



Pro Biodiversity Business Gap Analysis for Notranjska Regional Park, Slovenia



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Gap Analysis for Notranjska Regional Park

Promising Pro Biodiversity Business ideas that support the protection, sustainable use and appreciation of Ecosystem Services in the Danube region

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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 NRP. 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 should be a key aspect in planning economic development.

In the NRP 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 NRP. 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 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 Notranjska Regional Park

Notranjska Regional Park covers around 22,200 hectares at the border of central and southern Slovenia. It is characterized by unbroken beech and fir forests, where brown bear wolf and lynx roam freely and an intermittent lake Cerknjško jezero.

The area has an outstanding biodiversity with its karst caves and meadows. Almost 75% of all birds, half of mammals and more than 70% of all butterfly species found in Slovenia have been spotted in the Notranjska Regional Park. There are three species of endemic plants in the Notranjska Regional Park area: *Primula carniolica*, *Knautia fleischmannii* and *Campanula justiniana*.

Among the fauna, 10 endemic species of underground water snails endemic to underground parts of Ljubljanica River are found in the NRP. More than 100 species nest in the area of Cerknjško jezero alone and 276 bird species were observed here which is more than 70% of all bird species observed in Slovenia. About 90 species of mammals were recorded in Slovenia and half of them live in the NRP area.

Almost 11,500 people inhabit 65 settlements located inside the park boundaries. Many of them benefit from local ecosystem services such as timber, livestock farming and guided recreation.

The high valuable archaeological heritage and the rich gastronomy of the area are relevant for developing cultural and gastro-tourism PBB. Some of the outputs of the cultural heritage are Steinberg's heritage, Karlovac castle, witches legends, the protection and respect of old trees and the Šteber castle.

Local companies are mainly engaged in forestry and wood processing while the tourism sector and sustainable agriculture have a great potential for the economic development of the region.

Location:

Notranjska regional park (NRP) covers roughly 1 % of Slovenia. It covers almost 22.300 ha inside municipality of Cerknica borders (24.100 ha) as infrastructure and settlements are excluded. NRP is not divided into different parts regarding management regime but includes a Ramsar site *Cerkniško jezero and its environs* (about 7.200 ha).

N° Business:

Total number of companies inside the park: around 1,100. From there: 39 local tourist guides and 17 tourism farms.

Population:

65 settlements with almost 12.000 inhabitants.

Unique characteristics:

9 Natura 2000 sites lie inside NRP completely* or in part.

Intermittent lake Cerknjško jezero, karst valley of Rakov Škocjan with underground cave system of Karlovice ponor caves and Zelške

2.1 Cross-sectoral challenges in Notranjska Regional Park

There are several administrative, demographic as well as environmental challenges in NRP National Park, which have an influence on the development of all economic sectors.

2.1.1 Administrative obstacles

The national legislation makes the registration of businesses complicated, a lot of administrative effort is necessary to register businesses. In addition, there is a lack of information about the available support on agricultural subsidy schemes. This lack of financial incentives and state support

opportunities to finance projects, result in complex procedures and bureaucracy hard to achieve for investors and farmers. Usually people they do not have enough financial capital to start a business. Certificates for organic and similar sustainable management practices are too expensive for inhabitants to afford.

2.1.2 Social and human resources

Due to rural-urban migration of the younger population, there is a lack of young people who are willing to found businesses. At the same time, there is aging of the local people, who most of them unknown digital tools and low population density. There is poor motivation and disappointment among the local population.

2.2 Cross-sectoral opportunities in Notranjska Regional Park

It creates the perfect atmosphere for increase the motivations of the people, linking and helping them.

2.2.1 Cooperation between producers, processors and service providers

To successfully sell products enhancing the cooperation between producers, processors and service providers in the protected area and the region are crucial. The short transportation pathways between regional businesses are cheaper and decrease pollution.

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 produced 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.

A specific store that exclusively sells Notranjska Regional Park products 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 use of a regional brand that certifies the origin is helpful here.

Exporting the locally produced products 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 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. Acquiring an organic certification proves the production techniques to the customer and raises awareness within consumers. The same is valid for a fair trade certification, which stands for a fair treatment of employees. The FairWild standard for instance, ensures that wild resources are maintained and that

there are no negative environmental impacts. In addition, good working conditions are ensured: no discrimination, no child labour, healthy work conditions and a fair contract with collectors are required to receive the certification. 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 using the origin from the protected area as a special feature that demonstrates the naturalness of a product. Products from protected areas can be considered less contaminated, because of fewer industries that 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 Protected Landscape NRP. Cross-sectoral organization is crucial for the success of such a regional label.

2.2.3 Store focusing on Notranjska Regional Park products

A specific store that exclusively sells Notranjska Regional Park products 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 is an ongoing process. One star (*) stands for not important or low opportunity, five stars (*****) stand for a high importance and good opportunity for business development.

3.1 Wood production, processing and marketing


3.1.1 Current situation

Wood is mostly sold to Austrian companies (Spruce) or locally and used as firewood. Spruce is directly sold to international companies that offer the highest prices. Management rules are set by Slovenia Forest Service. The private landowners have mostly small patches of forests; just a few have larger forests. Some private forests are certified as PEFC in the regional scheme, all state forests has FSC certificate. Only logs are export and sold. The 66,66% of the park is forested, 98,2 % is owned privately and around 60,000 m³ of timber are harvested per year.

The region has a long history of local wood processing. There is just not much demand for local timber inside the park, as most local people have their own forest for firewood. Firewood is sold regionally or for private use. The private forests are sometimes managed by the owners, and sometimes by local companies that are hired to harvest the timber and sell it. This is because the owners mostly have very small patches, which you cannot live from. The wood is usually harvested with a chainsaw and tractor. Some people have bigger parts of the forest, which they can also live from, they might have FSC certificates.

There are still small wood processing companies. Some of them use local wood; the others use wood with lowest price. There are some wood processing companies which are the biggest companies in the area. Most of the wood that they process comes from the Balkans. There is no big furniture company anymore. It is only left some small carpenters and one big company which works for IKEA. There are also some individuals that process wood, but they usually just cut it. There are several sawmills inside the park that get wood from other regions. A lot of wood is used as firewood as it is not suitable for furniture production.

Current businesses: There are some producers of furniture, but they don't use local wood and some carpenters. A manufacturer of saunas buys wood from outside the region, as there is not enough local wood in storage.

|  Challenges and opportunities in the wood sector | |
|--|--|
| Challenges for biodiversity conservation | Challenges for economic development |
| <ul style="list-style-type: none"> ○ High biological diversity is not the focus of forest management. ○ Excessive forest exploitation. ○ Quenching the peace of forest animals. | <ul style="list-style-type: none"> ○ Small patches of forest make economic use difficult. ○ The value of local wood is not fully utilized. High quality products/final products from local wood are not produced or not successfully marketed. ○ Lack of processing facilities. ○ Lowering the rights of landowners. |
| Opportunities for biodiversity conservation | Opportunities for economic development |
| <ul style="list-style-type: none"> ○ Increase the share of FSC certified wood for processing. ○ Keep Strong tradition and knowledge. | <ul style="list-style-type: none"> ○ Additional jobs. ○ Higher product prices due to the quality of wood from the local environment. ○ Conservation of HT and wood biomass. ○ Obtain a FSC certificate to access new markets. |

3.1.2 PPB Opportunities


| | | |
|-------|---------------------------------|--|
| ***** | Producer of wood houses | Wood houses from timber from the park could increase added value and demonstrate the direct benefit people obtain from nature. |
| ***** | Carpentry business | Establish a business that focus on processing of local timber and using the origin of the wood for marketing and price setting. Increase added value in the pilot area. Use of local wood, traditional skills (furniture; kitchen tools; traditional boats, nesting boxes; handicrafts etc.), and environmental friendly paints and varnishes. Handicrafts could also be linked to the cultural heritage (witchcraft). |
| **** | Wood processing business | Use of waste wood for independent energy (chips, biomass). |

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

3.2.1 Current situation

There are general limitations for picking berries, herbs and mushrooms in the natural environment. For example, for mushrooms 2kg per day per person is allowed if it is for recreational use. The picking is free of charge and there are people that do not respect these restrictions.

Local businesses can buy berries etc. from local pickers. Some restaurants use mushrooms from the forest (in general restaurants in Slovenia use wild mushrooms for their dishes). The state gives out licenses for collecting NTFP, not the regional park. Private people cannot collect NTFP and sell them to companies. This is only possible if they register as a business.

|  Challenges and opportunities in the NTFP sector | |
|--|---|
| Challenges for biodiversity conservation | Challenges for economic development |
| <ul style="list-style-type: none"> The control over the amounts of picked mushrooms is very weak. | <ul style="list-style-type: none"> Local people do not use NTFP to produce and sell products. |
| Opportunities for biodiversity conservation | Opportunities for economic development |
| | <ul style="list-style-type: none"> Better promotion on selling the local products in local businesses and restaurants. |

3.2.2 PPB Opportunities

***** Distributor of NTFP / Collection company**

The establishment of a cooperative could enable the economic use of the forest patches. High biological diversity allows the additional use of non-timber forest products. Use of certification schemes as FairWild to prove legal collection and to create a competitive advantage. Collaboration with local suppliers increases trustful relationship and transparency of the origin of resources.

***** Production and processing company**

Products from NTFP like oils, seeds for bread (*Sorbus aria*), jam (*Sorbus aucuparia*), seedlings for hedgerows (*Viburnum opulus*, *V. lantana*, *Carpinus betulus*, *Acer campestre*, *Crataegus monogyna*, *Prunus spinosa* ...), balm production from *Abies alba* resin, etheric oils, tinctures, buds and crèmes can be sold to tourists. Products link to the local legends (witches tea, etc.).

3.3 Livestock production, processing and marketing and landscape maintenance

3.3.1 Current situation


Butchers: There are private people who work as butchers and sell the meat to individuals, but not as registered businesses, because it is too difficult and expensive to get all the permissions; requirements and costs are too high. The produced meat is of very good quality, and they could achieve better prices with certifications and specialized butcher shops. Now only local people buy the meat for a relatively cheap price. If the prices would be higher, local people could not afford it anymore, but there could be a potential to export it to other Slovenian regions.

Grassland management: Natura 2000 payments are connected to the intermittent lake, all of the payments targets at maintaining the wet meadows, specific requirements to receive the payments are: no animals on the meadows, no use of additional fertilizers, mowing after July. The payments are like a compensation.

Extensive grazing: There are three grazing communities. It is not clear how farmers in each of the communities work together, but they probably share the land and share the benefit obtained. They make their own milk products, which are sold on the local market.

Currently meadows managed. The owners can chose the way they want to manage their land. Management should be in accordance to the land-plots' assigned land use, e.g. assigned land use is meadow, so the owner should keep that meadow and not turn it to field, but there is no obligation on the management practice (intensive or extensive use). There are no special requirements except for Natura 2000 sites and only if owner decides to apply for the payments available.

Dairy products are quite successful but conventional production.

|  Challenges and opportunities in the livestock production, processing and marketing and the landscape maintenance sector | |
|--|--|
| Challenges for biodiversity conservation | Challenges for economic development |
| <ul style="list-style-type: none"> ○ Dairy products are quite successful but production in general is either not certified or organic. | <ul style="list-style-type: none"> ○ Legislation makes it difficult to sell products from the farm directly to restaurants or accommodation facilities. ○ Activities are dependent on subsidies. |
| Opportunities for biodiversity conservation | Opportunities for economic development |

| | |
|--|--|
| <ul style="list-style-type: none"> ○ Quality of hay. ○ Meadows for touristic activities (traditional mowing practices). ○ Environmental education for demonstration of high biodiversity value of grassland management. | <ul style="list-style-type: none"> ○ Cooperation with processors, restaurants, hotels, etc. to create local value and to sell to tourists. Use of label. ○ Hay from species rich meadows as food and litter for pets (rodents) |
|--|--|

3.3.2 PBB Opportunities


| | |
|--|--|
| <p>*****</p> <p>Farmer association: registered livestock farmer</p> | <p>Cooperation between young farmers that are running nature friendly farms and RP Directorate by offering these farmers grazing possibility on Nature 2000 habitats managed by the park. Share machines, transportation vehicles, grazing areas and work force to increase productivity. Reintroduction of traditional breed that supports preservation of species and use it for marketing. Collaboration with local cafes, restaurants and shops or tourist agencies that show tourist the traditional farm and to have different place to sell their products.</p> |
| <p>****</p> <p>Farmer association: Dairy products</p> | <p>Dairy production is quite successful, but conventional, not certified organic. Organize access to local products for tourists or joint sale in Ljubljana. Promotion of organic/sustainable dairy production. Use of origin from the RP.</p> <p>Joint collection of milk and transportation to processor or joint veterinary certificate for meat processing.</p> |

3.4 Crop production and marketing of agricultural products

There are farmers with small pieces of land, which are mostly producing for self-subsistence. They are organized in communities. In total there are 9 communities, with around 50 people each. Farmers receive gains from Natura 2000 payments and also rural development fund subsidies. Some farmers cooperate and use the land plots and machinery together.

There are some certified farms (Eco-farms) that grow crops under strict rules and control. They are very successful when they combine nature-friendly agriculture with other tourist offers, like accommodation, bike rentals, spirit production (see 3.5) etc. Example of such PBB is *Eco farm Knap*.

3.3.3 Current situation

|  Challenges and opportunities for the development of PBBs in the <i>agricultural sector</i> | |
|--|---|
| Challenges for biodiversity conservation | Challenges for economic development |
| <ul style="list-style-type: none"> ○ Lose of native species. ○ Traditional and environmental friendly farming is not promoted and farmers do not receive benefits from it. | <ul style="list-style-type: none"> ○ Farmers do not sell to local restaurants, because the restaurants buy the cheapest food, which is often not from the region. ○ There is production of non-certified organic food but due to high administrative efforts many farmers do not enter the certification. |
| Opportunities for biodiversity conservation | Opportunities for economic development |
| <ul style="list-style-type: none"> ○ More organic production and certification. Growing demand for organic food in Ljubljana. ○ The farmers produce in a rather traditional way without fertilizers, but they do not have organic certifications because it is too expensive. There are some ecological farms. | <ul style="list-style-type: none"> ○ Better cooperation also with processors to enhance local value creation. |


3.3.4 PPB Opportunities

There are no business opportunities in this sector.

3.5 Orchards, fruit processing and marketing

3.3.5 Current situation

Touristic farms also produce jams and juices that are sold to tourists and local people.

|  Challenges and opportunities in the <i>Orchard and fruit processing sector</i> | |
|---|--|
| Challenges for biodiversity conservation | Challenges for economic development |
| | |
| Opportunities for biodiversity conservation | Opportunities for economic development |
| <ul style="list-style-type: none"> ○ Use orchards to raise awareness about importance of preservation of biodiversity within tourists, local. ○ Organic production could decrease the biodiversity impact and can have a positive influence on price setting. | <ul style="list-style-type: none"> ○ Organic jam has higher value. ○ Cooperation with other producers to market biodiversity friendly products. ○ Selling to local restaurants, hotels, markets, shops. ○ Maintaining meadow orchards is important to ensure the maintenance of cultural landscape, which is valuable for tourism. |

3.3.6 PBB Opportunities


****** Production of spirits, liquors, dried fruit**

The production of spirits and dried fruit is a tradition in the area. Old school 'drying-houses' could be restored as well as old tall-trunk orchards. Potential to show tourists how important orchards are for biodiversity conservation. A wide range of products through the production of spirits, dried fruits, juices, etc.

3.4 Bee keeping and honey production

3.4.1 Current situation

Bee keeping is very popular. There are 3 beekeeper communities (Cerknica, Rakek and Begunje pri Cerknici) and around 40 beekeepers. None of them has an organic certificate, because it is too expensive. Practically all honey produced is sold to local people, not to tourists. The tourists also demand honey, but there are not enough beekeepers to fulfil this demand. All beekeepers also have a regular job, so they cannot have more than 10-15 hives (to live from honey one would need more than 200 hives). There are also seasonal beekeepers, called drivers, who come here from other parts of Slovenia for the fir and other tree species producing “mana”.

|  Challenges and opportunities in the <i>beekeeping</i> Sector | |
|--|--|
| Challenges for biodiversity conservation | Challenges for economic development |
| <ul style="list-style-type: none"> ○ No organic certification. ○ The presence of bears is harmful to beekeeping. Although there are bear-proof hives exist in the area. These hives are built higher than to the normal one avoiding that the bears from reaching them). | <ul style="list-style-type: none"> ○ Exploitation for construction works (week-end houses) in the protected area. ○ Need of licenses. ○ Bee keeping is only a side job. ○ Insufficient knowledge of species biology (bees, plants) and honey production. ○ Unorganized sales. |
| Opportunities for biodiversity conservation | Opportunities for economic development |
| <ul style="list-style-type: none"> ○ Presence of bears. ○ There is not presence of pesticides. ○ Beekeeping enables pollination, which enhance biodiversity in the protected area. | <ul style="list-style-type: none"> ○ Linking to the already existing training course with selling products content. ○ There are EU subsidies. |

3.4.2 PPB Opportunities


***** Organic bee keeping and honey products**

Honey could also be sold to tourists with purchasing power to pay higher price for this unloaded natural product. Different products: honey, candles from beeswax, pollen and pollen bread.

3.5 Hunting, processing and marketing of wild game

3.5.1 Current situation

The use of wild game is restricted. Hunters have to pay a license fee and have to be member of an association. There are wild game farms that raise deer or wild boar. All other wild game is being hunted. The Ministry sets the rules for wild game hunting. Hunters have to report the numbers to the Ministry. Mostly, companies outside the NRP area buy the meat, which process it further and sell it to shops all over Slovenia.

|  Challenges and opportunities in the <i>hunting</i> sector | |
|---|--|
| Challenges for biodiversity conservation | Challenges for economic development |
| <ul style="list-style-type: none"> ○ Negative impact on birds (especially migrating and wintering waterfowl). ○ Current practice has negative impact on game species (Red deer, Roe deer, Chamois) as they are hunted on their breeding time. ○ Waterfowl hunt is not yet ban. | <ul style="list-style-type: none"> ○ Urbanization - expansion of settlements and roads (forest roads). ○ Increased of number of people visiting the forests. |
| Opportunities for biodiversity conservation | Opportunities for economic development |
| | <ul style="list-style-type: none"> ○ Wildlife-watching (birds, bears, deer rut). ○ Photo-hunt. ○ Excellent quality wild-game meat. |

3.5.2 PPB Opportunities

*** Local seller store

Local company could be established to buy the meat from local hunters and sell the meat under common NRP brand. For a true PBB this company should only accept meat of animals hunted outside their breeding season (helping the population to grow in numbers and getting meat of higher quality at the same time).

3.6 Fishing, selling of fishes and sport fishing


3.6.1 Current situation

Ministry sets the limits for fishing; fishing association gives permissions to tourists and manages wild fish stock. Part of the lake Cerknjško jezero is managed by Angling Club Cerknica and the other part by Fisheries Institute of Slovenia (ZZRS). Only sport fishing (angling) is allowed in the NRP area. In total, there are 120 members of the angling club Cerknica. Around 550 one-day tourist licenses are sold to tourists annually (Angling Club Cerknica: 320 licenses per year & ZZRS: 230 licenses per year)

Native Brown Trout in Cerknjščica stream was protected in 2015 by Angling Club Cerknica. It can be fished but not killed (catch & release). Around 25 catch & release licenses for Cerknjščica stream are sold annually. This method can have positive effect on business opportunity in the lake Cerknjško jezero as well (fishing for Northern Pike) as it allows fish to grow bigger. Two small fish farms are raising trout species. This is a problem however as the species raised are not native. The main species raised in this way is North America's Rainbow Trout. Rules from the national Fishing Institute and Angling club may limit the potential to increase business in this area.

As the intermittent lake Cerknjško jezero area is truly one of Worlds' nature gems (Ramsar site, Natura 2000 site and area of protected nature), fishing here for visiting anglers could be made in something special. Fishing for Northern Pike with local traditional boat (drevak) guided by local anglers could be marketed.

Big problem at present is altered water regime due to constructional interventions in ponor caves and riverbeds of Cerknjško polje in the past. Therefore, nowadays water tends to run away in time when native Pike, Tench and Burbot are spawning. If water regime would be restored, fish species would reproduce in great numbers and grow fast as the conditions in Cerknjško Jezero Lake are very favorable. The second problem are non-native fish species (Rudd, Perch and Carp) introduced in the lake in the past, however improved conditions for spawning of native fish could may well turn things around by itself.

|  Challenges and opportunities in the <i>fishing sector</i> | |
|--|--|
| Challenges for biodiversity conservation | Challenges for economic development |
| <ul style="list-style-type: none"> ○ Alien species and the changing water level of the lake are a problem (this results from the lowering of the water level through the dams). ○ There are problems with fish populations' regeneration because of regular low water levels in time when native fish species spawn in | <ul style="list-style-type: none"> ○ Fishing tourism as a potential if the licenses for fishing would cost more. ○ Fish is very popular in the region and the permits are very cheap. ○ It can be additional earning for local fishermen. |

| | |
|--|--|
| <p>the lake.</p> <ul style="list-style-type: none"> ○ There are 3 non-native fish species in the lake that compete with native fish for food and space. | |
| <p>Opportunities for biodiversity conservation</p> | <p>Opportunities for economic development</p> |
| <ul style="list-style-type: none"> ○ Ponor caves entrances and former riverbeds restoration. | <ul style="list-style-type: none"> ○ Fishing is very popular in the region. ○ If stable water levels could be achieved in winter, spring and early summer when Burbot, Pike and Tench spawn, the population of these species should thrive and attract more visitors. ○ Stricter rules oriented towards bigger fish and increased released fish survival. |

3.6.2 PPB opportunities

There are no business opportunities in this sector.

3.7 Touristic accommodation & restaurants & cafés

3.7.1 Current situation

Only the 4% of the activities of the Natural Park come from tertiary sector.

There are 17 **tourist farms** that sell their products to locals and tourists, some of them produce organically. Some people produce spirits using pears and apples, honey, some have dairy products, etc. besides their main job. They also have accommodations and offer lunch. They explain the Park and environmental protection to the tourists. Only during the high season in summer, they get some benefit. The rest of the year, they have to make their money with farming activities. The advisement of these tourism farms are made mouth-to-mouth.

There is one big **camping facility** for groups such as scouts (but no electricity, toilets etc.) and there are camping sites on some of the tourist farms. There is an increase demand for camping grounds; but because it is limited to the summer season, no one has opened camping space yet.

There are a lot of **restaurants and cafés**, and there is no potential for more. Restaurants do not buy food from local farmers. Tourist farms however do, especially if they have their own production.

| Challenges and opportunities in the <i>touristic accommodation, restauration sector</i> | |
|---|--|
| Challenges for biodiversity conservation | Challenges for economic development |
| | <ul style="list-style-type: none"> ○ Administrative effort is quite high and hinders people to develop as tourist farms. ○ Administrative effort is quite high and hinders people to start a restaurant. ○ Advertisement is only done via mouth to mouth. |
| Opportunities for biodiversity conservation | Opportunities for economic development |
| <ul style="list-style-type: none"> ○ Buying food from traditional farmers in the region reduces the impact on biodiversity and supports the added value. | <ul style="list-style-type: none"> ○ Eco Camping combines an active nature protection with improved management and competitive advantages. |

3.7.2 PPB Opportunities

Accommodation which includes restaurant and tourist information

More accommodations and tourism facilities are needed since current facilities are fully booked in the peak season (summer). Offers locally produced food and traditional meals. Environmental friendly practices, such as: energy saving light


bulbs, photo voltaic panels, waste separation and disposal, biodiversity refuges in the garden, etc. Combination with information point for tourists (about accommodation, activities/tours, restaurants and cafés). Publication website/brochure which gives relevant info to tourists.

- **** Eco camping** Establish eco camping inside the park and use it as unique selling point. It attracts a different group of tourists such as nature lovers, students with less financial resources, young families, etc. Additionally, income can be generated by animal farming or by offering further services like workshops, etc. Advertisement via the RP, local tourist associations, tour operators, etc.
- ***** Eco-tourists farms** In collaboration with the RP, the tourist farms could increase the environmental education offers for tourists. Potential to differentiate from competitors by offering local traditional food or showing tourists the traditional farming practices. Environmental friendly practices, such as: energy saving light bulbs, photo voltaic panels, waste separation and disposal, biodiversity refuges in the garden, etc.
- *** Restaurant/ cafe** Offers locally produced food and traditional meals. Collaboration with local tourist agencies, RP and schools. Unique selling point: offering special services like: cooking classes, organic catering services, etc.

3.8 Touristic and cultural activities

3.8.1 Current situation

Besides the activities organized by the Natural Park, there are 39 local **tourist guides**. Most of them have regular jobs, and additionally a license to be a guide; 2 or 3 of them are self-employed and have their own company, a few have an environmental education in different areas (plants, animals, etc.). Green Karst Regional Association regulates and controls the number of licenses. Tourist guides have to do a seminar and an exam to get the license, and every 5 years it is controlled how many tours the guide has made and based on that the licenses can be renewed.

|  Challenges and opportunities in the <i>touristic and cultural sector</i> | |
|---|---|
| Challenges for biodiversity conservation | Challenges for economic development |
| <ul style="list-style-type: none"> ○ Tour operators do not work according to environment standards. ○ Visibility of natural values - too low ○ Great pressure on natural areas | <ul style="list-style-type: none"> ○ Local tour offers are not advertised jointly. ○ The divided offer is negative because it affects the price ○ There is no long-term development strategy. |
| Opportunities for biodiversity conservation | Opportunities for economic development |
| <ul style="list-style-type: none"> ○ No special offer for environmental education. | <ul style="list-style-type: none"> ○ Inadequate infrastructure management - thematic routes. ○ Visibility of domestic food too low ○ Bird watching tours are only offered by some guides and the park administration and could be further developed. ○ Interest of the people to discover the nature of the natural park. |

3.8.2 PPB Opportunities

******* Ecotours operators: tours combined with environmental education** The offer of educational courses could open up new possibilities for generating income. Make use of traditional and environmental friendly activities and show them to tourists. Foster collaboration between the park and tourist guides and associations to adjust the offer for tourists. Introduce “Leave no trace” standard to tour operators in order to ensure that nature and culture are not harmed during touristic activities.


Different modalities:

- **Sports** E-bike tours could increase the offer of tourism businesses in the park. Rentals of bikes and canoes could be more developed. Hiking; Mountain biking; Horse riding; Canoeing; Boating; Adrenaline park; Water sports; or Hay tourism (help with mowing in August and relaxing on hay bales as kind of aroma therapy).
- **Bird and bear watching** There is a project that aims at building the infrastructure for bird watching. Listen to wild animals, teach young people that animals are not dangerous, and how to identify them, among other possibilities.
- **Nature** Environmental education could demonstrate the high biodiversity value of grassland management. Topics: picking mushrooms, forest fruits; Nature protection, identification of trees, medicinal plants, floristry ...
Other offer: Caves; Meadows: orchids, other plants; interpretational value; Observation of bears ...
- **Culture** Cultural heritage - preservation of architecture, customs, witchcrafts legends.
- **Angling tackle store** Guests could join the local guide, and they could angle from traditional boat (drevak) as an option.

3.9 Delivery services and transport agencies

3.9.1 Current situation

No information available. There were buses taking people from remote villages to work and schools in previous times.

|  Challenges and opportunities in the <i>delivery services and transport</i> sector | |
|--|--|
| Challenges for biodiversity conservation | Challenges for economic development |
| Opportunities for biodiversity conservation | Opportunities for economic development |
| | <ul style="list-style-type: none"> ○ Business that collects and sells products jointly in a city. ○ Transportation of products to bigger cities is easy as Ljubljana (Slovenia's capital) is close (40 min drive). |

3.9.2 PBB Opportunities

- *** Delivery Service** A business that collects local products and sells them on a market in a city which is close to the National Park could be an opportunity to sell products jointly to tourists and locals.

4 Conclusion

Despite the challenges facing the territory, such as the rural exodus and the ageing of the population, Notranjska Regional Park has the potential to implement and promote the different PBBs that already exist.

The above discussed sectors cover those business opportunities that currently offer the most potential. It is highlighted the following Pro Biodiversity Businesses: **producer of wood houses, carpentry business, ecotours operators: tours combined with environmental education, eco-tourism farms, and registered livestock farmer**

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 community and social service activities, biodiversity management services and banking, insurance and investment.

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

