected areas of great
management area	importance)
V Protected landscape	3rd degree of protection
VI Protected area for	(Important protected
resource management	areas)

1996). One of these goals is that, by 2010, 10% of Serbian territory should be under some type of protection. Overall strategic and political frameworks for the field of nature conservation are also defined in the draft *Sustainable development strategy of the Republic of Serbia*, which states the following as the most important nature conservation objectives (Anon 2008b):

- Drafting a law on nature conservation, drafting a national strategy for biodiversity conservation of Serbia and its action plan, as well as ratifying international agreements on biodiversity and conservation;
- Enlarging the network of PAs, establishing ecological corridors and network of ecologically important areas;
- Establishing an effective system of bio-monitoring and information systems on wildlife and other rare species;
- Developing a registration system for biological diversity in Serbia;
- Implementing effective measures for control of genetically modified organisms in line with European Union (EU) legislation;
- Improving methods for sustainable use of the existing gene pool and establishing a bank for the conservation of genetic materials.

Among the main objectives of the *Sustainable development strategy* are to improve the capacities of PA managers and to increase the effectiveness of responsible state bodies in preventing and acting against unwanted and unregulated activities in protected and ecologically important areas. Similarly, the *Forestry development strategy of the Republic of Serbia* refers to the protection and conservation of forest

areas. This strategy emphasises that improving the designation, conservation and management of PAs is of strategic importance for Serbian nature conservation policy, requiring 'harmonised development of the ecological, economic, social and cultural forest functions' (Anon 2006:16). In addition to these specific strategies and plans, nature conservation in Serbia is regulated directly by the 2004 Law on Environmental Protection and indirectly by several laws, e.g. bylaws, and directly by specific provisions of certain legal acts (Nonić *et al.* 2006). A new law on nature conservation is being drafted and provides for the protection and conservation of nature and natural values, and of biological, geological, and landscape diversity as a part of the environment. Nature and natural values as assets of general interests for the Republic of Serbia enjoy special protection.

Protected areas in Serbia are designated by different bodies according to the legal framework and the distinction between different types of natural areas. National parks are designated according to the *Law on national parks* (Anon 1993). The protection of nature reservations, rare species and natural areas is based on international legislation (e.g. Convention on Biological Diversity) and these areas are designated by Serbian governmental act (bylaw for each protected area). Likewise, landscapes of extraordinary beauty that, together with cultural assets of extraordinary importance, are part of a geographical unit, are designated by Serbian government act (bylaw for each protected area). Other natural areas are designated by acts of the municipality or city where the protected areas are located. Currently, the fields of nature conservation and environment in Serbia are characterised by efforts at harmonising the numerous acts and laws with the EU legislation in this sector.

Institutional framework

The management of PAs is organised on several levels:

- State level (*state administration*);
- Level of autonomous province or municipality level (*local administration*);
- Level of public enterprises;
- Non-governmental level (non-governmental organisations and chambers);
- Other entities (individual persons and companies).

At the **state level**, the responsibility for PAs lies with the Ministry for Environmental Protection and the Ministry of Agriculture, Forestry and Water Management. In addition, the Institute for Nature Conservation of the Republic of Serbia plays an important role at the level of the state and of the autonomous provinces. This state institution is responsible for professional control, support, protection and improvement of Serbia's natural heritage and its biological and geological diversity.

At the **level of autonomous provinces**, a secretariat for environmental protection and inspection service, responsible for protection against air pollution, noise, urban planning, permit issuing service, and nature conservation service exists in some cities (e.g. Belgrade, Novi Sad, Nis). However, this is not the case in all municipalities. Instead, some have an Environment Board and national inspectors who perform these activities. Municipalities and cities also designate protected areas within their territory.

In addition to the state institutions in the fields of environment and nature conservation, in this transitional period there is an increasing number of **non-governmental organisations** (NGOs). Their activities have led to the affirmation of the influence of the private sector (Nonić 2004). At present, there are more than 300 registered NGOs in the field of environment and nature conservation, and their number is constantly increasing. The NGOs are trying to achieve a decrease in the use of natural resources, especially in forest areas. They are generally very critical of the existing management of natural areas, but most lack knowledge on issues relating to PAs. The influence of NGOs on local government and state institutions is very important and is expected to increase.

Thus, within the overall institutional framework reviewed above, the management of PAs is entrusted to different actors. The legal framework discerns between the managers, wardens and owners of PAs, and below we explain these terms further because they are important for a better understanding of the institutional nature conservation framework.

The managers of national parks are special state enterprises (public enterprises of Fruska Gora, Tara, Kopaonik, Djerdap and Sara mountain national parks), which are under the jurisdiction of the Ministry of Environmental Protection Section for Natural Parks within the Sector for Natural Protected Areas. These public enterprises are

established according to the *Law on National Parks*, and manage 21% of the total area of the National Parks.

The wardens of national park areas are legal persons responsible for National Park Areas, according to the *Law on national parks*. Wardens of other protected areas include public enterprises, companies, communal enterprises, museums, faculties, tourist organisations, ecological NGOs, foundations and other legal entities. The public enterprises for forest management, Serbiaforests and Vojvodinaforests, are the two most significant wardens, taking care of the majority of PAs: respectively, 48% of the total number of PAs (96 protected areas, total area 242,440 ha) and 15% (22 protected areas, total area 73,746 ha). These public enterprises integrate all forest functions. They perform professional-technical services for state and private forests, administrative functions, managerial functions (on behalf of the state as the owner of state forests) and functions related to commercial production in forestry, hunting and other domains. Both enterprises have a three-level organisational structure consisting of a central unit (Directorate General), lower regional units (Forest Estates), and community units (Forest Units).

The owner of protected area is a legal or natural person who owns a PA.

Users of natural values and protected areas services are various, depending on the type of protected area. In strict nature reservations, the primary users are scientific-educational institutions such as academic departments, institutes and schools. In other categories of PAs, users can be tourists, visitors, different businesses, producers, institutions and others who come to the PAs for their natural and cultural values, relaxation, recreation, sightseeing, etc.

THE LAZAR CANYON NATURAL MONUMENT

Characteristics of Lazar Canyon

The Lazar Canyon natural monument (1755 ha) is situated at the edge of Kucaj mountain in Eastern Serbia (Figure 1), 230 km from Belgrade, the largest city in this region. The natural monument comprises the watershed of the Zlotska River and part of the watershed of the Lazar River and Malinik Mountain. There is no urban or rural settlement

within the PA, which was designated in 2000 by regulation of the Serbian Government as a natural monument of the first protection category, i.e. a protected area of extraordinary importance. Within this PA, a protection regime of the second level has been established. This area is of international importance as an International Bird Area (IBA) according to the criteria of Bird Life International; the designated IBA is Zlotska gorge with an area of 2000–3000 ha. According to its *Protection and development program* (Serbiaforests 2007), this natural monument is characterised by its unique

system of limestone valleys, numerous and very important speleological objects, interesting appearances and processes of karst water circulation, exceptional diversity of flora and fauna, great landscape diversity and beauty (2007: 3) (Figure 2).

Natural values of this area include the numerous caves such as Lazar's cave (also known as Zlot's cave), Vernikica and Dubasnica caverns. In addition, the flora contains 720 taxa, representing 20% of the Serbian flora (including 41% of naturally occurring species of Serbian dendroflora), and 11% of the flora of the Balkan Peninsula. The flora of this area has a greater diversity (1.5-times more) than the flora of Kopaonik and Djerdap national parks. This is therefore one of the greatest centres of flora diversity in the Balkans and Europe. The fauna diversity comprises 35 mammal species, 96 bird species, nine reptile species, eight amphibian species, and numerous insect and cave fauna species. The accessibility of the area and the proximity of Bor lake, Brestovacka and Gramzigradska spas, the mountain areas of Rtanj and Black peak, and the hunting areas in Dubasnica and Brezovica represent great potential for education, research, tourism, recreation and hunting activities.

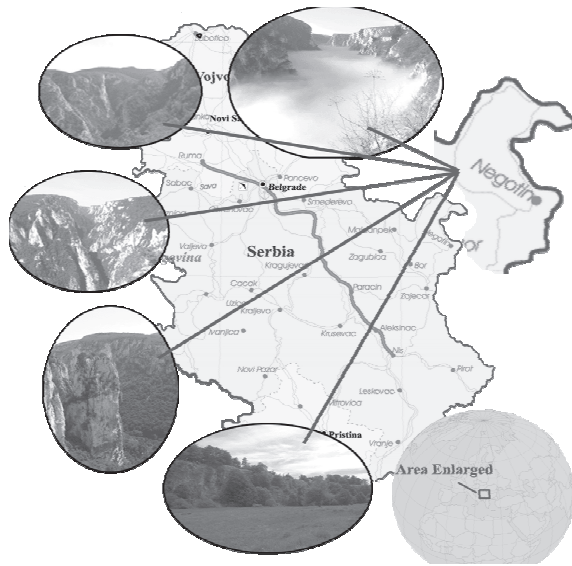


Figure 1 Location of Lazar Canyon Natural Monument in Eastern Serbia

Management of the Lazar Canyon and involved stakeholders

Of the 1755 ha of the Lazar Canyon natural monument, 1165 ha are state property, and 590 ha are private property. The land cadastre of the canyon



Figure 2 Lazar Canyon Natural Monument

originates from 1936 and the ownership structure has been changed only at the request of heirs or legatees, but this has happened very rarely. The ownership structure is therefore effectively the same as 50 years ago. Most (1018 ha) of the natural monument is under forest cover, of which 690 ha are state property, and 328 ha are private property. The remaining areas consist of meadows, pastures, and rocky grounds. Sixty-five per cent of the state-owned forests and forestlands are managed by Serbiaforests through its Forest estates 'Timocke forests' and 'Boljevac' and Forest unit 'Bor'. In accordance with Serbian Forest law, Serbiaforests also performs professional-technical activities on 320 ha of the private forests, as well as hunting activities, e.g. breeding and conservation of game. Because of its involvement, Serbiaforests has been appointed as warden of the natural monument. The current management plan (for 2007–2012) for the natural monument was thus developed by Serbiaforests and is laid out in the *Protection and development program* (Serbiaforests 2007).

Other users of the natural monument include the agricultural co-operative 'Zlot', the tourist organisation of Bor municipality, speleologists' associations, local inhabitants, NGOs, and visitors. Until 2006, user rights for Zlot, Lazar's and Vernjikica caves were given to the tourist organisation of Bor municipality, but since 2006 Serbiaforests has been responsible for these caves. Until 2005, the agricultural co-operative Zlot ran the Zlot cave motel and managed small-scale tourism to Lazar's cave. However, in 2005, the co-operative went bankrupt, leading to the closing of the motel and of Lazar's cave for visitors. The users have different interests with regard to this protected area: the main interest of the NGOs is the protection of the area in its entirety; the objective of Serbiaforests is the silvicultural management of the forests; while the tourist organisations want to develop the canyon's outstanding tourism potential.

Activities carried out by the numerous institutions are shown in Table 3. The main objectives of these activities are to: contribute to a better understanding of the main values of the natural monument; contribute to research; provide information for the public; and provide development functions, which contribute to the conservation and appropriate use of the area, based on sustainable development principles.

Table 3 Organisation of activities in Lazar Canyon Natural monument

<i>Activity</i>	<i>Institution(s)</i>
Organisation of conservation of natural monument	Forest estate Timocke forests Forest unit Bor
Conservation of nature and biodiversity	Institute for nature conservation Forest estate Timocke forests Forest unit Bor
Economic-community development of monument	Local government Scientific research institutions Experts teams of the Ministry of Environmental Protection Ministry of Culture Other natural monument users
Scientific research, monitoring, education	Ministry of Science Ministry of environmental Protection PE Serbiaforests Forest Institute Institute for Nature Conservation Forest estate Timocke forests Forest unit Bor

Interviews

The objective of the interview survey was to obtain a clear picture of the current situation of the Lazar Canyon natural monument, to define problems experienced by stakeholders, to identify efforts made for solving conflicts, and to define the visions of Lazar Canyon held by different institutions. Since it was a pilot study, we approached this research without a pre-defined hypothesis. One of the aims was to test the employed interview form with regard to conducting further research on protected natural areas in the future. This paper should therefore be seen as a starting point for further research, but it also provides information on the conflicts and problems specific to the Lazar Canyon case study. The interview method consisted of unstructured, non-directive in-depth interviews with open-ended questions (Neuman 2006). The social context of the interview is regarded as important for the interpretation and the meaning of the responses.

As this was a pilot study, it included only a limited number of interviews. The target groups for the interview survey were wardens, owners and users of protected areas. Thus, two or three representatives



of each of eight institutions or groups – the local government of Bor municipality (Section for economy and environmental protection as well as representatives of the community of Zlot village), NGOs, Serbiaforests, primary school in nearby village, local inhabitants, hunters, speleologists – were interviewed. Interviews with representatives of local community Zlot (president and secretary) and with representatives of forest owners (presidents and secretaries) of recently established associations of forest owners (Podgorac, Zlot, Krivelj and Brestovac) were also conducted.

PROBLEMS AND CONFLICTS IN LAZAR CANYON

Conflict issues

Some conflict issues were known before the survey, but most were determined only after completion of the interviews and analyses. The results obtained from the interviews suggest that the activities of the numerous users of the PA do not contribute to its conservation in a positive way. Also, the survey showed that there is a lack of co-operation and communication between the protected area warden and the other users; this is one of the reasons for frequent conflicts in the area. Conflicts exist in all domains, from maintenance to use and the management of Lazar Canyon. The problems that cause conflicts and were reflected in the responses are:

- Insufficient co-operation and communication between organisations;
- Exclusion of private forest owners from decision-making process;
- Unresolved future status of the canyon;
- Lack of funding.

Among the numerous conflicts caused by **insufficient co-operation and communication**, two, which have an administrative character, can be distinguished:

1. **Serbiaforests vs. Bor municipality.** According to an agreement on technical co-operation signed by Serbiaforests and Bor municipality, Lazar's Cave, which is part of the canyon complex, should be renovated and again made accessible for visitors. This activity has been stopped because Serbiaforests has broken the agreement. As a consequence, Bor

municipality stopped all investments in infrastructure and in the maintenance of the cave.

2. **NGO 'The Young Researchers of Bor' vs. Bor municipality.** This NGO was established in 1976 with the goal of bringing together young people interested in scientific research activities in the field of natural and social science, ecology and environment. It comprises several clubs and sections, and its activities include projects and programmes, schools and camps. Bor municipality is responsible for the maintenance and management of the caves. Speleologists have conducted research without permission from either the Institute for Nature Conservation or the warden. Since 2007, researchers started to co-operate with the warden.

The Lazar Canyon includes a large forest area under private ownership. **Exclusion of the private forest owners** from the whole project could lead to new long-term problems. Furthermore, the private forest owners currently have only limited rights over the use of their property because of the protection regime in place. The utilisation of rocks, sand, gravel and grazing are thus prohibited. The only permitted activity is limited tree cutting; but even this requires the prior permission of the warden. Since the construction of forest roads is also prohibited, forest owners rarely apply for tree-cutting permits because it is practically impossible to transport the wood out of the forest. Despite the reduction of the owners' incomes caused by the establishment of the protection regime, the state has not taken any steps to compensate these owners. The current situation has put them in a position of passive observers of their property, which they have found unacceptable. This has also led to recurring conflicts of certain landowners with the law, because they pursue activities on their own properties, which, according to the law, are illegal – such as logging, utilisation of rocks and grazing. This conflict could most likely be resolved through adequate compensation of the owners for their loss of income. The disaffection of forest owners is increased further by their exclusion from the decision-making process for this protected area, despite the fact that they own almost a third of it. So far, the private owners have not organised in order to represent their interests. However, in 2005 and 2006, general forest owners' associations were





formed in the villages of Podgorac and Zlot, and some of their members have property within the protected area. These associations could take a role in presenting private owners' interests, but this may also cause further conflicts with the current warden.

Tensions also arise from the unresolved **future status of the Lazar Canyon**, as any decision will define the canyon's future and therefore have important implications for the overall development of the area. As mentioned above, the unresolved status is due to the lack of harmonisation with regard to EU legislation and IUCN PA categories.

One of the largest problems is the **lack of financial means** for the management and protection of this PA. Despite the state's legal obligation to co-finance the protection and maintenance, no state funding has been received yet. However, in December 2007, an agreement on a project for the maintenance of the natural monument was signed between the Ministry of Environmental Protection and Serbiaforests, approving the co-financing of all activities related to protection and maintenance of this protected area.

The point of view of involved stakeholders

The interviews indicate that stakeholders have differing views with regard to the status and problems of Lazar Canyon. Contrasting viewpoints are held by the involved parties with regard to the current status of the protected area. Representatives of the local government and NGOs evaluate the current status as unsatisfactory, while representatives of other institutions (users) hold the opposite opinion. These differences in opinions result from differences in the engagement and activities of users. Users who have an active role and interest in improving the status of the natural monument more often have a critical attitude and evaluate the current situation as unsatisfactory, while other respondents are mainly passive observers and have a more positive viewpoint. While there were important differences of viewpoints among users, there were also some points of agreement. Thus, all interviewed representatives agreed that the primary objective of the protected area should be strict nature conservation, with the additional possibility of developing the tourist potential.

The majority of the interviewed representatives were familiar neither with the legal framework related to this protected area nor with measures planned by the warden. Given the contrasting viewpoints on problems and the status of this natural asset, the lack of awareness of measures planned by the warden can only increase the existing problems and conflicts, since participation is missing from the process of planning. The interviews indicate that, in addition to the warden, other interested organisations such as NGOs, tourist organisations, and local government could play an important role. Active co-operation and communication have to be developed on all levels as well as between stakeholders. This will enable exchange of opinions and ideas, identification of problems, and development of the canyon's potential uses.

Representatives of Serbiaforests regard the attitude of disregard by, and the lack of information for, local inhabitants as the main problems. The former refers to local people establishing 'wild' dumps, extraction of gravel, sand and rocks from the PA, as well as passage through the canyon without permission. Representatives of 'The Young Researchers of Bor' regard as the main problem the over-utilisation of the forest, which they see as a sign of unprofessional management. Representatives of Bor municipality agreed with the representatives of Serbiaforests that one of the problems lies in the attitude of the local inhabitants towards the PA. However, representatives of the municipality also see the termination of the agreement with Serbiaforests as one of the major problems, since they regarded this agreement as an important starting point for future progress. The local inhabitants are generally proud of Lazar Canyon, but they remarked that its potential is not developed sufficiently, considering that for decades it has been seen as the main asset of this region.

The majority of interviewees stated that conflicts of interest, insufficient awareness of the local inhabitants, and the political influence of rich individuals who use their political power to achieve personal interests are the greatest barriers for solving current problems.

Efforts made to solve conflicts

Awareness and recognition of problems by users indicate the current effort invested in solving the problems. Certain efforts have been made by the



warden and others who want to participate in the development of the canyon in order to overcome the existing problems. To prevent corruption, Serbiaforests has appointed a person to supervise the canyon and be responsible for its protection. 'The Young Researchers of Bor' contribute to the development of the PA by organising international camps for maintaining and cleaning up the canyon and caves. Further progress could be made towards solving existing problems if Bor municipality (Section for economy and environmental protection) organised the sustainable use of Lazar's cave for tourism, and if the Institute for Nature Conservation supervised further research in the caves by 'The Young Researchers of Bor'. Greater commitment and investment in conflict resolution is required by Serbiaforests, Bor municipality and NGOs to accelerate solving the remaining problems, even if this may seem impossible and insubstantial.

PROPOSED SOLUTIONS FOR SOLVING CONFLICTS

Proposed solutions of involved stakeholders

One insight from the interviews was that Serbiaforests, as legal warden of Lazar Canyon natural monument, prefers that a different manager should be appointed for this and other natural assets, since Serbiaforests has neither the financial means nor the motivation to manage it as conservation policy requires. Generally, PAs are seen as just an additional obligation for their wardens. Many employees of organisations acting as wardens do not see PAs as a potential source of income (e.g. through their improvement and promotion for tourism). In addition, they do not appreciate the need for co-operation with all stakeholders who can participate in improving, promoting and presenting the protected area. The perception of these employees is that, in this situation, the education of employees, people in nearby communities, and all other stakeholders with regard to the importance and possibilities of protected areas is a key priority in order to resolve all problems. From the point of view of 'The Young Researchers of Bor', appropriate agreements and co-operation between all stakeholders are essential for solving current problems and could contribute to the continuation of joint

activities. Other NGOs are also actively involved in conservation issues in Lazar Canyon, but it seems probable that new NGOs which emphasise the need for more strict conservation will eventually appear.

The Municipality of Bor proposes co-operation and the adjustment of the plans and interests of all stakeholders as a solution to the current problems, or at least as a starting point for future solutions. This may be an ideal solution, but is not achievable now. The reason is the lack of motivation and actions of interested stakeholders with regard to solving the problems, as well as the low awareness and passive attitude of the local inhabitants towards Lazar Canyon as a Balkan and European centre of diversity. The local focus is still directed at the immediate economic benefits of resource utilisation, and there is little awareness of the possibilities of options for sustainable use, which could form the basis for the development of less aggressive economic activities (e.g. production of healthfoods, tourism, recreation).

All sides offer potential solutions, and all claim that their proposal is the most suitable, since it offers the possibility for satisfying their specific interests, while disregarding the needs and claims of other stakeholders. For now, all of the stakeholders can agree on only one thing: the ideal solution has not been found yet.

Other possibilities for solving conflicts

Based on the above-mentioned conflicts between different stakeholders related to this natural monument, and considering the existing efforts in searching for solutions, the following actions can be proposed:

- Active co-operation and communication;
- Legal and technical training of employees in related institutions at the local level;
- Law enforcement.

Active co-operation and communication must be developed on all levels. Clear co-operation between the legal warden of the natural monument and the relevant ministry is necessary. Co-operation between local authorities and NGOs on all issues related to local communities and private forest owners is indispensable. In addition, it is essential that Serbiaforests and private forest owners cooperate with regard to including the latter in forest utilisation or providing appropriate compensation

for loss of income from forest property, which has been incorporated in the PA and has therefore been legally protected from exploitation.

Joint actions, co-operation, and co-ordination of activities of all stakeholders are especially significant for the successful implementation of protection and development programmes for the natural monument. Also, very significant for its further development is the use and development of specific values, such as tourism, educational courses held in natural environments, and marketing and branding. Of even more significance are the enforcement of obligations, and most important, investment in the area's development.

Legal and technical training of employees of relevant institutions at the local level should be conducted through:

1. Educational and cultural activities:

- Educational programmes for local people, aimed at stressing the significance of this natural monument,
- Training programmes for wardens and guides employed in organisations that manage the natural monument.

2. **Information and promotion** activities: marketing, branding, educational activities, tourism, etc.

Law enforcement and respect for legal acts can help more than statements regarding the importance of the natural monument. Legal actions have proven very successful in several cases related to the removal of sand, gravel and rock from this natural monument. Following the provision of information to the nature protection inspector and district attorney and control, criminal charges were raised against those who did not respect the laws and regulations. Subsequently, no similar breaches of regulations have occurred.

According to Glüeck (2004), every new attempt at conflict resolution needs to begin with a detailed description of the conflicting interests that are at the basis of every conflict (conflict analysis). This is necessary to reach the essence of a conflict and after that, find suitable forms of conflict-solving mechanisms.

CONCLUSIONS

The natural values of the Lazar Canyon – especially caves, forests, sand, gravel – and the numerous

stakeholders involved create a strong risk of conflict. Different opinions regarding the current condition of the canyon result from the fact that only some of the stakeholders are actively involved. Users with an active role in the development of the natural monument have a critical attitude, which is seen as unsatisfactory by other stakeholders, who are only passive observers. The survey has shown that the root causes of the conflict are insufficient co-operation and communication between organisations, and the exclusion of private forest owners in decision making in relation to the future status of this PA. Nevertheless, several problems have been successfully resolved, with smaller or larger efforts, in ways that were seen as satisfactory by all involved parties.

Active co-operation and communication should be developed at all levels and between all stakeholders. This will encourage the exchange of different ideas and contribute to joint problem-solving, leading to the development of all the canyon's potentials. This requires the joint organisation of, and co-ordination among, all interested parties through, for example, the organisation of daily fieldwork and contacts with the local population, seminars, and the creation of favourable credit options for promotion of local tradition. In brief, it is necessary to organise participation and to provide support. However, it is the local communities who least recognise the needs for the responsible institutions to organise such activities (workshops, fieldwork, seminars).

All sides agreed that raising awareness and providing new knowledge to local communities regarding the natural assets would lead to some positive results. A key starting point for the planning of future activities and management is analysis both of the current practices with regard to the organisation of protection and the utilisation of this natural asset, and of the tourism potentials of the area. In addition, planned obligations, regulations and laws must be respected.

The unresolved status of private forest owners represents a significant problem in this area, as throughout Serbia. Organising forest owners in special interest associations should help them to represent their interests, and supporting existing associations of forest owners in this region can be a driving force of rural development. Including private forest owners in decision-making is essential. Resolving the status of this natural asset also

would help in applying for funding for projects on a broader level.

This study did not affect the outcomes of present conflicts, but it provides a starting point by contributing to a better understanding of the problems and the different viewpoints of the involved stakeholders. The next step should be to create

initiatives for conducting developing projects in the Lazar Canyon. Any proposed projects should include all stakeholders. By creating opportunities for increased interactions between stakeholders in the quest for solutions to problems, conflict resolution will be one step nearer.

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