



# IMPACT OF COVID-19 PANDEMIC ON PROTECTED AREAS IN THE DINARIDES REGION

Regional overview

Podgorica, April 2021

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\* The name used herein shall be without prejudice to the position or status and under the UNSCR 1244/99 and the opinion of the International Court of Justice on the Declaration of Independence of Kosovo.

## INTRODUCTION

The COVID-19 pandemic caused by the SARS-CoV 2 virus affected virtually all aspects of life and functioning on earth. In addition to its effects on the lives of people and their health, the pandemic has brought many social and economic challenges. Although we are just beginning to grasp the impact of the COVID-19 pandemic on protected and conserved areas, there are many indicators of a direct impact on the areas, future challenges, and implications for new policies of nature protection.

The effects of the pandemic on protected areas boil down to the aftermath of the anti-epidemic health and safety measures. Restrictions of movement that regional countries imposed in March 2019 made a great impact on protected areas because they made it difficult to managers to exercise their powers and prevented visitors to visit the protected areas.

The most striking effects were on the economy due to the restriction of tourist activities in protected areas. The protected areas that primarily generate revenues from tourism struggled most.

The world's protected areas generated approximately eight billion visits every year before the pandemic, according to researches, generating as much as 600 billion dollars of direct revenues every year (Balmford et al., 2015). With travel and movement restrictions, visits to protected areas and the resulting revenues reduced drastically. UNWTO

(World Tourism Organization) expected tourism to decline over 70% globally in 2020 compared to previous years.

Losses from tourism in protected areas have a negative impact on local communities that make a living from tourism. There are fears they might turn to unsustainable use of other natural resources in protected areas due to adverse tourist and economic trends.

The pandemic soon caused many difficulties for the managers and the task of protection. Restrictions on physical communications, occasional or complete suspension of work, slowed down ongoing activities to preserve, monitor, and implement measures for the protection of natural values, and made them more difficult.

Restrictive measures have changed over time and the effects of the pandemic on protected areas changed too, often making the whole situation even more challenging and complex for the managers.

The effects of the pandemic and its duration soon caused budget cuts and the funds were diverted to the health department and the protection of citizens. Given rather modest state support for protected areas in the past, austerity measures were expected to put managers of protected areas in even a more difficult position.

When it comes to the management and protection of protected areas, the assumptions are that the current pandemic and its effect could undermine decades-long efforts to protect nature and establish an effective system of protection and management. The regional



systems of protected areas remain insufficiently developed, let alone without substantial support from the state and the general public. Additional disturbances in the form of a pandemic and related impacts are expected to further slow down and hinder progress in the protection of nature in the Dinarides.

On the other hand, many scientific analyses detect the connection between epidemiological phenomena and the constant and escalating destruction of natural resources and ecosystems. Protected areas, i.e. conserved nature, are a likely solution for future pandemics. The question is whether we can recognize and seize that opportunity.

## COVID-19 AND PROTECTED AREAS IN THE DINARIDS

The COVID-19 pandemic affected the functioning of the system of protection of nature in the Dinaric Arc just like in the rest of the world.

The Dinarides is a mountain massif in the south-eastern Europe, which covers an area of approximately 100,000 km<sup>2</sup> on more than 6,000 km of coastline, encompassing the entire area facing the Adriatic Sea and naturally connecting eight countries: Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Serbia, Kosovo\*<sup>1</sup>, Albania and Northern Macedonia. Protected areas make up more than 10% of the Dinarides. They are centres of biodiversity and an important economic resource that substantially improved the lives of many communities in the

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region in the past decade, through the development of sustainable tourism.

All aspects of the impact of the COVID-19 pandemic on a global scale, such as economic and managerial aspects, functioning of the protection system, and cooperation with local communities are evident in the protected areas of the Dinarides too.

This document is based on the webinar "Impact of the COVID-19 pandemic on protected areas in the Dinarides region" that the Parks Dinarides, in cooperation with WWF Adria and members of the Parks Dinarides Network, held on 8 December 2020 intending to review the scale and consequences of the COVID-19 pandemic on protected areas in the Dinarides.

Presentations of protected areas, one from each of the eight countries of the Dinaric Arc, attested that protected areas faced new challenges and demonstrated vulnerability, especially the ones that relied heavily on the development of tourism.

Some areas managed to compensate for the loss of revenues from foreign tourists through mass visits by domestic visitors who flocked to protected areas after the restrictions of movements were lifted and the ban on foreign travel persisted. However, many protected areas were left without much of their planned budget. Cancellation of group visits and recreational activities left managers and local communities without revenues from tickets and accommodation rentals.

We are still facing uncertainties in terms of the duration of the pandemic and the required time

to make the situation in protected areas normal again. Therefore, regional governments and the parks faced critical challenges now - how to find quick and easy mechanisms and ways to overcome the crisis caused by the pandemic.

## OVERVIEW OF THE IMPACT OF THE COVID-19 PANDEMIC ON PROTECTED AREAS BY COUNTRY

This part of the document provides an overview of the impact of the COVID-19 pandemic on management plans, financing of parks and state support programs, the impact on the system of physical and professional protection of nature, as well as examples of parks' mutual cooperation and their cooperation with local communities in national parks and protected areas with a lower level of protection. The review is based on data obtained from the protected areas that participated in the webinar "Impact of the COVID-19 pandemic on protected areas in the Dinarides region" in December 2020. Wherever possible, the review shows the situation on a national level.

### Impact of the COVID-19 pandemic on protected areas in Albania

Albania has 15 national parks that cover about 17% of its territory. The National Agency of Protected Areas (AZKM<sup>2</sup>), established in 2015, manages these areas. The Agency has 12 regional administrations of protected areas (ADZM<sup>3</sup>), located in the main counties of Albania.

<sup>2</sup>Agjencia Kombëtare e Zonave të Mbrojtura

With the outbreak of the COVID-19 pandemic, the Albanian government imposed measures that were mainly aimed at supporting the health system, leaving aside nature protection programs. During the first wave of the pandemic, the staff from protected areas alternated their work locations - remote work and office work making it difficult to manage the protected area, while supervisors continued to work in protected areas.



*National Park Divjake-Karavasta, Albania*

The COVID-19 pandemic hit tourism hard, as one of the growing sectors in Albania. So, the Government adopted new protocols following a strategy of gradual opening aimed at local visitors.

In 2019, the number of tourists in protected areas increased by 30% (+916,660 visitors) compared to 2018. However, in 2020, the pandemic brought a drastic reduction in the number of tourists, mostly foreign ones. Thus, in September 2020, there were 43.7% fewer visitors than in the same month in 2019.

Consequently, a reduction in the number of tourists resulted in lower revenues.

<sup>3</sup>Regional Administration of the Zonave of Mbrojtura

On the other hand, the decrease in the number of tourists led to a slight improvement of the ecosystem in protected areas, due to reduced pollution that was typical for previous years from the influx of tourists. Also, photo traps recorded some species more often due to the lack of disturbance by tourists.

The COVID-19 pandemic caused delays of projects in protected areas in Albania. All activities of this National Park are being implemented online, resulting in a lack of interaction with local communities.

The COVID-19 pandemic did not bring changes in the implementation of management plans of the protected area or the development of new ones. However, the pandemic caused a delay in the reassessment of the network of protected areas in Albania, whose aim was to analyse each protected area and propose a new system of protected areas.

## Impact of the COVID-19 pandemic on protected areas in Bosnia and Herzegovina

The network of protected areas in Bosnia and Herzegovina consists of 38 protected areas: four national parks and eight areas from the categories of the nature park and protected landscape (V category). Other areas have a lower level of protection.

National Parks Drina, Kozara, and Sutjeska are located in the Republika Srpska entity, while National Park Una is located in the Federation of Bosnia and Herzegovina. Only 2.61% of the territory of Bosnia and Herzegovina is under some degree of protection.



*National Park Una, Bosnia and Herzegovina*

The oldest national park in Bosnia and Herzegovina is National Park Sutjeska, founded in 1965, followed by the National Park Kozara that was founded in 1967, and National Park Una in 2008. National Park Drina is the youngest national park. Established only in 2017, it has insufficiently developed infrastructure and comparative data, so it was not the subject of this report. This report used data from the three above-mentioned national parks.

### Implementation of Management Plans

Even though the national parks operated under difficult circumstances, e.g. lower volume of operations, shorter working hours, and epidemiological measures that differed from one entity and region in the country to another, it can be said that NP Kozara and NP Sutjeska carried out most of the planned activities from Management plans, while NP Una halted the planned infrastructure investments. The National Park Drina did not draft a Management plan; its drafting and adoption are extended for 2021 due to the COVID-19 pandemic.

### Financial impacts

National parks in Bosnia and Herzegovina are funded through regular budgets and their own



revenues. Own revenues are generated through the payment of the entrance fees, various other fees, the provision of tourist services, and through the sale of timber after sanitary felling. Parks that were oriented to tourist services saw a plummet in their own revenues due to a drastic reduction in the number of visitors. The NP Una saw the highest decline in revenues (about 60%) since it had the best-developed tourism. The decline was significantly smaller in other parks.

With the decrease in demand and the reduced volume of wood processing activities during the pandemic, the demand for wood assortment was lower too causing problems for the realization of sanitary felling (up to 20%).

Unlike NP Una, which suffered a significant decline in the number of mostly foreign tourists, NP Kozara did not record a decline in the number of visitors in a year, as the numbers remained the same as in 2019, and it experienced no financial losses.

In addition to regular budget funds and additional support to reduce the negative effects of the pandemic, the Government of Republika Srpska provided for NP Kozara and NP Sutjeska further support in the form of reimbursement of contributions for employees for March and April 2020.

As a measure to help the tourism sector, the Government of the RS awarded travel gift vouchers to all adult citizens in Bosnia and Herzegovina, which had a positive effect especially on the National Park Sutjeska and its accommodation facilities.

As for the Federation of Bosnia and Herzegovina, apart from the regular funds planned by the federal budget, NP Una did not receive additional state support.

Budget planning for 2021 for all parks is based on the assumption that the situation would generally become normal after the first quarter of 2021, and there would be no reduction in the revenues from the state budget.

#### System of physical and expert protection of nature

The system of physical and professional protection of nature was regular and without any problems in the parks. However, other protected areas that did not receive state funding, faced many problems in the regular monitoring, due to the lack of financial resources.

#### Positive and negative sides of the pandemic

The reduction in the number of visitors, especially in the most-visited areas, had a positive impact on nature in terms of reduced pressure.

However, the change in the structure of visitors - mainly domestic visitors with lower environmental awareness, brought many incidents of poor treatment of protected areas (large quantities of waste, disturbance of wildlife, destruction of park infrastructure).

The pandemic negatively affected the mutual cooperation of parks and their cooperation with the local community. Many events were cancelled: fairs, conferences, events, professional visits, workshops, seminars, meetings, training, etc.

#### Impact of the COVID-19 pandemic on protected areas in Montenegro

The network of protected areas in Montenegro covers about 13.6% of the territory, with a total

of 74 protected areas consisting of five national parks (about 60%) and six nature parks. Over the past six years, the network of protected areas saw an expansion from 8.25% to 13.6%. All six nature parks were declared in the last six years. However, operationally speaking, only two nature parks have become functional since then: Nature Park Piva and Nature Park Orjen. The management of national parks is centralized and operated by the Public Institution of National Parks of Montenegro ("PINPM"), based in Podgorica.

For this report, data were collected for Nature Park Piva and PINPM, while Nature Park Orjen was established in 2018 only, and was not the subject of this report due to its underdeveloped infrastructure and lack of comparative data.

### Nature Park Piva

Nature Park Piva is the oldest protected area in this category in Montenegro. Since its establishment in 2015, it has seen a rapid development of infrastructure and an increasing trend in the number of visitors.



*Nature Park Piva, Montenegro*

### Implementation of the Management Plan

The impact of the COVID-19 pandemic on the Management plan of the Nature Park Piva was negative. Namely, as the entire country and the

region were in lockdown, the tourist season was almost non-existent causing the losses in income. For that reason, the Management plan suffered as it lacked funding. Fortunately, several projects financed by domestic and EU donors had begun before the onset of the pandemic, so some activities were implemented but without the direct participation of the Park. All financial resources in the Park are allocated for the Park's regular functioning and the fulfilment of obligations arising from the Management plan.

### Financial impacts

Poor tourist season and the failed tours affected the budget, so the Park recorded almost 90% less income in 2020 than in 2019. For that reason, the Park borrowed funds from its founder, the local self-government of the Municipality of Pluzine, under the obligation to return them in the future.

### State support programs

Nature Park Piva, as a protected area established by the local self-government, did not have the chance to participate in or compete for any support program of the Government of Montenegro and failed to receive such support.

### Impact to the system of physical and expert protection of nature

The pandemic did not affect the system of physical and professional protection and plans in this area were carried out. Due to restrictions of movement in effect, the environment did not suffer from any additional pressure or illegal activities.

### Management Plan and budget for the following year



For the following year, the Plan was made in line with the moderately optimistic scenario of the outcome of the following tourist season. Accordingly, the Park management defined and limited activities to institutional rather than investment ones. Owing to the good cooperation with its founder, the Municipality of Pluzine, and its good financial standing, the Park received liquidity from the municipal budget. For the following year, more emphasis will be put on strengthening cooperation with the local population, through direct participation and activities of employees following the applicable regulations.

### Public Institutions of National Parks of Montenegro

National parks of Montenegro are oriented towards service activities and generate most of their revenues through the sale of tickets to parks (2/3 of total revenues). When it comes to the structure of visitors, 90% are foreign tourists.



*National Park Skadar Lake, Montenegro*

### Implementation of program activities

Due to the circumstances caused by the COVID-19 pandemic, the Department for Promotion, Education, and Tourism managed to implement 32% of planned activities for 2020 for all five national parks. The Department for the Protection of Nature and Cultural Heritage

carried out about 80% of the planned activities in 2020.

The pandemic obstructed the preparation of new five-year management plans 2021-2025, which were drafted but not adopted.

The implementation of already started international projects continued, but at a slower pace.

### Financial impacts

The constraints related to the COVID-19 pandemic caused a drastic drop in the number of foreign tourists who make over 90% of visitors to national parks. The drop in the number of visits exceeds 90%, which means a plummet in own revenues of more than 90%.

Total revenues of the PINPM in 2019 amounted to 3,746,056.96 euro, of which own revenues were 2,826,556.00 euro (75.45%), and budget revenues were 919,500.00 euro (24.55%); Total expenditures of the Institution in 2019 amounted to 3,331,287.08 euro i.e. 89% of total revenues; there was a positive difference between revenues and expenditures in 2019 worth 414,769.00 euro.

Total revenues of the Institution in 2020 amounted to 1,844,038.41 euro, of which own revenues made 589,038.41 euro (32%), and budget revenues made 1,295,000.00 euro (68%); the total expenditures of the Institution in 2020 amounted to 2,539,129.76 euro which is 138% of total revenues. In 2020, there was a negative difference between revenues and expenditures of 695,091.00 euro.

### Mitigation measures:

To increase the numbers of visitors to parks by domestic visitors and increase revenues on that basis, the Government of Montenegro decided that admission to all National Parks was free to citizens of Montenegro from 1 August until the

end of 2020. They also introduced annual tickets for all parks.

A 50% discount was granted on fees for the use of vessels, rafting, fishing licenses, and for temporary and permanent facilities that perform activities directly dependent on tourism. However, these measures did not have a substantial positive effect on the operation of the parks.

#### Positive and negative examples

The reduced number of visits by the beginning of the summer season reduced the pressure on the environment. However, the Government's decision to allow free admission to national parks for domestic visitors from 1 August resulted in heavy congestion and unsustainable pressure on the environment.

### Impact of the COVID-19 pandemic on protected areas in Croatia

There is a total of 409 protected areas belonging to different categories in Croatia. Of these, eight areas are protected that belong to the category of national parks, and 12 areas belong to nature parks.

Protected areas cover 12.32% of the land and 1.95% of the territorial waters. The majority of the protected areas are nature parks (4.90% of the total territory).<sup>4</sup>

In addition, Croatia, as an EU member state, has a defined Natura 2000 Ecological Network, which covers 36.67% of the land and 16.26% of the coastal sea, and consists of 745 conservation

<sup>4</sup><http://www.haop.hr/hr/tematska-podrucja/zasticena-podrucja/zasticena-podrucja/zasticena-podrucja-u-rh>

areas important for species and habitats (including vPOVS, POVS, and PPOVS ), and 38 bird conservation areas (POPs).

#### Nature park Zumberak - Samoborsko Gorje

The park is located about 30 km southwest of Zagreb and is one of the favourite excursion sites of the inhabitants of the capital. Therefore, the COVID-19 pandemic did not significantly affect the number of visitors to the Park and as such, it is interesting from the standpoint of this report.

#### Implementation of the Management plan

Despite the pandemic, the planned annual program was mostly implemented. Some activities were carried out to a lesser extent than planned. Educational programs and events were cancelled.



Nature park Zumberak - Samoborsko Gorje

#### Impact on finances

This park is known for its free admission - almost the entire annual budget comes from the state budget. Own funds boil down to revenues from educational programs, from local cities and municipalities and make just a minor fraction of the total budget. Due to the impact of the COVID-19 pandemic on the economy and the need for state support, the budget was cut by about 10%.

The savings were made primarily in the investment in the park signalling infrastructure

for new bike routes, the renovation of educational trails, reduction of overgrown grasslands maintained by the park, and in fuel, material, and travel costs and promotional activities.

Due to the pandemic's long-term impact on the economy, the financial plan for 2021 was reduced by an additional 10%.

Mitigation measures:

Work in the park was organized in teams, one part of the staff worked from home, business hours for clients were limited, meetings were reduced to a minimum, and all activities involving larger groups of visitors were cancelled.

At the height of the first wave of the pandemic, Croatian Parks were closed to visitors, including the Nature Park Zumberak-Samoborsko gorje.

Positive and negative examples

Parks experienced major consequences as a large part of their income came from the sale of admission tickets which was used to pay staff who were not funded by the state budget. Good management of the pandemic in the spring and summer ensured a fair number of visitors during the summer season, which enabled tourism-dependent parks to mitigate the negative financial impacts.

As Zumberak-Samoborsko gorje was financed from the state budget, the pandemic did not make a substantial change to its financial standing.

When it comes to the number of visitors, the park did not experience a decrease in visits, as the timeline of visits is more or less the same during the whole year and the majority of visitors are hikers and climbers who were active despite the pandemic. After the initial strict measures and restrictions of movements were eased -

there was a significant increase in visitors to this park, especially during the summer months when more visitors flocked than in previous years. The reason behind it was the proximity of the park to the capital city and the lack of options for other travel.



National Park Krka, Croatia

Example of remote education in NP Krka

The new reality and constraints of the COVID-19 pandemic brought educational programs in protected areas to almost a complete stop. Therefore, new challenges required new ways to transfer knowledge. Although spending time with children in workshops, in their kindergartens and classrooms is by far the best and most interesting way to transfer knowledge and experiences, NP Krka adapted to the new reality by having educational workshops.

At the beginning of the new school year, the Public Institution National Park Krka invited all kindergartens, primary and secondary schools in the Sibenik-Knin County to take part in the Program of lectures and educational workshops in the school year 2020/2021. Afterward, a plan of workshops was made and distance education followed. Parents, foster parents, and teachers could use the YouTube channel of the NP Krka to

watch documentaries and educational videos about the natural and cultural-historical values of the Park.

<http://www.np-krka.hr/clanci/online-radionica/715.html>

<http://dinaricarparks.blogspot.com/2020/11/edukativne-radionice-np-krka-provode-se.html>

## Impact of the COVID-19 pandemic on protected areas in Kosovo \*

The total number of protected nature areas in Kosovo (2017) is 184, covering an area of 126,119.29 ha, or 11.56%. Of that number, two national parks, one nature park, and 156 nature monuments are protected.<sup>5</sup>

For this report, data were collected for Regional Park Germia and National Park Sara.

### Regional Park Germia

Regional Park Germia is located 7 km northeast of Pristina, the capital of Kosovo, and its well-developed infrastructure makes it easily accessible to visitors.



Germia Park, Kosovo

### Implementation of program activities

Due to the COVID-19 pandemic and related restrictive measures, it was not possible to hold a public debate and adopt the Management plan in the Municipal Parliament of Pristina, even though it was prepared.

### Financial impacts

Due to restrictions of movement, the National Park Germia saw a decrease in revenues from sales of tickets. Therefore, the Local Public Company "Hortikultura", which maintains the Regional Park, received subsidies worth 25,000 euros from the local budget. Despite the pandemic, employment levels remained the same as in the year before.

### Impact to the system of physical and expert protection of nature

The pandemic did not affect the system of physical and expert protection and plans in this area were carried out. There was no pressure on the park's resources as the control and work of the supervisory services stayed at the same level despite the pandemic.

\* The name used herein shall be without prejudice to the position or status and under the UNSCR 1244/99 and the

opinion of the International Court of Justice on the Declaration of Independence of Kosovo.

<sup>5</sup> [http://www.ammk-rks.net/repository/docs/Serbisht\\_B5\\_repaired\\_\(1\).pdf](http://www.ammk-rks.net/repository/docs/Serbisht_B5_repaired_(1).pdf)



### Positive and negative examples

Due to the restrictions of movement, the citizens/visitors were unable to visit the park and the Park experienced improvements in its ecosystem.

Delays in the installation and renovation of infrastructure and park furniture (benches, tables, waste bins, etc.) were identified as a negative example.

The pandemic had an adverse effect on the cooperation of parks and their cooperation with the local community; carried out activities were done mostly online and regarded the experiences related to the management of green areas during the pandemic.

### **National Park Sara (Sharri)**

#### Implementation of program activities

The Administration of the National Park Shara faced many problems in managing the 54,000 ha of the park throughout the pandemic. Since its establishment, the National Park Shara has faced a lack of human resources, with a special emphasis on nature preservation and a lack of investment in plans and projects. Today, the National Park Shara mainly faces illegal activities (deforestation, illegal construction, illegal use of pastures, poaching, etc.) due to the lack of nature conservationists in the municipalities of Kacanik, Shtërpe, and Dragash. Although the staff of the park worked at full capacity during the pandemic, data obtained from the park show an increasing trend of illegal activities during the pandemic.



*National Park Shara, Kosovo*

Local and international projects were limited and the park management mainly took part in local projects and activities of local organizations, thus securing a portion of the equipment for the functioning of the park (cameras, fire equipment).

#### Financial impacts

The Administration of the National Park Shara does not have its own budget line but operates within the Agency for Nature Protection/Ministry of Economy and Environment. Lack of finances coupled with the lack of human resources and difficulties in achieving the requirements and goals of the Management plan were evident before the COVID-19 pandemic.

Revenues from the sale of tickets for admission to the park were significantly lower in 2020 due to the pandemic than in years before. In 2020, due to the pandemic, farmers who used pastures on the territory of the National Park were exempt from paying compensation for their use.

The National Park Shara enjoys regular support from the state budget (salaries, transport, goods, and services), but there were no other types of support (e.g. employment, plans, project implementation) so far.

#### Positive and negative examples

Due to restrictions of movement and reduced number of visitors, the problem of waste on the territory of the National Park was not manifested as much. As for negative examples, there was growing pressure on resources and illegal activities in the Park (deforestation, construction, hunting, etc.)

National Park Mavrovo, like other parks in Northern Macedonia, saw a reduction in revenues of about 25% and failed to implement 15% of planned activities in 2020.

There is no state program to support protected areas.

## Impact of the COVID-19 pandemic on protected areas in Northern Macedonia

The protected areas of Northern Macedonia include 86 areas covering an area of 229,900 ha, which makes a total of 8.94% of its territory. Most of that percentage is covered by three national parks with 4.47%, followed by natural monuments with 3.07%, and 0.97% of the territory belongs to the multipurpose area Jasen.



National Park Mavrovo, Northern Macedonia

Data for national parks were collected for this report.

### Impact on financing and implementation of Management plans

Parks in Northern Macedonia are fully financed from their own revenues and do not receive support from the state budget.

### System of physical and expert protection of nature

In 2020, the National Park Galicica saw a reduction of revenues of cca 25%, and the sale of tickets decreased by 73% in comparison to 2019. Galicica is the only park in Northern Macedonia that charges the admission and generates income on that basis. Other parks are financed through concessions (deforestation, hunting, services, skiing ...)

The system of physical and professional nature protection functioned in difficult circumstances in all parks, due to smaller volume of business, shorter business hours, remote work, staff getting sick from COVID-19, and problems in finding replacements for workers on sick leave.

In 2020, the National Park recorded a drop in revenues of about 25%. The pandemic slowed down the process of preparation and adoption of the Management plan 2021-2030.

A special problem concerned the transport of employees for fieldwork. Plans for 2021 were prepared with an optimistic scenario and with the application of all optimization measures, cost reduction, and reliance on activities financed through projects.

### Negative and positive impact



Due to the COVID-19 pandemic and travel restriction measures, there were no visits by foreign tourists which resulted in the loss of income.

There was no cooperation with the local community either and all events were cancelled.

The pressure on the environment reduced with the lower number of tourists.

### Impact of the COVID-19 pandemic on protected areas in Slovenia

Slovenia is one of the European countries with the best-preserved nature and the greatest biological and landscape diversity. This is reflected in the size of the Slovenian territory that is under protection: more than 52% belongs to some of the protected categories, and approximately 37% of the territory belongs to the Natura 2000 ecological network.

Protected areas consist of one national park (NP Triglav which geographically belongs to the Alps region), three regional parks and 34 landscape parks, 66 nature reserves, and over 1200 nature monuments.<sup>6</sup>

The impact of the COVID-19 pandemic on protected areas in Slovenia is presented through the example of the Regional Park Skocjan Caves.

#### Regional Park Skocjan Caves

Before the pandemic, Regional Park Skocjan Caves was recognized as one of the three regional parks in Slovenia with well-developed tourism, which generated a lot of its income from tours to caves, and practiced good

cooperation with the local community, especially in the field of education.



*Park Skocjan Caves, Slovenia*

#### Impact on finances

The pandemic made a drastic effect on the park, which is oriented to foreign visitors and generated most of its income from admission tickets. For 2020, as many as 200,000 visitors were planned, but only ¼ of the plan (50.000) was realized. The planned budget for 2020 was 4,121,013 euros. The loss from the tickets only amounted to cca 2 million euro.

The pandemic affected the endangered functioning of the park and the Institute as its manager (liquidity, salaries, jobs, basic material costs, water, electricity, gas). Following the budget cuts and operational measures, the annual loss amounted to 535,000 euros.

#### State support program

The line ministry provided 254,638 euro for staff salaries and 200,000 euro for material costs for the year 2020 and the state-guaranteed funds for the salaries of all employees in the park until the following tourist season (2021).

#### Impact on the protection system

<sup>6</sup><https://www.naravniparkislovenije.si/en/nature-parks>

The park was monitored on regular basis during the pandemic. The circumstances in the nature improved during the quarantine, probably due to the closure of some industrial facilities that polluted rivers.

#### Plan for the following year

The plan for 2021 is to have 100,000 visits to the cave. Prioritization was done and unnecessary costs were cut (catering, trips abroad). The plan is to finance as many activities as possible through projects. Expectations are that not all the planned activities in the five-year Management Plan could be implemented.

#### Positive and negative examples

The reduction in the number of visitors resulted in lower negative pressure on the cave. The park management decided to reduce the number of group visitors in a single visit to the cave and to limit ticket sales, to increase the quality of its offer and reduce the pressure on natural values. Negative example: many seasonal workers lost their jobs (about 50 people)

#### Cooperation with other parks and local communities

Most of the events were cancelled. There was no cooperation with other parks.

### Impact of the COVID-19 pandemic on protected areas in Serbia

The area of protected areas in Serbia stretches on 677,950 ha, or takes up 7.66% of its territory. There are 469 protected areas.

For the report, data were collected from the National Park Tara.

### National Park Tara

National Park Tara covers most of Tara Mountain in the far west of Serbia. The border of the park is the course of the river Drina between Visegrad and Bajina Basta. Due to the COVID-19 pandemic, the Park recorded an increase in tourists and increase in revenues on that basis.



National Park Tara, Serbia

#### Implementation of program activities

COVID-19 pandemic, the state of emergency, and related measures did not have a major effect on the implementation of program activities. All activities planned through the Management plan for 2020 were mostly implemented.

There were no interruptions in the work and implementation of planned activities in the protection of the area, protection and monitoring of habitats and species (all planned monitoring activities were carried out with expert organizations, Faculties of Biology from Belgrade and Novi Sad, Institute for Nature Conservation and Natural History Museum Belgrade.

However, there was a suspension in work of the Visitor Centre and its work with visitors for 2.5 months, from mid-March to June 1. During that period there were no guests in the accommodation premises, manifestations, or organized visits and excursions.

The COVID-19 pandemic made an impact on the timeline of planning and management activities regarding forest resources. Forest survey activities were carried out. In addition to employees, twenty temporary workers were hired. COVID-19 infections of project participants affected the timeline of project execution and slowed down the work, but still, the activities were brought to their end.

#### Impact on finances

The forecast of budget realization for the year 2020 stands at 96%, which means that revenue worth 3,298,813 euros was generated, or 96% of the planned revenue. Therefore, one may conclude that no major impact was made on revenues. The revenues from the use of forests, game, fishing, was realized in full.

Lower revenues were generated in the area of guiding through the area, bear watching, visits to nature reserves, sale of souvenirs.

The increased number of visitors to the National Park Tara resulted in increased revenues from the provision of tourist accommodation by more than 65% when compared to 2019 (2019-9,260 euro, 2020-15,450 euro). Also, the income from fishing licenses increased by about 50% more than in 2019 (2019-7,302 euros and 2020-10,099 euros).

#### State support programs

There was no state support for protected areas due to the pandemic. The planned subsidies were conducted as in previous years. In addition, the Government of the Republic of Serbia introduced a measure to reduce expenditures by 20%, so the National Park Tara had to make cuts in expenditures by 20%.

#### Impact to the system of physical and expert protection of nature

The COVID-19 pandemic affected the system of physical and professional protection of nature which was reflected through difficulties in the organization of work and the pressure on nature. The employees contracted the virus during all three waves of the pandemic, which resulted in disturbances in the protection of the area, prolongation of deadlines for forest surveying, disturbance in the use of forests, delayed or postponed investments in some cases even cancellation of investments.

All activities regarding professional protection and monitoring were carried out, as well as field activities and cooperation with expert institutions, monitoring, and control of bark beetles and other forest protection-related activities.

However, some locations experienced direct pressure on nature and habitats due to the increased attendance and more visitors during the pandemic.

#### Management plan and budget for the following year

The Management plan for the year 2021 is projected at 3,870,237 euros, which is by 15% more than in 2020 (budget inflows for investments are expected, and the removal of the Government's measure on reduction of the budget by 20%).

#### Positive and negative examples of the impact of pandemic

A positive example of the impact of the pandemic is reflected in the impact on the protected area where increased attendance affected the promotion of that area, its values, and resources.

The increased attendance generated more revenues to the local population, which makes living from tourism and tourist accommodation

services because all accommodation capacities were full.

However, the increased number of visitors had a negative impact on some locations (pressure on nature, higher capacity to visit some nature reserves, and observation points).

The negative impact involved the pressure on the construction of facilities, in construction zones with permits and beyond. There was also an increased interest in buying real estate in the park area and potential construction, which we see as a negative impact.

#### Cooperation of protected areas within the state during the pandemic

The cooperation of protected areas in the country took place through the exchange of experiences by telephone and online, and primarily concerned the Management plan, ticket fees, and other associated matters. The planned meeting of the national parks "Parkovijada" and the seminar on protected goods of the Ministry of Environmental Protection of Serbia were not held.

## CONCLUSIONS

COVID-19 pandemic had a significant impact on protected areas in the Dinarides. Although there are many common effects of the pandemic, there are significant differences between countries, and between parks within the same country.

Work and management activities in the protected area were continuous, even though they took place under difficult conditions, such as reduced business volume, shortened working hours, remote work, COVID-19 infections among the staff, inability to perform all tasks due to imposed measures against the COVID-19 pandemic, inability to hire seasonal workers, and prolongation of planned activities and projects.

The immediate reaction of protected areas to the pandemic was to reduce vital management services and activities of their staff, including the field and surveillance operations.

When it comes to human resources, protected areas managed to preserve the nucleus of humanity, there were no major layoffs, but there were no new employments either. This is especially evident when it comes to seasonal employment.

A question that remains is how the reduction of own revenues and budgets will affect the employment activities of some parks in the future and the organization of systems of protection under the circumstances of reduced financing.

When it comes to the implementation of five-year and annual management plans, there were no major digressions in their implementation despite the COVID-19 pandemic. Protected areas managed to ensure regular activities in parks,

while most of the planned infrastructure investments were cancelled or postponed.

The most dramatic impact of the COVID-19 pandemic was the decline in park revenues that occurred in all countries.

Protected areas in the Dinaric Arc region are financed through revenues generated from regular budgets and through own revenues, which include revenues from tourism, forestry (including sanitary felling), various concessions, collection of fees ...

The pandemic showed that regular funds from the state budget allowed the stability and regular functioning of parks that received that kind of funding (mostly national parks). However, parks with a lower category of protection (nature parks and lower) suffered significant problems in functioning due to the lack of state support and reliance on revenues of local self-governments.

The protected areas that rely heavily on tourism as a source of financing faced the biggest problems in ensuring regular functioning and business operations. The impact of the pandemic was mitigated to some extent by focusing on the domestic market and domestic visitors. However, as there are no clear forecasts for tourism in 2021, there are still high uncertainties and risks for the financing of protected areas in 2021.

The reduced number of tourists can be seen generally as a positive impact on the reduction of pressures on the environment. However, the change in the structure of visitors with more irresponsible tourists resulted in more negative examples and pressures on protected areas (disturbance of wildlife, destruction of biodiversity, destruction of park infrastructure, waste left around).

The pandemic showed that some protected areas in the past were too oriented towards the development of tourism, which resulted in a constant increase in the number of visitors, especially those that make one-day visits to parks. Therefore, the resulting pressures had a negative effect on the protection of nature. However, the crisis caused by the COVID-19 pandemic brought to the agenda the need for new and more sustainable offers in the field of responsible tourism and the optimization of the number of visitors to a level that would allow sustainable functioning of parks without negative impact on nature.

Also, some protected areas that were not focused on tourism in the pre-pandemic period, saw a surge in the number of domestic tourists, but experienced difficulties in control of visitors and failed to develop mechanisms to generate revenues from visits.

The COVID-19 pandemic had a very negative impact on the aspect of work and cooperation with local communities. Most of the regular activities, events, exhibitions, workshops, and training, which were supposed to take place in protected areas, were cancelled due to the COVID-19 pandemic. Education in protected areas, which was an important aspect of their activities, came to a complete halt and is very likely that it would not be implemented in the old ways in 2021 either.



## RECOMMENDATIONS

Given the substantial impact of the COVID-19 pandemic on protected areas and the uncertainty of further trends, challenging short- and medium-term work planning, the countries must be proactive in their assessment of the situation and exchange of information with protected areas, and be more flexible in terms of financing mechanisms and support for protected areas.

### **PROTECTION OF NATURAL RESOURCES AND BIODIVERSITY AS A COMMON GOAL**

The common goal of all actors in the protection of nature should be to prevent negative impact of the pandemic on natural resources, prevent intensive and unsustainable use of protected areas to remedy the short-term economic deficit, and improve the financing of such areas through increased budget support and by developing and adapting specific capacities to enable enhanced sustainable financing.

### **PROVIDING TARGETED FINANCIAL SUPPORT TO PROTECTED AREAS**

All countries in the Dinarides region should consider having special funds for protected areas that would provide support in the coming period, and similarly to a public bid or competition provide support to protected areas in matters directly related to the system of monitoring and preservation of nature during the epidemic and the time needed to remedy its consequences.

### **INTENSIVE COOPERATION AND TIMELY EXCHANGE OF INFORMATION OF COMPETENT INSTITUTIONS AND MANAGERS OF PROTECTED AREAS**

This brief regional overview indicates that the pandemic's impact is complex and different in different countries and in individual protected areas. For this reason, it is necessary to make a quick and comprehensive review and analysis of the extent and all aspects of the COVID-19's impact on the operation and functioning of most valuable resources. Perception and analysis of its effects under present circumstances must be based on intensive cooperation between protected areas and competent institutions. The specific needs of protected areas for their optimal functioning in the coming years should be considered and adequately addressed through specific support measures and the development of new public policies. The identified impacts do not show regularity or specificity in terms of the category and size of protected areas, so it is necessary to include representatives of different groups of managers during the analysis at national levels.

### **INVOLVEMENT OF OTHER RELEVANT SECTORS TO SUPPORT MANAGEMENT OF PROTECTED AREAS**

Other relevant sectors must be involved in the dialogue to support the management of protected areas i.e. the funding, economy, and tourism, to find feasible and effective support mechanisms. Competent institutions for the protection of nature and management of protected areas must ensure that the areas and the matter of their management are integrated into national policies and packages of measures





that are being developed as a response to the pandemic.

### **INTENSIFYING REGIONAL COOPERATION AND JOINT ADVOCACY TO SUPPORT MANAGEMENT OF PROTECTED AREAS THROUGH INTERNATIONAL MECHANISMS AND INITIATIVES**

Regional cooperation is vital for the joint identification of priorities in the management of protected areas during the pandemic and joint advocacy towards international institutions, organizations, and donors. In this regard, the countries are invited to use the existing networks for cooperation and to support and improve their work through active participation. Protected areas, in addition to optimizing their work in the next five years, should be motivated to develop their human resources to be able to create innovative ideas and projects and apply for domestic and international funds and donors and provide missing funds and equipment for monitoring and protection of nature, and to improve the cooperation with local communities.

### **THE GREEN AGENDA FOR THE WESTERN BALKANS IS AN OPPORTUNITY TO IMPROVE THE MANAGEMENT OF PROTECTED AREAS**

The COVID-19 pandemic had an extremely negative impact on economies in the countries of the Dinaric Arc, pushing some of them into economic recession. However, this crisis may also be an opportunity for transformation of the current economic approach through the creation of green, inclusive policies for sustainable recovery that will lead to a far better future for protected areas and local communities. Such an opportunity is the Green Agenda for the Western Balkans that focuses on the development of the circular economy, achieving carbon neutrality,



reducing pollution, and protecting biodiversity. Competent institutions and managers should make efforts to provide support for protected areas through national plans and priorities for the Green Agenda.

### **GREATER ORIENTATION OF DOMESTIC TOURISTS TOWARDS PROTECTED AREAS IS AN OPPORTUNITY TO WIN STRONGER SOCIAL SUPPORT FOR PROTECTED AREAS**

In some countries, the number of tourists visiting the protected areas grew rapidly due to restrictions on cross-border travel. Many protected areas were not ready for such a sudden increase in the number of visitors and could not adequately respond to the increased risks of disturbance of nature and pollution. On the other hand, that opens up opportunities for the future development of protected areas and provides an opportunity to create stronger support for more concrete investments in protected areas.

### **SYSTEMIC PROFESSIONALIZATION OF MANAGERS AND TARGETED INCREASING OF EXPERT AND TECHNICAL CAPACITIES NEEDED FOR ADAPTIVE MANAGEMENT**

Managing protected areas is a very complex activity in regular circumstances let alone during the pandemic.

The COVID-19 pandemic brought to light all the weaknesses of the systems and the need to develop specific knowledge and skills that the employees will use to be able to respond to many challenges in their daily activities. This implies more complex knowledge and skills in the matter of conservation of biodiversity, innovative sources of financing, education, tourism, use of new technologies, but also some simpler technical capacities such as online communication and information exchange.

*The report was prepared by the Parks Dinarides - a network of protected areas of the Dinarides in cooperation with WWF Adria.*

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*The report is available in electronic form only*

**The Parks Dinarides network – a network of protected areas of the Dinarides** were founded at the end of 2014, with the seat in Podgorica, based on a political agreement of eight countries of the Dinaric Arc - Big Win II. The organization is committed to the promotion of natural and cultural values of protected areas of the Dinarides, their promotion, support, and regional integration, through the principles of good governance and sustainable development. The Parks Dinarides network consists of 77 members from 92 protected areas from eight regional countries.