

Pro Biodiversity Business

Gap Analysis for Apuseni Nature Park, Romania



Global Nature Fund - Eco Karst Project

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Gap Analysis for Apuseni Nature Park					
Promising Pro Biodiversity Business ideas that support appreciation of Ecosystem Services in the Danube region	the	protection,	sustainable	use	and
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1 Aim and procedure of the Gap Analysis

1.1 Aim

The aim of this gap analysis is to showcase opportunities for the development of Pro Biodiversity Businesses (PBBs) in the Nature Park Apuseni. The results of the analysis will contribute to the development of the Action Plan which is an outcome of the ECOKARST project.

PBBs are enterprises that generate financial returns and at the same time make a positive contribution to preserving biodiversity. For most economic activities, ecosystem services are used and sometimes exploited. Conserving biodiversity and ecosystem services, while simultaneously ensuring economic success, offers the chance to ensure a sustainable use of ecosystem services.

The usage of ecosystem services in a protected area provides a special opportunity to produce natural products, because the resources are less exposed to pollution from traffic and industry. The special karstic landscapes additionally provide unique features to develop touristic activities. To ensure a long-term success, also for future generations, sustainability and biodiversity conservation are crucial aspects for the economic development of the region and should be a key aspect in planning economic development.

In the Nature Park Apuseni there are already some businesses that have good first approaches to preserve biodiversity and the environment. However, this analysis will identify gaps for future economic development or for enhanced biodiversity conservation practices.

1.2 Procedure

The results presented in this gap analysis are the outcome of a desk research and expert interviews on Pro Biodiversity Businesses (PBBs) and international examples. The results of several interviews, discussions and workshops with the project partners and a variety of stakeholders that took place between May 2017 and December 2018 in each protected area will be presented and compared to successful PBB approaches.

In a first round of interviews, local economic and environmental conditions in the area were discussed with the project partners from the Nature Park Apuseni. Simultaneously, GNF searched for good international examples of PBBs, which were then presented to the involved partners and stakeholders through presentations and the PBB brochure. An overview of PBB examples is also included in the PBB Development Guide. Combining the information regarding the protected area with information on international best practice examples helped to identify first gaps and opportunities for the development of PBB. In a second round of interviews with the project partners, open questions about the situation in all economic sectors (primary sector with the extraction of raw materials; the secondary sector with manufacturing and tertiary sector with services) were then clarified. While considering a rating of the project partners from each pilot area regarding the importance of the identified opportunities, a first selection of opportunities with high potential was undertaken. These sectors were then further discussed in a participatory approach with local stakeholders from a variety of institutions and sectors during the workshops. All relevant information acquired during these steps, are included in this document.

2 Overview Nature Park Apuseni

Apuseni Nature Park is located in the western part of the Romanian Carpathian Mountains, covering an area of 75,784 hectares. The area is characterised by more than 1,500 caves, forests and a rich biodiversity with some 1,550 plant species and 1,350 animal species. The park also includes the largest accumulation of underground ice in the world and fossil-rich sites such as the Bear Cave. There are a number of businesses that already operate inside and in the vicinity of the park. In principle, businesses operating inside the Nature Park need to have permission from the authorities. The companies are predominantly small-scale and

Location: Western part of Romanian

Carpathian Mountains

Size: 75,784 hectares

Population: 55 settlements inhabiting

around 10,000 people

Unique characteristics: karst

phenomena such as forested karst area; largest accumulation of underground ice

Landscape: cultural landscape with local identity tradition and ancestral culture and unique natural landscape with forested karst area, caves and rich biodiversity

range from wood processing companies (mostly very small) and farms to medicinal plant companies, beekeepers and tourism facilities.

2.1 Cross-sectoral challenges in the Nature Park Apuseni

There are several administrative and demographic challenges in the Nature Park Apuseni which have an influence on the development of all economic sectors.

2.1.1 Administrative obstacles

The national legislation makes the <u>registration of businesses complicated</u>, which is the reason why some private persons do not register their businesses: Every business that wants to operate inside the Nature Park has to ask the Romanian Environmental Protection Agency for permission. The permission from the Apuseni Nature Park Administration is integrated in this process. A protocol is developed with each partner that clarifies the rights and obligations of each partner for their activities. Now those protocols with partners are part of a new "Park Partner Program" aiming at sign protocols with every company that asks for a permit. However, still many businesses that operate inside the park have not asked for permission. The main reason for this issue is that the people want to avoid the complicated process and the paying of taxes. Due to the existing laws, it is also difficult for farmers to directly sell their products to accommodations and restaurants. In addition, the legislation regarding biodiversity conservation is too weak (especially in regards to speleological tourism).

2.1.2 Social and human resources

Due to <u>rural-urban migration and temporary</u> migration (to work in other EU countries) <u>of the younger population</u>, there is a lack of young people who are willing or able to start businesses. At the same time, this leads to an <u>aging population</u> and lower population density. In consequence, there is small motivation, often disappointment and a lack of trust among the local population. Within the remaining local population there is a lack of education, awareness and knowledge regarding business development and the importance of biodiversity conservation. In addition to this the population does not have extensive financial resources as start capital for the foundation of new businesses.

2.1.3 Infrastructure

There are several challenges related to the infrastructure in the Nature Park Apuseni. First, <u>no proper water treatment and garbage disposal facilities</u> are available leading to illegal deposition of garbage and water pollution.

Second, the <u>local transport infrastructure is not well developed</u>. This limits the number of people who can get into the area. The existing international airports (Cluj Napoca, Târgu Mureș, etc.) offer the possibility for international tourism. This opportunity is limited due to the bad local infrastructure.

Third, the improper urban development and insufficient enforcing of urban planning rules is problematic for the development of all sectors and the conservation of biodiversity.

2.2 Cross-sectoral opportunities in the Nature Park Apuseni

Several opportunities in the Nature Park Apuseni are relevant for the development of a variety of sectors and shall be discussed, before going into more detail for the different sectors.

2.2.1 Cooperation between producers, processors and service providers

To successfully sell products <u>enhancing the cooperation between producers</u>, <u>processors and service providers</u> in the protected area and the region is crucial. The short transportation pathways between regional businesses are cheaper and decrease pollution in comparison to national or international import/export relations.

The collaboration can simultaneously be used for a joint marketing and selling of products to tourists. For example, restaurants and accommodation providers can offer meals that are made from locally produced and processed products. This does not only create local value, but can also be useful for marketing strategies, since it transmits the local identity to tourists.

<u>Exporting the locally produced products</u> to national or international customers is another opportunity, which is facilitated by cooperation since bigger amounts can be transported and sold jointly. The use of a certification scheme (see below) could facilitate the cooperation with international customers.

2.2.2 Certification schemes and regional brand

Producing in an organic way without using fertilizers, pesticides and by avoiding antibiotics is recommended to preserve biodiversity and to ensure sustainable land use. This more natural way of producing does attract new customer groups and can increase revenues. <u>Acquiring an organic certification</u> proves the production techniques to the customer and raises awareness within consumers.

The same is valid for a <u>fair trade certification</u>, which stands for a fair treatment of employees. The FairWild standard for instance, ensures that wild resources (NTFP) are maintained and that there are no negative environmental impacts. In addition, good working conditions are ensured: no discrimination, healthy work conditions and a fair contract with collectors are required to receive the certification. For forestry sustainable management standards include FSC and PEFC. Using such a standard can help to access new markets and to create trust.

In addition to these international certification schemes, there is an opportunity in <u>using the origin from the protected area as a special feature</u> that demonstrates the natural origin or production. Products from protected areas can be considered less contaminated, because of a lack of industry that might pollute the environment. The naturalness can be used as a marketing feature and products could be sold as high quality products also outside of the region. The trust of customers who care about the origin of their food can be earned with a regional label, which reliably certifies products from the Nature Park Apuseni. Motivated by the EcoKarst project, the Park administration started again to launch a "Park Partner Network" recently, after some previous unsuccessful attempts. Until now partners from the tourism sector and some from the food production and non-timber forest products have joined. Cross-sectoral organization is crucial for the success of such a regional label.

2.2.3 Store focusing on National Park products

A specific <u>store that exclusively sells Apuseni Nature Park products</u> could offer a business opportunity that connects different product chains and uses the regional character of products as a key selling point which promises naturalness to the buyers. The cooperation of businesses and the development and use of a regional brand certifying the origin of the product can be helpful here. The store could simultaneously serve as an information contact point for tourists.

3 Gap Analysis

During the process of analysis the possible linkages between the three sectors became more and more apparent. Many companies operate in more than one of the sectors. In addition, the cooperation between companies of different sectors makes sense because it enables local value creation and a stronger connection to the protected area. This is why the results of the analysis will be presented in a value chain approach: each chapter includes various activities to underline possible linkages.

The indicated rating for each Pro Biodiversity Business is a result of discussion between stakeholders and the park administration. The discussions and the rating are ongoing processes. One star (*) stands for no or low relevance, five stars (*****) stands for a high relevance and good opportunity for business development.

3.1 Wood production, processing and marketing

3.1.1 Current situation

53.000 ha of the Apuseni Nature Park are forests, 60% of them are privately owned and 40% are property of the Romanian state. 18% of the forest are located in a special protected zone, in which just sanitary cutting is allowed. Most of the private forest owners have very small patches of land, which are not managed by the private people themselves, but by a management office that can either be a private managed office or a state office under Romsilva management. Those offices regulate the use according to national forest management requirements. This means, that the private people cannot decide themselves what and how much timber they want to harvest. When harvesting is allowed private companies are usually hired by the forest owners.

Wood from the park territory is not FSC certified yet. However, the park authority is discussing a certification options with the forest management. On roughly 15% of the land the procedure of certification has already began.

The NP authority does not have access to data regarding the timber use. They estimate that the largest amount of timber is used for construction (especially conifer). A big amount is used for energy production. Most of the timber is consumed in the area itself. Some parts, however, are exported to an area in Hungary where timber is lacking. Another part is exported to Italy.

The wood processing was traditionally local; now wood for buildings is produced and sold to national and international construction companies. There are 39 wood processing companies (mostly very small). Smaller logging companies in the bigger cities produce furniture.

The local communities were once famous for their handicrafts, for example they produced wooden barrels from spruce (different sizes up to 5.000 liters). Since the barrels were of low price and good quality they played a role as a family income. Today there is no demand for barrels made out of spruce. Low cost barrels are made from plastic and expensive barrels are made from oak or other hardwood.

Challenges and opportunities in the wood sector		
Challenges for biodiversity conservation	Challenges for economic development	
 High biological diversity is not the focus of forest management Illegal logging and other illegal activities like grazing 	 Small patches of forest make economic use difficult Lack of infrastructure to access to certain forested areas and poor maintenance of forestry roads The national legislation favors large companies for logging to small local entrepreneurs and exploitation of forests by private owners with their own means is not allowed. 	
Opportunities for biodiversity conservation	Opportunities for economic development	
 Implementation of sustainable management practices for wood processing companies Increase the share of FSC certified wood for processing 	 Obtain a FSC certificate to access new markets High biological diversity allows the additional use of NTFP Production of wood souvenirs for tourists Use origin as unique selling point / connection to the Nature Park 	

3.1.2 PBB opportunities

**** Wood processing/ carpentry business

Establish wood processing/carpentry businesses that focus on processing of local timber under sustainable standards and using the origin of the wood for marketing and price setting. Production of final products increases the local added value. The use of environmental friendly paints and varnishes increases the positive influence on environmental conservation.

Building wooden houses from timber from the park could increase added value and demonstrate the direct benefit people obtain from nature.

** Manufacturing of i.e. wood handicrafts and souvenirs

Manufacturing of i.e. wood handicrafts and souvenirs for tourists using traditional skills and environmental friendly additional products (i.e. paints). Products are distributed in collaboration with local markets, shops, restaurants, accommodations, visitor centers and park administration. The origin of the wood is used as a unique selling point and the connection to the Nature Park is used for advertisement.

3.2 Non-timber forest products (NTFP), processing and marketing

3.2.1 Current situation

Local people collect mushrooms and berries and sell them to businesses at collecting points. They can collect inside the nature park from the "Durable Development Zone", even if it's private land. The nature park authority gives permissions to businesses based on biological studies, which analyses the maximum amount that could be collected. These studies are not independent because they are prepared by companies with economic relations to the collecting companies.

The authorizations which companies need to collect NTFP are complicated to obtain. In addition, a small administration fee for the license has to be payed, but no additional (user) fees. Currently around 40 companies have this authorization (47 permits in 2017); the permits are valid for one year. Many people collect mushrooms and berries for self-consumption, a few of them also process them. Private consumption is not regulated, but the Nature Park is thinking about implementing restrictions here.

There is a tradition in the region of producing medical plants and products. One village specialized in processing medical plants, which they also collect from the park area. They focus on the production of food supplements, which are approved by the state and sold on the free market. It is currently discussed whether this company can use the park resources and the logo. There are around 150 small family businesses (2 larger ones) producing i.e. food supplements, syrups, jams from local wild plants. The products are predominantly marketed in the country (> 95 % domestic use), but the companies are also preparing for export.

The most frequently collected herb is *Arnica Montana* from meadows. Bioflora and Ecoherba are two local companies which export dry *Arnica Montana*.

T	Challenges and o	pportun	ities in the NTFP sector
Ch	nallenges for biodiversity conservation	С	hallenges for economic development
0	Biological studies which are the basis for allowed collection rates must be improved	0	Lack of local collection, processing and transport facilities
0	Unsustainable harvesting due to insufficient training (harvesting before recommended period)		
Орр	portunities for biodiversity conservation	Ор	portunities for economic development
0	Educate pickers regarding sustainability	0	Low pollution of the area
0	Local distributors can support local	0	Labelling the products with a National
	pickers in sustainable harvesting in order to increase the local supply and added value.		Park Logo and collaborating with hotels, shops, supermarkets could incentivize legal production and increase the
0	Use of standards / certification which ensures sustainability and monitoring (FairWild)	0	turnover Competitive advantage through using standard or certification (FairWild)

3.2.2 PBB opportunities

businesses
picking and
processes NTFP

* * * Enterprises, family business collecting, processing and selling medicinal herbs and cosmetic plants Enterprise or small/family businesses picking and processes mushrooms and berries. Collaboration with local restaurants, cafes, shops, hotels is possible. Branding of products using the "label" of the Nature Park could generate added value. Especially tourists could be a potential customer group due to a higher buying power. Controlled cultivation is also an option that can be considered, to limit the pressure on wild herbs and berries.

Enterprises, family business collecting, processing and selling medicinal herbs and cosmetic plants such as nettle, thyme, elder, comfrey, rose hip and other wild NTFP. A possibility for the development of a collection company offers the use of a certification schemes such as FairWild. Such a certification proves legal collection and can create a competitive advantage, especially on international markets. Because of their unpolluted origin, herbs are demanded on the international market to produce medicinal products. In addition, such a standard provides the opportunity to educate locals on sustainability topics.

3.3 Crop production and marketing of agricultural products

Because of the characteristic of the climate, soil quality and the high altitude, there is almost no crop production. There are five mixed farms which produce for self-use. There is thus not much potential for the agricultural development of those farms. It could be an opportunity to connect the existing family farms with tourism. This opportunity will be discussed in the tourism sector.

3.4 Livestock production, processing and marketing and landscape maintenance

3.4.1 Current situation

Within livestock farming, cattle's farming is the most prevalent form of livestock in the eastern and northern part of the Park. In the western part, sheep farming is getting more common. The production of meat and dairy products is similar to the alpine region. The cows are kept at high altitude pastures during summer. In some cases a whole family lives in summer cabins in the mountains. Some use also mother cow husbandry systems. The main product is meat, while the milk is only for self-use and to feed the pigs. The reason is that no one collects the milk in the distant area. Also, the price for milk is very low and there is no tradition of cheese production. Most local people breed sheep, pigs and chicken on subsistence level. There are EU subsidies to support the maintenance of hay fields and meadows and for a certain quantity of cows. This kind of livestock farming is only attractive due to these subsidies. Here is a certain imbalance between "under-grazed" and overgrazed meadows. This is due to their locations: while meadows close to the villages are overgrazed, the ones which are further away are under-grazed. This results in natural succession (shrubs, trees) leading in the long run to a reduction of diversity. Also, some communities are more active in livestock production than others and thus use their meadows more intensively. Currently, many people are not interested in developing food processing businesses because of the complicated process of getting permissions. An additional problem is the aging population and due to that a low interest and capacity for financial investments. Young people are migrating to the cities or to the low lands.

Challenges and opportunities in the livestock production, processing and marketing and the landscape maintenance sector		
Challenges for biodiversity conservation	Challenges for economic development	
 Loss of biodiversity in the under-grazed meadows Lack of knowledge on biodiversity value of meadows 	 Lack of collection and processing facility for meat and dairy Lack of local markets to sell the dairy and meat products Legislation makes it difficult to sell products from the farm directly to restaurants or accommodation facilities. Activities are dependent on subsidies Lack of motivated young people 	
Opportunities for biodiversity conservation	Opportunities for economic development	
 Reintroduction of traditional, adapted species Meadow conservation through touristic activities (traditional mowing practices) Environmental education for demonstration of high biodiversity value of grassland management 	 Establishment of farmer association that supports the distribution of meat and dairy products or the joint transportation to a processor. Production of specialty / high-quality product Cooperation with processors, restaurants, hotels, etc. to create local value and to sell to tourists. Use of label. 	

3.4.2 PBB opportunities

**** Farmer

association: livestock and dairy products Establishing a farmer association which produces livestock and dairy products such as cheese, milk, etc. jointly and supports the product distribution from the pilot area could be an opportunity to sell bigger amounts of goods. Sharing machines, grazing areas, and work force can save time and financial resources, which would make a livestock production business more profitable. It could be an opportunity to reintroduce a traditional species for the animal husbandry. This has several advantages: the business would contribute to the preservation of species. Simultaneously, it offers the possibility to sell specialty meat products, which differ in taste and quality from other meat. The origin from a protected area can add up to the high quality of the meat / dairy products, leading to higher achievable prices. Additionally, traditional species are often adapted to local climatic conditions. The farmer or farmer association could sell its products to local butchers, who then sell final products to restaurants, who are preparing food for tourists with higher buying power. This collaboration would lead to a decreased waste of milk and could incentivize the registration of the business.

** Meadow business

Furthermore, there is a business opportunity in maintaining and mowing meadows. For instance, it can be used for touristic activities: traditional mowing techniques without heavy machines could be explained to and practiced by tourists. This has the double effect of ensuring biodiversity friendly management and providing an income to the land owner.

3.5 Bee keeping and honey production

3.5.1 Current situation

In the last couple of years, a lot of beekeepers founded new businesses, because of EU subsidies, which are quite high. There are beekeepers that are coming from distances of 100-200 km to stay in the park area for the summer. Only a few locals work as beekeepers; they are usually not very satisfied with their economic revenues. This is due to high expenses, which are partly caused by prevalent diseases and the expensive additional food. It is not clear whether some of them produce organically.

Summary of specific challenges	and opportunities in the beekeeping Sector	
Challenges for biodiversity conservation	Challenges for economic development	
 No organic beekeeping Diseases & additional food is expensive Competition with beekeepers from oth regions 		
Opportunities for biodiversity conservation	Opportunities for economic development	
 Organic beekeeping Beekeeping enables pollination which enhance biodiversity in the protected area 	 Origin from unpolluted environment as special feature Logo as proof for origin EU subsidies 	

3.5.2 PBB opportunities

**** Organic bee keeping and honey products

There is a potential for organic beekeepers inside the protected area. The advantage, that the honey comes from an area which is far away from industries and conventional farming and thus from an unpolluted environment can be used as an advantage. Since many people appreciate the healing effects of honey a natural origin is often important for honey consumers. Using a logo that proves this origin can help to achieve higher prices.

It might also make sense to establish a beekeeper association which supports local beekeepers.

3.6 Hunting, processing and marketing of wild game

Hunting is regulated by the national law that divides the whole country into hunting districts. For each district there is a responsible hunter from the Hunting Association. There are 7 districts in the park area. In the 7 hunting districts, the respective hunter creates a plan in which he proposes a number of individuals of each species he is planning to shoot. The park administration also suggests a number and the ministry then finally decides. The permit is always valid for one year. The park has to monitor what kind of hunting activities are implemented, but unfortunately, many hunters do not cooperate much with the park administration and refuse to share data. There is one core zone area in the park, where hunting is not allowed at all. The legal owner of the game is the state, even if the land is private. There are no business opportunities in this sector.

3.7 Fishing, selling of fishes and sport fishing

Inside the Nature Park Apuseni there is one old, rather small trout farm, which is managed by the state. There are a couple of very small fish farms that only produce for self-use.

Summary of specific challenges and o	pportunities in the beekeeping Sector
Challenges for biodiversity conservation	Challenges for economic development
 Escaping fish can impact local ecosystems. 	
Opportunities for biodiversity conservation	Opportunities for economic development
 Use of local species. 	 Origin from unpolluted environment as special feature Logo as proof for origin

3.7.1 PBB opportunities

** Environmental friendly fish farms

There might be an opportunity to transform one of the existing fish farms into **environmental friendly farms**, which cultivate native fish species and use environmental friendly management techniques. Linking the pond to the naturalness of the nature park by using a logo provides an opportunity for advertisement.

3.8 Touristic accommodation & restaurants & cafés

3.8.1 Current situation

The tourism sector is very important for the Nature Park Apuseni. 90% of all economic activities are related to tourism. Currently, most of the visitors are coming from Romania, but more and more people are coming from neighbouring countries. There are around 150 accommodation facilities that can host approx. 3,000 visitors. Most of the accommodation facilities are inside or close to the park. There is one area in the park where tourism infrastructure is very prevalent. The total number of overnight stays is not accessible for the Park management, as some people do not register their accommodation business to avoid taxes and hence figures are unreliable. As estimation, there are approximately half a million of visitors to the Park per year. Those accommodation facilities often offer food, too, but as far as restaurants and cafes are concerned, there are very few.

Challenges and opportunities in the touristic accommodation, restauration sector		
Challenges for biodiversity conservation	Challenges for economic development	
 Improper urban development and insufficient enforcing of urban planning rules. 	 So far the few restaurants do not source regionally from farmers close to the Park. One reason might be that local producers do not comply with required certifications (health and hygiene). 	
Opportunities for biodiversity conservation	Opportunities for economic development	
 Restaurants and Cafés could sell organic products and traditional meals with old varieties Implementation of environmental friendly practices, such as energy saving, waste reduction, etc. by restaurants and cafés 	 Restaurants and Cafés could sell traditional meals from local products and advertise the naturalness Connect farms with provision of accommodation, restaurant and activities and the protected landscape Open EcoCamping facility (camping, mobile homes, caravan parks) 	

3.8.2 PBB opportunities

**** EcoCamping facility

The development of an EcoCamping facility might be attractive as well and could also be combined with farming activities. Camping is a popular and low-budget way to experience close-to nature tourism. By implementing a couple of environmental friendly practices such as the provision of biodiversity refuges, a camping space can be designed environmental friendly.

**** Tourism farm

Furthermore, a PBB opportunity could be to combine farming with accommodation and restauration which would give tourists the chance to experience the traditional live on farms. Courses related to farming practices, such as traditional cultivation, harvesting or mowing techniques could be offered to tourists. This could also be used for educational purposes. For instance, farmers could explain and show the special value of meadows of old species to school children or tourists.

** restaurant with special services or products

A restaurant which provides special services or products and differs from other restaurants might be a potential. Not only offering traditional food from local meals is a chance, but also the provision of special services like cooking classes, catering services or wine tastings could make a difference.

3.9 Touristic & cultural activities

3.9.1 Current situation

One of the most important attractions in Apuseni Nature Park are the caves. They are a state property and managed by the park administration. However, there is a lack of a proper legal framework that ensures conservation, allowing speleological tourism at the same time. Guided canoeing, hiking and mountain biking and some other adventure sports tours with activities like speleology, canyoning, rafting or Via Ferrata climbing are offered inside the Nature Park. Some tour guides respect environmental standards, but they don't use certification schemes.

Bird watching tours are offered by one tour operator (included in the Park Partner Program) at the moment, however the area is not too famous for bird watching, as there are other regions close with better water availability and a more diverse avifauna. There is collaboration between tour operators and the Nature Park for bird watching and wild life watching. A protocol was developed that clarifies the rights and obligations for each partner.

What is lacking are regular biodiversity education programmes for children. There are a few activities occasionally offered by the Apuseni Nature Park Administration. There are some information points that offer information to visitors about activities and attractions in the area and limited information about accommodation. Three of them are under ANPA but there are also some that are managed by local or county authorities.

Challenges and opportunities for	the development of touristic and cultural PBBs	
Challenges for biodiversity conservation	Challenges for economic development	
 Lack of proper legal framework that ensures conservation but allows speleological tourism Tour operators do not use environmental standards so far. There seems to be a lack of knowledge about appropriate certification schemes Lack of biodiversity education programmes for children 	 Insufficient local transport infrastructure is a main problem, because it limits number of people that can get to the area 	
Opportunities for biodiversity conservation	Opportunities for economic development	
 Environmental education during guided tours 	 Beautiful landscape of the park Local tour guides that offer diverse touristic activities such as: wildlife watching tours, village tours, fishing tours, biking, photo shooting courses, backcountry skiing, horse riding Potential to connect touristic activities (such as courses on traditional farming, cooking, handicrafts, etc.) with accommodation, restaurants, farms, etc. 	

3.9.2 PBB opportunities

**** Local tour guides with special offer

There is a potential to diversify the touristic tours offered inside the Nature Park Apuseni. Local tour guides can offer programs and attractive "packages" for different target groups. One day or multi-day trips, i.e. hiking, cycling (e-bike tours), bird watching, village tours, photo shooting courses, or NTFP collection and processing. From a biodiversity perspective it is essential that the tour operator works according to environmental standards such as the "leave no trace" standard, which ensures that the natural environment is respected by visitors. For instance it recommends proper waste disposal, respecting wild life, not collecting plants, animals, rocks, etc. and respecting cultural or historic structures. The offers can be aimed at different target groups (families, pupils, etc.) and can also include organised tours from Cluj and thus create different sources of income.

** Local tour guides with focus on environmental education

Tours that primarily aim at environmental education are an additional opportunity. As discussed, there is a special demand by schools for tours that provide education on natural and cultural heritage. But also for tourists who are interested in biology such tours might be very attractive. Giving environmental education creates a more respectful interaction with nature. Combining such tours with knowledge about ethnology and local culture, which is available within the local population, has potential. Offers could include traditional bakery, handicrafts, NTFP collecting, etc.

3.10 Biodiversity management and consulting services

3.10.1 Current situation

There are no or few businesses that provide (professional) services such as advice on nature management; project impact assessment; biodiversity performance monitoring; certifying consultancies; organic production consultancies; environmental management consultancies in the region so far and the is a limited development capacity for that.

Challenges and opportunities in	the biodiversity management and consultancy service sector
Challenges for biodiversity conservation	Challenges for economic development
 Lack of expertise in the field of biodiversity management 	 Local entrepreneurs do not have the financial resources to pay such a consultancy. External funding / seed capital is needed.
Opportunities for biodiversity conservation	Opportunities for economic development
 Consultancy on biodiversity friendly practices and management could increase the number of businesses that act in an environmental friendly way 	 Local entrepreneurs could share their experiences Consultancy for business registration; Certifying consultancies; Organic production consultancies Offer services that are needed in the area and for which there is no competition

3.10.2 PBB opportunities

* Consulting company

Since many local people have problems with the complicated legislation process, there is a potential for a consultancy company, which supports local people in the registration process. They could offer consulting services for the legal registration of business, for accessing funds and subsidies, etc. Additionally, consultation regarding biodiversity friendly practices, management and certification schemes could be an option.

3.11 Delivery services and transport agencies

3.11.1 Current situation

Insufficient transport infrastructure is a main problem for the development of tourism, since it limits the number of people that can get to the area. There are international airports, which are reachable from a lot of parts of Europe, but the local transport is not good enough. There are also no businesses so far that can collect locally produced products from small producers and jointly bring it to bigger cities.

Challenges and opportunities	s in the delivery services and transport sector
Challenges for biodiversity conservation	Challenges for economic development
	 Transportation of local products to bigger cities is difficult. Insufficient transportation infrastructure for tourists
Opportunities for biodiversity conservation	Opportunities for economic development
	 Businesses that collect and sell products in cities. There are big cities with a larger market potential in 100 km range. Transportation for tourists. Especially between airports and nature park entrance.

3.11.2 PBB opportunities

*	Transportation	It might be an opportunity to develop an agency that organizes		
	agency	transportation from the airports to the park entrance. To be considered a		
		PBB, such a business would need to act environmental friendly and use for		
		instance electric busses.		
**	Delivery	A business that collects local products and sells them on a market in a city		
	Service	which is close to the nature park could be an opportunity to sell products		
		iointly to tourists and locals.		

4 Conclusion

Despite the challenges facing the territory, such as migration of younger people to the cities or foreign countries, the legal and institutional framework that is not conducive for business development and local value chains and lack of infrastructure, the Apuseni Nature Park and its inhabitants have the potential to establish and promote Pro Biodiversity Businesses.

The above discussed sectors cover those business opportunities that currently offer the most potential. It is highlighted the following Pro Biodiversity Businesses: Family businesses picking and processes NTFP; Farmer association for livestock and dairy products; Organic bee keeping and honey products; EcoCamping facility and local tour guides with special tourist packages.

Overall, the economic development of the region requires cooperation between producers, processors and service providers in order to increase the local added value and attract young people and tourists to come to the region.

There are, however, other sectors in which the development of Pro Biodiversity Businesses is generally possible and which might provide opportunities in the future. Those sectors include banking, insurance and investments that support Pro Biodiversity Business ideas.

Furthermore, there are sectors which do not provide business opportunities for the Apuseni Nature Park such as Orchards and fruit processing or wine production. The development of businesses in these sectors is hindered by missing orchards or due to climatic and geographical conditions in the park.

For further steps, it is recommended to read the Pro Biodiversity Business Development Guide, in which, through a series of simple items, recommendations are given to implement measures to incorporate biodiversity into small local businesses.

