



REPORT

ADRIA

2016



# Protected Areas Benefit Assessment (PA-BAT) in Bosnia and Herzegovina

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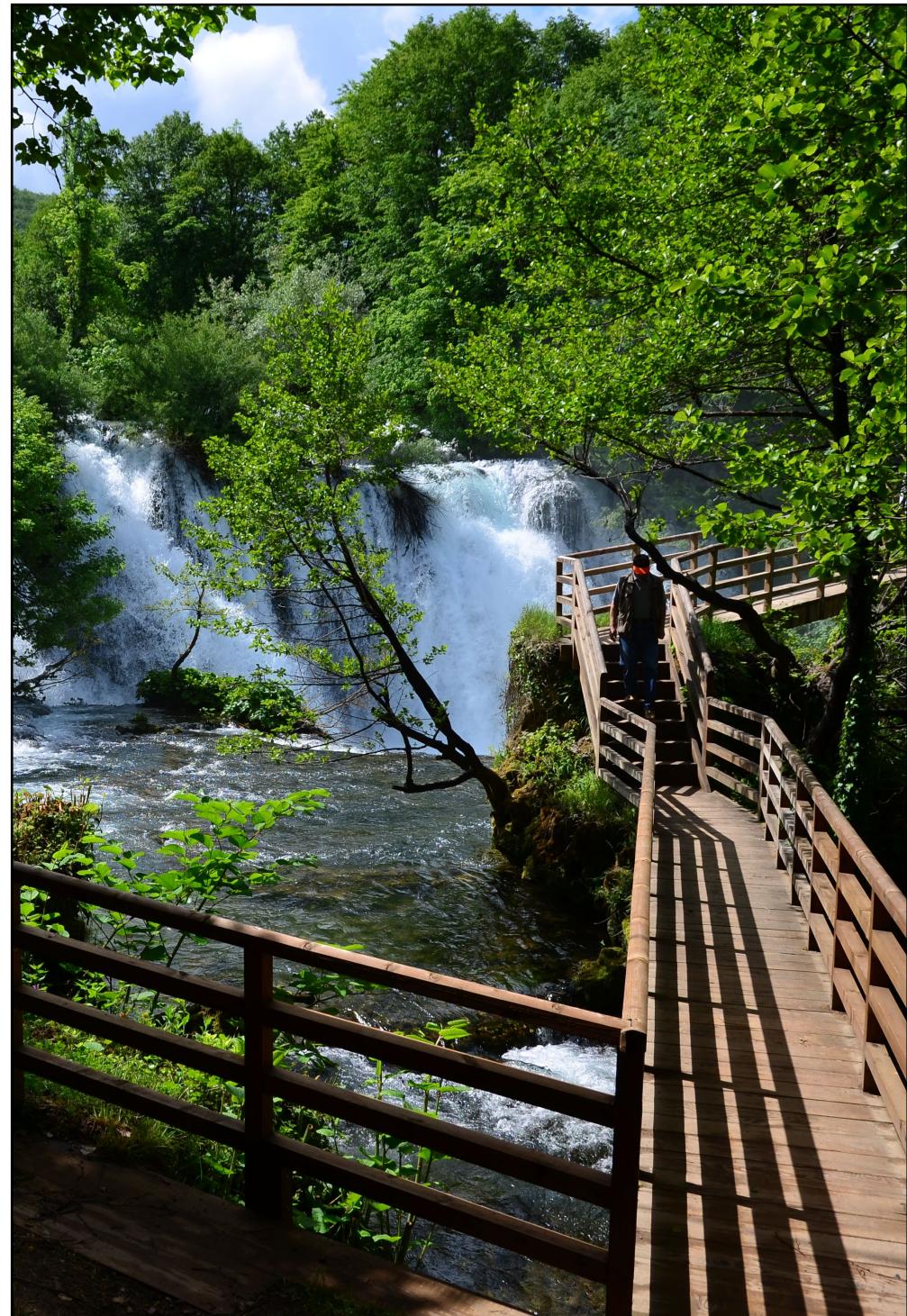
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# Who we are

WWF is one of the world's leading non-governmental and non-profit organizations for nature conservation. WWF was established in 1961, and has representative offices in over 100 countries across the globe. The organization is proud to have over five million people who support it.

WWF Adria's mission is conservation, better governance and sustainable management of protected areas, marine and freshwater ecosystems and forests in the Adria-Dinaric region. The main goal of WWF Adria is protection of natural environment, biodiversity and ecological processes in the Dinaric Arc area.

## What we want to achieve

WWF's mission is to stop the degradation of our planet's natural environment, and to build a future in which people live in harmony with nature. Sustainable use of natural capital forms a basis for social and economic development and is safeguarded through enhanced environmental responsibility among the public, governments, CSOs and the business sector.

## How will this document contribute to our goal

WWF brings to the region a wide range of the best international and regional practices that can be locally applied according to our in-depth knowledge and experience of conditions and needs.

## Why you need to read this document

This analysis identifies main drivers relevant for the protected areas and country's development policies; identifies flow of economic benefits and a need to develop strategies to give revenue back to local people and protected areas; the importance of jobs in protected areas - vital for rural economies and relevant for politicians.

## Introduction

WWF is presenting key findings of an analysis that can provide initial information/guidance on how various stakeholders perceive the current and potential value of protected areas. Based on the discussions which have involved more than 100 experts, government officers, entrepreneurs, farmers and local community representatives in general, these results reflect actual situation, actual challenges and opportunities local communities are facing. They can be applied in various fields and in various areas, including assisting Bosnia and Herzegovina in integrating natural capital and ecosystem services into development planning. We believe that **proper evaluation of protected areas leads to greater interest, more investments and better preservation of natural values**. We hope that this report can stimulate discussion and provide groundwork for further actions and engagement of key decision makers, resulting in the changes in policies and development of economic models that include natural values in local and national development plans.

CURRENT PAs  
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OR 2% OF THE  
NATIONAL  
TERRITORY

The protected area system in B&H is still not adequately developed and current PAs cover only around 102.000 ha or 2% of the national territory<sup>1</sup>. Benefit assessment according to the PA-BAT methodology was done in all three national parks (Una, Sutjeska and Kozara) with the total area of ca 40 000 ha, as well as three additional areas from different categories (Nature park Hutovo blato, the Bijambare protected landscape and natural monument Vrelo Bosne). The Federal Ministry of Environment and Tourism, Ministry of Spatial Planning, Civil Engineering and Ecology of Republic of Srpska, including Institute for Protection of Cultural, Historical and Natural Heritage of Republic of Srpska, as well as management bodies and stakeholders of the six PAs, were involved in the assessment.

## Methodology

The PA-BAT methodology<sup>2</sup> is an important tool used to identify a full range of current and potential benefits of individual PAs, including protected area management challenges. The PA-BAT is primarily designed to be used by protected area managers working with stakeholders to identify important values and benefits that they bring to a range of stakeholders.

Steps in implementing the PA-BAT:

1. Nomination of the PA-BAT coordinators in protected area and basic PA data collection
2. Site-based participatory workshops (datasheets, detailed notes, stakeholder survey)

<sup>1</sup> <https://www.cbd.int/doc/world/ba/ba-nr-05-en.pdf>

<sup>2</sup> More could be found at [http://wwf.panda.org/wwf\\_news/?174401/PABAT](http://wwf.panda.org/wwf_news/?174401/PABAT)

3. Data validation (post-workshop)
5. Data analysis (site-based, national and international level)
6. Guidance notes - How to apply results
7. Implementation of recommendations

Using this methodology, workshop participants assess economic and non-economic/subsistence value in terms of their benefits to a range of stakeholders. The tool uses a list of 22 values that are characteristic for protected areas. Values are organized around nine main groups: nature conservation, protected area management, food, water, culture, health and recreation, knowledge, environmental services and materials. Values were scored on a six-point scale: no benefit; minor or major non-economic/subsistence benefit; minor or major economic benefit; and potential benefit.

Eight stakeholder groups were consulted: local people living in the protected area, local people living near the protected area, national population, science/experts, civil society organizations, government, business sector and global community. The analysis combines the assessment made by workshop stakeholders and information collected from protected area managers and experts through a data validation process. We also received valuable input through a workshop participant survey carried out after each workshop. Guidance notes<sup>3</sup> were developed to support park management in utilizing the PA-BAT findings.

**The PA-BAT results can be used at both national as well as site level to support management and to develop appropriate policies that support nature conservation while promoting sustainable development and wise use of natural resources.**

## Results and discussion

Subsistence values and their significance (major or minor value) for all six protected areas in Bosnia and Herzegovina are summarized in the figure 1. There is a difference in the recognition and valuation of subsistence benefits (non-economic benefits that contribute to well-being, i.e. health, nutrition, clean water and shelter) and economic values (benefits that provide the ability to earn an income, to consume and to have assets). The most recognized subsistence benefits are tourism and recreation, iconic or site-specific values (i.e. river, mountain peak), water resources, preserved natural values, as well as cultural and historical heritage, while top economic ones are jobs in the PA, tourism, honey production, water resources and livestock grazing.

<sup>3</sup> [http://croatia.panda.org/en/what\\_we\\_do/protected\\_areas/pa4np/pa\\_bat\\_methodology/](http://croatia.panda.org/en/what_we_do/protected_areas/pa4np/pa_bat_methodology/)

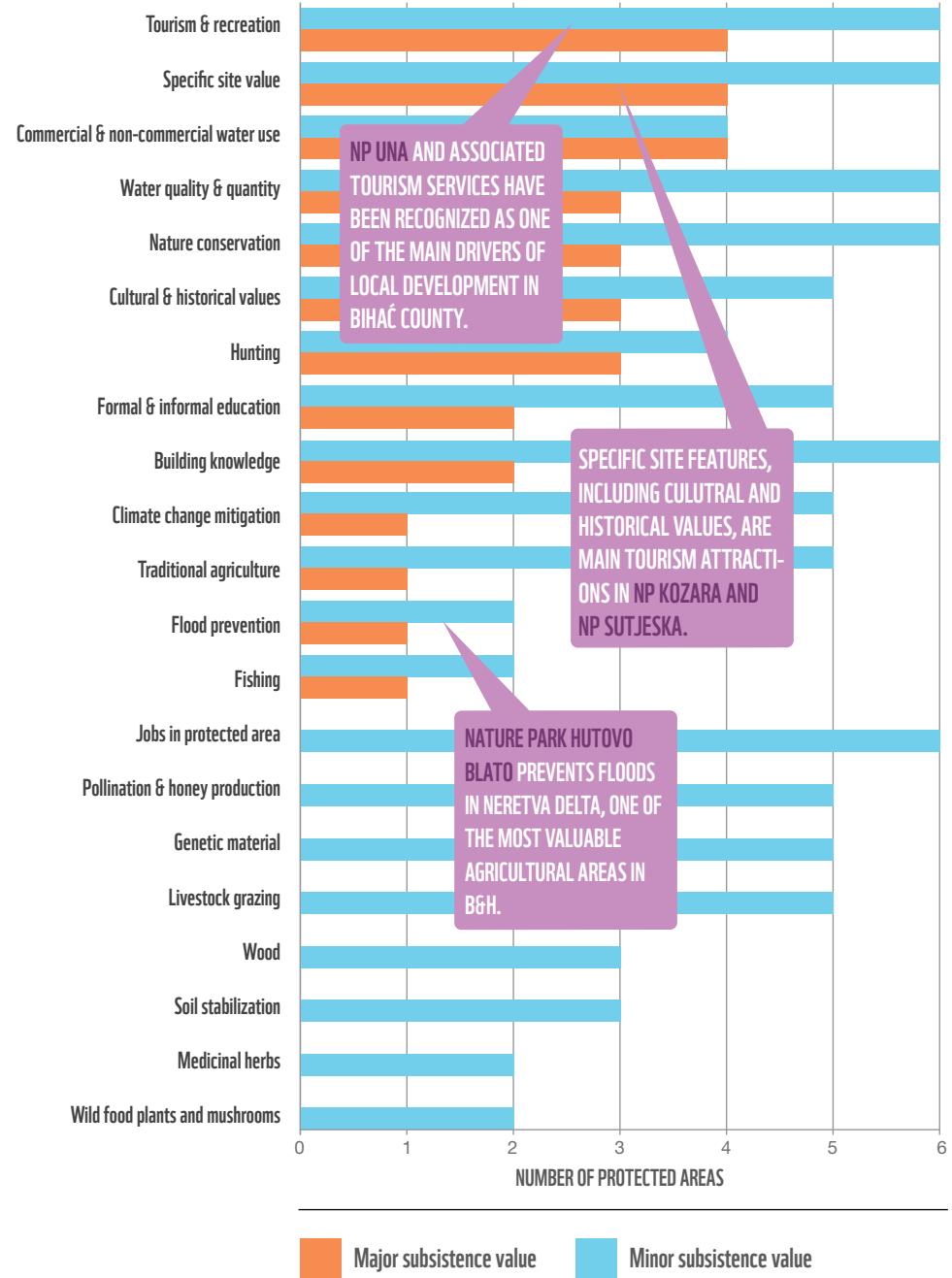


Figure 1 List of subsistence benefits of the six assessed protected areas and the comparison between major and minor subsistence values

Preserved and rich nature is obviously an advantage of this region, which significantly supports its attractiveness and visibility. If properly managed, it brings substantial economic benefits from tourism, recreation and other related services.

#### Key Findings:

1. People are traditionally sensitive to fundamental resources like water<sup>4</sup>. The link between **preserved nature and pure and rich water** sources is among the highest rated values in the assessment. Significance of water as a resource has been recognized in all assessed areas and in 50% of assessed areas<sup>5</sup> it was rated as major subsistence value.

2. Highly rated subsistence values, mainly for local people and local stakeholders, are **traditional agriculture** including grazing and honey production recognized in 84% of the assessed areas<sup>6</sup>.

3. PAs are seen as jobs providers and they offer certain economic stability for local communities in rural areas. **Jobs in protected areas** have been recognized as minor subsistence values in all assessed areas.

4. Knowledge building and formal or informal **education** were well recognized as minor subsistence values. Stakeholders in two protected areas (34%) have identified each of these values as major subsistence values<sup>7</sup>.

5. **Regulatory ecosystem services are often neglected on a local level**. However, the PA BAT analysis showed that people in Bosnia and Herzegovina do consider **PAs as important actors in climate change mitigation** but they do not have comprehensive understanding of PA role in climate change mitigation. Supporting role of PAs for **flood protection** has been emphasized as a major value in Nature Park Hutovo Blato, while **soil stabilization** has been rated as significant in national parks Kozara, Sutjeska and Una. Obviously, people in mountain regions are more aware of potential issues related to soil stability (erosion, landslides and torrent floods). **Pollination** is associated with honey production and it is not recognized as a regulatory ecosystem service related to food production (crops pollination). This can be explained by the absence of large and intensive agriculture operations in or around PAs in Bosnia and Herzegovina.

6. Most of the assessed areas include forest ecosystems and local communities are traditionally associated with them. **Importance of forest** as an existential resource for local community, mainly for the provision of firewood, has been recognized in half of the assessed PAs (national parks Kozara,

<sup>4</sup> In average 68% of assessed stakeholder groups have stressed the importance of water quality and quantity.

<sup>5</sup> In National Park Kozara, Nature Park Hutovo blato and in Natural Monument Vrelo Bosne.

<sup>6</sup> In National Park Kozara, Sutjeska, Una, Nature Park Hutovo blato and Bijambare protected landscape

<sup>7</sup> Knowledge building in Nature Park Hutovo blato and Una National Park and formal or informal education in natural monument Vrelo Bosne and Bijambare protected landscape.

THE TOTAL ECONOMIC VALUE OF ECOSYSTEM SERVICES WITHIN UNA NATIONAL PARK IS ESTIMATED TO BE OVER 45 MILLION OF BAM PER YEAR

Una and Bijambare protected landscape). Non-timber forest products like mushrooms and edible plants have subsistence value only in national parks Kozara and Sutjeska.

7. Hunting has been recognized as a major subsistence value in three protected areas<sup>8</sup>. NP Sutjeska has the most developed hunting activities which also include commercial hunting (hunting tourism). Management of the NP is responsible for game management and for hunting organization and marketing. Most of the revenues are directed to the park management and local people don't have many benefits. People living and hunting around protected areas have recognized that protected zones serve as reproduction centers for game and support populations in surrounding hunting areas (i.e. NP Kozara).

In order to make nature's values visible, ecosystem services of Una National Park have been quantified by UNEP through The Economics and Ecosystem biodiversity methodology. The most valuable ecosystems are forest ecosystems (mainly support and regulation) with an average annual benefit of more than 4,000 BAM per hectare. Other most valuable ecosystems are river, wetlands, meadows and arable lands. The total economic value of ecosystem services within Una National Park is estimated to be over 45 million of BAM per year<sup>9</sup>.



<sup>8</sup> In national parks Sutjeska, Kozara and Una

<sup>9</sup> UNEP Bosnia and Herzegovina, Una National Park Transferability study

# Economic values

## Overall economic value in B&H protected areas

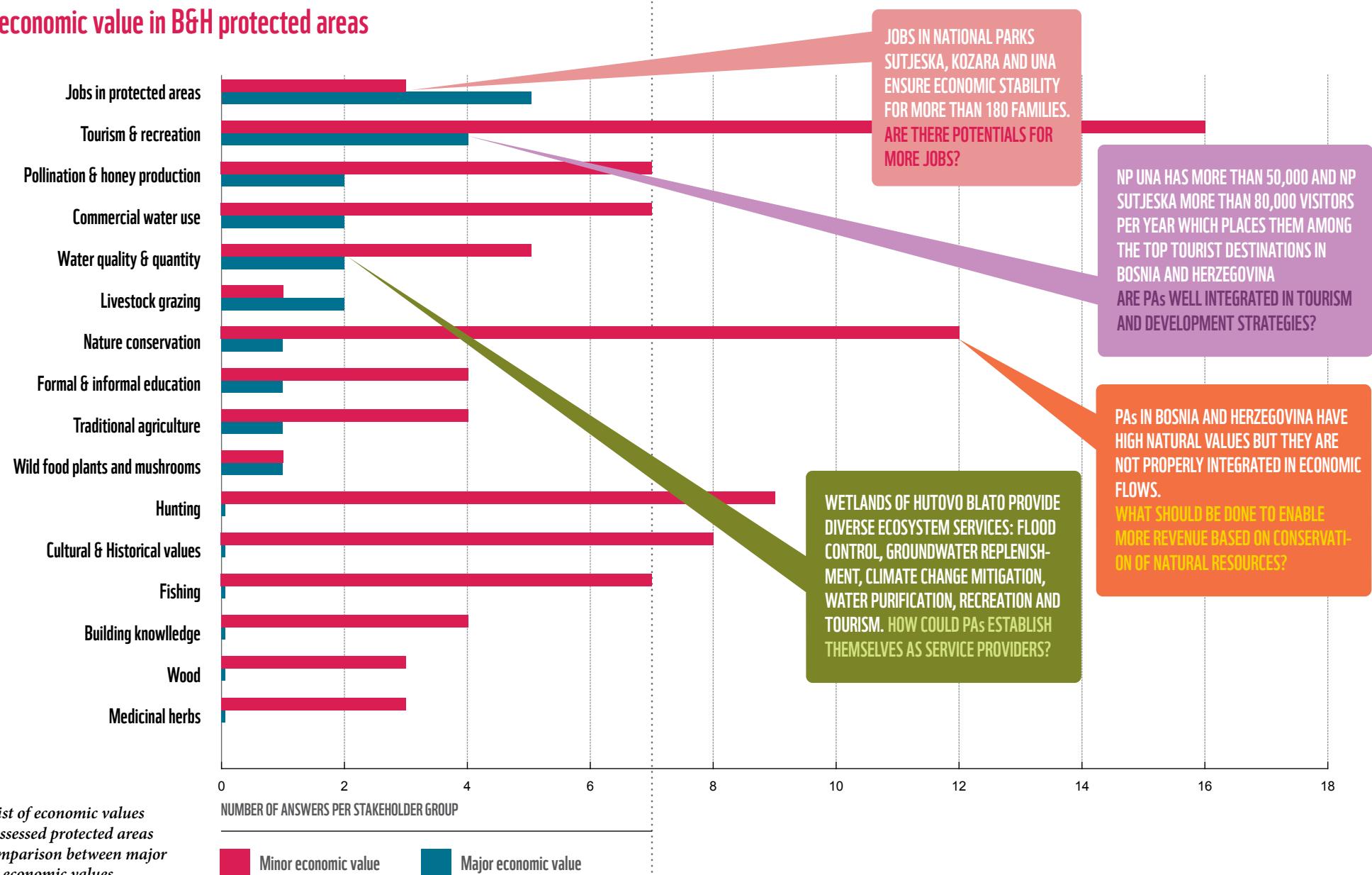


Figure 2 List of economic values of the six assessed protected areas and the comparison between major and minor economic values

# Tourism

Tourism potentials of Bosnia and Herzegovina are considered as a big opportunity for recovering economy of the country. Currently, tourism sector in B&H is still at an early stage of development. According to the official statistics, tourism accounts for cca 2% of the GDP<sup>10</sup> and it provides ca 33,000 jobs<sup>11</sup>. Tourism revenues in B&H are currently far below the average of competing countries<sup>12</sup>. Rural and nature tourism are the main opportunities for development<sup>13</sup>.

Despite their relatively small number and small coverage (cca 2% of the national territory), protected areas in Bosnia and Herzegovina attract large number of domestic as well as foreign tourists. Two national parks (Una and Kozara) have almost 150,000 tourist visits annually, which is around 15% of the total annual tourist visits in Bosnia and Herzegovina<sup>14</sup>. National Park Kozara is primarily known for its cultural and historical heritage and ensures permanent boost to the local economies by attracting more than 80,000 visitors per year<sup>15</sup>. In NP Una the key attraction is nature itself together with river and waterfalls visited by more than 50,000 tourists annually. However, the lack of well-developed tourism offer and infrastructure is evident, and most of the visits to the protected areas are one-day visits<sup>16</sup>.

Majority of the people living in the parks have emphasized the importance of tourism for local economies. 68% of the assessed stakeholder groups have recognized tourism related activities as minor subsistence values. Direct economic benefits from tourism in protected areas are obvious and in most cases crucial for fragile local communities. Major subsistence value of tourism and recreation was emphasized among stakeholder groups in National Park Una, Nature Park Hutovo blato and natural monument Vrelo Bosne.

Tourism in protected areas is generally seen as a promotor for development of other sectors such as traditional agriculture and food production. Agriculture production in PAs in Bosnia and Herzegovina is currently not among major values, but **tourism development could boost existing subsistence production and enable more benefit flow for local people**. By supporting sustainable development and use of natural resources, nature-based tourism also supports integral and efficient management of protected areas. PAs are sustainable and viable only if they are integrated in local

<sup>10</sup> Agency for Statistics of Bosnia and Herzegovina. <http://www.bhas.ba/>

<sup>11</sup> [http://www.mvteo.gov.ba/linkovi/Linkovi\\_29102013/3.%20Uloga%20turizma%20u%20BIH.pdf](http://www.mvteo.gov.ba/linkovi/Linkovi_29102013/3.%20Uloga%20turizma%20u%20BIH.pdf)

<sup>12</sup> <http://poslovnijsvijet.ba/znacaj-turizma-u-BIH/>

<sup>13</sup> Strategy of tourism development in FBiH 2008-2018. Federal ministry for environment and tourism. 2008. <http://www.fmoit.gov.ba/downloads/strategija.pdf>

<sup>14</sup> Total number of tourism visit in B&H in 2015 was 1,029,000. Source: <http://www.bhas.ba>

<sup>15</sup> Data provided by the national park management body.

<sup>16</sup> Strategy of tourism development in FBiH 2008-2018. Federal ministry for environment and tourism. 2008. <http://www.fmoit.gov.ba/downloads/strategija.pdf>

NATIONAL PARKS  
UNA AND KOZARA  
ACCOUNT FOR  
15% OF THE  
ANNUAL TOURIST  
VISITS (150,000  
TOURISTS) IN  
BOSNIA AND  
HERZEGOVINA



A LEVEL OF  
TOURISM IMPACT  
(NUMBER OF  
VISITORS,  
FACILITIES,  
INFRASTRUCTURE  
AND TRAFFIC)  
SHOULD BE KEPT  
AT A LEVEL WHICH  
DOES NOT HARM  
NATURAL VALUES  
OF AN AREA

economies. Furthermore, tourism often provides local, low-entry job that can help unemployed and vulnerable groups (youth, minorities, women) make an entry into the workforce.

However, one of the main challenges in tourism in PAs is balanced intensity of tourism. A level of tourism impact<sup>17</sup> (number of visitors, facilities, infrastructure and traffic) should be kept at a level which does not harm natural values of an area. Otherwise, it may bring only temporary economic benefits which would soon be outweighed by negative, long-term loss.

PA management bodies should have important role in the development of tourism strategies and initiatives on local and national level. A lot of strategic approaches and practical tools for sustainable tourism have been developed in recent years. One of the useful mechanisms which have been proved in many PAs across Europe and the region<sup>18</sup> is European charter for sustainable tourism developed by Europarc Federation. National Park Una has been holding the Charter since 2014 and it is remarkable how this park has established itself as a leading tourism destination in just a few years. Number of visitors has increased by 16 times<sup>19</sup> since 2011 when the PA was established.

## Jobs in protected areas

Importance of protected areas as jobs providers is well recognized by most of the assessed local communities. In Bosnia and Herzegovina there are **around 300 people employed in protected areas** (177 people in the Republic of Srpska<sup>20</sup> and 132 in the Federation of Bosnia and Herzegovina<sup>21</sup>). The three national parks alone provide around 200 jobs<sup>22</sup>. These numbers can easily be neglected or underestimated when compared with overall employment statistical data. To understand the significance of the PA in terms of jobs and economy, we should have a closer look at the local level data. Many municipalities in Bosnia and Herzegovina suffer from large unemployment rate and even from very low total number of provided jobs. Unemployment rate on the state level was 24.2% in 2015, while some municipalities, like Foča, Donji Vakuf and Hadžići, have significantly higher unemployment rates, above 30%<sup>23</sup>. Majority of these municipalities are situated in remoted, mainly mountain areas, with underdeveloped

<sup>17</sup> Protected Area Management Effectiveness in Bosnia and Herzegovina, RAPPAM, [http://awsassets.panda.org/downloads/bosnia\\_and\\_herzegovina\\_rappam\\_report.pdf](http://awsassets.panda.org/downloads/bosnia_and_herzegovina_rappam_report.pdf)

<sup>18</sup> Examples of well-established models are National Park Kornati and nature parks Medvednica and Lonjsko polje in Croatia

<sup>19</sup> <http://www.vecernji.ba/za-nacionalni-park-una-2015-godina-bila-najuspjesnija-1058052>

<sup>20</sup> Data provided by the Institute for Protection of Cultural-Historical and Natural Heritage of Republic of Srpska

<sup>21</sup> Data provided by the Federal Ministry of Environment and Tourism

<sup>22</sup> NP Una has 31, NP Sutjeska 113 and NP Kozara 58 employees

<sup>23</sup> Socioekonomski pokazatelji po općinama u Federaciji Bosne i Hercegovine 2015. Federalni zavod za programiranje razvoja. <http://www.fzzpr.gov.ba/bs/pubs/3/3/publikacije>

infrastructure. As such, they are not attractive for investments in industry or technology. Due to that, majority of economic activities is based on natural resources, agriculture or tourism.

**The National Park Sutjeska, established on the territory of two municipalities Gacko and Foča, offers more than 100 permanent and seasonal jobs. This figure is significant in terms of job opportunities in that region. The park has substantial role in economic stability of all villages and towns in the park or in its close vicinity.**

In the National Park Una and Bijambare protected landscape, locals living in and around PAs have recognized the importance of the jobs in protected areas as a major economic value. Local community of National Park Kozara and natural monument Vrelo Bosne has minor economic benefit from employment in those PAs due to other existing opportunities in urban areas near the PAs.

These are only jobs provided directly by the PA management body. Undoubtedly, PAs indirectly induce much more jobs on a local level. A number of local business initiatives strongly depend on the PA and its management. Those are mainly small enterprises working in tourism sector, forestry or agriculture.

More and more individuals, enterprises and civil organizations recognize NP Una as the basis for development of new activities and business ideas. Local people are actively participating in tourism activities and they accept NP Una as an opportunity for development. They offer their domestic products, handicrafts, souvenirs within the NP Una boundaries or along access roads. Those who have more capacities, knowledge, ideas and incentive are transforming parts of their homes into rooms for rent, apartments and camping places. In addition, interest for investments within the national park is growing. The PAs are often the only stable enterprises in remote and empowered regions. Due to that, their role is much more relevant and they are deeply embedded in local communities.

Apart from economic benefits in a narrow sense, jobs in a PA bring many other social benefits. PAs provide many opportunities for formal and informal education of the local people. Activities and events organized within a PA increase the number of people visiting the area, enable knowledge exchange and increase the visibility of the region and eventually all rise the competitiveness of local communities.

However, employment potentials of a PA highly depend on the management practice. Some of the PAs with long tradition, like NP Sutjeska and NP Kozara, are not well adjusted to modern approaches in PA management and still don't have well developed partnership and participation mechanisms with local stakeholders. Governance model of newly established park NP Una has from its very beginning been focusing on intensive collaboration



**AROUND  
300 PEOPLE  
ARE EMPLOYED  
IN PAs IN B&H**



with local stakeholders and now it more effectively contributes to local economic development.

**Establishment and development of the NP Una was supported by international organizations and funds from its beginnings. They have recognized high development potentials of the park, have initiated and supported building of tourism infrastructure, development of small business enterprises and development and promotion of tourism products. Through continual cooperation with local community, the park has very quickly established itself as a pillar of the local development. The majority of newly created businesses in and around the NP Una are based on tourism.**

## Water resources in protected areas

Bosnia and Herzegovina with more than 9,200 m<sup>3</sup> of water per capita is the richest country in drinking water resources in the region and among ten richest countries in Europe<sup>24</sup>. That clearly depicts the importance of water resources for the country and for the region.

People are traditionally sensitive to water resources and they very well recognize its importance. In all assessed protected areas, water resources are perceived as important subsistence value to local community. In two areas (Vrelo Bosne nature monument and Hutovo Blato Nature Park) they have major economic value for government and business sector. Protected areas serve for the protection of water, in terms of quality as well as in terms of quantity (e.g. filtration, groundwater restoration and maintenance of natural flows) allowing commercial exploitation of water but without revenues for protected areas. The relevance of PAs and other natural areas for commercial uses of water is often neglected or underestimated usually because of the



<sup>24</sup> World Bank <http://data.worldbank.org/indicator/ER.H2OINTR.PC>

distance between PAs and places where the water is actually being used. Large forest areas have extremely high importance for water supply since they are usually the regions where the highest quantities of surface waters originate. Therefore, management of forest ecosystems within PAs is very relevant for water security.

Water resources in PAs have other uses other than public supply; these are energy production, agriculture, tourism and industry.

  
**BOSNIA AND HERZEGOVINA WITH MORE THAN 9,200 M<sup>3</sup> OF WATER PER CAPITA IS THE RICHEST COUNTRY IN DRINKING WATER RESOURCES IN THE REGION AND AMONG TEN RICHEST COUNTRIES IN EUROPE**

Una River as a main feature of the Una National Park is the largest river in Western Bosnia and Herzegovina. More than 600,000 people living in the Una basin are receiving benefits from diverse services this river is providing. Especially important for the local development are outdoor activities such as rafting, canoeing, sport fishing, as well as tourism development from local food production to accommodation in the vicinity of rivers.

Despite huge natural richness, water resources in Bosnia and Herzegovina are facing serious challenges. Pollution, intensive regulation, permanent deterioration of natural water regimes are among the most acute ones. Hydropower developments present a serious threat for some of the most valuable river stretches, especially in mountain regions. In return, there are few benefits to local community especially in long-term perspective. Solutions may include considering other land/water uses that provide greater benefits while minimizing impacts. For example, National Park Sutjeska, with unique old growth forest rare at European scale, is under threat by hydropower development.

WWF, together with its partners, is developing and promoting canyoning as a new touristic offer as an alternative to hydropower development.

**Examples of business sector using water from PAs in Bosnia and Herzegovina**

**Drinking water – Vrelo Bosne** has been protected due to the importance of a water supply for Sarajevo capital city and surrounding area, with the population of half million people. Possible threat is inappropriate settlement sprawl around the PA in the water protection zone.

**Energy production - Water resources from Nature Park Hutovo blato** directly support energy production and water supply. Around 45% of the energy produced in B&H comes from hydropower. Every year hydropower plants in B&H produce in average the energy worth EUR 350 million. Many of the hydropower plants, like "Čapljina" or "Slapovi na Uni", depend on water resources from the protected areas.



Hutovo Blato is recognised as an internationally important wetland (Ramsar site in B&H) and protected as a nature park. Water resources from Nature Park Hutovo Blato directly support energy production and water supply. Equally important is the value of flood prevention, which is recognized as a major subsistence value by local people living in and around the PA, as well as by national population.

Nowadays, the wetland is disappearing due to tremendous human impact, mainly from hydropower. The main cause of inadequate management is that the values provided by the wetland ecosystems in flood prevention are not economically valued. Additional ecosystem services provided by Hutovo Blato are groundwater replenishment, climate change mitigation, and water purification, reservoir of biodiversity, cultural values, recreation and tourism.

WWF is supporting restoration and conservation of the wetlands of Hutovo Blato as well as securing sustainable financing that would enable relevant authorities to save the ecosystem of Hutovo Blato.

## Forestry

Economic activities related to timber production have not been identified as a major economic value in the assessed PAs. In all three national parks logging is restricted to sanitation cuttings. Some economic value of forestry is however recognized by government in two national parks Sutjeska and Kozara. Importance of forest as an existential resource for local community, mainly for the provision of firewood, has been recognized in half of the assessed PAs (national parks Kozara and Una and Bijambare protected landscape).

**WWF AND IKEA  
ARE TRYING TO  
REDUCE ILLEGAL  
LOGGING IN B&H  
THROUGH FOREST  
CERTIFICATION**

More than half of the surface area of Bosnia and Herzegovina (63%) is covered with forest and forest land. Forestry sector contributes to the GDP by cca 1% and directly employs more than 10,000 people<sup>25</sup>. From 2012, WWF, in cooperation with IKEA<sup>26</sup> and through forest certification (FSC), is trying to reduce illegal logging and to promote responsible forest management to support sustainable development in Bosnia and Herzegovina.

Forestry sector in the EU is facing structural changes. Some segments of the traditional production are declining, while new production concepts

<sup>25</sup> <http://www.fao.org/3/a-au015o.pdf>

<sup>26</sup> [http://croatia.panda.org/en/what\\_we\\_do/forests/](http://croatia.panda.org/en/what_we_do/forests/)

are emerging. One of the main trends is increasing the relevance of services related to the whole forest value chain<sup>27</sup>. By definition, PAs are not meant for intensive timber production. Therefore, diversification of forest based products and services could be an opportunity for economic development in and around PAs (non-timber forest products, tourism, recreation etc.).

## Flow of benefits

Economic flow analysis and distribution of benefits is crucial for a proper understanding of local and rural economies. Size of the investments is not the only criteria for economic sustainability and it is often overestimated. Economic benefits from large investments do not necessarily reach local people. In general, fair distribution and sustainability of incomes are more relevant for fragile rural economies. Properly governed protected areas, which integrate local communities and businesses, serve as an ideal framework for sustainable rural development.

### Flow of economic value to different stakeholder groups in B&H protected areas

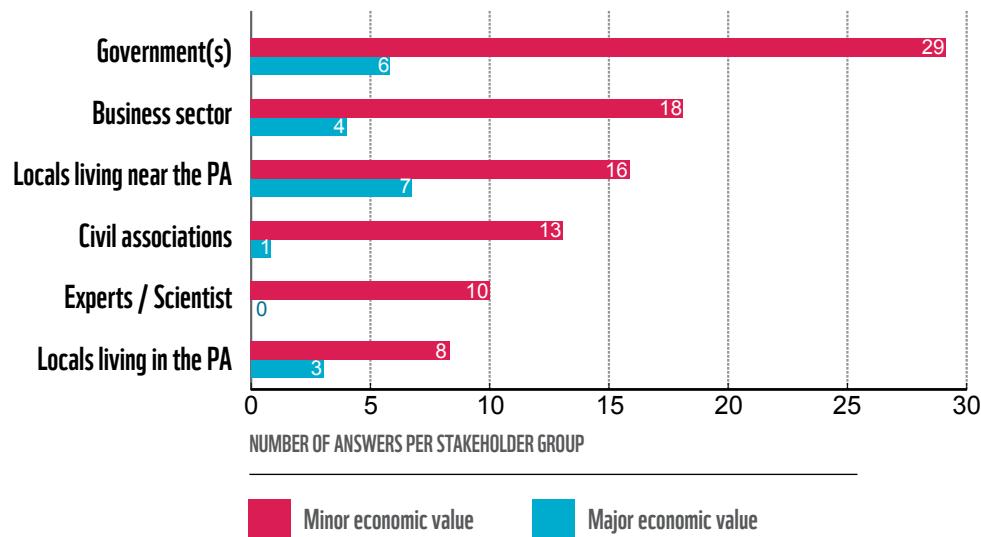


Figure 3 Flow of economic benefits from all assessed values within protected areas

### IMPROVED GOVERNANCE MODELS FOR PAs WOULD ENSURE MORE EQUITABLE FLOWS OF BENEFITS

The assessment has shown that in the majority of the PAs the local people are the group that gains economic benefits. These major economic benefits are mostly related to jobs in PAs. Other resources from which local community has major economic values are: wild food plants (blueberries) in National Park Sutjeska, traditional agriculture in the surroundings of Bijambare, livestock grazing and honey production in Hutovo blato. This clearly depicts the importance the PAs have for small and vulnerable communities in remote rural areas. Even if there is interest from investors, such communities have no capacity to be adequately involved to gain benefits. The role of a PA is to develop and offer mechanisms for community outreach and their integration in decision making which would enable profits from investments.

### Local communities - business - government

The benefits of people living near a PA are usually better perceived than benefits of people living within the boundaries of a PA. Reasons are probably multiple. First, the population in a PA is usually much smaller in number than the population around a PA. Other reasons are the consequences of old concepts of PA, where local communities were not properly integrated in a PA management and were directly exposed to restrictions for use of different resources.

The importance of a PA for business, as well for public sector, is well recognized. Main identified areas of interest for business sector are tourism and recreation. Other areas with the existing or with a potential value for business sector are medicinal plants, commercial water use, fishing and hunting. Relatively high significance has been associated with cultural and historical values, mainly because of impact on tourism activities.

Governmental sector values tourism as one of the main economic gains of PAs. However, benefit flow to this sector is also associated with nature conservation values, cultural and historical values, education, water quality and quantity, and other values, which are of public or community relevance.

<sup>27</sup> Future of the European Forest-Based Sector: Structural Changes Towards Bioeconomy. European Forest Institute. [http://www.efi.int/files/attachments/publications/efi\\_wsctu\\_6\\_2014.pdf](http://www.efi.int/files/attachments/publications/efi_wsctu_6_2014.pdf)

# Main potentials

## Distribution of potentials for all stakeholder groups

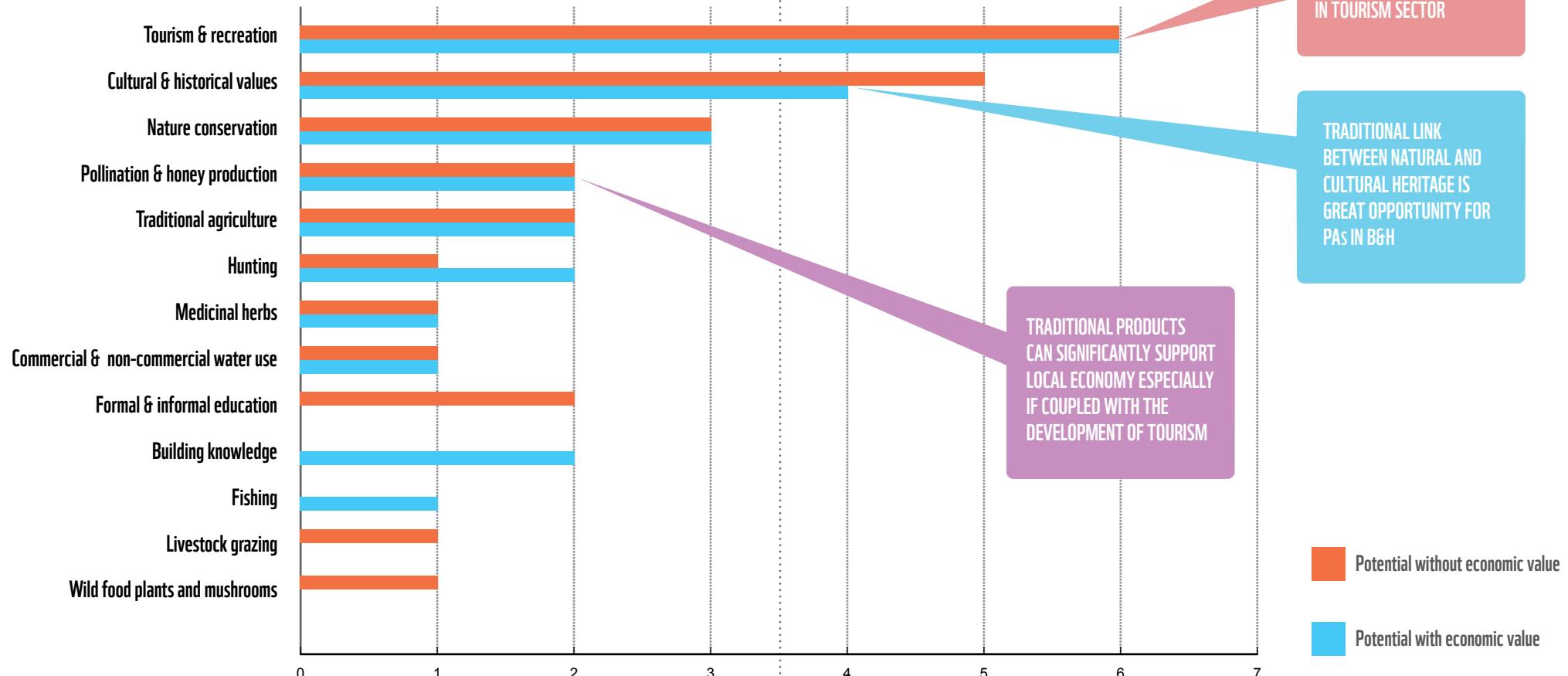


Figure 4  
Potentials for all stakeholder groups

# Main potentials

Potentials of PAs for economic development have been widely recognized among the stakeholder groups involved in the assessment. Potentials highly depend on the main characteristics of the area and main resources present. However, the highest potentials for the development are connected to tourism. In all six assessed areas, the stakeholders have rated tourism at the top of the potentials. Potentials for further tourism development are best recognized among local people living in and around PAs, civil associations and business sector<sup>28</sup>.

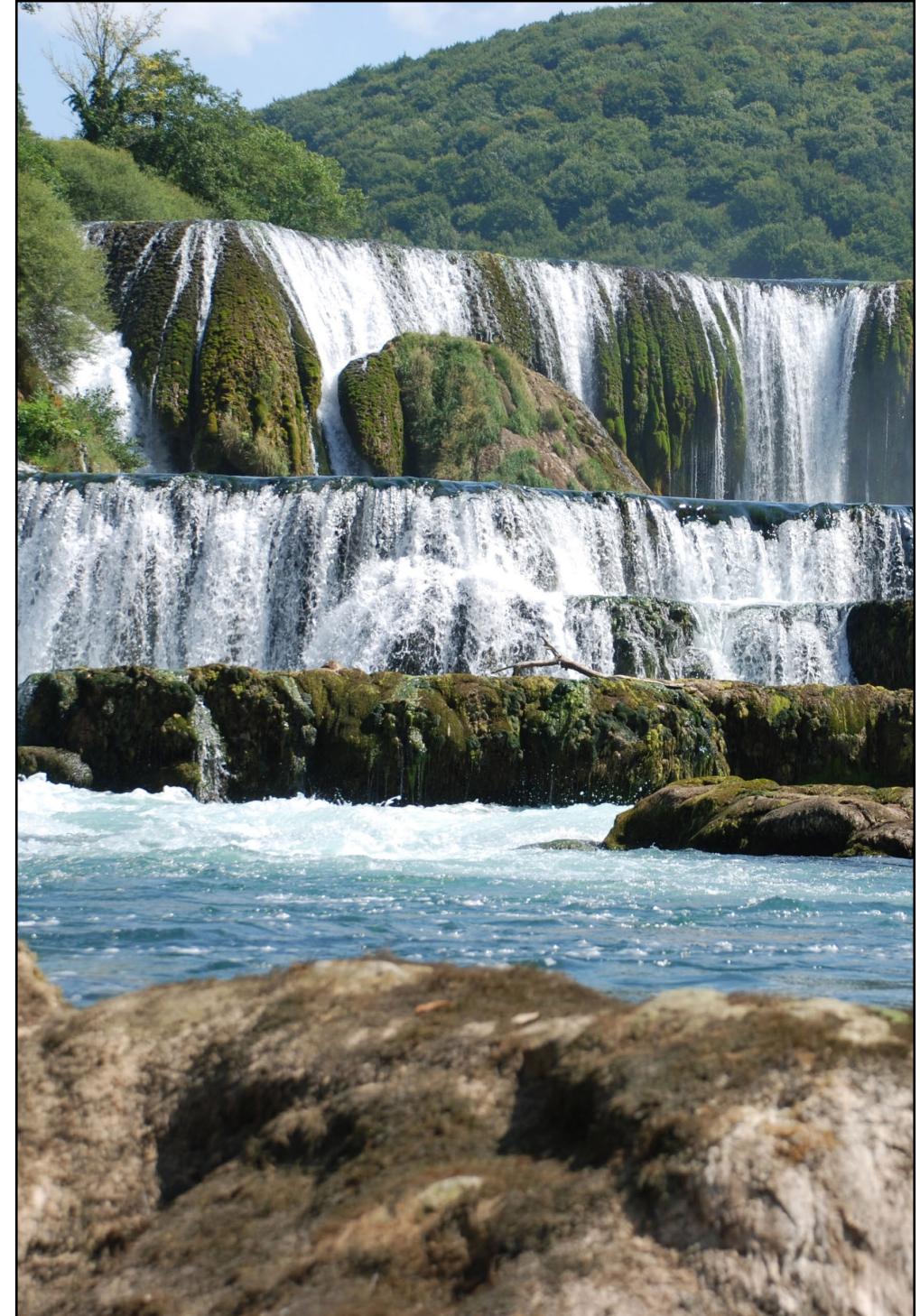
Potentials for development are recognized also in **cultural and historical values**. PAs often include different kinds of cultural heritage, which are sometimes even more prominent than natural values. Therefore, high appreciation of cultural values by stakeholders, in particular local people, should be reflected in a PA management. National parks Kozara and Sutjeska were protected primarily because of their rich cultural history. Well-known monuments and sites from medieval times (tombstones-stećci) as well as more recent historical sites (World War II) are the main attractions for visitors.

Potentials related to traditional use of natural resources and traditional agriculture (food in Una, trophy hunting in Una and Sutjeska, fish in Hutovo Blato, honey in Una, Kozara and Bijambare) are well recognized as potentials. These activities are very much dependent on tourism, and it is to expect that further development of tourism will boost activities related to traditional agriculture and food production in B&H PAs. Development of bear watching and other non-consumptive uses of wildlife also offer a development opportunity. Stakeholders have not recognized intensive use of natural resources (i.e. timber) as significant potential for future development. This is an important fact for management planning in the PA and should be used to support diversification of sustainable economic activities.

Clearly, most stakeholders focus on potentials related to tourism<sup>29</sup>. This also shows the need for the promotion of other values, particularly those regulating ecosystem services through government policies.



**TOURISM,  
RECREATION,  
CULTURAL AND  
HISTORICAL  
VALUES ARE  
RECOGNIZED AS  
MAIN POTENTIALS**



Una National Park © Haris Hadžihajdarević

<sup>28</sup> 83% of answers from all stakeholder groups, where potentials in tourism have been recognized, fall within these four groups.

<sup>29</sup> 57% of all answers recognize potentials in tourism and recreation, cultural and historical values and natural values.

# Participation in protected area management

Modern concepts of a PA rely on intensive collaboration of all stakeholders. Managers of PAs should not only inform stakeholders but they should also develop structures and processes which would enable active participation of all relevant actors in the management. The participation highly increases effectiveness of a PA management, but also ensures enabling environment for economic development initiatives.

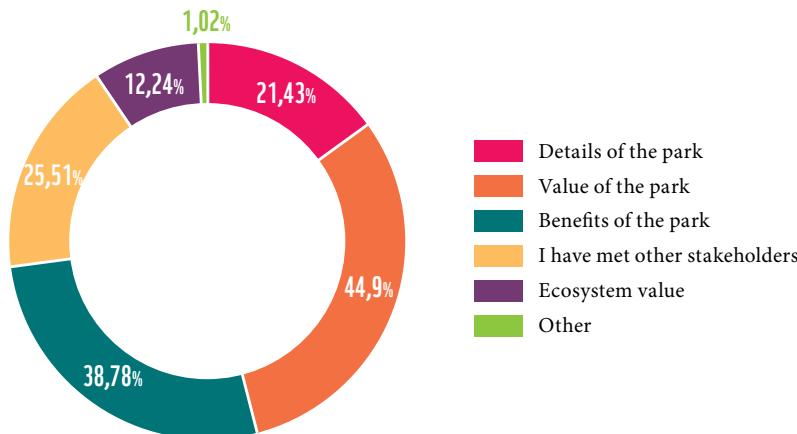


Figure 5 What was learned during the workshops

Most of the PAs in the region were established and managed without engaged consultation processes. Nowadays, situation has changed and managers mainly recognize the importance of collaborative work. However, the consequences of a long period of authoritative governance are still present and both managers and stakeholders need to develop their capacities for participation.

**For a certain number of stakeholders, the PA-BAT assessment workshops were the first occasion for structured discussion on issues related to their PAs.**

The process of the PA-BAT workshop is equally important as the results. The process itself enables stakeholders to understand the role, values and benefits from protected areas, provide networking opportunities and direct contacts with PA management. More than 81% of the participants have met new people during the workshop (38% met more than 5 new people), and 80% of them are ready to start collaboration with new acquaintances.

**80% OF PARTICIPANTS ARE READY TO START COLLABORATION WITH NEW ACQUAINTANCES FROM THE WORKSHOP**

Lack of comprehensive information due to weak interaction between managers and stakeholders is evident. For over 70% of the stakeholders the most valuable knowledge gained on workshops were basic facts about values and park specifics.

Over 95% of the involved people stated that they would be able to use the knowledge gained during the workshop. This kind of workshop proves to be very convenient tool for explaining sometimes quite complicated relations of ecosystem services and other values and benefits.

## Challenges

The PA-BAT assessment is not meant to be a comprehensive and final evaluation of all values of PAs. It is meant to help collate and start building information about the overall benefits from nature conservation, which are immense. In addition, participative and integral assessments do not only help in identification of benefits and values - they are also practical for the identification of the main challenges and obstacles in PA management. We have highlighted some that had been identified during stakeholder discussions.<sup>30</sup>

1. There is a lack of strategic approach in PA management and rural development. PAs are often not recognized and integrated in strategies, plans and programs of other sectors.
2. Legal documents relevant for a PA management are often contradictory and in collision. Diverse legal obstacles cause difficulties in PA management and implementation of new approaches and initiatives (partnerships with local people, tourism activities, collecting taxes).
3. Only limited number of the present PA values and potentials are actually used. Capacities of PA management bodies and other supporting institutions for income diversification in PAs are currently low.
4. Financial resources for the development of sustainable economic initiatives are limited and not easily accessible by local communities.
5. Although financial mechanism for the payments for natural resources does exist (taxes for water and forests), the collected funds are not streamlined for nature conservation and PAs.
6. Structures and processes for participation of stakeholders are not developed. Low level of participation is one of the main obstacles in PA management.

<sup>30</sup> For additional information on pressures and threats in protected areas, see RAPPAM report for Bosnia and Herzegovina



**LOCAL PEOPLE  
ARE NOT AWARE  
OF IMPORTANCE  
OF VALUES AND  
BENEFITS OF PAs**

7. Capacities of PA managers are limited in number of staff and in their competencies. Lack of experts for nature conservation, education, interpretation and tourism is evident.
8. Public and local support for PA is on a rather low level as a result of long absence of effective and structured cooperation between PA management bodies and local communities.
9. Complex administrative structures in B&H are not an enabling environment for PA management, which are often extending beyond municipal, cantonal or even national borders.
10. Local people, as well as public, are not aware of complexity and importance of values and benefits PAs are continuously providing to them. Ecosystem services, which are substantially supporting local and national population, are often underestimated (i.e. regulating and supporting ecosystem services).
11. Lack of understanding of socio-economic role of PAs in issues such as job creation in rural areas with depopulation trends.
12. Problems with landownership and property issues, complicated procedures and bureaucracy present a burden for local stakeholders.

## **Recommendations for the usage of PA-BAT results**

Different actors in nature conservation, protected area management and rural development can use the results of the PA-BAT assessment. They are particularly relevant for PA managers, but also for national and local governments and for local actors who are trying to develop initiatives for sustainable development.

Responsible institutions for nature conservation in Bosnia and Herzegovina could take into account the issues identified during the series of PA-BAT workshops and utilize the advice (guidance notes<sup>31</sup>) on using the PA-BAT results developed in consultation with PA experts and authorities.

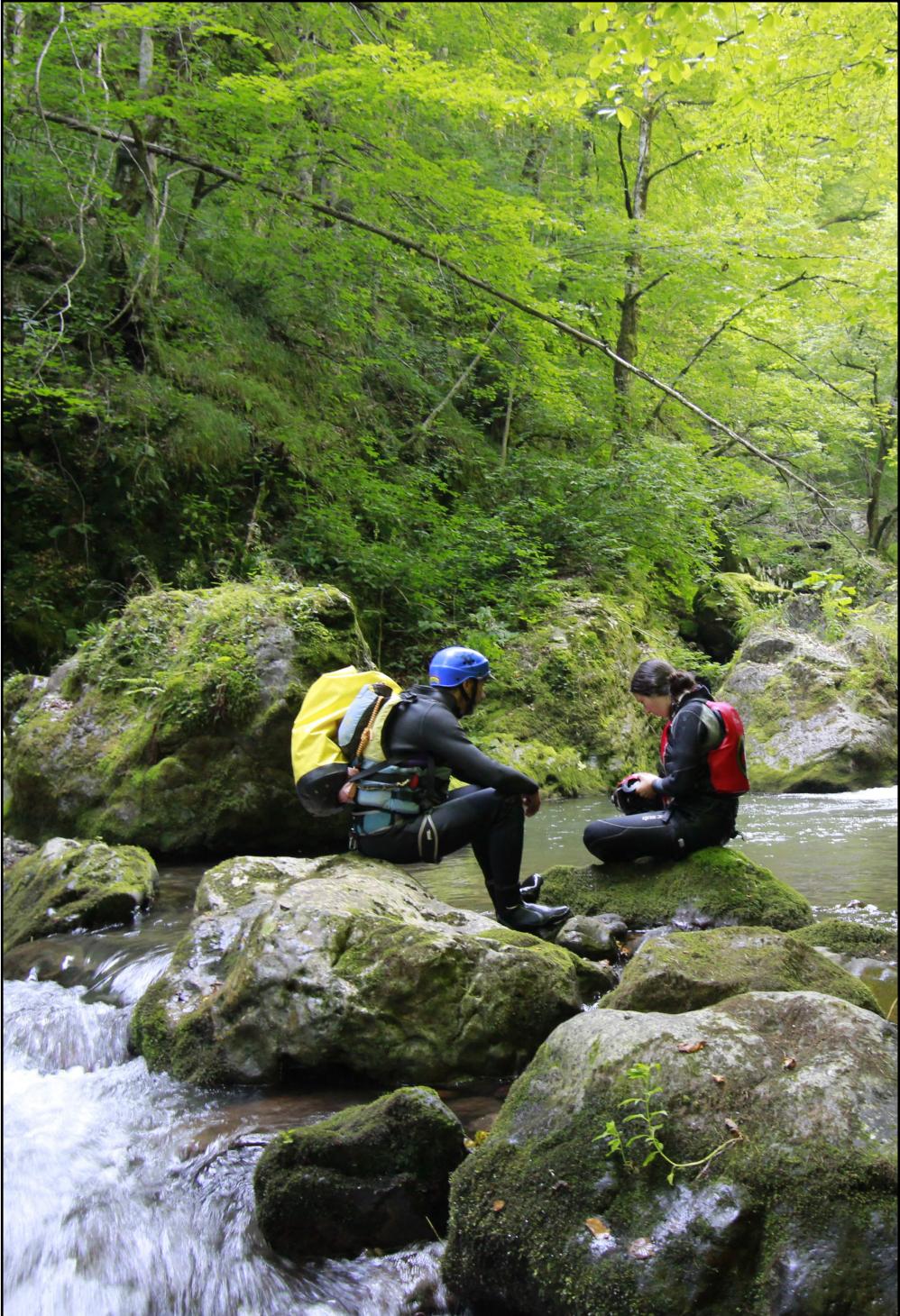
Guidance notes are developed for: 1. Management plan, 2. Developing ecosystem service assessments, 3. Communication plan, 4. Business plan, 5. Interpretation and education plan, 6. Rural development plan, 7. Project development.

<sup>31</sup> [http://croatia.panda.org/en/what\\_we\\_do/protected\\_areas/pa4np/pa\\_bat\\_methodology/](http://croatia.panda.org/en/what_we_do/protected_areas/pa4np/pa_bat_methodology/)

The potentials for the usage of the PA-BAT results in PA management planning are reflected in the following:

1. Better understanding of values and benefits PAs are providing to people can significantly improve their management.
2. The PA-BAT assessments provide initial information for further development of detailed and targeted assessments for development initiatives.
3. Discussions on PA benefits and values are the basis for building participation processes and partnerships between stakeholders in a PA.
4. The PA-BAT results help in strategic orientation of a PA or PA system on national level. Also, the results provide useful data for management planning.
5. Benefits recognized by local people and stakeholders are a convenient content for awareness raising and for promotion of PAs in general.
6. Modern concept of the PA-BAT is based on their integration in local development programs. PA BAT results are very useful for integrating and developing local economic incentives.
7. Due to intensive participatory approach, PA BAT results reflect the actual situation in PAs and challenges people in PAs are facing. Therefore, they help PA managers in focusing on practical solutions, which contribute to local communities.
8. The sole process of the PA-BAT assessment is equally important as its results. Benefits and values are changing with time, as well as their perception within stakeholders. Periodical revision of the PA-BAT assessments can help in updating and maintaining positive and constructive dialogue between stakeholders.
9. Assessed values and benefits provide very important inputs for decision-making, spatial planning, Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA) or similar processes. Arguments directly linked to social or economic benefits can significantly improve quality of decision-making processes.
10. PA can become significant drivers of local economies. However, development initiatives should always be based on sustainability. They should not jeopardize the main values of a PA. Development initiatives should be planned gradually, with a special attention to fair distribution of benefits among all stakeholders.





## Recommendations for addressing identified challenges

1. Inform decision makers and policy developers about the values and benefits PAs are providing and advocate for the integration of PA related issues to strategic documents.
  2. Initiate multi sectoral discussion related to the identified values and possible solutions for legal obstacles in implementation of sustainable development initiatives.
  3. Use the PA-BAT for strategic planning of PA management and capacity building. A management body should focus on capacity building in areas related to the identified values.
  4. Consider capacities and resources of local people in management planning and develop adequate mechanisms for rising and supporting their competitiveness.
  5. Advocate for sound financial mechanisms, which would ensure return of money collected for the usage of natural resources to PA management and local communities. Identified values should be used as a reference.
  6. Develop permanent mechanisms for consultations with stakeholders (i.e. Stakeholder councils). Focus groups should be established according to the identified values.
  7. Leverage cooperation among different levels of administrations. Values and benefits are often reaching out of administrative borders.
- Develop intensive cooperation with tourism sector (governmental institutions, tourism organisations and agencies) and work on strategic development of tourism activities in PA;
  - Ensure regular and transparent exchange of information between local governments and PA management on issues related to local development agendas;
  - Promote PAs as “job providers” and ensure support from relevant institutions (subsidy schemes, employment programs);
  - Establish stakeholder councils or other mechanisms for effective and permanent consultations with local stakeholders;
  - Organise regular PA-BAT assessments with local stakeholders in order to understand values better and to learn most efficient ways for generating benefits from them.

Overall, our key recommendation is to intensify processes that would integrate natural/protected area's values into development planning in partnerships with key stakeholders.

## Conclusion

Despite intensive technological development, society will always be very much dependent on natural values and natural resources. Contribution of these values to our well-being is often neglected in diverse sectoral policies. PAs, as systems founded on integrative approach and sustainable principles, can serve as ideal polygons for understanding the importance of natural capital.

Focusing on prime values and benefits can ease the understanding between interest groups. Modern approach in PA management, aiming to harmonize development and conservation of natural values, is based on participation of wide range of stakeholders. The PA-BAT is a tool which helps PA managers in designing fruitful and structural participation through a better understanding of natural values and their importance for local stakeholders.

People involved in the PA-BAT assessment in B&H have identified many values, which are of high importance for their subsistence and economic development. In that way, they have justified the need to protect nature and have addressed the need for improvement of protected areas management.

The PA-BAT is a contribution to the fulfillment of country's obligation on Aichi Biodiversity Targets (goals for conservation and sustainable use of biological diversity) included in the CBD's Strategic Plan for Biodiversity 2011-2020 and it directly supports the implementation of more than one Sustainable Development Goals adopted in 2015.

Finally, our team would like to thank everyone who have participated in the workshops for their time, good humor and open discussions.



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