

Marketing as a management tool of biosphere reserves to achieve goals of Agenda 2030

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Abstract The aim of the paper is to identify the role of marketing places in the sustainable development of the biosphere reserves and demonstrate it on the examples of Slovak biosphere reserves. The main sources of data are the international and national documents related to biosphere reserves, as well as interviews with managers of four biosphere reserves in the Slovak Republic - Slovak Karst, Poľana, Eastern Carpathians, and Tatras and a chairwoman of the Slovak Committee for the biosphere realised with the aim to identify the main problems of biosphere reserves development and their potential solutions. The paper proposes possible measures how to develop marketing activities with the aim to eliminate the weaknesses of the biosphere reserves management and thus raise the value of biosphere reserves.

Keywords: Marketing. Marketing mix. Biosphere reserves. Strategical development. Agenda 2030.

1 Introduction

Recent development in the world is characterized by significant, often turbulent, and unpredictable changes that pose numerous challenges for society. The sustainable development of the world economy is getting increasingly vulnerable and exposed to new challenges related to the processes of globalization. The technological revolution that transforms society, is demonstrating itself in all the different spheres of life, and often has a radical impact. But the key decisive factor lies in a long-term perception of management of limited natural resources, with the search for less energy-intensive production processes. The organization of the world is becoming more fragile, unpredictable, and closely linked to the interdependence of countries.

To eliminate the negative impacts of the above-outlined trends in countries, as well as to highlight how to achieve a sustainable future for all generations, the United Nations adopted the document titled 'Transforming our world: the 2030 Agenda for Sustainable Development' (further referred as 'Agenda 2030') in 2015. This document contains perhaps the most comprehensive selection of global priorities selected to foster the concept of sustainable development. The aim of Agenda 2030 is to guide the structural political, economic and social transformation of individual countries of the world

in response to the threats currently faced by the human. The Agenda 2030 integrates all three dimensions of the sustainable development concept: economic, social, and environmental.

An important contribution to the achievement of the Agenda 2030 objectives in the environmental protection and sustainable use of biodiversity is realized by UNESCO. In particular, this organization holds a multidisciplinary mandate including education and public awareness of biodiversity and sustainable development. UNESCO highlights the links between cultural diversity, biodiversity, social aspects, and ethical issues.

In the paper, we focus especially on the role of biosphere reserves as a part of UNESCO heritage. Biosphere reserves are internationally recognized as model areas for the practical application of interdisciplinary knowledge to understand and maintain the relationship between man and nature and to coordinate change, including conflict prevention and biodiversity protection. Biosphere reserves are areas of international importance declared by the main body of the UNESCO Program Man and Biosphere - International Coordinating Council MAB (ICC MAB) (§ 28b paragraph 1 of Act No. 543/2002 on nature and landscape protection as amended).

In biosphere reserves, the sustainable management supports actively critical transformations, which contribute to the broader goals of natural resource management (Olsoon et al., 2007; Albert et al., 2012; Bridgewater, 2016; Reed, 2016) and to the achievement of the Sustainable Development goals in various ways (Stoll-Kleemann, O’Riordan, 2018; Pool-Stanvliet, Coetzer, 2020). They contribute significantly to the fifteenth goal of the Agenda “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”, which is closely linked to all the other Agenda 2030 objectives. Maintaining resilient ecosystems and their services (e.g. the availability of drinking water, food, soil fertility, climate regulation, aesthetic values, etc.) and protecting our planet’s biodiversity is the basis of the fight against poverty and the fight for human health and welfare. Biodiversity, as such, supports the achievement of most of the sustainable development goals, and the loss of biodiversity poses a threat to both security and peace (UN, 2015; UNESCO, 2021).

The aim of the paper is to identify the role of marketing places in the sustainable development of the biosphere reserves and demonstrate it on the examples of Slovak biosphere reserves.

The paper is organized as follows. In the first part, we define theoretically the functions of the biosphere reserves in sustainable development and the role of marketing places as a managerial tool in hands of biosphere reserves management. Then we characterize the used material and methods. In the analytical part of the paper, we present the characterization of the biosphere reserves of the Slovak Republic from the marketing point of view. To sum up the findings, we identify the potential solutions to develop marketing activities and thus raise the value and awareness of biosphere reserves.

2 Theoretical framework

2.1. Biosphere reserves as an object of marketing places

Biosphere reserves were established in the 1970s under the UNESCO Man and Biosphere Program (MAB). The development of the international environmental agenda resulted in the second international congress on biosphere reserves in Seville, Spain, in 1995, where the Seville Strategy was formulated, including the Seville Vision for the 21st century. The key activities for implementing the biosphere concept and the Statutory Framework of the World Biosphere Reserves Network were defined. Biosphere reserves are the areas where the land management approach that harmonizes human-nature relations, is implemented. They include countries of different characters defined geographically (Batisse, 1985; UNESCO, 1996; Bridgewater, 2002). These are representative territories with their role and mission beneficial to both nature and man. They serve as an example of sustainable living, acceptable balance, and the human relationship with the natural environment. They play an important role not only for the local population but also for the whole society. The global network of biosphere reserves currently consists of 727 territories in 131 countries. Of the total number, 22 biosphere reserves are cross-border. The number of biosphere reserves varies based on the ICC MAB decision (UNESCO, 2021).

Biosphere reserves are envisioned as local initiatives where stakeholders engage in self-management of natural resources in line with the common-pool resource theory (Ostrom, 1990) and in sustainable manner (Baird, et al., 2018). They aim to achieve biodiversity conservation while still permitting human activities via integrated management of natural resources (Donevska, 2021).

Each biosphere reserve has three functions, namely: a) protection - with an emphasis on protection at all levels, including the protection of landscapes, ecosystems, species and genetic diversity; b) development - is aimed at ensuring the economic and human development of the territory, which is socio-culturally and ecologically sustainable; c) logistical support, including support for demonstration projects, environmental education and training, research and monitoring in relation to local, national, regional and global issues of protection and sustainable development (Vološčuk, 1998; Donevska, 2021).

Under the Framework Statutes, each biosphere reserve should consist of three zones. The first zone, so-called nuclear zone, is the most protected and most valuable part of the territory in terms of natural values, with the preference to preserve biodiversity and monitor little disturbed ecosystems. This zone also contributes to maintaining ecosystem services - carbon capture, soil stabilization, or drinking water supply. In parallel to protection, certain human activities, such as environmental education, research, environmental protection and rehabilitation, as well as recreational and eco-tourism activities, can be developed within this zone. The second zone, so-called buffer zone, surrounds the nuclear zone and can be used for environmentally compatible activities. This zone also reduces the impact of human activities on the nuclear zone and is essential to preserving biodiversity and cultural diversity. It promotes a biological link that acts as a natural corridor between the nuclear zone and the transition zone. The third zone, so-

called transition zone, is a basis for the management and sustainable development of natural resources. A much wider range of economic activities that benefit the socio-economic development of the local population can take place in this zone. However, these activities must respect the specific objectives of each biosphere reserve (Fabriciusová, Slávik, 2010).

The precondition to developing sustainable all three types of zones in biosphere reserves is an application of a strategic and integrated approach, which according to Berman, West (1998) includes the systematic planning of the way of organization of changes and the creation of a society-wide consensus and a common vision for a better future and development of the place.

Strategic planning is the process of creating and maintaining a strategic balance between the goals and opportunities of the territory about changing market opportunities and societal needs (Kíta, 2002; Vaňová, 2006). It is a systemic and integrated approach to territorial development that provides an opportunity to increase efficiency and strengthen the links that should work together to achieve synergies, stimulate territorial coordination and thus improve governance through stakeholder participation in defining and implementing development public policy (Dente, 2014). In the real conditions of the territory, these are specific planning documents that address the development of various areas of life in the territory.

The integrated conservation and development approach aim to overcoming the competing interests between development and nature protection (Fischer et al., 2015). This combined approach should identify the extent of natural resources and services that can be used without degrading the ecosystems or reflecting its ability to self-regenerate. To the most recent approaches how to manage the spatial development in integrated way belong marketing places (Vaňová, 1996).

According to Kotler (2002) and Holcomb (1994), places marketing means designing a place in such a way that the needs of the target segments are satisfied, and the territory is more desirable.

Places marketing is a continuous social process that provides the possibility to influence on the sustainable development of the territory more effectively by building a sustainable competitive advantage, creating conformity between demand and supply of the territory at the market by using specific marketing methods and tools. The process aims to minimize the risks of the territory associated with its entering the market and maximize its social benefit in accepting its social role (Vaňová, 2006; Vaňová, Vitálišová, Borseková, 2017). Marketing places focuses on demand (because the needs and expectation of customer should affect directly the use of the build-up place); building the specific competitive advantage of a territory (an offer of territory creates the added value for the target customer); introducing new methods, tools, and management approach; creating conditions for the collective definition of objectives and direct participation of key entities (citizens, entrepreneurs, offices of public administration, non-profit organizations, etc.) operating in the territory or relation to the territory. Without direct involvement and participation of these subjects, it is not possible to talk about the marketing approach (Vaňová, Petříková, Borseková, 2010). We assume, that because the fact that the marketing places is an innovative approach to the spatial development based on the strong participation of relevant stakeholders and focused on

achieving the win-win strategies, it can contribute also to find some compromises solutions between the integrated conservation and development (Donevska, 2021)

2.2. Toolkit of marketing places

In order to achieve the set objectives of the place and promote the place in the target markets, the places marketing uses a set of controllable and interconnected marketing tools, which are referred to as the marketing places mix. Due to the specifics of the territory, the marketing places mix differs from the classic marketing mix consisting of the tools: product, price, distribution and marketing communication (Vaňová, Vitališová, Borseková, 2017). Booms, Bitner (1980) added to the marketing mix tools - participants, physical evidence and process (original 4 Ps to apply in the marketing mix concept of service); Judd (1987), Vaňová (1996) adds people; Kotler (1986) adds political power and public opinion; MaGrath (1986) adds personnel, physical facilities and process management; Vignalis, Davis (1994) adds services. Based on our previous researches (Vaňová, Vitališová, Borseková, 2017) we identify the marketing places mix as product, price, accessibility, marketing communication, people and participation. This definition fits to the needs of biosphere reserves because of the great impact on stakeholders' participation in the territorial development.

In marketing places, the product is everything what the place offers on the place market to its customers with aim to satisfy their needs (Vaňová, Vitališová, Borseková, 2017, Hanuláková, 2004, Kotler, Armstrong, 2004). The product is a place. It could appear as a finished product offered in the market. On the other hand, it is also a variable product that consists of partial products and that is gradually changing over time and space. The partial place products can be in a form of tangible and intangible goods representing the natural, cultural, socio-economic and innovative potential of the place (buildings, technical infrastructure, services, events, attractions, natural, cultural, historical monuments, institutions, work, educational, investment opportunities, etc.) (Vaňová, Vitališová, Borseková, 2017). When we apply this definition of product to the issue of biosphere reserves, the biosphere reserve with all natural, cultural, socio-economic, and innovative potential can be understood as a product of marketing places. The limitation is that all this potential can be exploited only in line with the restrictions defined by the type of zone and by that way it contributes fulfilling the main functions of the biosphere reserves (protection, development, and logistical support). In the case of biosphere reserves, not only physical aspects of the places are important, but also the unique value of nature, which is confirmed by UNESCO. UNESCO (2022a) highlights especially the outstanding biodiversity, ecosystems, geology and superb natural phenomena. This unique value can be a core of competitive advantage building in the biosphere reserves (Borseková et al., 2017).

Price as a tool of marketing mix is a relative value of the place attribute(s). By other words, it is represented by the prices of partial products (prices of real estate, rents, services, labour force, financial instruments within the competence of place management) determined by the place potential, the place brand, demand for the place and its partial products, competition, quality, legislation and other internal and external factors (Vaňová, Vitališová, Borseková, 2017). Price reflects the quality of the place as a unit;

sub-products of the place; its location; its functions; the conditions in the place; image, attractiveness and the importance of the place, etc. The price in biosphere reserves can be reflected in entrance fee to the strictly protected zones, fees for parking, etc. or can be used as a financial incentive like subsidies, grants to motivate human behaviour (e. g. to maintain the traditions and cultural values) or eliminate the undesirable behaviour (e. g. the industrial activity which affects negatively the environment).

Communication as a process from finding needs and wishes through marketing research to sale of product and after sale communication covers plenty of activities with the aim to persuade the customer to buy the product, or in our case to visit a place, to inform the public about the territory, to awake interest or to engage stakeholders in development activities (Lee, 2022). In case of biosphere reserves, the managers should understand people's perceptions while promoting habitat conservation. The strategic communication that's why should be oriented also on the internal audience, to engage and involve them in discussions, decision making as well as enhance local and social capacity within the community (Harwell et al., 2020).

For this purpose, it is inevitable to prepare a comprehensive promotion strategy. It includes the activities of traditional communication tools as well as innovative ones. Unlike traditional forms of marketing communication, innovative forms of marketing communication make possible to reach target segments massively and at the same time individually; to maintain the interest of target segments; to convey individually tailored information and obtain feedback. Even though marketing communication, like other tools of the marketing places is very important for the territorial development, it is often underestimated by the place management and without particular attention.

Accessibility, as a precondition for the further social and economic development of the area, can be understood as: "position and geographic location of the place, accessibility from and to other places, orientation marking in the place, character of transport connection (roads, railway, air and water transport), number, speed and quality of transport infrastructure in terms of time and distance, activities contributing to a commercial character of the product of place, the so-called organization of direct and intermediated "sale" of the place as a total product and sub-products to potential buyers" (Vaňová, Vitališová, Borseková, 2017, p. 30). In the case of biosphere reserves, attention should be paid to supporting environmentally friendly technological transport means, including electromobility. The important aspect is also a construction and maintenance of hiking trails with the aim to preserve the natural heritage.

The key tools that should integrate all other tools of marketing places are tools – people and partnership. The people are an important and unthinkable element of place. It is represented by the skilled managers of biosphere reserves as well as by other actors of the territory that contribute to its development. In the territory, a key role has whether as a subject activating and implementing changes in the territory or as an object, which is close-knit with the character of territory as a product, with activities related to territory development and by marketing approach with orientation on the customer as well. The fact, if the territory will prosper and develop or not, is depending on the people, who live, work, do business, shop, relaxing in the territory, and on people, who manage the territory, on their ability to use all existing resources of territory and to create supply, which will be interesting for the market. In biosphere reserves, the role of manager

is very important. It should be not only an expert in natural resources, but also the “mediator” among the stakeholders in the territory in negotiations of their various interests in context of natural conservation and development (Kirkpatrick, Kiernan, 2006; Bernbaum, 2019; Donevska, 2021). Managerial decisions should be based on sound science and knowledge, including local traditional knowledge. The management interventions should be consistent with the strategic plan and conservation objectives. They should reflect knowledge of the distribution of the area’s key environmental assets and monitored to assess their impact on biodiversity and other protected area objectives (Kirkpatrick, Kiernan, 2006).

The tool people influenced strongly also the partnerships of stakeholders within the territory and their willingness to be engaged in satisfying the needs of customers of the territory as well as in the development of the territory. The research studies (Seixas, Davy, 2008; Donevska, 2021) confirm as a basic principle of biosphere reserve the participatory decision-making process of relevant stakeholders, that affect the achievement of integrated conservation and development.

Considering the fact that the place is a combination of unrepeatable features and qualities, it can be stated that each place has a comparable chance to attract its group of customers and investors. It only requires using the right methods and tools, which can be offered by marketing in hands of place management (Vaňová, Vitálišová, Borseková, 2017).

3 Material and Methodology

The aim of the paper is to identify the role of marketing places in the sustainable development of the biosphere reserves and demonstrate it on the examples of Slovak biosphere reserves.

In the paper, we define firstly the functions of the biosphere reserve, their role in the strategical development in the context of marketing places based on the literature review of domestic and foreign scientific and professional sources. Subsequently, we analyse the current state of art in biosphere reserves of the Slovak Republic regarding the tools of marketing places and based on synthesis and generalization we identify the problem areas for their further development.

The main source of data are the international and national documents related to biosphere reserves. The review of this material was followed by the detail interviews with the managers of four biosphere reserves in the Slovak Republic - Slovak Karst, Poľana, Eastern Carpathians, and Tatras and a chairwoman of the Slovak Committee for the biosphere to identify the main problems of biosphere reserves development and their potential solutions. In the last part of the paper, we propose possible measures how to develop marketing activities with the aim to eliminate the weaknesses of the biosphere reserves management and raise the value and awareness of biosphere reserves.

4 Research results and discussion

4.1 Slovak biosphere reserves and marketing places

The issue of biosphere reserves is gradually developed in the Slovak Republic from 1977 when the first biosphere reserve the Slovak Karst was announced by UNESCO. On 9th March 1993, the Slovak Committee for the Human and Biosphere Program was established as an advisory body to the Minister of Foreign Affairs of the Slovak Republic and responsible body for the implementation of the UNESCO MAB Program in the Slovak Republic. It is an organizational part of the Slovak Commission for UNESCO under the Ministry of Foreign Affairs and European Affairs of the Slovak Republic.

From the marketing places point of view, the product is a whole territory of biosphere reserves as well as all the goods and services that the actors from the territory offer. In the Slovak Republic, the Slovak Karst (1977), Poľana (1990), Eastern Carpathians (1992), Tatras (1992) were recognized as biosphere reserves. The Tatras Biosphere Reserve and the Eastern Carpathians Biosphere Reserve are cross-border biosphere reserves. By § 28b par. 1 of Act no. 543/2002 Coll. on nature and landscape protection, as amended, biosphere reserves are areas of international importance. All four are simultaneously large protected areas (3 are national parks and 1 protected landscape area). Until 2014, the biosphere reserves in the conditions of Slovakia were not dealt with in any particular Slovak legislation. Although the amendment to the Nature and Landscape Protection Act, as amended by the Act of the National Council of the Slovak Republic Act No. 543/2002 Coll., effective as of 1 January 2014, the situation has changed, and biosphere reserves have been given the status of internationally significant territories

The Slovak Karst Biosphere Reserve is the largest karst-type karst area in Central Europe in south-eastern Slovakia, on the border with Hungary. It is an important area in terms of the occurrence of geological, geomorphological phenomena and groundwater resources in terms of the occurrence of unique species of fauna and flora. The total area of the Slovak Karst Biosphere Reserve is 74,500 ha. The karst landscape is characterized not only by relief and subsoil but also by special hydrology. There are 1,300 known caves in the Slovak Karst, which since 1995, together with the caves of the neighboring Aggtelek Karst in Hungary, have been inscribed on the UNESCO World Heritage List under the name Caves of the Slovak and Aggtelek Karst. The diversity of the habitats of the Slovak Karst and the very diverse vegetation reflects its climatic and geological conditions and geomorphologically different karst phenomena. Its flora is one of the richest in Central Europe. Most of the forests are woody plants from repeatedly cut deciduous trees and forest plantations grown by foresters. Forestry with agriculture predominates on the plateaus. Population density is very uneven but generally low. Settlements and related economic activities are concentrated in river basins and river valleys. The region has an industrial-rural character and more people are employed in agriculture than in industry.

The Poľana Biosphere Reserve is the highest volcanic mountain range in Slovakia. The whole area is part of the Carpathian arch. Due to its extension to the south and an altitude range of almost 1000 m, thermophilic as well as mountain species of plants and animals occur in a relatively small area. The unique geological and geomorphological character of this area is the result of volcanic activity in the period 13 - 15 million years ago. Forests cover about 85% of the area. Poľana is characterized by large beech forests,

fir beeches and hilly forest communities. In the past, deforested areas, today they represent meadows and pastures with the occurrence of valuable vegetation of peat bogs and waterlogged meadows. Mountain and subalpine grass species are typical. Rock communities increase the overall biodiversity of the area. Horses and traditional agricultural tools are used in the area for agricultural purposes. The unique landscape structure is highlighted by traditional wooden houses, barns, potato cellars, painted wooden crosses and other folk art. The current area of the Poľana Biosphere Reserve is 24,158.23 ha (2016) (Fabriciusová, Miňová, 2016).

The Eastern Carpathians Biosphere Reserve is located in the easternmost part of Slovakia at the crossroads of the political borders of three European countries - Poland, Slovakia and Ukraine. It is the first tripartite biosphere reserve in the world, consisting of Polonny National Park (Slovakia), Bieszczadzki National Park, Krajobrazowy Doliny Sanu Park, Ciśniańsko-Wetliński Park Krajobrazowy (Poland) and Užany National Nature Park, Nadsyansky Regional Landscape Park (Ukraine). The territory of the Slovak part of the BR overlaps with the territory of the Poloniny National Park. On 28 June 2007, the Carpathian Beech Forests located in the Slovak part of the BR were inscribed on the UNESCO World Heritage List as a cross-border serial nomination (Ukraine / Slovakia). This World Heritage site has been gradually expanded to include components in other European countries, with the last expansion taking place in 2021. It currently has the name Old Beech Forests and Beech Forests of the Carpathians and other regions of Europe. The total area of BR currently represents 40,689.92 ha. Preserved vegetation beech forests, mowed meadows, pastures and special mountain meadows "polonins meadows" - predetermine the natural diversity of biocenoses. Forest covers more than 90% of BR and more than half of BR forests are private. Forestry is the dominant economic activity, and it provides opportunities for low-skilled jobs.

The Tatras Biosphere Reserve is located in the northern part of the Slovak Republic. The territory of the biosphere reserve includes two national parks and their protection zones located on both sides of the Slovak-Polish border. The Slovak part consists of the Tatras National Park - Tatra National Park (TANAP) and the Polish side consists of the current Tatras National Park - Tatrzański Park Narodowy (TPN). The uniqueness and picturesqueness of the natural conditions of the biosphere reserve lie primarily in their alpine character. This is reflected in the significant differentiation of the country, which depends mainly on the orographic arrangement, size, extent and height of the mountain range. The biosphere reserve consists of the Eastern Tatras, Western Tatras, Podtatranská kotlina and Podtatranská brázda. After adjusting the borders as part of the periodic evaluation in 2017, the BR Tatras occupy an area of 101,819.05 ha. The diversity of the area is enhanced by the preserved features of traditional folk culture. The folk culture and folklore of this region have a lot in common, but they also differ significantly from the neighbouring regions in Poland and Slovakia. The traditional use of the biosphere reserve is agriculture and forestry, spas and sports and recreational activities. Since the beginning of historical development, agriculture has been associated with cattle and sheep farming. Tourism began to emerge in 1871. The mountain landscape with tourist centers is a transition between cultivated and natural parts of the region, including many types of forests, with great biotic diversity.

All the biosphere reserves have plenty of natural and cultural uniqueness. They should be protected and maintained by the activities of all actors in the territory. However, in the case of the Slovak Republic due to the ignorance of the mission and the importance of biosphere reserves, the biosphere reserve is often perceived as another category of a protected area and the associated restrictions or bans. Biosphere reserves are not typical protected areas, they are model areas where the protection of natural values is supported by sustainable human land use. At the same time, such an approach should guarantee compensation from the state in practice for owners and users who preserve cultural traditions and natural values in these territories. This condition is not adequately reflected in the case of the Slovak Republic.

This aspect of biosphere reserves is a part of the price as a tool of marketing mix. It includes also other forms of pricing specific products in biosphere reserves. As was mentioned in the theoretical part, there can be also the entrance fees to biosphere reserves, in the Slovak Republic, they are not applied. To the price as well as to the communication belong also the regional brand of products. With the local producers in the biosphere reserves are connected to these regional brands – Podpoľanie, Gemer-Malohont, Karsticum.

The tools of human factor and partnership include the management of biosphere reserves as well as networking and partnerships with stakeholders within the territory. Currently, the management of biosphere reserves is coordinated by the State Nature Protection Authority of the Slovak Republic. But from 1. 4. 2022 there is established a new organizational structure – 3 biosphere reserves will be a part of national parks (Slovak Karst, Eastern Carpathians, Tatras). Poľana stays still under the umbrella of the State Nature Protection Authority of the Slovak Republic, specifically protected landscape area Poľana. In the case of the Slovak Republic, Poľana is an example of best practices in the management of biosphere reserves. As a key body of biosphere reserve is a coordination board where participate various stakeholders. It meets regularly and solves various problems in development of the biosphere reserve. We can understand it as a participative platform used to engage the stakeholders into the development of the territory. However, this platform is working only in the case of Poľana. The other three biosphere reserves are characterized by a lack of deeper cooperation and partnership. We presume that the situation is going to be changed by the reform of the national parks.

Another point of tool human factor is strategical management realized in biosphere reserves. Currently, there are no direct managerial activities oriented toward the biosphere reserves with exception of Poľana. The biosphere reserves do not have sufficient capacity to implement development activities strategically. The Slovak biosphere reservations lack the key development documents, action plans, promotion strategies, as well as methodological procedures for preparing such documents. Based on good practice from abroad, we can identify as a weakness also the missing guidelines in the field of management and functioning of biosphere reserves considering the specific conditions of the Slovak Republic.

This lack of a strategic approach to the development of biosphere reserves is closely linked to the lack of analyses of biosphere reserves, especially in terms of socio-economic, socio-demographic, and innovative potential. This problem is associated also

with the lack of data at the lower level of territorial administration. The biosphere reserves cover usually a few districts as well as some parts of districts, and to gain some specific economic and social data are not available in the Slovak Republic.

Promotion as a marketing tool includes various activities realized by the Slovak Committee for the Human and Biosphere Program or management of individual biosphere reserves. But there is missing a common promotion strategy that should promote the uniqueness of the natural heritage and present its importance for sustainable development. Currently, the biosphere reserves are promoted by the common website (<http://www.sopsr.sk/web/?cl=1600>), videos, some leaflets and events. But there is a lack of activities oriented at increasing awareness about biosphere reserves and their specifics through the educational activities on issues of biosphere reserves (e. g. workshops for children and students), videos with more educational purpose explaining the value of the UNESCO label.

Accessibility as a tool means localization of the biosphere reserves and transport with the forms of transport within the territory and out of the territory. The localization of the biosphere reserves is illustrated in figure 1.

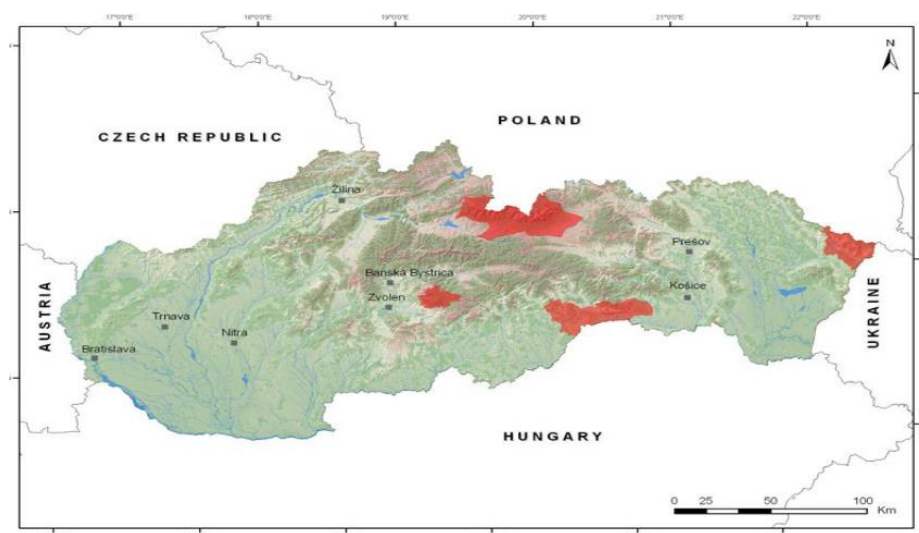


Fig 1. Map of the Slovak biosphere reserves

Three biosphere reserves are localized close to the borders in the middle and east part of Slovakia. They are mountain areas, from this point of view, the important is also the infrastructure of hiking tracks and orientation signs in buffer zones. Their maintenance is in hands of national parks or protected landscape area Pol'ana. In transition zone of biosphere reserves, the focus should be given to environmentally friendly transport modes. Currently, there are various activities of local people and public authorities to construct bike paths, this ambition is also in line with the priority of the new programming period of the European Union, as well as the support of electromobility.

The summarization of the current situation in the Slovak biosphere reserves from the marketing places point of view presents table 1.

Tab. 1 Strengths and weaknesses of the biosphere reserves
from the marketing places point of view

Strengths	Weaknesses
<p>PRODUCT</p> <p>Uniqueness of the natural heritage UNESCO label Diversity of the territory</p>	<p>PRODUCT</p>
<p>PRICE</p> <p>Label of regional products for local producers</p>	<p>PRICE</p> <p>Non-existence of pricing strategy or pricing modification used as a tool of marketing mix Weak compensation rules from the state for owners and users who preserve cultural traditions and natural values in these territories Non-existence of funding schema for biosphere reserves</p>
<p>HUMAN FACTOR and PARTNERSHIP</p> <p>Management of biosphere reserve in Poľana</p>	<p>HUMAN FACTOR and PARTNERSHIP</p> <p>Insufficient personal capacity Lack of strategical orientation in management of biosphere reserves Lack of participative initiatives except Poľana</p>
<p>PROMOTION</p> <p>Mix of partial promotion activities</p>	<p>PROMOTION</p> <p>Lack of educational activities to raise awareness about biosphere reserves and UNESCO label Non-strategical approach to communication caused by the lack of qualified human sources</p>
<p>ACCESSIBILITY</p> <p>Infrastructure of hiking tracks and orientation signs</p>	<p>ACCESSIBILITY</p> <p>New initiatives of local stakeholders to use environmentally friendly transport modes</p>

4.2 Discussion

It is obvious that biosphere reserves, like other products (Schumpeter, 1989), go through different life cycles (Vaňová, Petříková, 2012). Currently, it can be stated that they are returning to the growth phase. It is related to society's preferences in healthy lifestyle and environmental protection. From the strategic orientation point of view, it is necessary for biosphere reserves to focus on competitive development strategies based on innovations. The pillars of modern competitive marketing strategies are mainly versatile customer orientation, the enforcement and support of ethical, moral and environmental requirements of the society, and implementation of innovations. The goal is to promote sustainable development and ensure the growth of living standards through the creation of a sustainable competitive advantage. In this way, it is possible to gain advantages over the competition. The competitive advantage of the biosphere reserve is a character of territory (Borseková, K., Petříková, K., Vaňová, A., 2011). Several positives result from that, but above all the proximity of a unique attractive environment, which, however, requires sensitive regulation of development and environ-

mental protection. It is important to look for ways to maintain and "sell" this competitive advantage. The priority segments that need to be targeted within this strategic focus are residents, entrepreneurs and visitors to the biosphere reserve. Another significant group are legislators and preservationists. For the management of the biosphere reserve, this approach means continuously and systematically to look for new potential benefits, to monitor constantly market development, to behave professionally, creatively, entrepreneurially and to develop the offer based on these activities.

A sensitive approach to the development of the biosphere reserve requires financial resources. Directly to the biosphere reserves a part of the budget of the Slovak Committee for the Human and Biosphere Program is dedicated, but especially for the promotional activities or study visits to foreign biosphere reserves. But the sum of funds is so small, that the real benefits are questionable.

Anyway, during last year, there is again a strong initiative from down (from the communities in biosphere reserves) to change the situation in biosphere reserves. The first step should be an open discussion with the relevant representatives at the national level (e. g. the Ministry of Foreign Affairs and European Affairs of the Slovak Republic, Ministry of Environment of the Slovak Republic) about the strategic orientation of the biosphere reserves and their development. It should be supported by designing a suitable system of management as well as funds in a respective legal framework.

From the marketing point of view, management system should be based on the participation of citizens of the biosphere reserve and other stakeholders, or by other words on governance approach. It is necessary to look for possibilities and ways to activate people and motivate them to participate in all processes of biosphere reserve management. It is also important to innovate management processes. The emphasis must be placed on the education of the inhabitants of biosphere reserves, but also on business entities. In Slovenia, for example, educational programs aimed at preschool and school-age children have proven, that educate them in a fun way about behaviour in nature, environmental protection, fauna and flora, etc. The example how to improve the interaction of all marketing mix presents the cooperation of five biosphere reserves in northern Italy: the Po Delta, Appennino Tosco-Emiliano, the Ledro Alps and Judicaria, Sila and the Tuscan Islands. The partnership of these biosphere reserves is focused on the preservation of national nature as well as local culture, including gastronomic specialties (e. g. unique kinds of risotto) that rely on locally grown ingredients and are prepared by traditional way by local communities. To celebrate this unique ecological, social and cultural heritage, these five biosphere reserves created UPVIVIUM. This initiative awards producers, restaurant owners and food producers that keep traditional and sustainable practices alive, while offering some of the gastronomic delights for which Italy is renowned. UPVIVIUM also promotes products that are guaranteed 'Zero Km' (food produced, sold and eaten locally) and safeguards both bred and cultivated biodiversity (UNESCO, 2022b).

The second important tool is a product. Considering the strategy, it is necessary to pay attention mainly to product innovations. Innovations should be focused primarily on a) environmental protection; b) creating an offer of local production (local gastronomy, food, souvenirs, etc.), which could contribute to the development of business ac-

tivities and the creation of new jobs; c) preservation and use of cultural-historical heritage and natural potential in a sustainable manner. Among the new and recently applied approaches in the creation of an innovative offer is an involvement of customers in that process. The cooperation of customers and consumers in the creation of products contributes increasing their value for the customer (Lusch, Webster, 2011). It is implemented within the framework of community development, partnership, cooperation with residents, entrepreneurs or e.g. by visitors of the territory as a part of the creation of conditions for the offer packages from alternative offers. This approach is known in the literature as co-creation or co-production) (Voorberg, Bekkers, Tummers, 2014).

The price of the territory should reflect its quality. In addition to the quality of the environment, the price of a biosphere reserve also includes, for example, the prices of services and products offered on the territory of biosphere reserve. Due to the quality and uniqueness of the environment, it is possible, with appropriate promotion, to offer products at a higher price. Another option is to build loyalty through VIP cards, which will provide visitors with benefits when visiting local sights, attractions, accommodation and meals, or buying local products. On the other hand, VIP cards allow the involved business entities to present their offer to customers or create incentives for customer loyalty.

Another marketing tool is accessibility of biosphere reserves. Innovations should be focused primarily on alternative forms of transport. The solution is to build integrated routes (combination car/train/bus – cycle paths - tourist trails). Another option is using mobile applications for better orientation in the area, making movement in the area more attractive. Mobile apps help eliminate traffic jams, allow to get information about public transport connections, etc. They are also able to provide extensive information about the territory and events according to the needs of customers - from general facts to special professional questions and offers of the place. They often have other functionalities or are implemented in an entertaining form (e.g. as a game).

Best practice example how to develop a product as well as an accessibility, Austrian Biosphere reserve is a pioneer in the energy transition in a way that is largely free from conflict and will enable them to become model regions for the socially and ecologically sustainable production of renewable energy. It provides recommendations and guidelines on sustainable production of renewable energies, to support people involved in the administration of a biosphere reserve as well as lawmakers, in strict accordance with UNESCO's international criteria and Austrian relevant national guidelines. The guidelines include mainly the topics: reduction of energy consumption, space heating, sustainable mobility services (Austrian national committee Man and the Biosphere Programme, 2017).

The last tool is a marketing communication. Nowadays, both online and offline forms of communication are used in marketing communication, often in combination, when one form supports the other. It is necessary to focus on promotion, public relations, sale promotion, events, and brand building. A very important part of these tools are the channels of communication, especially communication via social media. The inspiring activity how to promote the territory of biosphere reservation and how to develop relations with inhabitants is a case of Intercontinental Biosphere Reserve of the Mediterranean. It published a book that uses oral narrative techniques that manage to

capture attention and transmit, in a close and effective way, information and perceptions about the most representative places of the biosphere reserve, as well as the values of equality, solidarity, environmental awareness. It includes information on flora, fauna, cultural heritage, history, geography and natural values, making it an effective teaching tool through the children's active participation (Red Espanola de Reservas de la Biosfera, 2022). Another example is a citizen's college and volunteer program for local residents living near the biosphere reserve, which provides local residents with various educational programs such as the conservation of natural and cultural resources and the history of the Sorak region, in Korea (UNESCO, 2022b). In relation to the external public, we recommend paying more attention to the use of social networks, especially Facebook, Instagram and Tik Tok, because as our research (Rojíková et al., 2021) has shown, they have a chance to reach a large target group of potential visitors.

5 Conclusions

The development of the biosphere reserves as a part of Agenda is very current issue at international level, as well as in the Slovak Republic. However, both state officials and the general public are not aware of the need to preserve biodiversity in the territories and to support systematically this specific type of territory.

In the paper we present the brief analysis of the current state of art of marketing mix in Slovak biosphere reserves. In Slovakia, the issue of the biosphere reserve is underdeveloped. As a key problem for further development, we identify a lack of strategic orientation, insufficient personal capacity and the fact, that there does not exist any funding schema special oriented to the biosphere reserves. One of the potential solutions is an implementation of innovative managerial approaches, e. g. marketing places, supporting participative governance, promotion and education contributing also to increase of general awareness on importance of biosphere reserves and their role in sustainable development. It is reported by many successful examples of developed biosphere reserves all over the world.

Even the development in Slovak biosphere reserves fight with a lot of challenges, the initiatives from down be a first step to move the progress in desired way. But it is important to be open-minded as well as take inspiration from better ones.

The paper presents the partial outputs of project APVV-20-0108 Implementation of Agenda 2030 through biosphere reserves.

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