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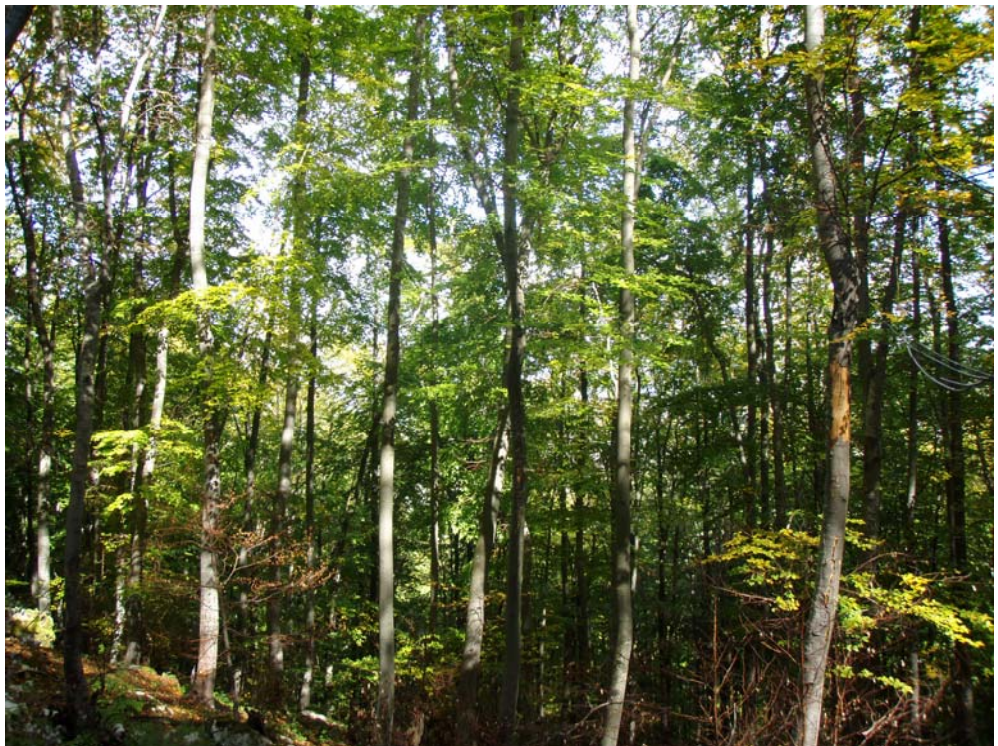


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SUSTAINABLE FORESTRY ODRŽIVO ŠUMARSTVO

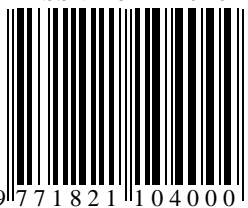
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REFLECTION OF DIFFERENT FINANCING MECHANISMS WITHIN THE

NATIONAL PARK “FRUŠKA GORA”

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REFLECTION OF DIFFERENT FINANCING MECHANISMS WITHIN THE NATIONAL PARK “FRUŠKA GORA”

Ilija ĐORĐEVIĆ, Radovan NEVENIĆ, Zoran PODUŠKA¹

Abstract: *In this paper different financing mechanisms are analyzed in the case of National Park “Fruška Gora”. Aspect of financing protected areas is one of the raising issue in current environmental policy. In recent years, due to the revival of economic situation and influence of international surrounding, some progress has been made. The principle research objective of this paper is the analysis of management aspects of national park with its financing, and analysis of financing possibilities at the present and foreseeable future level. Current law legislation defines seven groups of financing instruments. This financing mechanisms are going to be investigated through the application of the mechanisms defined in publication Financing Species Conservation (Koteen, 2004). National Parks, comparing to other protected areas, have one huge advantage. Through establishment of Public Enterprise they have sort of financial autonomy. This autonomy is illustrated through there ability to obtain funds both from internal and external sources.*

Keywords: National park, protected areas, financial instruments, environment.

¹ Ilija Đorđević, master of science in forest policy and economy, Radovan Nevenić Ph.D, Zoran Poduška, graduate forestry engineer, Institute of Forestry, Belgrade

RAZMATRANJE RAZLIČITIH MEHANIZAMA FINANSIRANJA U OKVIRU NACIONALNOG PARKA “FRUŠKA GORA”

Izvod: *U ovom radu analizirani su različiti mehanizmi finansiranja u okviru Nacionalnog parka “Fruška Gora”. Odnos prema finansiranju zaštićenih prirodnih dobara je tema koja je, u poslednje vreme, vrlo aktuelna u oblasti politike zaštite životne sredine. S obzirom na oporavak ekonomske situacije, kao i uticaj međunarodnog okruženja, zadnjih godina je učinjen određeni napredak na ovom polju. Osnovni cilj ovog rada je analiza upravljanja Nacionalnim parkom sa aspekta njegovog finansiranja, kao i analiza finansijskih mogućnosti u sadašnjosti i bliskoj budućnosti. Sadašnja zakonska regulativa definiše sedam grupa finansijskih mehanizama i oni su razmatrani kroz primenu mehanizama definisanih u publikaciji Finansiranje zaštite vrsta (Koteen, 2004). U poredjenju sa ostalim zaštićenim prirodnim dobrima, Nacionalni park, u našim uslovima, ima prednost što se kroz osnivanje javnog preduzeća ostvaruje izvesna finansijska autonomnost, koja se ilustruje njegovom sposobnošću da prikupi istovremeno interna i eksterna sredstva.*

Ključne reči: Nacionalni park, zaštićena prirodna dobra, mehanizmi finansiranja, životna sredina

1. INTRODUCTION

Protected areas (PA) are defined as a) a unique area, rare in its species, phenomenon or with small geographic dispersion; b) typically representative of its species or phenomenon in special place or time and c) preserved in the context of its originality. In 1996, the global system comprises some 30.000 sites covering an area of 13.2 million square kilometers (Eagles, 2002). Today protected areas cover more than 20 million km² of the global land surface, roughly 12 percent (Chape et al., 2005). Total protected areas in Serbia are 6.6% of the country's territory, while until 2012 plan is to increase this area to 12 percent. There are 5 national parks, 14 parks of nature, 74 natural reserves, 18 protected landscapes, 42 cultural-historical landscapes and 328 monuments of nature.

The law on nature protection (LNP) from 2009 defines National park as follows: “A National park (NP) is an area with a large number of diverse natural ecosystems of national importance, prominent landscape features and cultural heritage in which man lives consistent with the nature, intended for preservation of existing natural values and resources, the total landscape, geological and biological diversity, and satisfaction of scientific, educational, spiritual, aesthetic, cultural, tourism, health and recreational needs and other activities in

accordance with the principles of nature protection and sustainable development (Official Gazette no. 36/09).

1.1. Study area

The National Park “Fruška Gora” (NPPG) is one of the five national parks which are recognized by the new LNP and it represents an area with unique flora and fauna, rich of different historical and cultural monuments. The area of the national park was managed as an economic forest till 1948, since then Fruška Gora was proclaimed as an area of special interest in Pannonia lowland. The Government of NR „Serbia“ established the organization „Public recreation area” with the aim to improve it as a recreation and resting site. The law on proclamation of Fruška Gora for National park (Official Gazette no. 15/65) established the borders of the NP (24 302 ha), while the law on National parks (Official Gazette no. 39/93) increase this area to 25 393 ha (this law is still valid in the part that describes area and borders of NP).

2. METHODOLOGICAL APPROACH TOWARD THE RESEARCH

This is applied research oriented toward the improvement of the current situation with the following main objectives: a) to address concrete problems; b) to offer possible solutions; c) to enhance nature protection; and d) to apply different financing mechanisms. The primary target groups are: a) decision-makers within the park area and the state administration (Ministries for agriculture, forestry and water management (MAFWM), Ministry for environment and spatial planning, Institute for Nature Protection etc.; b) managers and employees in the NP; c) researchers; d) local communities; e) non-governmental organizations and other stakeholders involved in the work of NP.

The method of research is both descriptive and explorative. The research is based on a case study approach dealing with a concrete situation at a determined period of time, and has analytic discretion to the researcher (Neuman, 2006). Qualitative method in the form of in-depth interviews is used in order to conduct interviews. The interviews were designed to gather qualitative rather than quantitative information (Kostas Papageorgiou, Ioannis N. Vogiatzakis, 2006) from protected area managers. Concerning the sample, a non-probability sampling-purposive or judgmental method is used.

Considerable amount of fieldwork, written data sources (published and unpublished documents, company reports, non-governmental reports, and newspaper articles) and related ongoing research were used as a complementary literature.

3. RESULTS

The LNP represents an “umbrella law” that regulates protection and conservation of nature, biological, geological and landscape diversity as a part of environment. Its also partly sets the institutional framework in which national parks are managed, since some new acts are going to be established concerning there management

The National Park “Fruška Gora” has been established in 1965 and from that time different state institutions have been in charge of there activities. Today law on nature protection recognizes a Public Enterprise as the institution which manages this protected area The same law defines seven groups of financing mechanisms: a) revenues from budget of state, autonomous province or units of local government; b) fond for environmental protection (FEP); c) fee for use of protected area; d) revenues generated in the performing activities and managing PA; e) funds provided for the implementation of programs, plans and projects in the field of nature protection; f) donations, grants and assistance and g) other sources in accordance with the law. Beside this law, today the domain of nature protection is regulated indirectly by a number of laws and bylaws, and directly with specific regulative documents. Altogether there are more then 130 different regulative norms applicable.

In the part below some new financing mechanism are going to be explained in order to combine them with the actual situation in NP management as well as with possible legal financing sources, prescribed by the LNP, that can be used.

Internal and external sources of funding will be explained in this part. Financing mechanisms of protected forest areas should be more diversified and totally used. The quantity and quality of the collected funds is also very important. In order to secure the long term planning in the NP and diversified mechanisms from the LNP, the following categorization is applied. These financing mechanisms are grouped in six parts: 1) government revenue allocation; 2) grants and donations; 3) tourism revenues; 4) real estate and development rights; 5) resource use fees; 6) for profit investments. Financial mechanisms that are already used, as well as those that could potentially be used, have been retained. The data's are collected based on interview results which were made in NPPG, Ministry for environment and spatial planning (MESP), MAFWM and Provincial Secretariat (PS). In the table 1 six types of financing mechanisms are showed with there subcategories explained in the section below.

Government revenue allocation: This groups include mechanisms as direct allocation from budget, government taxes, tax deduction schemes, lottery revenues, premium priced motor vehicle plates, wildlife stamps, debt relief programs and environmental fund. Allocation of funds from the budget already

exist, and this is done in cooperation between different state institutions. A special government tax is levied through MESP and MAFWM but funds collected in this way are used not only for protected areas but for different purposes. In this moment support exist from Provincial Secretariat and MESP. The other five mechanisms are not used and the current law regulation does not recognize them as possible source for financing NP management. Environmental fund as such exist, as a part of MESP, and some funds were used in previous years.

Grants and donations: Donation or grants can be managed by agencies, domestic or international foundations, conservation trust funds, non-governmental organization (NGO) or by private sector. None of these five instruments are used. There are a few domestic foundations but their interest is not in this area and a trust funds as such does not exist. Trust fund could be a good instrument in cooperation with FEP. There are some indicators which could change this situation since cooperation with some embassies exist and IUCN is planning projects in cooperation with United Nation Development Pogramme.

Table 1. *Overview of financing mechanism, results and sources of revenues*

FINANCING MECHANISMS	Results		Source of revenue
	Presently obtained mechanisms	Possible succeeding mechanisms	
1. Government revenue allocation			
a) Direct allocation from government budget	Yes		Government budget revenues
b) Government taxes	Yes		Tax payers
c) Tax deduction schemes	No	Yes	Investors
d) Lottery revenue	No	Not applicable	Gamblers
e) Premium priced motor vehicle license plates	No	Yes	Vehicle owners
f) Wildlife stamps	No	Yes	Postal customers, hunters, fishers
g) Debt relief programs	No	Yes	International organizations, Donors
h) Environmental fund	Yes		Government budget revenues
2. Grants and donations			
a) Multilateral and bilateral agencies	No	Not applicable	Donor agencies
b) Foundations	No	Yes	Individuals,Coorporions
c) Conservation trust funds	No	Yes	Multi-source
d) Non-governmental organizations	No	Yes	Multi-source
e) Private sector	No	Not applicable	Investors
3. Tourism revenues			
a) Protection area entry fees	No	Yes	Visitors to park
b) Recreational fee	Yes		Different services within the NP
c) Airport passenger fee and hotel taxes	No	Yes	Tourists

FINANCING MECHANISMS	Results		Source of revenue
	Presently obtained mechanisms	Possible succeeding mechanisms	
d) Voluntary contribution by tourists	No	Yes	Tourism operators and tourists
e) Revenues from tourism operators	Yes		
4. Real estate and development rights			
a) Real estate tax surcharges for conservation	No	Yes	Property owners
b) Conservation concession	Yes		Investors
c) Conservation easement	No	Yes	Environmental fund
5. Resource use fee			
a) Wood extraction	Yes		Wood products
b) Eco labeling	No	Not applicable	Wood and non wood products
c) Recreational fishing	Yes		Associations or individual fishers
d) Hunting license fees and fines from illegal activities	Yes		Associations or individual hunters
e) Right of way fees for main roads and telecommunications	Yes		Corporations and individuals
g) Hydroelectric and thermoelectric power revenues	No	Not applicable	Power producers
h) Revenues from mining industry	Partly		Mining companies
i) Voluntary contributions by energy companies	No	Not applicable	Energy companies
6. For-profit investments			
a) For profit investment	No	Not applicable	Private investors
b) Biodiversity prospecting	No	Not applicable	Pharmaceutical companies

Tourism revenues: One of the important aspects of every national park is tourism development and nature based tourism. In order to develop this branch of the economy it is necessary to integrate tourists with the area they want to visit. PS and MESP stress that NPPG has a huge potential to use this resource since they have comparative advantage in there position toward the urban areas. Tourism can become one of the major financial mechanisms if all preconditions could be accomplished. Preconditions are in particular good road communication, infrastructural facilities and marked attractions within the NP and foremost well established services for its utilization. Examples of the possible financial mechanisms are protection area entry fee, recreational fee, airport passenger fee and voluntary contribution by tourists and tourism operators. In this moment NP collects only some type of recreational fee, while huge potential lays in protection area entry fee in the opinion of the managers in the NPPG. Hotels don't participate in any tax collection for protection purpose but there is a tourism tax that goes to development of local communities. Also tourism operators are in obligation to pay toll for using the area of NP but they don't behave according to law.

Real estate tax surcharges and development rights: This group of mechanisms refers to possible use of economic instruments as real estate taxes, conservation concession and conservation easement. Conservation easement can be used for protection of public and private land such as purchase or donation of land. It is a mechanism for conserving biodiversity on private land. In this case the owner can give or sell easement on his property to a government agency or to some trust fund. First group is mainly oriented toward development rights while purchase or donation of land can be used for unsolved ownerships legitimacy. In the opinion of the managers in the NPPG conservation easement could be a good instrument that would directly influence the problem with the monastery communities and the land that they owned. It needs the help of the government or some international or domestic donor agency. In the case of the NPPG only conservation concessions are present. After the process of reorganization, some of the activities were privatized or given in form of concessions. They have revenues from yearly leasehold which goes directly to their budget. Special tax for real estates in the vicinity of NP do not exist

Resource use fees: In order to better understand this field one has to distinguish park products and revenues made from energy, mining and transport versus park products related to different wood products, non wood products and processes of eco labeling or certification. Wood products are the main resource for financing the NPPG. The national park is also involved in collecting non-wood products on the basis of licenses for utilization. There are four types of licenses depending on their lasting and type of product. At the moment the NP does not have any type of certificate for use of eco labeling. Beside this NP management can collect hunting and fishing fee. The second type of fee is in the field of energy, mining and transport, including right of way fees for transport, telecommunication and electric power revenues and voluntary contribution by energy companies. Right of way fees, telecommunication and electric power revenues are interconnected. For both of them there is a special payment depending on the activity made in NP (fee for use of road, cable-car, electric and telecommunication cables). Collection of these revenues is based on act standard approved by government. For the mining industry it is interesting that the local industry can extract different materials. The good side of their utilization is that they make, after some period, re-cultivation of already used mining sites. The last component is contribution for energy sector but in our situation this does not exist. Resource use fees are the main component of NP funding. In this category services that NP provides are already now quite diversified, both with regard to wood production and non-wood forest products.

For profit investment: We can distinguish two types of investments, first dealing with private sector investments and second biodiversity prospecting. Private sector investments focus on the prevention of land-based pollution. In our case this refers to reclamation of quarries by different industry

facilities. One of the biggest industries operating in the area is Lafarge located in Beočin. The agreement for extraction of material from queries is made with relevant ministries and the companies pay only road fee for using parts of the area of the NP. Concerning biodiversity prospecting, there are no arrangements with none of the pharmaceutical companies.

4. DISCUSSION

The objectives of NP management can be grouped in two parts. The first one is dealing with nature protection and preservation including scientific and educational purposes. The second one includes parameters emphasizing production and utilization of different park products and services. To consider these objectives in a perspective of financial matter is important, since besides protection and preservation, economic instruments for obtaining are essential.

Funding possibilities were explained in previous chapter where all financing mechanisms were grouped in six parts. This categorization was made in order to better understand different types of services that could be provided within the NP. Government revenue allocation in many countries provides good mechanism for diversification of the existing ones. The main potential is presently the willingness of different state institutions for financing the work in the NP. Beside direct allocation from budget, mechanisms mentioned in this part can be used as innovative financing approach. Instruments as tax deduction schemes in some countries as Hungary have gathered specific funds for protection purpose (IUCN, 2000). This also includes premium vehicle plates and wildlife stamps. Naturally this needs changes in some regulation which is the task of different ministries and institutions. Their support can initiate these instruments and promote them as social responsible behavior of our citizens. A debt relief program is an instrument for decreasing of foreign debt in international organizations. It could be used if there is demand of our country and sympathy of these institutions.

Use of second instrument which refers to grants and donations appears to be rather limited. The main potential will be after accession into the EU with access to different specialized funds. One of these funds are the new Financial Instruments for the Environment (LIFE+) which already disposes of funding for next few years. This fund can be used both by non-governmental (conservation trust funds, foundations etc.) and governmental organization. Cooperation between donors at regional and global level is needed as well as information sharing among NPs in the region.

Tourism revenues, as the third group of financial mechanisms are applied in different forms in PA. NP position is quite unique and can bring a lot of tourism development. One of the mostly used instruments is an entry free,

which could be obtained if some conditions are fulfilled. This could bring huge amount of revenues which further could be used for some other potential costs. The overall status of collection of these revenues is quite undervalued. This is connected with the actual organization and insufficient use of the tourism potentials from surrounding cities. Second potential lies in collection of special hotel tax for conservation purpose. Beside residence tax one small tax of 1 percent can be also included for protection purpose. In next period cooperation with all relevant Ministries will be done in order to solve the problem of tourism operators who don't provide any type of fee for conducting their activity within the borders of NPPG. Efforts need to be undertaken in promoting national park activities through information centers. These centers should not only be established in the NP but rather in major cities nearby (Novi Sad and Belgrade).

Fourth financial instrument, real estate tax surcharges and development rights, is partly used and has potential for generation of revenues from estates which are in their neighborhood through special tax while conservation easement can be a good mechanism if there is support from state institutions. The main potential lies in development of tourism and good cooperation with state institutions. Actions which are needed are for sure investment in tourism facilities and regulations for construction within the park borders.

In the fifth mechanism, resources use fees, we can find most of the incomes generated by the NP. This part represents the basis for their management and financial sustainability. This structure gives enough space for collection of funds and provides a certain amount of economic autonomy from state institutions (Djordjevic, 2009). The main potential lies in the fact that there is need for these products in nearby cities providing a huge market for this branch of the economy.

For-profit investments as the sixth group do not provide revenues for NP since their management does not have direct contacts and agreements are made on provincial and state level.

5. CONCLUSION

Better use of current financing mechanisms and applying of some new innovative one in NP can provide sustainable financing of their management. Besides state support strong efforts should be put on grants and donations due to openness of EU funds after accession. Tourism revenues represent one of the major potential in future management of this park. This mechanism could provide enough revenues if it would be followed with proper development of tourism facilities and improvement of tourism propositions. Some steps concerning this mechanism are already done but it will need more cooperation between different state institutions in order to become realistic.

All of the mentioned mechanisms should be optimized and improved to become applicable in the management of the National park “Fruska gora”. Further analysis of these instruments, and their integration into the financing sustainability pattern, will be done, in order to see how they are going to change the current situation.

Structure of the interview:

Date of the interview:

Name and surname of the interviewer:

Position of the interviewer:

1. What is the current level of government revenue allocation?
2. Do non-governmental organizations participate through project or donations in the work of NP?
3. Is there a possibility for establishing protected area fee or recreational fee?
4. Do hotels provide any kind of contribution to protection purpose?
5. Are there fees for provision of tourist services?
6. Since there is huge proportion of private land under the management of NP, what is your opinion on conservation easement?
7. Does real estate tax exist for private owned property?
8. Does the NP collect revenues from different services provided within the NP?
9. Is there possibility for collecting right of way fee and revenues from power industry?
10. Does the NP collect revenues from resource extraction?
11. Are there contacts with pharmaceutical companies for biodiversity prospecting and for-profit investments?

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REFLECTION OF DIFFERENT FINANCING MECHANISMS WITHIN THE NATIONAL PARK “FRUŠKA GORA”

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Summary

Law on nature protection recognizes the National Park “Fruska Gora” as one of five national parks in the territory of the Republic of Serbia. This law was adopted in 2009 and its provisions are defining the manner of management and financing of protected areas. National Park “Fruška Gora” was established in 1965 when its borders were set, while law on National from 1993 accurately define the boundaries of the park on the territory of 25 393 ha.

The paper analyzed the management of National Park, with its financial aspects and possibilities of additional funding in the near future. The method of research is descriptive and explorative, since it gives a descriptive picture of the current situation in National Park, while the explorative analyzes current trends related to the financing of protected areas. To collect data for this research was used qualitative methods in the form of in-depth interviews. Through interviews, current method of financing and use of financial mechanisms defined by (Koteen, 2004) was questioned. All the financing mechanisms are processed through the six groups: a) government revenue allocation; b) grants and donations, c) tourism revenues; d) real estate tax surcharges and development rights; e) resources use fees and f) profit investments.

This approach provided a deeper insight into the current financial sustainability of national park management as well as proposals for additional sources of income, which could cover potential costs in the future

RAZMATRANJE RAZLIČITIH MEHANIZAMA FINANSIRANJA U OKVIRU NACIONALNOG PARKA “FRUŠKA GORA”

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Rezime

Zakon o zaštiti prirode prepoznaje Nacionalni park „Fruška Gora“ kao jedan od pet Nacionalnih parkova na teritoriji Republike Srbije. Ovaj zakon je usvojen 2009. godine i njegovim odredbama definiše se način upravljanja i finansiranja zaštićenih prirodnih dobara. Nacionalni Park „Fruška gora“ je osnovan 1965. godine kada su i postavljene njegove granice, dok je zakon o Nacionalnim parkovima iz 1993. godine tačno definisao granice parka na teritoriji od 25 393 ha.

U ovom radu analizirano je upravljanje Nacionalnim parkom, sa aspekta njegovog finansiranja kao i mogućnostima dodatnih finansiranja u bliskoj budućnosti. Metod istraživanja je deskriptivan i istraživački, deskriptivni daje trenutnu sliku u Nacionalnom parku dok istraživački analizira trenutne trendove vezane za finansiranje zaštićenih prirodnih dobara. Kako bi se prikupili podaci za ovo istraživanje korišćena je kvalitativna metoda u obliku dubinskih intervjua. Kroz intervjue ispitani su trenutni načini finansiranja i primene finansijskih mehanizama definisanih od strane Koteen-a u 2004 godini. Svi mehanizmi finansiranja su obrađeni kroz šest grupa a) prihodi od strane države; b) donacije i pokloni; v) prihodi od strane turizma; g) prihodi od poreza na nekretnine i prava gradnje; d) prihodi od korišćenja prirodnog resursa i đ) profitne investicije.

Ovaj pristup omogućio je dublji uvid u trenutnu finansijsku održivost upravljanja Nacionalnim parkom kao i predloge za njegove dodatne izvore prihoda koji bi omogućili pokrivanje potencijalnih troškova u budućnosti.

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