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РЕПУБЛИКА СРБИЈА
МИНИСТАРСТВО
ЖИВОТНЕ СРЕДИНЕ И
ПРОСТОРНОГ ПЛАНИРАЊА

REPUBLIC OF SERBIA
MINISTRY OF ENVIRONMENT
AND SPATIAL PLANNING

**RAPID ASSESSMENT AND PRIORITIZATION
OF PROTECTED AREA
MANAGEMENT (RAPPAM)**



Protected area management effectiveness in Serbia Final report of the RAPPAM analysis

Authors: Deni Porej, Nevena Piscevic and Violeta Orlovic-Lovren

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SUMMARY

At 7th Conference of Parties to the Convention on Biodiversity held in February 2004, 188 countries including Serbia made a huge step forward towards world biodiversity protection through Programme of Work on Protected Areas (PoWPA). The main purpose of this programme is to establish a global network of comprehensive, well-managed and representative land and water protected areas, with implementation deadlines expiring in 2010 and 2012 respectively. Also, one of the obligations to be fulfilled by 2010 for the convention signatories is to adopt and implement framework for status monitoring, evaluation and reporting on progress in management of protected areas, national and regional systems, as well as transboundary protected areas. This implies that every party should do the following activities at national level:

- To develop and adopt methods, standards, criteria and indicators for the assessment of protected natural areas management, using methodological framework of the Committee for Protected Area of the International Union for Conservation of Nature (IUCN), as well as database tailored to specific environment,
- To assess management success for 30% of protected areas out of total number at national level,
- To include results obtained in this assessment into the National Report to the CBD,
- To include key recommendations based on this assessment (at the area level and protected areas system) into strategies of adaptive management.

Success in protected areas management in Serbia has been assessed through application of RAPPAM methodology (Rapid Assessment and Prioritization of Protected Area Management) in February 2009. The project has been implemented in collaboration with the Ministry of Environment and Spatial Planning, Institute for Nature Protection of Serbia and Mediterranean Office of WWF in Serbia, with participation of 3 national parks and 13 protected natural areas of other categories.

1. Loads and threats

Water management, unsettled ownership and legal issues and changes in land use are three major current loads to resources of protected areas. At the same time, they are rated very high as loads and threats as well. Also, water management is assessed as strongest threat in the future, followed by tourism and recreation and unsettled ownership-legal issues.

2. Management successfulness

According to management successfulness in the area of planning, investment and process, it is shown that system of protected areas in Serbia is stronger in the sphere of planning, legal ensuring and infrastructure, while weakest links of this chain are financial and human resources. Communication, collaboration and

joint decision-making with local community representatives are areas which should be improved in order to achieve more successful management in protected areas and better sustainable development in general.

3. Results

In accordance with total assessments, it has been shown that protected areas managers are generally satisfied with management planning, while they are far less satisfied with implemented activities pertaining to habitat renewal, staff training and specialization and research and status monitoring.

The above mentioned lacks and needs expressed through this assessment make basis for changes at system level – from normative, via structural, to research and educational ones.

4. Conclusions and recommendations

1. It is necessary to adjust activities to regulations in the area of ownership-legal issues (planning documents with relevant laws) and set clear criteria for application in practice (example of land use) in order to reduce loads and threats to resources in protected natural areas,
2. It is necessary to work on harmonization of national and municipal regulations in order to relieve protected areas managers from numerous municipal fees which present significant loads to their low budgets,
3. Lack of financial resources is the most prominent problem in protected area management in Serbia. It affects management capacities in many ways, so it is necessary to have strategic approach to solve this problem through:
 - Further analysis of capacities in protected areas in order to determine needs and possibilities for retrieval of adequate financial mechanisms (including financing, co-financing and self-financing),
 - Improvement of clarity and criteria transparency for allocation of budget funds to protected areas managers,
 - Ensuring continuity in financing in accordance with prescribed budget obligations and regulations,
 - Capacity building for protected areas management and identification and use of other financial sources (donors, co-operation with business sector, pre-accession funds, self-financing projects etc.),
 - Capacity building for protected areas managers for absorption of budget and donor funds.
4. Co-operation with local community in protected areas management has proved weak in most of here assessed aspects, such as communication and information, support to management aims, and as something very important, participation of community in decision-making process. At the same time, there is a relative

isolation both at the managers and community, due to lack of practice of information exchange and common planning. Since this collaboration is more and more important for future development in whole, it is necessary to stimulate in various ways:

- Use of examples of good practice in certain protected areas (Deliblatska pescara, Ludasko jezero) in order to find models for common recognition of needs and planning of solutions (such as joint programmes for tourism development, strengthening collaboration in the area of rural development and so on),
- Encouraging research projects whose results would contribute to data collection about social and economic status and possibilities for development of community, which would be available to managers and would be incorporated into their management plans,
- In compliance with results obtained in such researches and specific socio-economic conditions, drafting of plan of communication with local community should be initiated in pilot protected area (areas), as a model which will be offered to other managers and will encourage them to undertake similar steps in planning and management,
- Encouraging managers at system level to use existing and find new, appropriate forms of participation of community representatives in decision-making process – such as joint councils, boards, pressure groups, teams for campaign and project implementation and so on.

5. Assessment of employment level and possibilities of staff development in protected areas clearly points out to the need to undertake strategic steps at system level, such as:

- Implementation of projects to build organizational capacity of managers in protected areas (modern organization of human resources development, harmonization of needs and formally-legal issues, improvement of possibilities for staff development and practices of performance evaluation),
- Establishment of real employment needs and staff training at system level in protected areas,
- Implementation of training programme for staff groups with most visible needs in order to develop management success,
- Coordination of project implementers in this area at national level with an aim of systematic and standardized approach to human resources development, in accordance with international experience and criteria.

6. Poor availability of results obtained in scientific researches, as well as data from nationally relevant institutions to protected areas managers requires certain steps, such as:

- Coordination of scientific and professional institutions by relevant ministries in order to improve co-operation and transparency in project implementation, selection of research problems and results,
- Improvement in efficiency of relevant national institutions and organizations (bureaus, institutes, agencies) in presenting and increasing availability of their databases and resources,
- Internal and external capacity building among protected area managers in the area of information provision (technologically and organizationally).

1. INTRODUCTION AND CONTEXT

1.1. Biological diversity of Serbia

Large magnitude of biological diversity in Serbia is conditioned with bio-geographical position, openness of territory to other surrounding regions, as well as with historic processes of florogenesis and faunogenesis over the last several thousand years. It has been estimated that in Serbia there are about 1,000 plant communities. Balkan endemits make 8.06% flora of Serbia (287 taxons), while local endemits make 1.5% (59 species). Total number of mammals, nesting birds, lizards, amphibians and fish make about 43.3% of total number of these animal groups in Europe. Numerous sorts are tertiary, glacial, boreal, xerothermic or heath relicts, while gorges and canyons of Eastern and Western Serbia represent most significant refugiums of tertiary vegetation on Balkan Peninsula. Geographic position and variety of climate and habitat conditions in Serbia have enabled presence of a number of different forest phytocenosis, which shows significant biodiversity wealth of Serbian forests. Out of total area under forests and forest land, 18% is under special purpose, i.e. under different protection regime. Taking into account that about 90% of these forests are state –owned ones, this means that almost 35% of state-owned forests under protection according to regulations which regulate protection and use of forests and environmental protection. Process of nature and biodiversity protection goes through development and application of strategic, preventive and integrated approach, i.e. integration of economic and ecological aims into sector policies which lead towards sustainable development.

In the area of nature and biodiversity protection, several projects of national interest have been implemented, among which we want to mention the following:

- Red book of flora of Serbia,
- Red book of endangered vertebrates of Serbia,
- Harmonization of national nomenclature in codification and classification of habitats with the international community standards,
- Red book of butterflies of Serbia,
- Atlas of birds of prey of Serbia,
- First phase of the project “Sustainable Development and Protection of Forest Ecosystems in Serbia – harmonization with international standards”.

1.2. Management of protected areas in the Republic of Serbia

Main instruments in protected area management (normative, planning, organization, information and finances) have been developed in accordance with the aim of sustainable management system of certain natural values which are defined as specially protected by the Law on Environmental Protection and other regulations, i.e. laws which regulate other areas (protection and use of natural resources – forests, water, land, spatial planning and landscaping). In the Republic of Serbia, methodology and manner of valorization of natural and anthropogenic values in protected areas (national parks, nature reserves, nature parks, landscapes with special characteristics and monuments of nature) have been harmonized with international criteria of IUCN valorization of natural values and protected areas. Natural resources management has been regulated with the Act on Placement of a Natural Resource under Protection of the Republic of Serbia (Ordinance), while national parks have been separated into special category and management thereof has been regulated with special law.

Law on National Parks from 1993 proclaimed 5 national parks: Djerdap, Tara, Fruska gora, Kopaonik and Sar planina. Serbian Assembly makes decisions on proclamation of national parks, while it establishes special public enterprises in charge of national parks management. Main goal of the special protected values protection is implementation of commitments defined by law and national policy for protection of special natural values, biodiversity and natural areas with extraordinary characteristics. It is essential for the Republic of Serbia to develop protection systems for those areas which are of national, regional and global importance, such as: biosphere reserves (part of the nature park “Golija” was proclaimed Biosphere Reserve in 1997), wetlands of international importance – Ramsar areas (Ludasko jezero, Obedska bara, Stari Begej – Carska bara, Labudovo okno, Pestersko polje, Slano Kopovo, Gornje Podunavlje, Zasavica and Vlasina).

Also, a number of natural resources and habitats of Serbia has international status or is on the list of potential internationally important areas:

- Large number of habitats is on the list of internationally important areas for birds (IBA - Important Bird Areas),
- Large number of habitats is on the list of important plant areas (IPA - Important Plant Areas)
- A number of habitats are identified as EMERALD areas
- National Park Tara is on the preliminary list of natural goods proposed for natural heritage on the basis of the Convention Concerning the Protection of World Cultural and Natural Heritage (World Heritage - UNESCO)
- Area around Drina which includes National Park Tara, Area of extraordinary characteristics Mokra Gora and future Area of extraordinary characteristics Zaovine, are placed on preliminary list of transboundary Biosphere Reserves (MAB – UNESCO) together with parts of natural goods on the territory of the Republic of Srpska (BiH).

Table 1. Network of protected areas in republic of Serbia

2009		
Protected natural goods	TOTAL	
	No.	ha
National parks	5	158.986
Nature parks	16	248,950
Area of extraordinary characteristics	15	32 026
Nature reserves	70	83.829
Monuments of nature	284	7780
TOTAL	428	531571
	6.2	% of the territory of Serbia

Table 2. Network of internationally important areas of the republic of Serbian

Type of area	Planned/proposed	Accepted/registered
Ramsar areas	68	9
Biosphere reserves	9	1
Areas of importance for birds protection (IBA)	38	38
Areas of importance for plant protection (IPA)	59	-
Areas of world natural heritage	5	-
Areas of EMERALD network	61	-
Areas of GREEN BELT network and transboundary areas	14	10
Areas of NATURA 2000 network	-	-

Strategic idea

Existing strategic plans (Spatial Plan of the Republic of Serbia, National Environmental Protection Programme), as well as strategy of spatial development of the Republic of Serbia (drafting in progress), it is stipulated that network of protected areas should be expanded to at least 10% of the territory, while preliminary plan states that area under ecological network should be up to 20% of the Republic territory.

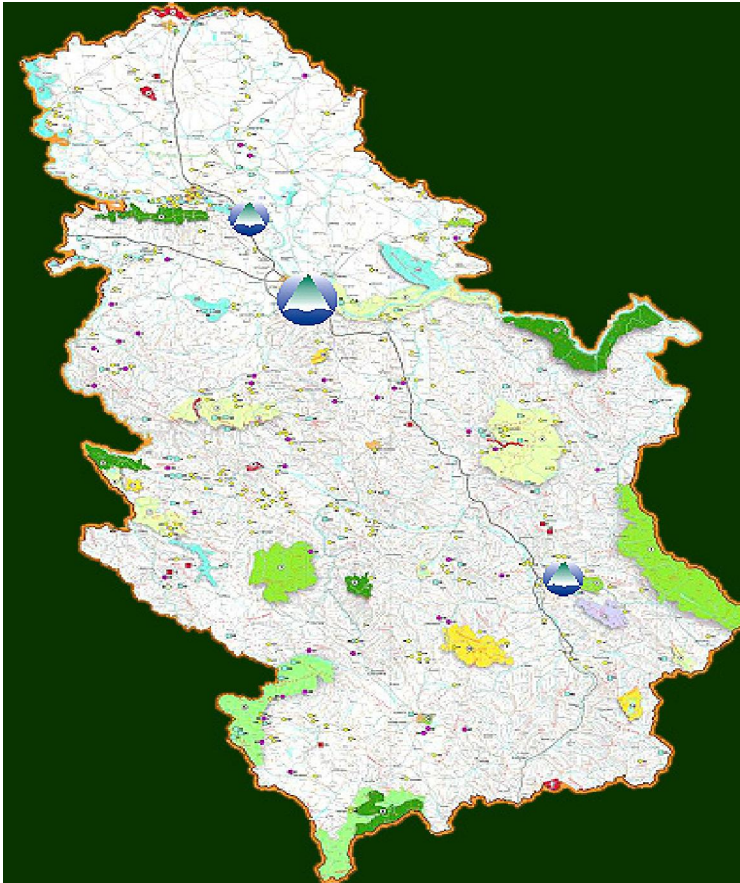


Figure 1. Protected areas in the Republic of Serbia

2. APPLICATION OF METHODOLOGY

2.1. Methodology of the Rapid Assessment and Prioritization of Protected Area Management (RAPPAM)

WWF's RAPPAM methodology uses framework for assessment which was developed by the World Commission on Protected Areas (WCPA). WCPA's methodological framework is based on management cycle. It includes six main assessment elements: context, planning, investments, processes, outputs and results. RAPPAM offers tool to policymakers to achieve aims of the Programme of Convention on Biological Diversity for world protected areas by enabling rapid assessment of overall successfulness of protected area management.

2.2. Application of RAPPAM methodology in Serbia

RAPPAM Questionnaire consists of more than 100 questions. Best approach to the implementation of this methodology is to hold an interactive workshop where managers would fully participate in the assessment of protected areas, analyze results and recognize further steps and priorities. In order to be prepared for the workshop, RAPPAM questionnaire has been translated and questions have been customized for Serbia. Following the experience gained in this methodology implementation in neighboring countries, questions pertaining to context of protected areas, their relative biological, socio-economic value and vulnerability, were not included into the assessment in Serbia, taking into account volume of needed data, which is available in the existing official documents. RAPPAM workshop in Serbia was held in Belgrade, Serbia, on 19-20 February 2009 and it involved representatives of three national parks (Kopaonik, Tara, and Fruska gora) and thirteen managers from other protected areas. The workshop was conducted by Deni Porej, Director of the WWF programme, assisted by Nevena Piscevic and Jelena Ducic from the Ministry of Environment and Spatial Planning of the Republic of Serbia. Taking into account optimal number of participants for an interactive workshop, the work was done within one group. After the introduction and agreement made upon terminological and methodological issues, participants answered questions or group of questions (in the part Pressures and Threats) either individually or in groups (in cases of related areas), which was followed by discussion and explanations of possible doubts. Doing so, active participation was enabled to all participants, as well as possibility to make comparisons or harmonization of assessment criteria.

The assessment was finished during the first workshop day, data were processed by organization team, and on the second day they were presented, followed by discussion and harmonization of final version of the assessment results.

3. RESULTS AND ANALYSIS

3.1. Pressures and threats

Pressures were defined here as those activities which had already harmed protected natural goods, while threats are those activities which could start or continue to harm the goods in the future. They are assessed with respect to aims of protected areas, and are evaluated on the basis of their range, impact and duration. For the purpose of this assessment, participants were offered the following list of pressures and threats, with the notion that they themselves may add something that is present in certain area, but was not present here:

- Forest ownership and management
- Alien invasive species
- Hunting and fishery
- Unsolved ownership-legal issues
- Change in land use
- Water management
- Waste water
- Tourism and recreation
- Mining
- Pastures succession
- Problems of floating routes
- Waste
- Firefighting issues
- Collection of medical herbs and fungi

3.1.1. Forest ownership and management

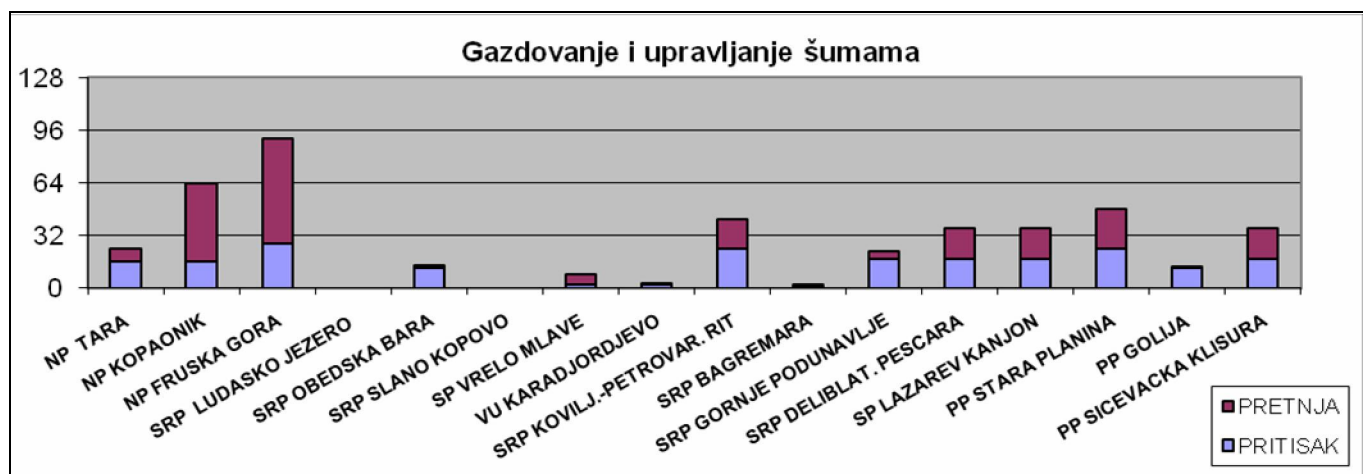


Figure 2. The overall degree of pressures and threats in protected areas due to forest ownership and management

All here assessed protected areas are facing problem of forest management. The reasons are mostly related to illegal and legal harvesting and exploitation. Privately owned forests present additional difficulty, because managers do not have full insight into or control over harvesting.

Special Nature Reserve “Gornje Podunavlje” is facing the problem that in one protected area there are several managers, and planning documents are not harmonized for better forest management; Special Nature Reserve “Palic-Ludas” has problems with thefts and alienation of forests, while National Park “Tara” sees great pressure in illegal harvesting in state- and privately-owned forests, but there is tendency of reduction of such pressure in the future. Also, protection regimes are not obeyed, which means that there is violation of provisions contained in the Regulation on Protection (e.g. SNR “Koviljsko petrovaradinski rit” is under 1st degree regime, but it is being afforested with monocultures, which is strictly forbidden), which, of course, disturbs biodiversity.

In this segment, it is visibly obvious that there is disharmony between planning documents and legal provisions at system level.

3.1.2. Alien invasive species

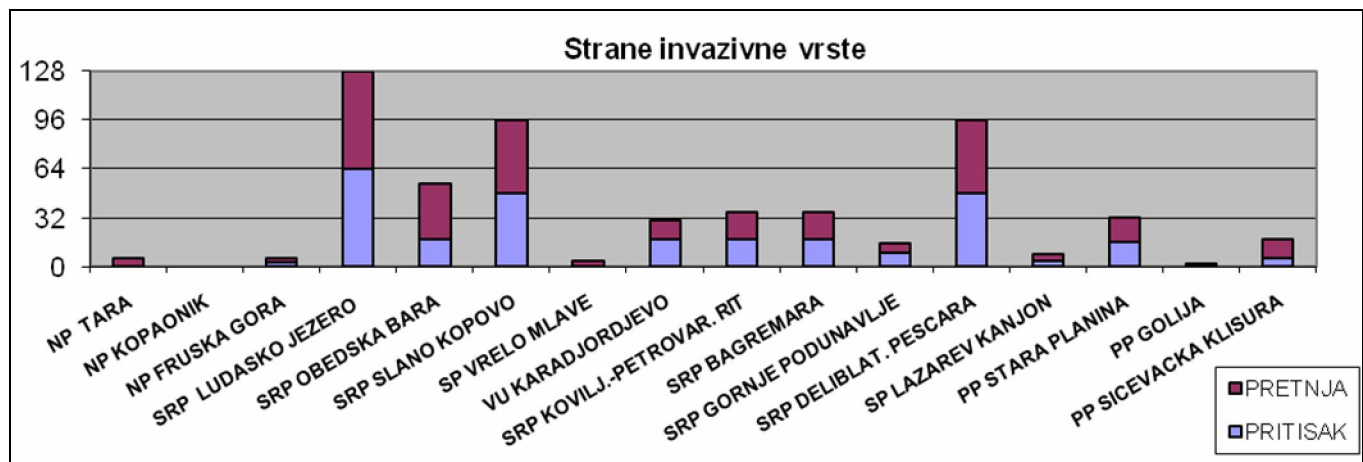


Figure 3. The overall degree of pressures and threats in protected areas due to alien invasive species

Problem of alien invasive species is mostly seen in wet habitats. According to the assessment results, the strongest pressure and threat as well in this area is felt by SNR “Ludasko jezero”, SNR “Slano Kopovo” and SNR “Obedska bara”. Wet habitats face problems with common ragweed (*Ambrosia artemisiifolia*) and invasive species of ichtio-fauna, while SNR “Deliblatska Pescara” face problem of acacia overgrowth in the area. Pressures and threats have almost the same intensity, except in the case of SNR “Obedska bara”, which in this respect suffers higher threat than actual pressure.

3.1.3. Hunting and fishery

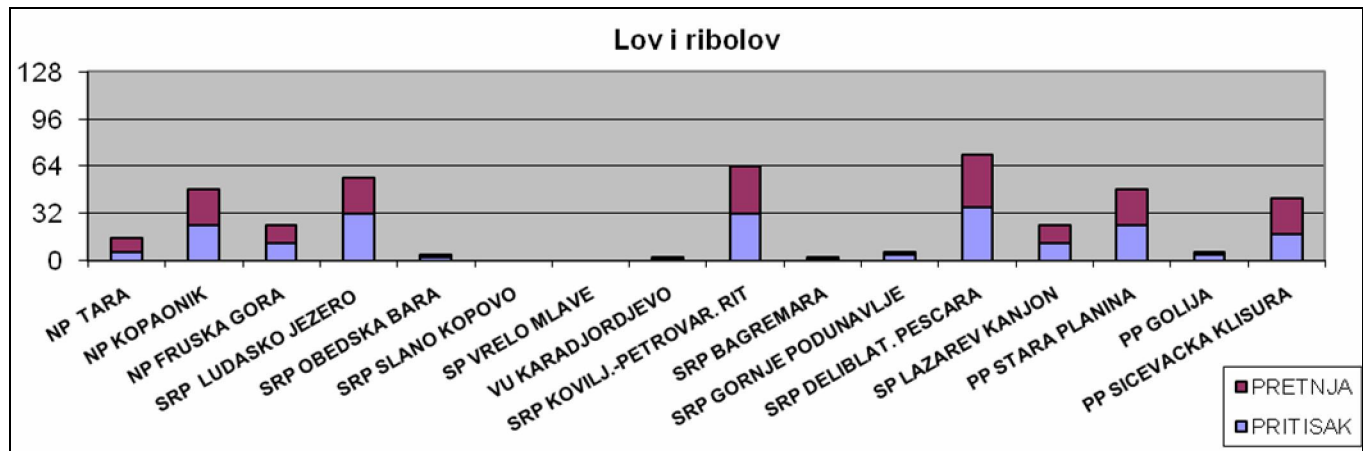


Figure 4. The overall degree of pressures and threats in protected areas due to hunting and fishery

Ownership over hunting area is defined by current Bases on Hunting, while fishing is implemented according to Bases for Fishery, i.e. activities of hunting and fishing are harmonized with protection regime. Of course, there are problems pertaining to poaching, and they are mostly expressed in NP “Kopaonik”, NP “Fruska gora”, SNR “Ludasko jezero”, SNR “Koviljsko petrovaradinski rit”, SNR “Deliblatska pescara”, PoN “Sicevaska klisura”, PoN “Stara planina”, as well as SR “Lazarev kanjon”. The problem is even bigger because illegal methods are used in fishing practice, such as dynamite or electricity.

3.1.4. Unsolved ownership-legal issues

Ownership-legal issues are one of biggest problems in protected areas, primarily due to unsolved relations and unclear boundaries between private and state owned land, as well as due to the issue of restitution. This problem is particularly obvious in NP “Fruska gora”, where Church requires restitution of ground which now belongs to the national park.

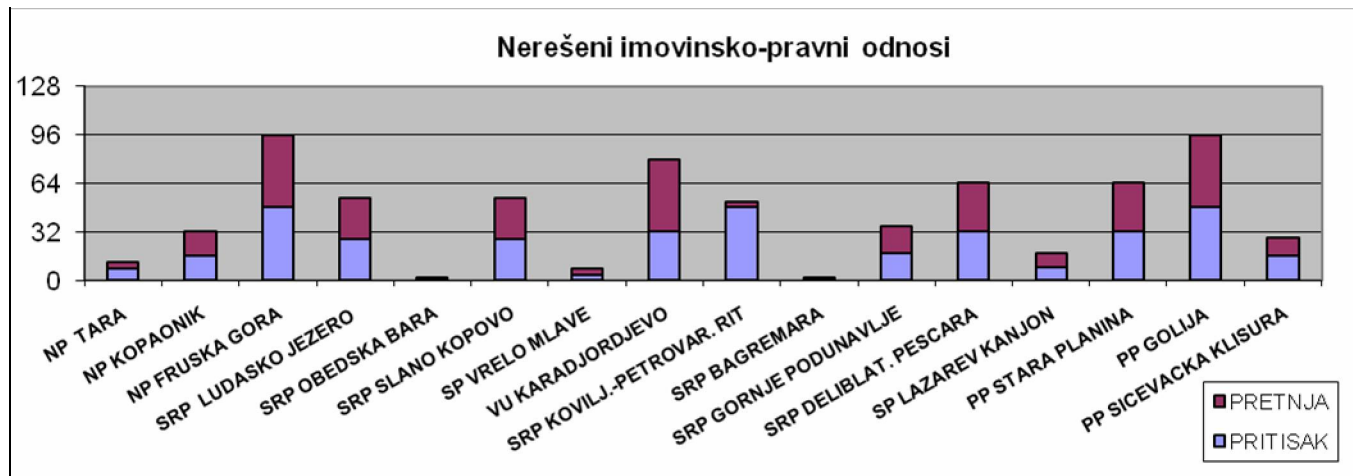


Figure 5. The overall degree of pressures and threats in protected areas due to unsolved ownership legal issues

In the SNR “Koviljsko petrovaradinski rit”, buffer zone is actually bed of the Danube, some 1,250 km in length, and that part of the Danube makes part of a fishing area Danube II. Commercial fishing is allowed in this zone, but taking into account that the Reserve’s buffer zone, as a part of the Danube II, is granted to other user, revenues gained from fishery remains with that user, although according to law, such revenues should be used for investments into the Reserve, because they are obtained in the protected natural area. In that way, there is no flow of financial means, and that part is alienated part of the Reserve. Also, one of the problems pertaining to ownership-legal relations is construction of a hotel which is owned by an individual, while the ground itself is state-owned. PE “Srbijasume”, as manager of major part of protected areas, does not have information who is the owner of about 35,000 (out of total 917,000) hectares of land, while PoN “Stara planina” due to its attractive location, has problem with current and future construction of ski slopes. The problem is also seen in misuses of legal possibility of change (according to the Law on Forests), where owners of less attractive parcels inside protected areas require more attractive ground to be granted to them in some other location.

3.1.5. Change of land use

This threat and pressure is present in many protected areas, mostly SNR “Deliblatska pescara”, PoN “Stara planina”, PoN “Golija”, three national parks, SNR “Ludasko jezero”, SNR “Gornje Podunavlje” and SNR “Koviljsko petrovaradinski rit”. The problem is usually related to demographic changes and anthropogenic effects, but also with intensification of natural processes.

In some cases, this phenomenon has positive aspects, such as change of land into wet meadows.

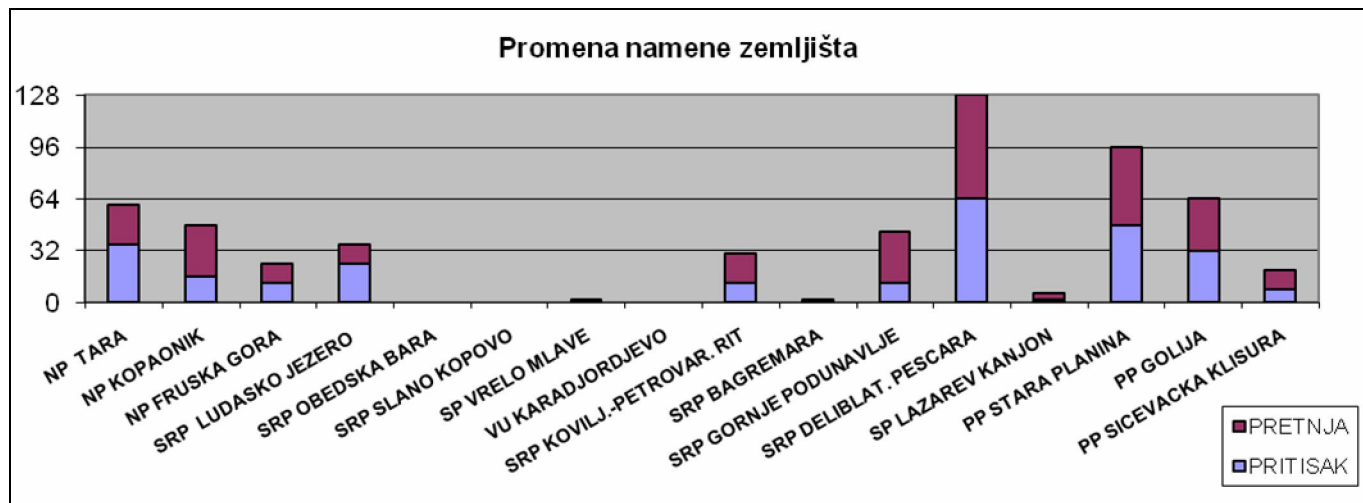


Figure 6. The overall degree of pressures and threats in protected areas due to change of land use

3.1.6. Water management

Most of the protected areas managers emphasize that this threat has great impact, and according to their opinion, this situation will not significantly change on the future.

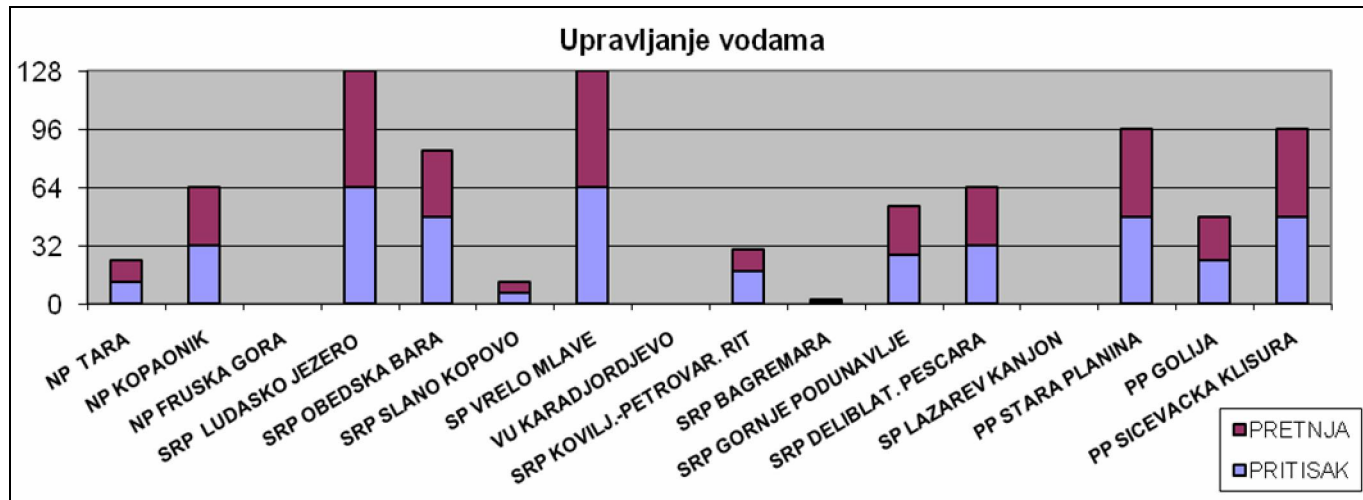


Figure 7. The overall degree of pressures and threats in protected areas due to water management

Problems that are generally seen here are the following:

- Watercourses within the areas often remain buried after harvesting,
- Irrational use of mountain springs for water supply of weekend settlements,
- Artificial snowing causes loss of about 20% of water from the location (NP "Kopaonik"),
- Construction of water supply network endangers forests,

- Problem with capture of spring water in highlands leads to water pollution,
- Release of water from Zavojsko jezero into PoN “Sicevacka klisura” sharply changes level of the Nisava, which significantly affects river fauna (fish spawn is disturbed, and population is reduced)
- Rapid growth of tourism does not include regulation of water supply, which results in insufficient biological minimum.

Related to this group of pressures and threats, there is a range of disagreements between laws and municipal regulations (e.g. protected areas participate in irrigation, but they pay for drainage, such as SNR “Koviljsko petrovaradinski rit”). Currently, Law on Water is being prepared and draft amendments have been submitted by the managers, but there is no any feedback yet related to fate of their proposals. General assessments from all participants were that water resources are poor and are used irrationally, and awareness about that topic is not adequately developed in the community.

3.1.7. Wastewater

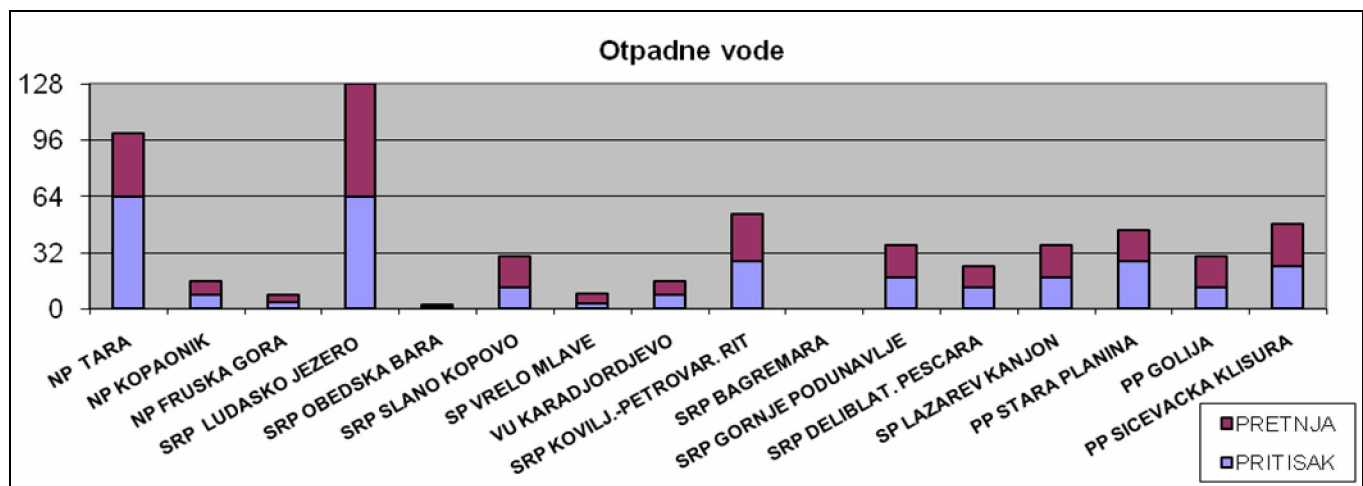


Figure 8. The overall degree of pressures and threats in protected areas due to wastewater

Problems which occur here are the following:

- Uncontrolled spillage of wastewater from weekend settlements,
- There are no facilities for wastewater treatment near the weekend settlements, sumps are present only sporadically,
- Pollution of water courses affects fauna to great extent,
- Run-off of surface layer of soil from agricultural areas treated with chemicals for plant protection and mineral fertilizers leads to soil and watercourses pollution, where fish population suffers the most.

3.1.8. Tourism and recreation

There is a big pressure of object construction (hotels, ski slopes) both in defined construction zones and in those not defined so. The most serious and usual problem with this pressure is that large number of tourists means large quantity of waste left, but all protected areas do their best to solve that problem after the tourists leave. In parts of PNG intended for visitors' stay, there are regulated paths equipped with either containers or bags for rubbish.

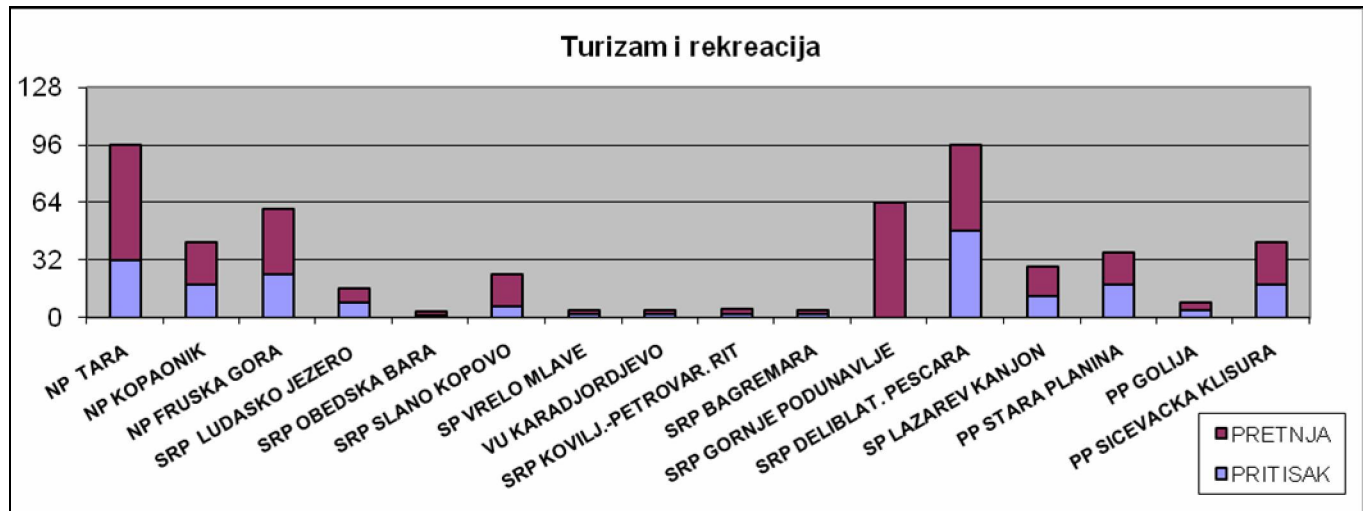


Figure 9. The overall degree of pressures and threats in protected areas due to tourism and recreation

Generally, forecast of threats in the future is more expressed than in case of current pressures in the area, if we bear in mind plans for tourism development in the country and growing pressures to protected areas in prospective.

3.1.9. Mining

Problem with mining is not highly present in protected goods. Biggest problem falls upon the NP "Fruska gora" and SNR "Deliblatska pescara". There are two pits in the NP "Fruska gora", one of them active, while the other has approval for exploitation. Also, additional problem here is transport of feedstock through the national park. SNR "Deliblatska pescara" has situation in which, under the excuse of maintenance of floating route, gravel and sand are being dug up, which causes collapse of edges and Ada Cibuklija is slowly sinking.

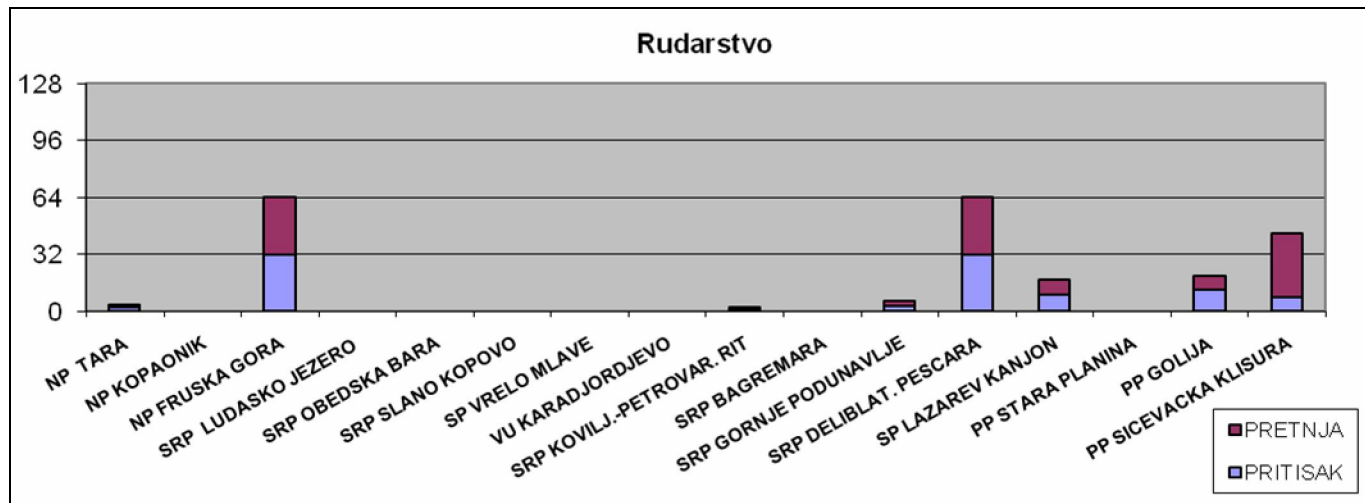


Figure 10. The overall degree of pressures and threats in protected areas due to mining

3.1.10. Vegetation succession

Abandonment of land, and/or reduction of pasture lead to vegetation succession (NP "Tara", PoN "Golija"). Also, pasture communities change into forest ones in some locations in national park, although there are cases of transit of forest communities into pasture ones (NP "Fruska gora") due to utilization of forests. Taking into account that regular maintenance of wet meadows is needed (SNR "Ludasko jezero"), it is necessary to allocate significant financial funds for reed mowing and for transport of biomass out of the good. In the future, more attention will have to be paid to this problem (SNR "Deliblatska pescara"), in the way that will require new approaches in management and status monitoring, including higher investments in land management.

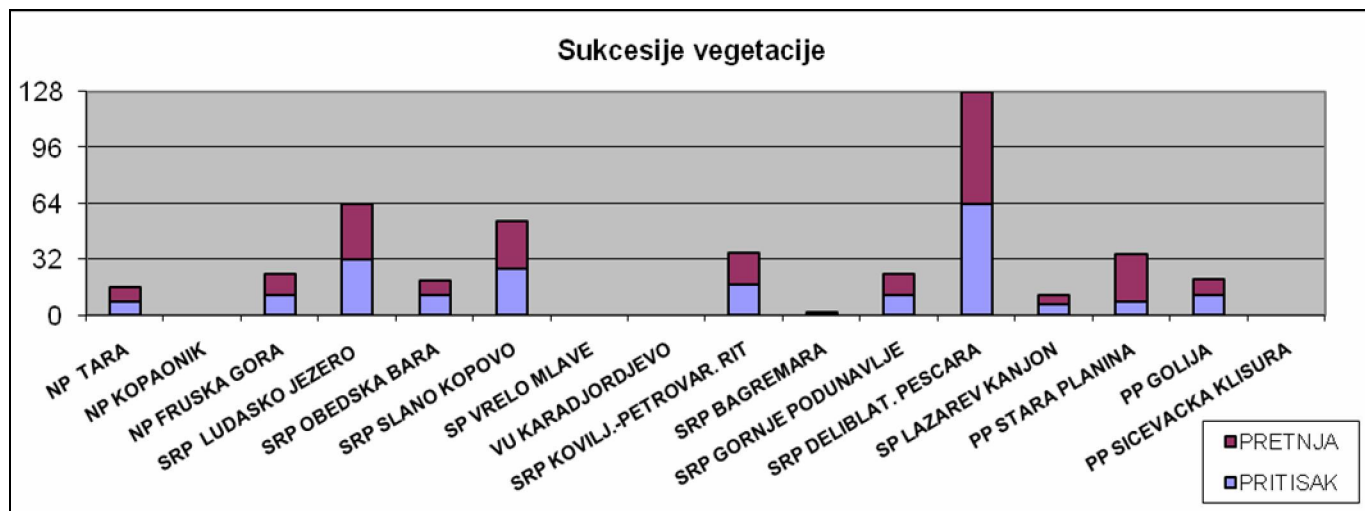


Figure 11. The overall degree of pressures and threats in protected areas due to vegetation succession

3.1.11. Problem of the floating route

This threat is present in only several PNG, but is most present in SNR “Deliblatska pescara”, which is caused by inadequate digging up of sand and gravel.

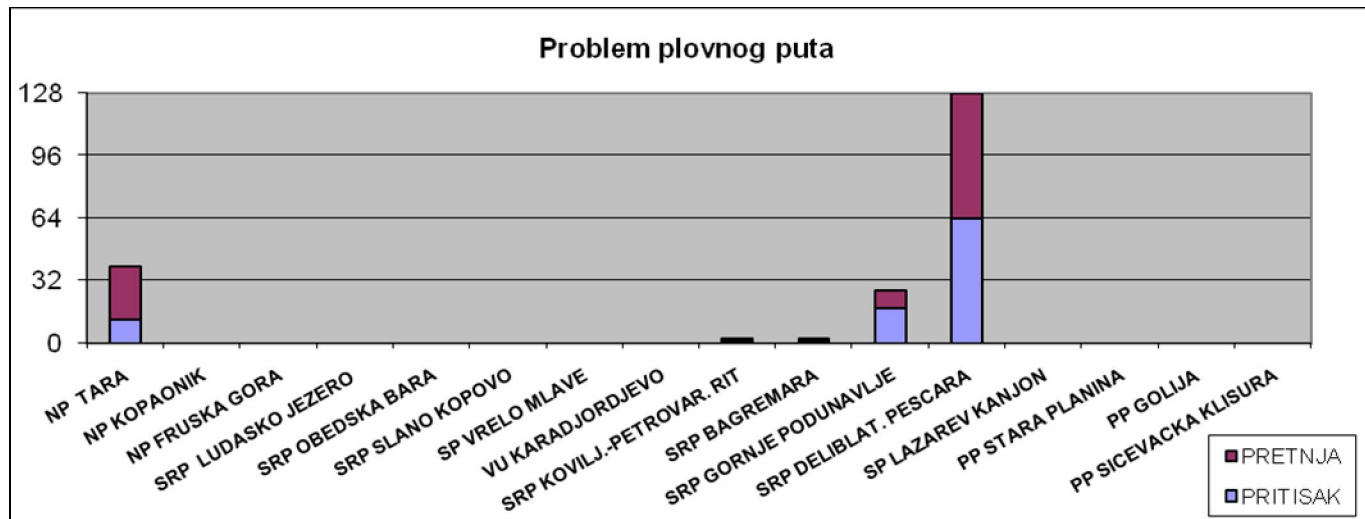


Figure 12. The overall degree of pressures and threats in protected areas due to problems of floating routs

3.1.12. Waste

All protected areas are more or less endangered with organic and inorganic waste. In NP “Tara” and NP “Kopaonik” transport of waste is organized all year long. In PoN “Sicevacka klisura”, great problem is seen in international highway which goes through the good, as well as big weekend settlement around the river Nisava. This increases pressures and threats related to waste. This pressure is most expressed in SNR “Deliblatska pescara”.

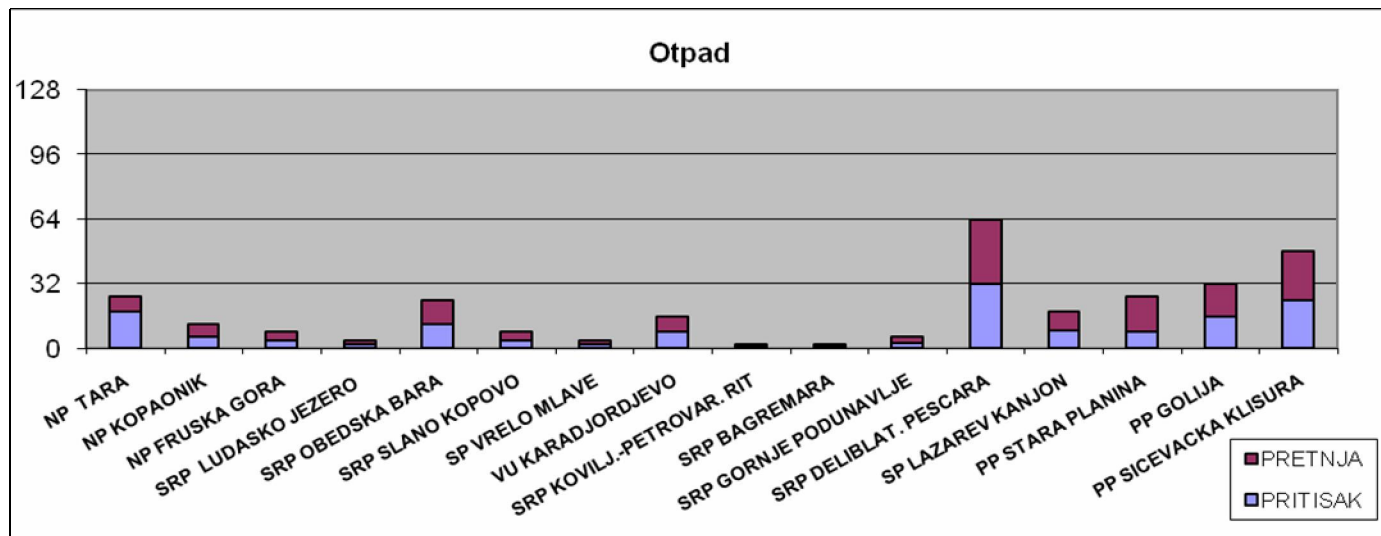


Figure 13. The overall degree of pressures and threats in protected areas due to waste

3.1.13. Problem of protection against fire

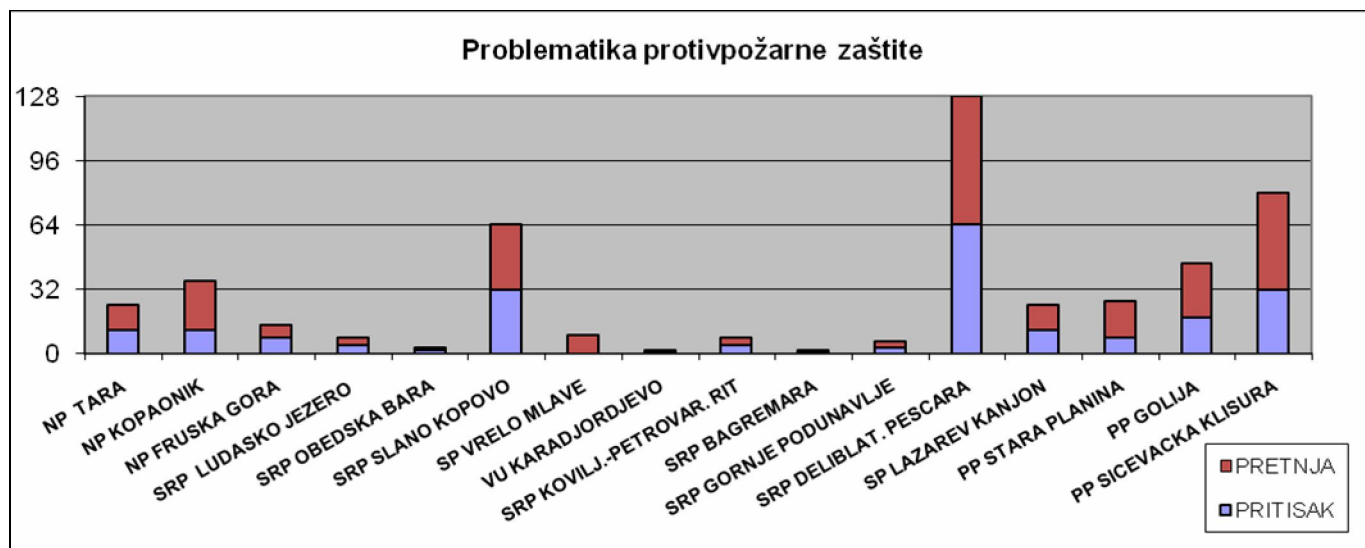


Figure 14. The overall degree of pressures and threats in protected areas due to problem of protection against fire

Problem of protection against fire in PNG mostly pertains to:

- Negligence of visitors/tourists who light fire in unmarked and non-allowed places (NP "Tara", NP "Kopaonik", NP "Fruska gora"),
- Intentional fires in areas under reed (SNR "Koviljsko petrovaradinski rit", SNR "Ludasko jezero") in order to obtain more quality reed next year, which disturbs habitat of many small mammals and insects.

3.1.14. Collection of medical herbs and fungi

Generally, common problem in all PNG is that collection of medical herbs and fungi is predominantly focused to economic gain, neglecting conservation of the habitat structure. Due to individuals' incompetence, plants are damaged and over the time, they fade away. Most endangered species are marshmallow, chamomile, salvia, great yellow gentian, red geranium and blackberry.

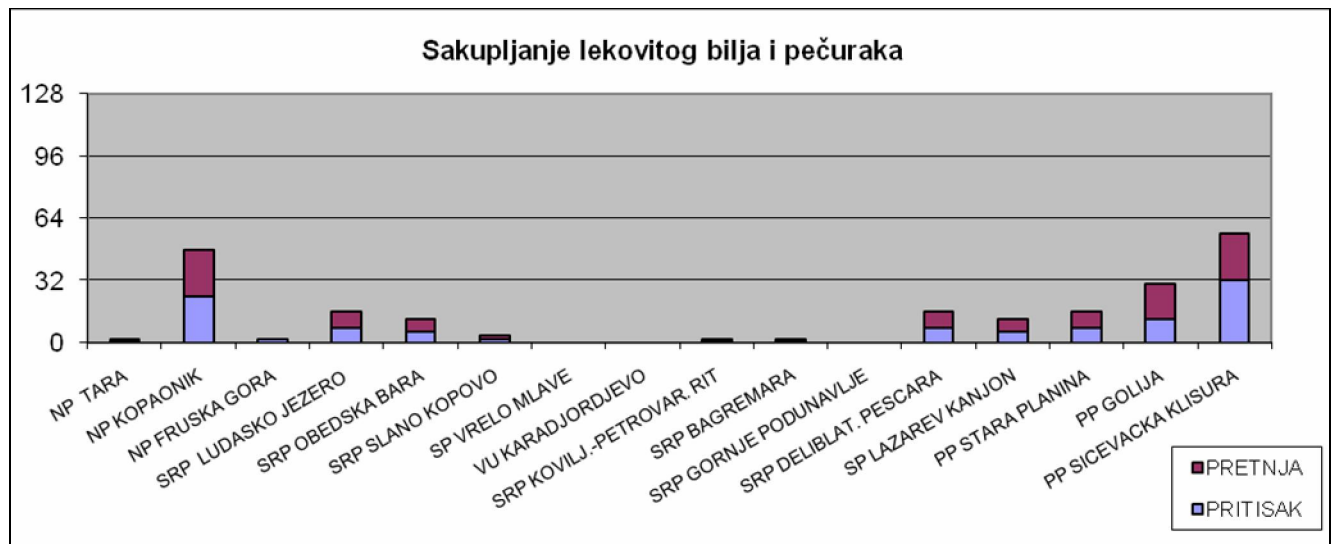


Figure 15. The overall degree of pressures and threats in protected areas due to collection of medical herbs and fungi

3.2. Trends

Answer to the question which pressures will be reduced, and which will probably remain as problem in the future may be obtained through comparative ranging of pressures (current status and threats (future status) in whole.

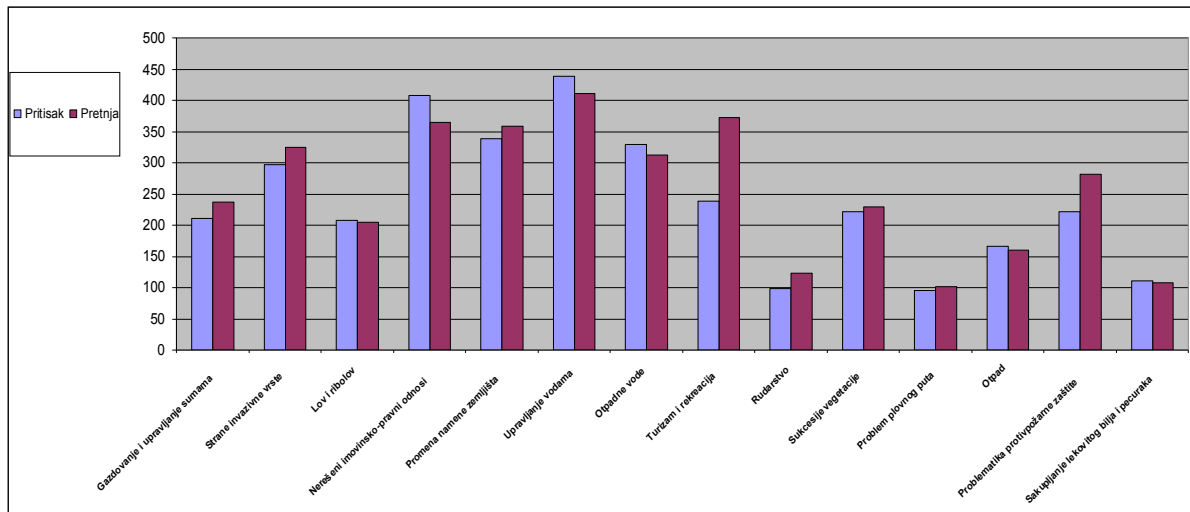


Figure 16. The overall degree of pressures and threats in protected areas due to trends

On the basis of the answers shown in the graph, participants expect that intensity of the problem of unsolved ownership-legal issues, water management, wastewater and collection of medical herbs and fungi will reduce to some extent in the future. However, as for the other threats – ownership and forest management, alien invasive species, change in land use, tourism, mining and problem of protection against fire are expected to grow in the future; therefore, it is necessary to pay special attention to this group of problems. Generally, after the assessment of pressures and threats at the group level of covered areas, the following order was formed:

Water management, unsolved ownership-legal relations and change in land use are three most expressed actual pressures to protected areas resources. At the same time, water management is assessed as strongest possible threat in the future, followed by tourism and recreation and unsolved ownership and legal issues.

Regardless the trend of reduction of pressures forecast for the future, water management and unsolved ownership-legal relations are placed high among both pressures and threats, while tourism and recreation are making big step forward as threat compared to current pressure to resources.

4. ASPECTS OF SUCCESSFULNESS OF PROTECTED AREAS MANAGEMENT

This point forward, we will present results and analysis of assessment of four aspects of successfulness of protected areas management: planning, investments, processes and results. Elements inside each of these assessment segments are presented in the following table:

Table 3. Elements of management successfulness through WWF questionnaire

Projecting and planning of protected areas	Investments	Processes	Results
<ul style="list-style-type: none"> • aims of protected areas • legal security • planning and projecting • PA structure design 	<ul style="list-style-type: none"> • staffing • communication and information • infrastructure • financial means 	<ul style="list-style-type: none"> • management planning • management procedures • research, status monitoring and evaluation 	<ul style="list-style-type: none"> • prevention of threats • renewal of location • wild species management • awareness raising and education of local community • care about visitors and tourists • infrastructure development • management planning and recording • monitoring, supervision and staff evaluation • staff specialization and development • results from research and monitoring

This part contains participants' answers to the group of questions pertaining to objectives defining, legal security and planning and projecting of a location.

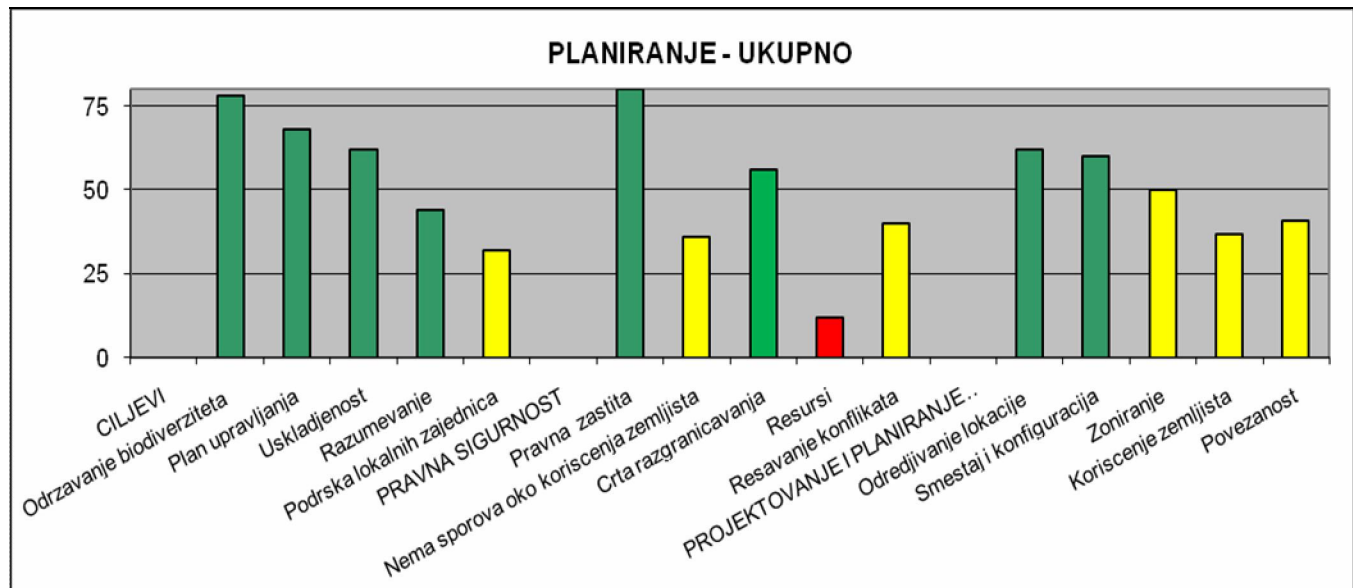


Figure 17. The overall degree of total planning in protected areas

At the level of overall results, we may conclude that maintenance of biodiversity and legal protection are strengths of protected area management planning (most of the participants replied with “yes” to these answers, so that total score was even more than 75 out of possible 95 points).

4.1. Aims

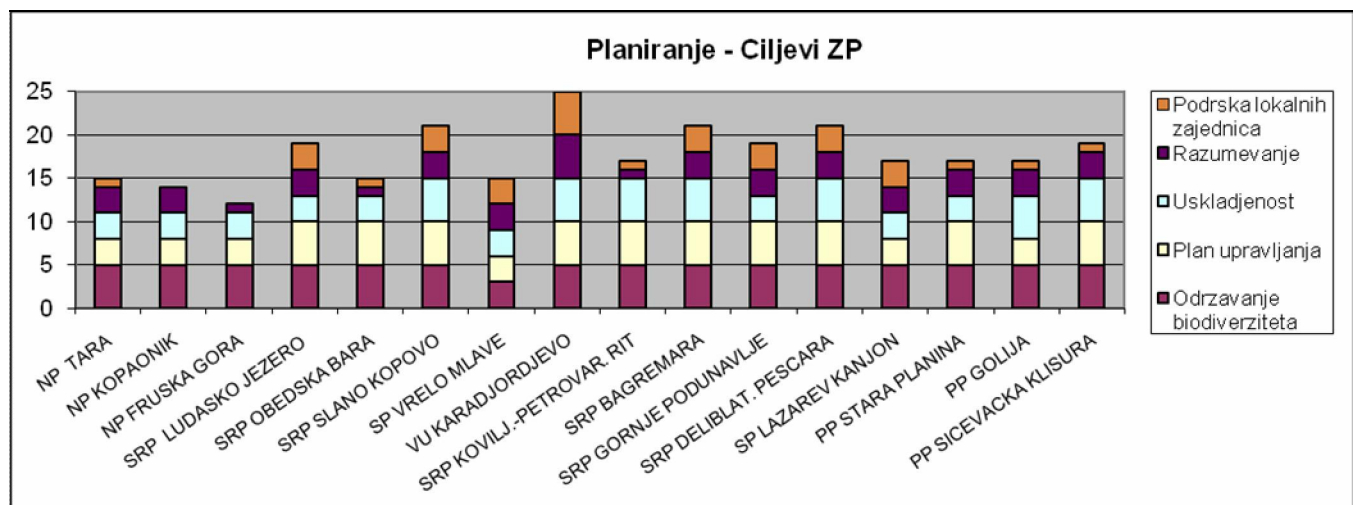


Figure 18. The overall degree of management objectives in protected areas

Aims of protected areas fully or partially stipulate protection and maintenance of biological diversity in all areas. Aims related to biodiversity are mostly clearly in all management plans which have been adopted or are in draft phase. (medium-term and annual plans of protection and development). Weakest point of this segment is support that management plans receive from local community; it is completely absent from two

out of three national parks, while it is very weak in PoN “Golija”, which is also biosphere reserve – i.e. area whose core definition is in collaboration with local residents. Such results imply lack of communication and education aimed to familiarization of population with the aims, which would enable people to understand, and consequently support them.

4.2. Legal security

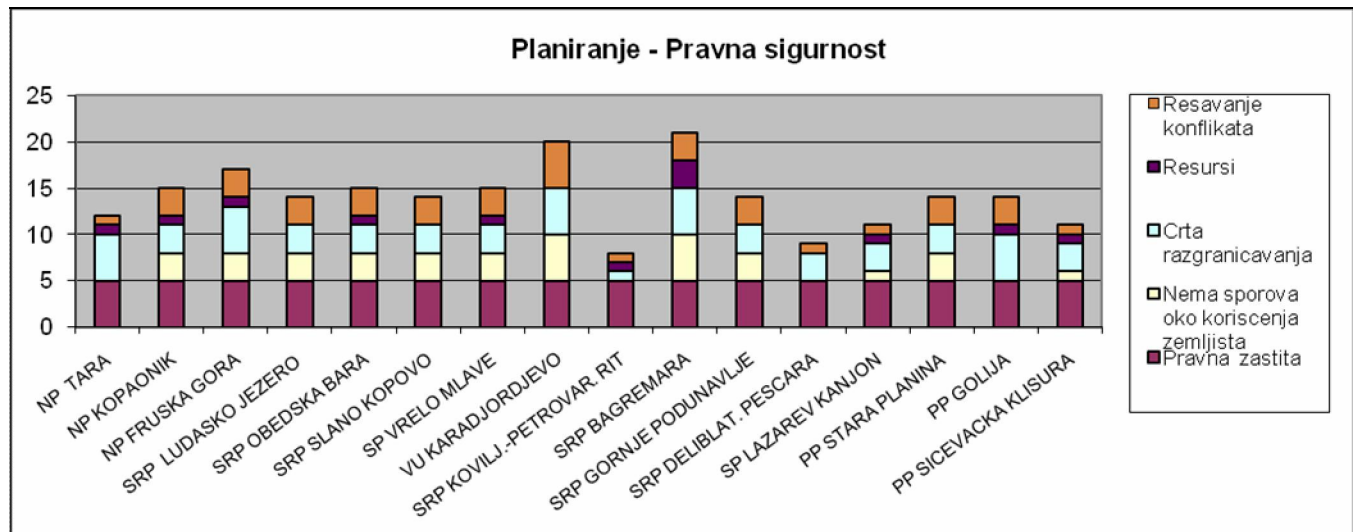


Figure 19. The overall degree of legal security in protected areas

All protected areas have long-term, legally binding protection. Majority of goods has unsolved litigations related to lease of right to use the land, e.g., problems with cadastre office and/or ownership-legal issues; NP “Fruska gora” is in litigation with Church in relation to church grounds (restitution problem). Mark-off line is fully or mostly adequate and it enables achievement of the aims of protected area. In all goods, litigations may be settled in court. Conflicts with local community exist in most cases and are settled with medium successfulness. The most obvious problem in this group of issues, according to the participants, is lack of human and financial resources necessary for application of legal regulations and implementation of key activities in protected areas.

4.3. Planning and project designing of a location

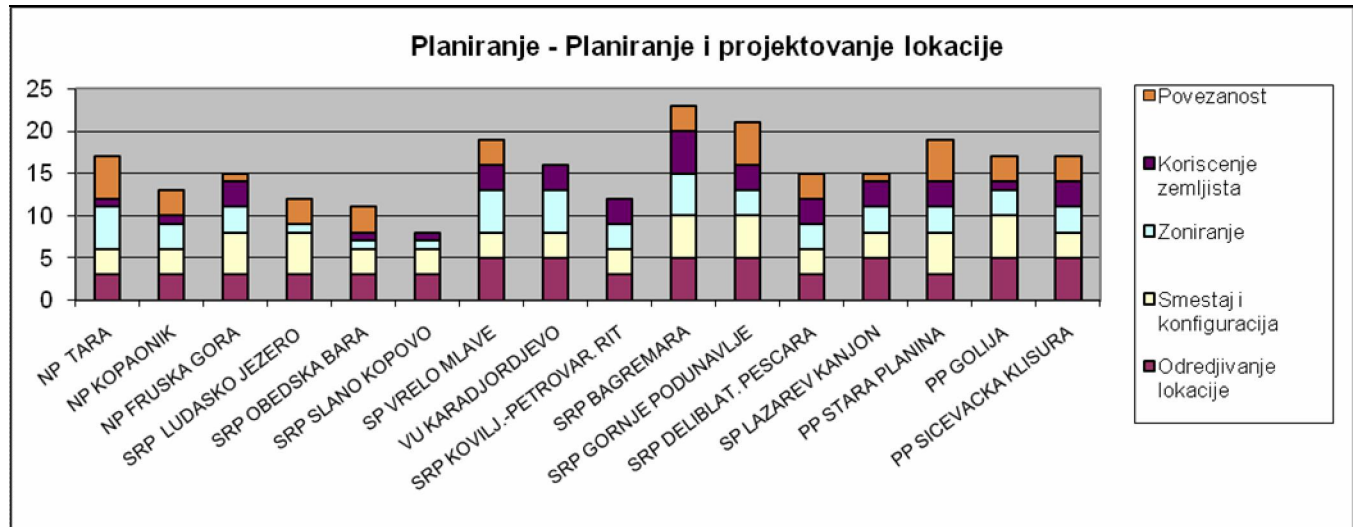


Figure 20. The overall degree of planning and project designing of location in protected areas

Designation of a protected area location is fully or mostly compliant to the aims of protected area.

Accommodation and configuration of PNG mostly enable optimal biodiversity protection in all areas (taking into account that answers to this question were “mostly yes”). Zoning of a protected area presents problem in some of the goods. The following characteristics contribute to this: physical position of zones in respect to existing environmental elements; limits of the activities, i.e. bans; lack of economic possibilities to make investments. In SNR “Slano Kopovo”, for example, first zone is located along the regional road, in SNR “Obedska bara” plantation of North American Poplars is in the second grade, where use of natural resources is limited and strictly controlled. Also, since in the first grade use of natural resources is banned and all other aspects of area utilization are excluded, as well as activities, except for those related to scientific researches and controlled education, and since it covers small surface in this area, it should be planned to expand that zone. Military Institution “Karadjordjevo” has only 2nd and 3rd grade of protection, and in order to maintain the system, 1st zone should exist here. SNR “Ludasko jezero” has problem with plowing along the shore and buffer zone is breached with such activity. Also, maze crops are treated with certain chemicals which eventually run off into the lake. The same problem with chemicals exists in SNR “Slano Kopovo”. Boundary of the SNR “Obedska bara” is on the boundaries of three villages whose intensive agriculture adversely affects the reserve. NP “Tara” has big problem with quicklime pits and burning of tires, which adversely affect park life.

Predominant answers to the question of linkage with other goods were “mostly not”.

4.4. Investments in protected areas

This section contains participants' answers to the group of questions pertaining to employment, communication, infrastructure and financing of protected areas.

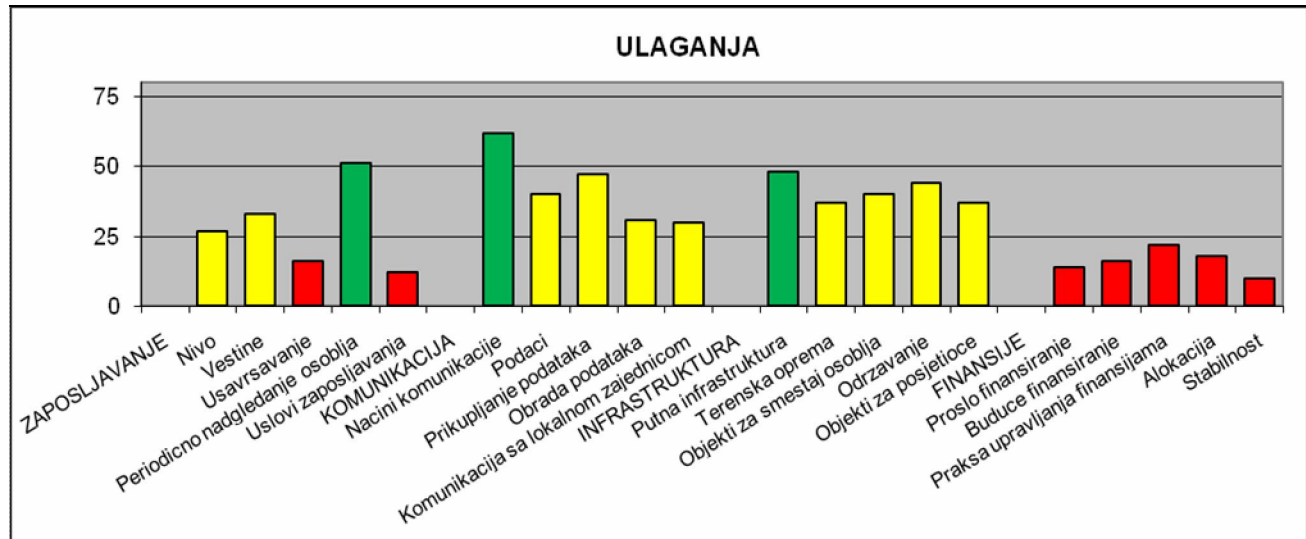


Figure 21. The overall degree of investments in protected areas

At the level of overall results, we may conclude that communication and existing infrastructure are at satisfactory level. Number of employees, specialization, employment conditions and future funding are areas in which workshop participants listed significant problems.

4.4.1. Employment

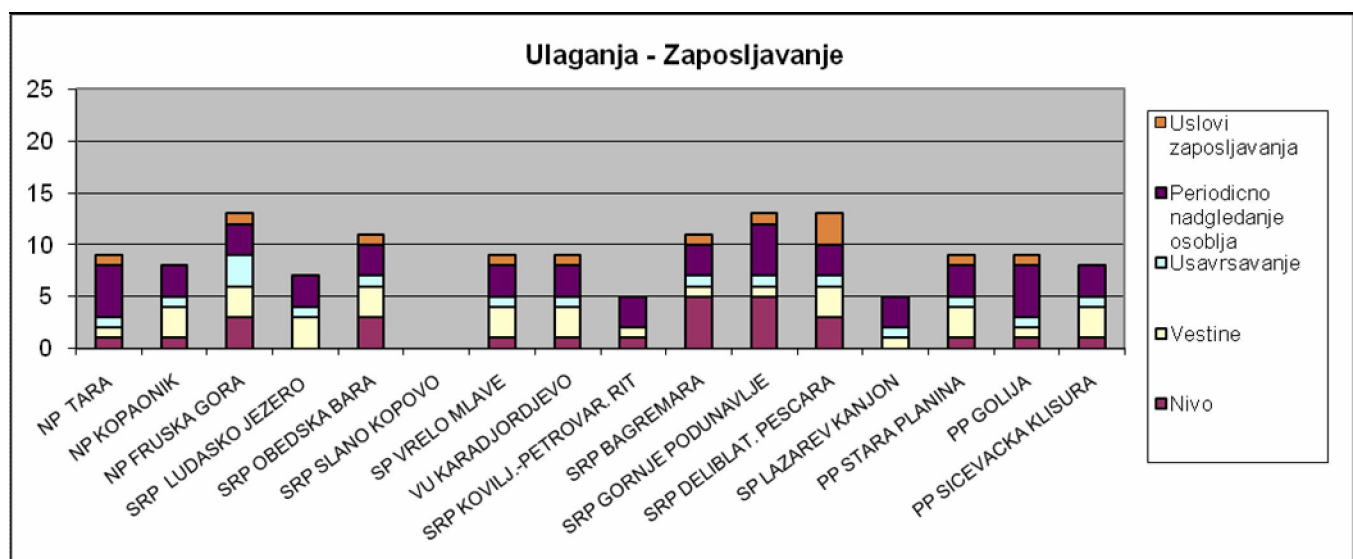


Figure 22. The overall degree of employment in protected areas

In most of the goods, employment level is not at satisfactory level. General problems pertain either to lack of professional staff or such staff that is not available at all (in SNR "Bagremara" people face problem of being undermanned in the area of protection, because field work is usually covered by people who work in forestry and are not competent enough to work in the area of protection). Also, non-compliance of systematization of working positions to real situation in a good leads to problem. In NP "Kopaonik", for example, according to systematization there should be 60 people in charge of protection, but there are 30 people employed in that division, which affects quality and speed of operation, but also lack of free time which could be used to train people. In NP "Tara" restructuring of inadequately employed must be done (in order to employ 20 people with necessary qualifications for the park, another problem must be solved – 100 people who have inadequate qualifications, i.e. people with reduced working abilities). In SNR "Koviljsko petrovaradinski rit" there are no adequate employees with proper qualifications, while in PoN "Sicevaska klisura" they face problems with retirement of large number of people, but due to poor financial status they are

not able to employ new people. According to general participants' assessment, currently employed people generally have necessary skills to implement key management activities in the goods. Possibilities for development and specialization of employees are most serious problem in this monitored management aspect. There are very few managers (except for PE "Srbijasume", partially) implement activities of staff specialization, i.e. human resources development in an organized, planned and continual manner. In most of the cases, this activity falls under some individual initiative from the employees who, depending on financial resources and management bodies' policy, receive support for the specialization. Specialization must be organized at the level of managers, as well, not only at the competent ministry level, which was common conclusion from all the participants. Poor possibilities for specialization and development of employees are closely related to employment conditions. Assessments in this context pertain to weak attractiveness of positions in protected areas to recruit quality staff at all, as well as to fluctuation of quality staff caused by poor working conditions and low opportunities for specialization and development.

4.4.2. Communication and information

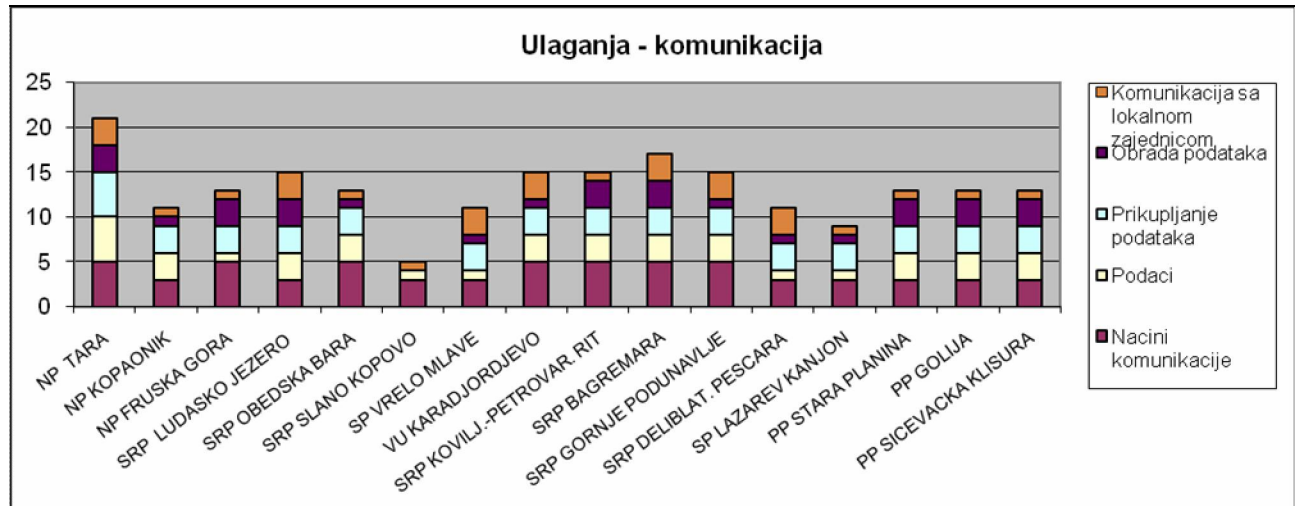


Figure 23. The overall degree of investments for communication and information in protected areas

Greatest pleasure of the participants who were assessing this segment referred to manners of internal communication, while other aspects were marked with significantly worse marks. All protected goods need more intensive co-operation with scientific institutions and faculties. Main problems seen at this level of overall results are lack of harmony between scientific and managers' interests (institutions and researchers deal with what they are interested in, not with what would be managers' interest; *inter alia*, scientific institutions deal with researches in state-owned forests, but not in private ones); lack of feedback and transparency (unavailability of results and analysis from scientific researches, but also databases from referent national institutions); weak initiative from protected areas themselves for the implementation of researches, partially due to financial and organizational problems, but also due to lack of adequate staff. Also in this segment communication with local community is weakest point, according to the assessment results. According to the participants' discussion, not only is it necessary to educate local community and involve it more into the management, but it is also necessary to train employees about manners of efficient communication with community as one of mechanisms of more successful area management.

4.4.3. Infrastructure

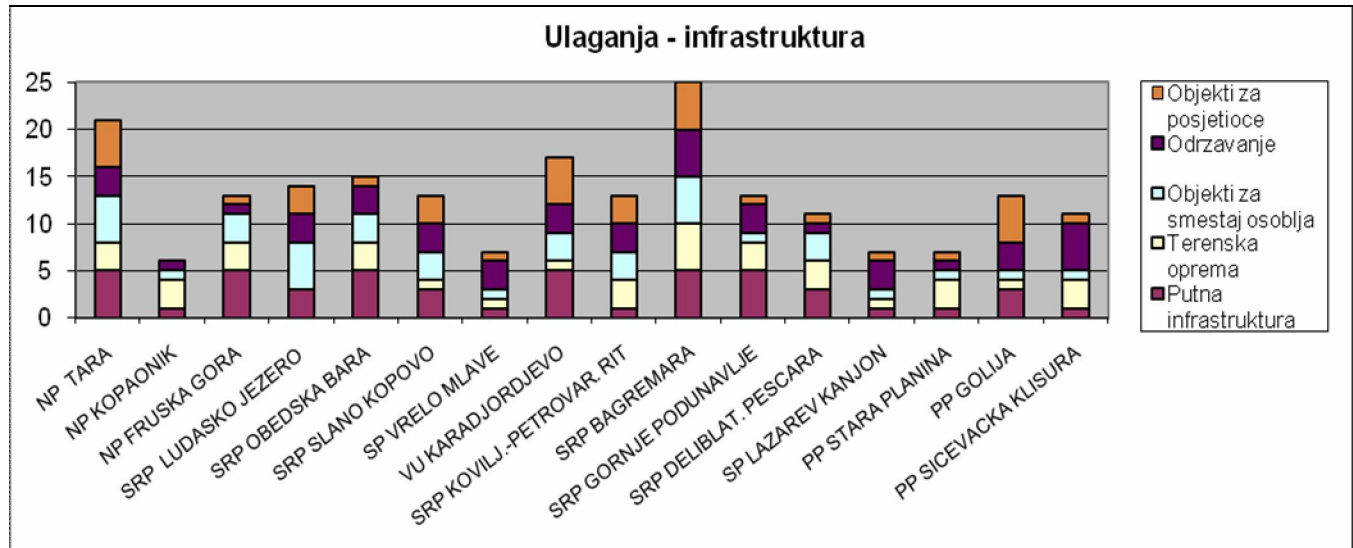


Figure 24. The overall degree of investments for infrastructure in protected areas

In most of the goods, road infrastructure is fully or mostly appropriate for the implementation of key managerial activities. Problem of field equipment is seen in all goods, while staff accommodation is more or less satisfactory. According to the assessments, objects intended for visitors are underdeveloped element of this managerial segment.

Objects intended for visitors exist in SNR "Obedska bara", NP "Tara", NP "Fruska gora", SNR "Palic-Ludas", while they are being constructed in SNR "Deliblatska pescara" and SNR "Slano Kopovo"

4.4.4. Financing

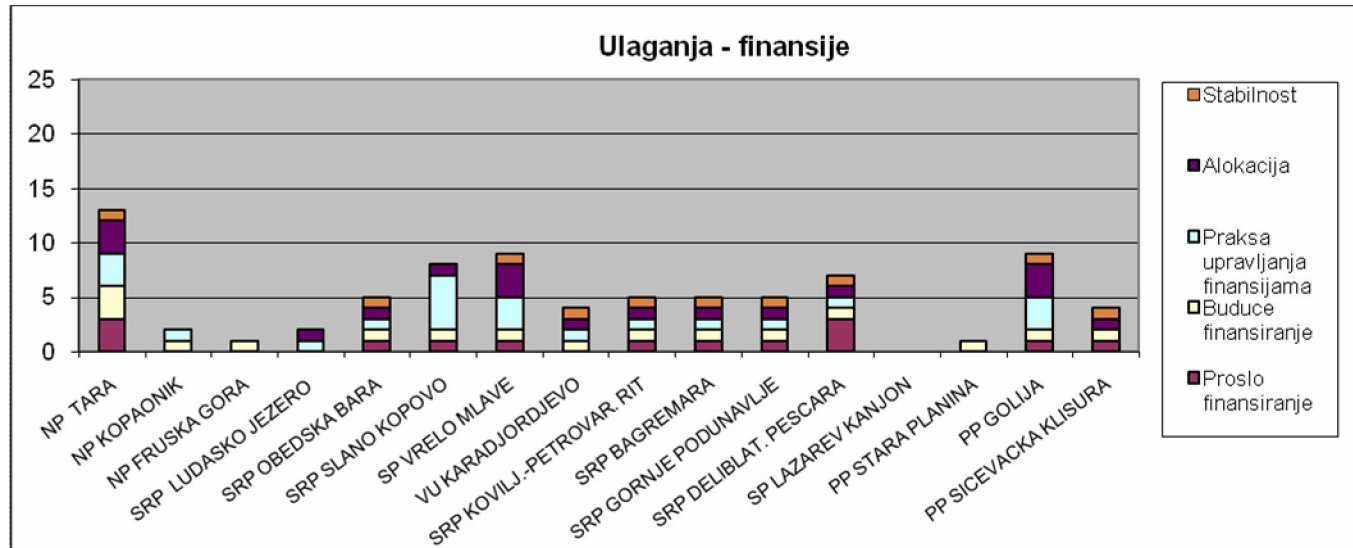


Figure 25. The overall degree of financing in protected areas

As we have already mentioned, financing had been assessed as a very weak point of protected areas management in Serbia.

According to legal regulations, protected areas may obtain funds in the following way:

- From the revenues gained through business, from lease, service provision and other revenues which they gain through their business activities,
- From the republic budget, according to the annual plan of protection and development,
- From other sources compliant to law.

Major part of PNG got financial support from the Ministry of Environment and Spatial Planning to equip security service. Managers/stewards also obtain certain funds from projects submitted to the competent ministry. Apart from this, there are the following possible financial resources: the EU pre-accession funds, various donations etc.. Still, assessments and discussion among participants reflected dissatisfaction with previous funding. It is stressed that it is necessary to establish clear and transparent criteria for funds allocation in the ministries, because current financial situation in protected areas does not allow undisturbed operation, especially in the area of scientific-research work and staff development. Special aspect of the problem was stressed in the discussion pertaining to the results, on the basis of experience, according to which one part of funds allocated to smaller number of managers remains unspent, due to weak capacities of the organization.

4.5. Management processes

This part contains participants' answers to the group of questions pertaining to management planning, decision-making about the management and research, evaluation and status monitoring.

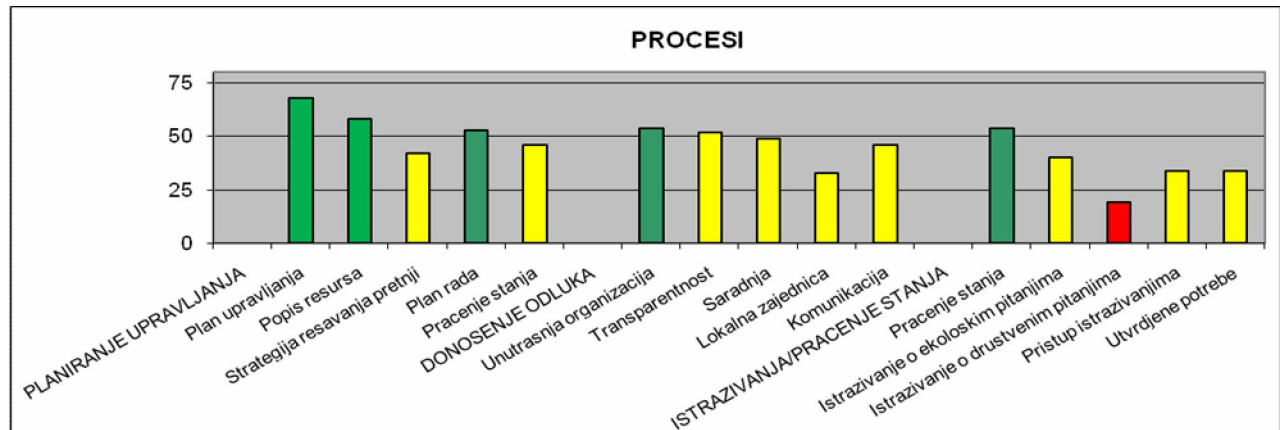


Figure 26. The overall degree of management processes in protected areas

As it is obvious from the graph, best assessments in this segment were obtained in the area of planning, while lowest marks were given to research elements, as well as elements of evaluation and monitoring in management of protected areas at the level of all key managers.

4.5.1. Management planning

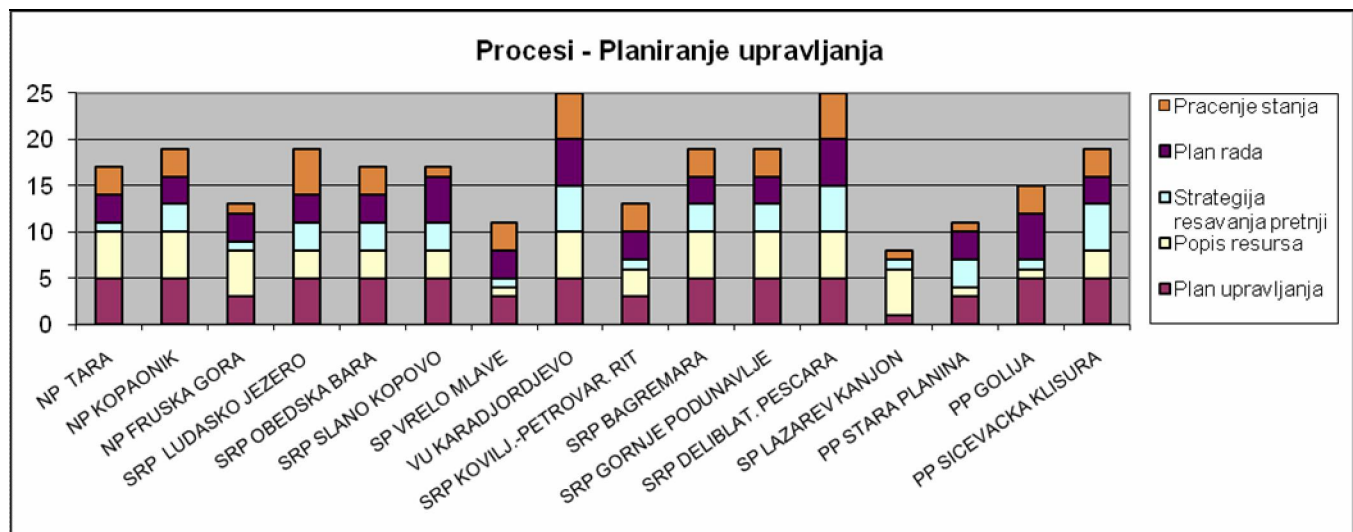


Figure 27. The overall degree of management planning in protected areas

All protected areas are obligated to produce medium-term and annual programmes of protection and development. It should be stressed that in Serbian protected areas there is still predominant practice of designing a document which is called Protection and Development Programme, not Management Plan, which is more comprehensive from the existing programmes which are still being developed by stewards/managers. In all goods there is a comprehensive list of natural and cultural resources, while analysis of threats and pressures, as well as strategy for solution thereof makes part of management plans.

Weakest segment in this management aspect is, according to assessments, monitoring system and back incorporation of such obtained data into management plans.

4.5.2. Decision-making in management

According to participants' assessment, decision-making process in protected areas management includes satisfactory collaboration, but it should be raised to higher level in the future.

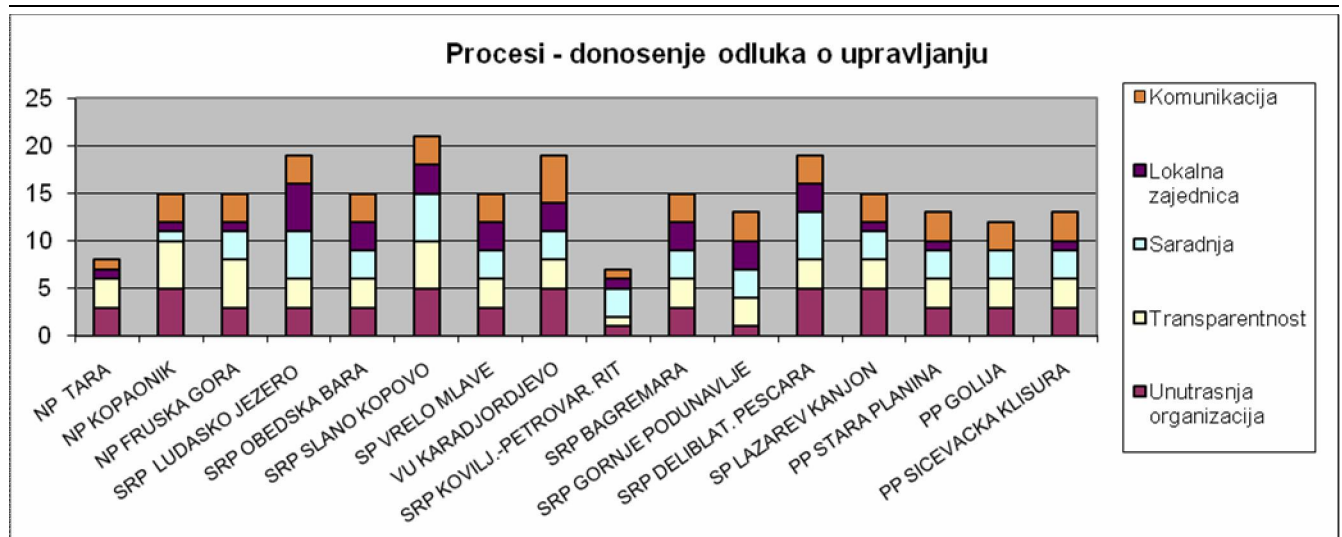


Figure 28. The overall degree of management decision making in protected areas

In all goods there is generally clear internal organization, except for SNR "Gornje Podunavlje", where it is at lower level, i.e. it is necessary to harmonize existing, more realistic organization of work with formal systematization of working positions and job descriptions. Decision making in management is generally transparent, i.e. decision-making process is public. At the same time, public has less knowledge about these decisions, and in accordance with that, local community is insufficiently involved in decision-making process in this segment. There are initiatives for collaboration with local community and other organizations, which does not always get response, such as in case of NP "Kopaonik", which faces somewhat lower interest from local self-government. Among examples of good practice, we may name the following: in SNR

“Gornje Podunavlje”, there is annual meeting of the Fishermen Association, where they agree upon future plans; MI “Karadjordjevo” holds regular meetings with local community which helps in promotion of this good (hunting and fishery tourism, bird watching etc.). Communication between employees and management of protected areas is at satisfactory level.

4.5.3. Research, evaluation and status monitoring

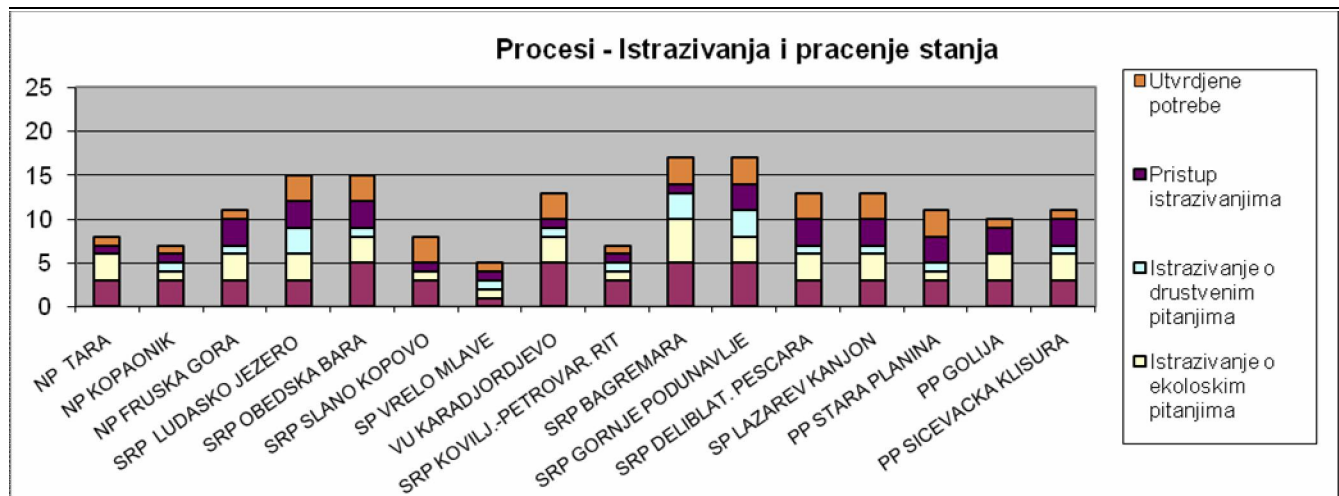


Figure 29. The overall degree of research, evaluation and status monitoring in protected areas

As we have already mentioned in the results analysis in the area of communication and information, this domain of protected area management contains a number of weaknesses and problems. With respect to management processes measured with this assessment instrument, as already said, research activities and status monitoring are weakest ones, especially in the area of data gathering and researches of social-economic issues and processes around protected area. This is one of system lacks in protected area management in Serbia, and as a relatively modern concept, it is very developed in practice. In all goods, researches about key ecological issues are generally compliant to the needs of a protected area, according to the participants' assessment.

5 RESULTS

Participants were asked questions about whether the results were consistent to threats and pressures, aims of the protected area, as well as annual working plan over the past two years, and generally, the answers were positive.

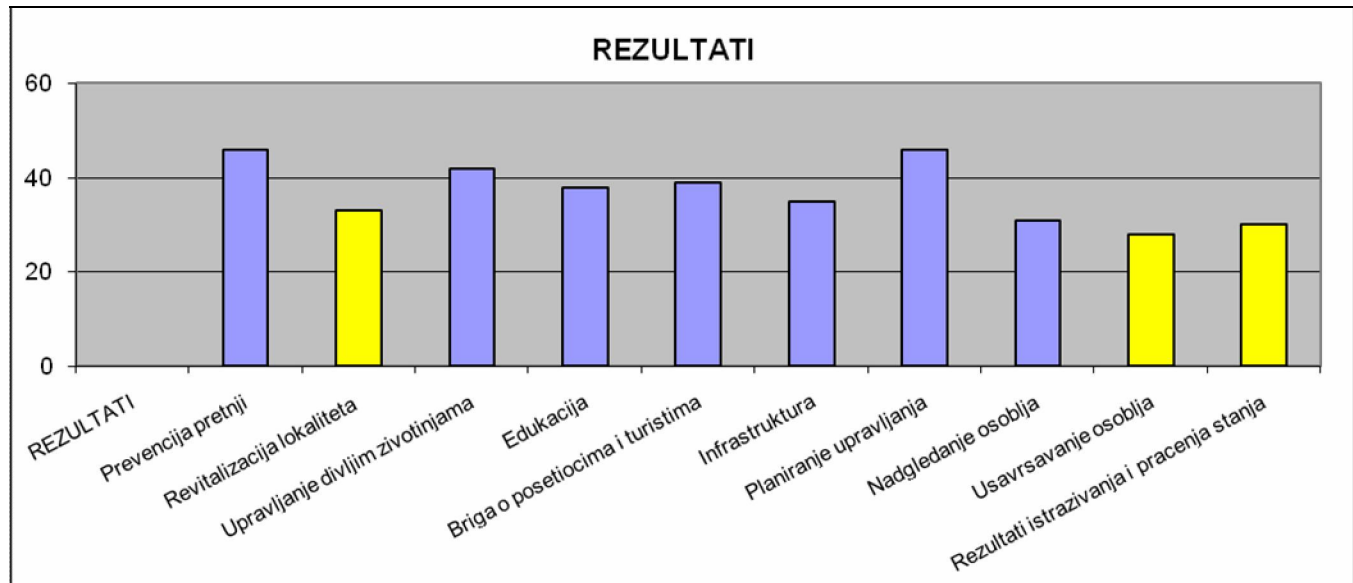


Figure 30. The overall degree of results in protected areas

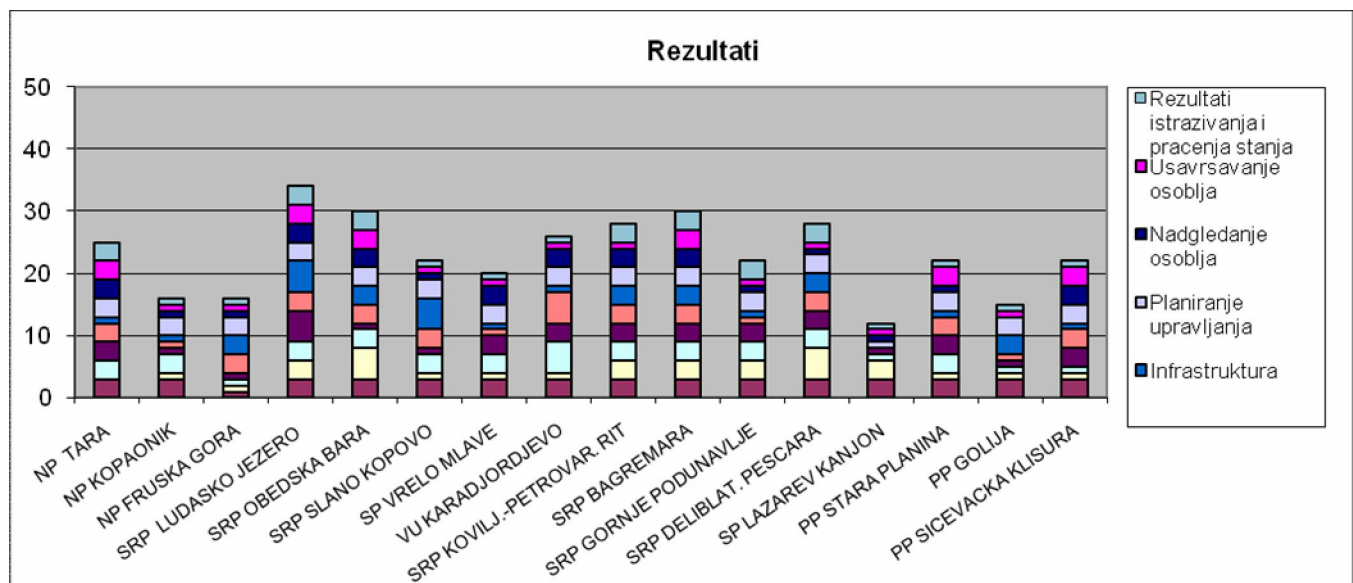


Figure 31. The overall degree of results in protected areas

Since this segment somehow presents summary of previously assessed aspects of successfulness in protected areas management, it is not surprising that assessment showed that weakest results were gained in the area of habitat recovery, staff specialization and researches and status monitoring. Managers expressed greatest

pleasure, according to assessments, about planning of protected areas management in the previous period.

6. CONCLUSIONS AND RECOMMENDATIONS

As the participants themselves concluded at the end of the workshop, it had represented a successfully conducted process of joint assessment, mutual comparison and harmonization of standpoints. All the participants had positive statements about the methodology offered by RAPPAM, but also about its application during this workshop. This has been first systematic and conducted process of the assessment of successfulness of protected area management in Serbia, and it is particularly important for the participants that they were able to express their own impressions, assess status individually and in groups, and loudly propose some possible solutions.

As majority of interactive workshops, this one was also an opportunity to exchange experience and to learn mutually. The group was mostly composed of experts who in their own

organizations belong to medium-layer management, whose impact is sometimes crucial for policy and practice of protected area management. Particularly in conditions of political appointment of a part of directors of organizations – managers, these people make strength of continuity in protected areas, and in further development of collaboration in enhancement of protected area management, they can play important role. During the final discussion, participants expressed regrets because a part of invited managers was not able to participate and make the assessment more comprehensive. A part of participants expressed interest for comparison of these assessments with the analysis of successfulness of protected areas management from the point of view of experts from relevant institutions, who are not directly involved in management.

The following conclusions and recommendations are based on the results obtained in the assessment of successfulness of protected areas management, as well as on constructive discussion and contribution from all participants:

1. It is necessary to harmonize activities and regulations in the area of ownership-legal relations (planning documentation with relevant laws) and establish clear criteria for practical application (example of change of land) in order to reduce pressure and threat to resources in protected natural areas;
2. It is necessary to work on harmonization of national and municipal regulations in order to exempt managers of protected areas from numerous municipal fees which put big pressure to their poor budgets;

3. Lack of financial resources is most obvious problem in protected areas management in Serbia. It affects all managerial capacities from many sides, and it is necessary to have strategic approach towards solution of the problem through:

- Further analysis of capacities in protected areas in order to determine needs and possibilities on how to find adequate financial mechanisms (including financing, co-financing, self-financing)
- Development of clarity and transparency of criteria for allocation of budget means to protected areas managers
- Ensuring continuity in financing in accordance with prescribed budget obligations and regulations
- Capacity building among protected areas managers for identification and utilization of other financial sources (donors, co-operation with business sector, pre-accession funds, self-financing projects, etc.)
- Capacity building among protected areas managers in protected areas to absorb budget and donors funds.

4. Co-operation with local community in protected areas management has shown as weak in most of the assessed aspects, such as communication and information, support to management aims, and as very important, participation of community in decision-making process. At the same time, there is relative closeness among managers and in community due to lack of practice of information exchange and common planning. Since this collaboration is more and more important for the future development generally, it is necessary to stimulate it in various ways, *inter alia*:

- Using examples of good practice of certain protected areas (Deliblatska pescara, Ludasko jezero and others) in order to find models for joint recognition of needs and planning of solutions (such as joint programme of tourism development, strengthening collaboration in the area of rural development and so on),
- Providing incentives to research projects whose results would contribute to data gathering about social-economic status and possibilities of community development, in order to make them available for managers and in order to incorporate them into their management plans,
- In accordance with results of those researches and concrete socio-economic conditions, it is necessary to initiate drafting of a communication plan with local community in pilot protected area (areas), as a model which will be offered to other managers and which will encourage them to undertake similar steps in planning and managing,
- Providing incentives to managers at system level to use existing and find new forms of appropriate participation of community representatives in decision-making process – such as joint councils, boards, pressure groups, campaign teams, project teams etc.

5. Assessment of employment level and possibilities for staff development in protected areas clearly points out that it is necessary to undertake strategic steps at system level, such as:

- Implementation of projects for organizational capacity building among protected areas managers (modern organization in human resources development, harmonization of needs and formal – legal solutions, development of possibilities of staff development and performance evaluation practice),
- Determination of real needs for staffing and its training at system level in protected areas,
- Implementation of training programme for groups of employees with most obvious needs in order to develop successfulness in management,
- Coordination of project proponents in this area at national level, with an aim to gain systematic and standardized approach to human resources management, in compliance with international experiences and criteria.

6. Low availability of results obtained in scientific researches, as well as data from relevant national institutions for protected areas managers requires steps, such as:

- Coordination of scientific and professional institutions done by relevant ministries in order to increase collaboration and transparency in project implementation, selection of problems and dissemination of results,
- Development of efficiency in relevant national institutions and organizations (bureaus, institutes, agencies) in presentation and increase of availability of their databases and resources,
- Internal and external capacity building among protected areas managers in the area of information provision (technologically and organizationally).

ANNEXES

ANNEX 1.

RAPPAM QUESTIONNAIRE WWF METHODOLOGY OF RAPID ASSESSMENT AND PRIORITIZATION OF PROTECTED AREA MANAGEMENT (RAPPAM)

QUESTIONNAIRE FOR RAPID ASSESSMENT

BASIC INFORMATION

1 BASIC INFORMATION

- a) Name of the protected area:
- b) Foundation date:
- c) Size of the protected area:
- d) Examinee's name:
- e) Final date of the survey:
- f) Annual calculation:
- g) Specific management aims:
-
-
-
- h) Key activities in the protected area (PA):
-
-
-

PRESSURES AND THREATS

2 PRESSURES AND THREATS

Pressures:

.....

<p>.....</p> <p>○ Exists ○ There have not been pressures over the past 5 years</p>																		
<p>Over the past 5 years this activity has:</p> <p>○ sharply increased</p> <p>○ slightly increased</p> <p>○ remained unchanged</p> <p>○ slightly decreased</p> <p>○ sharply decreased</p>	<p>Total load of this pressure over the past 5 years has been:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; padding: 2px;">Range</th> <th style="text-align: left; padding: 2px;">Impact</th> <th style="text-align: left; padding: 2px;">Durability</th> </tr> <tr> <td style="padding: 2px;">○ Everywhere (>50%)</td> <td style="padding: 2px;">○ Strong</td> <td style="padding: 2px;">○ Permanent (>100 g)</td> </tr> <tr> <td style="padding: 2px;">○ Widespread (15-50%)</td> <td style="padding: 2px;">○ Big</td> <td style="padding: 2px;">○ Long-term (20-100 g)</td> </tr> <tr> <td style="padding: 2px;">○ Dispersed (5-15%)</td> <td style="padding: 2px;">○ Moderate</td> <td style="padding: 2px;">○ Medium-term (5-20 g)</td> </tr> <tr> <td style="padding: 2px;">○ Localized (<5%)</td> <td style="padding: 2px;">○ Mild</td> <td style="padding: 2px;">○ Short-term (<5 g)</td> </tr> </table>	Range	Impact	Durability	○ Everywhere (>50%)	○ Strong	○ Permanent (>100 g)	○ Widespread (15-50%)	○ Big	○ Long-term (20-100 g)	○ Dispersed (5-15%)	○ Moderate	○ Medium-term (5-20 g)	○ Localized (<5%)	○ Mild	○ Short-term (<5 g)		
Range	Impact	Durability																
○ Everywhere (>50%)	○ Strong	○ Permanent (>100 g)																
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○ Dispersed (5-15%)	○ Moderate	○ Medium-term (5-20 g)																
○ Localized (<5%)	○ Mild	○ Short-term (<5 g)																
<p>Threat:</p> <p>.....</p> <p>.....</p>																		
<p>○ There is ○ There will not be in the forthcoming 5 years</p>																		
<p>Probability of threat occurrence is:</p> <p>○ Extremely high</p> <p>○ High</p> <p>○ Medium</p> <p>○ Low</p> <p>○ Extremely low</p>	<p>Total burden of this threat in the forthcoming 5 years will probably be:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; padding: 2px;">Range</th> <th style="text-align: left; padding: 2px;">Impact</th> <th style="text-align: left; padding: 2px;">Durability</th> </tr> <tr> <td style="padding: 2px;">○ Everywhere (>50%)</td> <td style="padding: 2px;">○ Strong</td> <td style="padding: 2px;">○ Permanent (>100 g)</td> </tr> <tr> <td style="padding: 2px;">○ Widespread (15-50%)</td> <td style="padding: 2px;">○ Big</td> <td style="padding: 2px;">○ Long-term (20-100 g)</td> </tr> <tr> <td style="padding: 2px;">○ Dispersed (5-15%)</td> <td style="padding: 2px;">○ Moderate</td> <td style="padding: 2px;">○ Medium-term (5-20 g)</td> </tr> <tr> <td style="padding: 2px;">○ Localized (<5%)</td> <td style="padding: 2px;">○ Mild</td> <td style="padding: 2px;">○ Short-term (<5 g)</td> </tr> </table>	Range	Impact	Durability	○ Everywhere (>50%)	○ Strong	○ Permanent (>100 g)	○ Widespread (15-50%)	○ Big	○ Long-term (20-100 g)	○ Dispersed (5-15%)	○ Moderate	○ Medium-term (5-20 g)	○ Localized (<5%)	○ Mild	○ Short-term (<5 g)		
Range	Impact	Durability																
○ Everywhere (>50%)	○ Strong	○ Permanent (>100 g)																
○ Widespread (15-50%)	○ Big	○ Long-term (20-100 g)																
○ Dispersed (5-15%)	○ Moderate	○ Medium-term (5-20 g)																
○ Localized (<5%)	○ Mild	○ Short-term (<5 g)																

Pressures and threats:

1. Forest management
2. Alien invasive species
3. Hunting and fishery
4. Unsolved ownership-legal relations
5. Change in land use
6. Water management
7. Wastewater
8. Tourism and recreation
9. Mining
10. Succession of vegetation
11. Problem of floating routes
11. Waste
12. Problems of protection against fire
13. Collection of medical herbs and fungi

PLANNING

3. AIMS				Notes
d	u/d	u/n	n	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a) Aims of PA stipulate biodiversity protection and maintenance
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b) Specific objectives related to biodiversity are clearly listed in management plan
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c) Management policies and plans are harmonized with aims of PA
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d) PA employees and managers understand aims and policy of PA

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e) Local community supports overall aims of PA
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4. LEGAL SECURITY

d	u/d	u/n	n	Notes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a) PA has long-term, legally binding protection
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b) There are no unsettled litigations related to lease or right on land utilization
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c) Mark-off line is appropriate and enables achievement of PA's aims
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d) Staff and financial means are adequate in order to implement key activities related to law application
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e) Conflicts with local community are settled are solved in fair and efficient manner

5. PROJECT DESIGNING AND PLANNING OF A LOCATION

d	u/d	u/n	n	Notes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a) Designation of a PA is in accordance with PA's aims
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b) Arrangement and configuration of PA optimize biodiversity protection
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c) Zoning system of PA is adequate for the achievement of PA's aims
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d) Land utilization in surrounding areas enables efficient PA management
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e) PA is connected to other area of conserved or protected surfaces

INVESTMENTS

6. EMPLOYMENT

d	u/d	u/n	n	Notes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a) Employment level sufficient for efficient area management
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b) Employees have skills necessary for the implementation of key management activities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c) Specialization and development possibilities are staff-appropriate
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d) Staff performance and advancement in achievement of aims are supervised periodically
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e) Employment conditions are sufficient to keep high quality of staff

7. COMMUNICATION AND INFORMATION

d	u/d	u/n	n	Notes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a) There are appropriate manners of communication between office and field staff
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b) Existing ecological and socio-economic data are suitable for management planning

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c) There are appropriate manners of new information gathering
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d) There are appropriate systems for data processing and analysis
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e) There is efficient communication with local community

8. INFRASTRUCTURE					Notes
d	u/d	u/n	n		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a) Traffic infrastructure is proper for the implementation of key management activities	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b) Field equipment is proper for the implementation of key management activities	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c) Staff accommodation is proper for the implementation of key management activities	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d) Adequate maintenance and care about equipment guarantee long-lasting use	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e) Objects intended for visitors are proper for such use	

9. FINANCES					Notes
d	u/d	u/n	n		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a) Over the past 5 years financing has been adequate for the implementation of key management activities	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b) Over the forthcoming 5 years financing will be adequate for the implementation of key management activities	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c) Finances management practice enables efficient PA management	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d) Task allocation is adequate to PA priorities and aims	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e) Long-term financial views are stable for PA	

PROCESSES

10. PLANNING AND MANAGEMENT					Notes
d	u/d	u/n	n		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a) There is comprehensive, relatively recently drafted management plan	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b) There is a comprehensive list of natural and cultural resources	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c) There is analysis of threats and pressures for PA, as well as strategy for solving them	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d) Detailed operation plan determines specific objectives for achievement of management aims	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e) Results obtained in researches and monitoring are routinely incorporated into planning	

11. DECISION-MAKING PROCESS IN MANAGEMENT					Notes
d	u/d	u/n	n		

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a) There is clear internal organization
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b) Decision-making in management is public
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c) PA staff regularly collaborates with partners, local community and other organizations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d) Local communities participate in decision-making for the areas that affect them
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e) There is efficient communication between all levels of PA staff and management

12. RESEARCH, EVALUATION AND MONITORING				
d	u/d	u/n	n	Notes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a) Effects of legal and illegal utilization of PA are carefully monitored and recorded
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b) Research on key ecological issues is compliant to PA's needs
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c) Research on key social issues compliant to PA's needs
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d) PA staff has regular access to latest scientific research and advice
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e) Key research and monitoring are established and prioritized

13. RESULTS				
Over the past 2 years, the following results have been consistent to threats and pressures, PA's aims, as well as annual work plan				
d	u/d	u/n	n	Notes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a) Prevention of threats, detection and implementation of law
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b) Location recovery and efforts on mitigation
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c) Wild animals and habitat management
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d) Field work with local community (<i>community outreach</i>) and education
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e) Care about visitors and tourists
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	f) Infrastructural development
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	g) Management planning and listing
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	h) Monitoring, supervising and staff evaluation
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	i) Staff specialization and development
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	j) Results obtained in researches and monitoring

ANNEX 2.

WORKSHOP PARTICIPANTS LIST

- Ministry of Environment and Spatial Planning - Nevena Piscevic, Jelena Ducic,
- Violeta Orlovic, consultant for education and nature protection,
- National Park "Tara" – Milica Tomic,
- National Park "Kopaonik" – Radosav Novcic,
- National Park "Fruska gora" – Ljuba Josic,
- PE "Srbijasume" – Gordana Jancic, Predrag Aleksic, Bojan Mitic, Milos Dugalic,
- PE "Vojvodinasume" – Miljan Velojic, Marijus Oldja, Elizabeta Stanic, Vojnic Hajduk, Aleksandra Vujasinovic,
- PE "Palic-Ludas" – Sandra Cokic
- MI "Karadjordjevo" – Slobodan Stojnovic,
- SNR "Slano Kopovo" – Milan Knezev,
- MoN "Risovaca" – Miroslav Stojanovic
- MoN "Vrelo Mlave", "Krupajsko vrelo", "Homoljska potajnica" – Jovica Trailovic
- Bureau for Nature Protection of Serbia – Dejan Bankovic, Dejana Lukic, Duska Dimovic,
- Ministry of Agriculture, Forestry and Water Management – Ivana Grujicic.