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Proposal for Effective Management of Geoparks as a Tool for Sustainable Tourism in the Conditions of the Slovak Republic

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Abstract: Geoparks, as sustainable tourism products, embody a range of values and functions aimed at mitigating the negative impacts of tourism on the landscape. The current increasing trend in establishing and supporting geoparks has extended to the territory of the Slovak Republic, which possesses valuable natural potential. However, effectively harnessing this potential requires a clearly defined management structure aligned with the goals and mission of each geopark. The paper presents the operational aspects of geoparks in Slovakia, providing a comprehensive overview of geopark management followed by a subsequent evaluation. Assessing the management approach yields valuable insights into the ongoing development of Slovak geoparks, serving as a stepping stone for their further advancement. These geoparks are in a state of continual evolution, demanding significant support to ensure their efficient functioning. The study establishes clear quality management criteria for optimal staffing. The main objective of the paper is to demonstrate the need for the professionalization of human resources in geopark management. Additionally, the article concludes with a model for a strategic approach to human resources management, covering all its areas. Geoparks, as a modern product of geotourism and territorial management, represent innovative strategies for protecting and conserving geodiversity. They are closely intertwined with knowledge dissemination, education, and fostering a broader appreciation for the Earth's value. Moreover, they play a vital role in the sustainable development and preservation of territories.

Keywords: geoparks; sustainable tourism; effectivity; management; personnel matrix



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1. Introduction

A geopark represents a relatively new concept that embraces education, conservation, sustainable tourism, and recreational spaces. These ‘natural geoscientific laboratories’ introduce an innovative approach to education and teaching, providing experiential learning directly at sites where the natural environment showcases the historical development of Earth. A geopark is a geotourism product that systematically creates functional values for society. The importance of geotourism, from which the concept of geoparks arises, is discussed by numerous scholars who describe its functions [1–5]. One of its primary roles is to engage the public, educate them, and raise awareness about the natural values of the landscape, the geodiversity around us, and the importance of nature conservation and responsible use to preserve these values for future generations [6–10].

The existence of geoparks is justified by their functional value to society, particularly in education at various levels and in raising public awareness about nature and its inherent values. It is crucial to highlight that natural heritage serves us and requires our efforts to raise societal awareness about the need to protect this heritage to ensure its value for future generations.

A geopark encompasses geographic areas with sites representing geological heritage integrated into a holistic concept that includes conservation, education, and sustainable development [11]. UNESCO [12] defines a geopark as a ‘territory comprising one or more

sites of scientific significance, not only from a geological perspective but also in terms of archaeological, economic or cultural uniqueness of European or global importance'. Another definition describes it as an area with a significant geological heritage, a cohesive and strong management structure, and sustainable economic development [11]. UNESCO also describes a geopark as 'a territory characterized by its scientific importance, not only from a geological standpoint but also considering its archaeological, economic or cultural value of national, European or global significance' [13]. Additionally, the Global Geoparks Network (GGN) [14] defines a geopark as embracing 'a number of phenomena of unified significance due to their scientific value, rarity, artistic and educational value, which may include archaeological, ecological, historical or cultural potential'.

Concept and Significance of Geoparks

The fundamental idea behind a geopark is to implement a sustainability strategy for a given area. Geoparks can be synonymous with protecting the natural and cultural resources of a specific location. Pásková [14] highlights the main benefits of geoparks as increasing the interest of local residents and visitors in the values of abiotic nature, improving the quality of life for rural inhabitants, and combining the protection of landscape diversity with the appropriate presentation and interpretation of (not only) abiotic nature. Pásková [14] also points out the sustainable use of geological heritage for regional development, the role of the local community in sustainable tourism, the certification of geological guides, and the marketing of tourist trails, linking geology with the ecological and cultural values of the area and supporting local identity. Pásková further emphasizes that economic regional development is directly proportional to the development of these activities, which have a tradition in the area and are adapted to local conditions. She notes that this approach can preserve local traditions, culture, and crafts [14]. Currently, geoparks represent a modern geotourism product that offers visitors a multifaceted experience—adventure, tourism, education, health, ecology, sports, culture, etc.—all in one place. This results in a synergistic effect, where the collaboration of all involved components positively impacts the geopark's existence and operations. Geoparks serve as a tool for sustainable tourism, defined by sustainability principles, with the pillars of sustainable geopark development being the protection of geological heritage and economic and community development. This effect is achieved primarily through geotourism and educational activities [15]. The European Geoparks Network (EGN) defines a geopark as 'a territory with clearly defined boundaries and sufficient size to allow for economic development primarily through tourism'. Geological sites must be of special significance due to their scientific quality, rarity, aesthetics, and educational value. These sites are related to geology and archaeology, ecology, history, and culture, forming a thematic park [16]. UNESCO [12] summarizes the basic criteria and prerequisites that must be met by both member and candidate global geoparks. All geoparks should meet these criteria, with some formulations adjusted according to the level of the specific geoparks. The basic definition of geoparks, as defined by UNESCO and EGN, is thus used within global, continental, and national networks.

The geopark concept often needs to be clarified among the general public. It is frequently mistaken for a geological park or a new category of legally protected area. Most countries do not legally define geoparks. They arise based on the voluntary cooperation of local stakeholders and only collaborate with state-protected areas. Therefore, although geological heritage is the foundation for establishing a geopark, it is not merely a geological park but rather a platform that connects nature and people, as affirmed by the UNESCO Global Geoparks program's motto: 'Celebrating Earth Heritage, Sustaining Local Communities' [11]. Pásková [14] describes a geopark as 'a creative connector between the landscape and its inhabitants and visitors, between its ancient past and distant future, between science and play'. In other words, a geopark is a unique 'living space' where the socio-cultural interrelation of natural heritage brings geoscientific disciplines closer to people and fosters sustainable heritage development [17]. Farsani, Coelho, and Costa [10] emphasize the paradox of global geoparks, which are established internationally but managed locally.

Conversely, Henriques and Brilha [18] see this as their essence, stating that individual geoparks can best contribute to achieving global sustainability goals by linking global challenges with local actions. It is essential, however, that the designation of a global geopark does not exclude the local community from decision-making, as this could diminish the area's attractiveness. Halim and Ishak [5] argue that geoparks should be exclusively rural regions. While this is mostly the case, several functioning geoparks exist in urban settings, such as the Hong Kong Geopark and the English Riviera Geopark.

The article analyzes Slovakia's current state of four selected geoparks to highlight the need to professionalize human resources in geopark management. It proposes a personnel matrix covering all management areas.

2. Materials and Methods

This article explores the management of geoparks within the context of the Slovak Republic. To provide a comprehensive understanding of this subject, initially defining the term geopark's fundamental meaning and articulating its conceptual framework is imperative. The introductory section thoroughly outlines these terms, which were preceded by an in-depth review of academic literature from Slovak and international sources in this domain. Valuable insights were gleaned from scholarly articles originating from foreign outlets, which delved into the operational dynamics of geoparks within the EGN and GGN networks. Drawing inspiration from the functioning of geoparks in these networks, we crafted an analysis of the managerial landscape of geoparks. The aim was to offer a holistic perspective on their management environment in the Slovak Republic, focusing on the functional domains derived from their core functions.

As mentioned above, the main objective of the paper is to highlight the need to professionalize human resources in geopark management. To achieve this objective, it is necessary to fulfill the following secondary goals:

1. Conduct an analysis of the current state of Slovak geoparks in the context of their historical development;
2. Elaborate analysis of conceptual and strategic documents of the Slovak government focused on geoparks;
3. Analyze the management status of Slovak geoparks, focusing on the management of employees;
4. Create a personnel matrix for optimizing managers and staff working in geoparks.

The analysis of the current state of geopark-related issues in the Slovak Republic is formulated based on an examination of all relevant government documents at the national level. Subsequent to this analysis, an assessment form tailored for Slovak geoparks within the Slovak Geoparks Network was formulated. This form was devised following an analysis of the evaluation utilized by the Global Geopark Network during the assessment processes for geoparks seeking entry into the GGN. The evaluation process of the GGN [17] served as a pivotal and invaluable resource for obtaining an in-depth understanding of the managerial aspects within the geopark context. Aligned with the functions and management framework of geoparks, an assessment form comprising 39 inquiries was developed to gather insights into the management practices of operational geoparks in Slovakia as part of the Slovak Geoparks Network. These inquiries were categorized based on various management aspects, ranging from general inquiries elucidating legal frameworks and organizational structures to more specific domains such as marketing and personnel management. This form was administered by four representatives of each geopark, ensuring a first-hand account of the operational dynamics from a management, planning, cooperation, and stakeholder coordination perspective. The form was devised and administered between March and May of the year 2023. Subsequently, a personnel matrix was created as a recommendation for effective geopark management in all its areas and for its long-term sustainability and development [19].

3. Analysis Management of Slovak Geoparks

3.1. Development of Geoparks in Slovakia

The inception of the idea to establish geoparks within the Slovak Republic dates back to the years 1998–2000. This period marked the beginning of managing areas surrounding the geoparks currently in operation [20]. However, the situation was complex in terms of implementing these ideas because the concept of building and supporting geoparks within the Slovak Republic at that time was not embedded in legislation. Therefore, there was no state support [21].

Other forms include national parks, nature reserves, protected areas, and various designations specified by Slovak Republic legislation [22]. While geoparks fit within these categories, it is important to note that they are not directly defined or delineated in legislation. After 2000, this concept gained traction and was formalized in strategic documents issued by the Slovak Republic Government. Geopark management then adopted specific guidelines.

In 2006, the concept of geoparks was officially introduced in the Government Program Declaration of the Slovak Republic. Subsequent goals are aligned with Agenda 21, Sustainable Development Strategies and the National Sustainable Development Strategy. These goals emphasized environmental policy development, including formal and informal education, regionalized environmental studies, and increasing public awareness about environmental protection. This also involved expanding environmentally beneficial activities for all demographics. Consequently, efforts were made to develop the formation of geoparks, including environmental infrastructure (educational trails, geosites, educational facilities, etc.). The introduction of these terms into government documents marked a positive turning point, even if not immediate, towards recognizing and supporting geoparks as tourism products. In the ensuing years, specific conditions for their establishment were further outlined in subsequent strategic documents.

3.2. Analysis of the Current Status of Geoparks in Slovakia

On 6 December 2016, the Ministry of Environment of the Slovak Republic issued a press release [23] granting decrees to three Slovak geoparks: the cross-border Novohrad–Nógrád Geopark, the Banská Bystrica Geopark, and the Banská Štiavnica Geopark. This announcement also marked the establishment of the Slovak Geopark Network (Figure 1), representing the initial official action toward addressing geopark issues in Slovakia. Following the series of preparatory steps, including the development of conceptual and strategic documents, we will elaborate on the declaration in the section titled ‘Concept of Geoparks in the Slovak Republic’ [22].



Figure 1. Logo of the Geoparks Network of the Slovak Republic [24].

This act represented a significant milestone in environmental protection, preserving and presenting geological heritage for future generations and improving the quality of life for rural populations. The contemporary approach to protecting and preserving natural heritage through geotourism aligns with the principles of the sustainable development strategy, as emphasized in the 2030 Agenda. There are four geoparks in the Slovak Republic, which are part of the Slovak Geoparks Network. This network is managed by the Slovak Environmental Agency, which supports the development and operation of the geoparks and

identifies potential areas for inclusion in the network. The management of geoparks in the Slovak Republic is defined and developed by the Ministry of Environment in collaboration with external partners through strategic documents.

Additionally, the management of geoparks depends on their marketing activities and vice versa. The concept of geoparks emphasizes active marketing and innovative forms of heritage presentation to engage the younger generation. Marketing is crucial in any organization or business for reaching customers, capturing their interest, and providing information to target groups. Similarly, a geopark requires effective promotion from a marketing perspective. Recognizing the online space as the primary source of information is essential for geoparks. However, the current state of marketing efforts is insufficient in all Slovak geoparks.

Marketing management should encompass various areas, including the provision of presentation, educational, and promotional materials. In addition to traditional promotional tools such as interactive exhibits, guided tours, and educational workshops, promotion should also include modern digital content like AR and VR applications, webinars, live streaming, or geotagging tools. Online marketing and advertising platforms, in particular, should be a strategic priority due to their significant impact on the functioning and success of geoparks. For potential visitors, the online space is the main source of information, which geoparks must prioritize.

The solution lies in professionalizing marketing, either by creating a dedicated geopark marketer position or outsourcing marketing activities to professional marketing companies.

3.3. Concept of Geoparks in the Slovak Republic

3.3.1. Initial Concept of Geoparks

The management of geoparks in the Slovak Republic was first outlined in the document titled 'Draft Concept of Geoparks of the Slovak Republic' [25]. This document was approved by the government through Resolution No. 740 on 15 October 2008. In 2012, a report was prepared on implementing this concept, discussing the state of its execution, detailing specific actions taken, and highlighting the development and progress of the geopark areas according to the planned activities outlined in the concept [26].

3.3.2. Updated Concept of Geoparks

The 'Updated Concept of Geoparks' is an additional document approved by the Government of the Slovak Republic in Resolution No. 15 on 7 January 2015 [27]. This update reassesses and revises the original concept. It addresses the need to reclassify geoparks, establish criteria for the use of the term 'geopark', integrate existing geoparks into the Slovak Geoparks Network (SGN) based on models from other European countries, and develop a contemporary framework for the financing, operation, and development of geoparks [27].

In addition to existing documents, it is essential for management to review the 'Information on the Implementation of the Updated Concept of Geoparks in the Slovak Republic' [28]. This document details the progress and execution of the conceptual framework for Slovakia's geopark initiatives, tracks these areas' advancement and modernization, and highlights collaborative efforts. Furthermore, it provides an overview of the financial support for the various implemented projects.

3.3.3. Destination Management Document for Geoparks

One of the key publications available on the Ministry of Environment of the Slovak Republic website is the 'Methodology for Destination Management' [29] from 2016. This document is a comprehensive resource containing valuable information on approaches to geopark management, guidance on managing various areas, stakeholder identification, and a model proposal for geopark area management. It explains the relationships among stakeholders within the geopark environment, emphasizing cooperation and strategic

orientation in areas such as marketing, collaboration, geotourism, and education. It serves as a general guide for effective geopark management.

Categorization of Geoparks in Slovakia

According to strategic documents, the categorization of geoparks in Slovakia is as follows:

1. Geoparks with membership in the Global Geoparks Network (GGN) and the European Geoparks Network (EGN);
2. Geoparks in operation;
3. Areas with potential for inclusion as geoparks [27].

This new categorization, compared to the original classification outlined in the concept of geoparks (Category A—geoparks in operation, Category B—developing geoparks, and Category C—proposed geoparks), sheds light on the evolution of geoparks and their progress since 2008 [27]. To qualify as a geopark, these areas must maintain geopark status for at least two years and meet the conditions specified in the Updated Concept of Geoparks of the Slovak Republic. Geoparks are exclusively designated for areas falling under the first and second categories. Geoparks are supported by UNESCO and fall under UNESCO's program. Specifically, there are four Slovak geoparks in the national network, and only one of them is a UNESCO geopark.

The third category includes areas with potential and the prospect of being integrated into the geopark network.

Currently, the network includes geoparks, which are classified by strategic documents governing geoparks, the Draft Concept of Geoparks, and the Update of the Draft Concept of Geoparks of the Slovak Republic. These geoparks hold membership in the Global Geoparks Network (GGN) and the European Geopark Network (EGN). They include the operational geoparks Novohrad–Nógrád Geopark, the Banská Štiavnica Geopark, Banská Bystrica Geopark, and the Malé Karpaty Geopark (Figure 2).

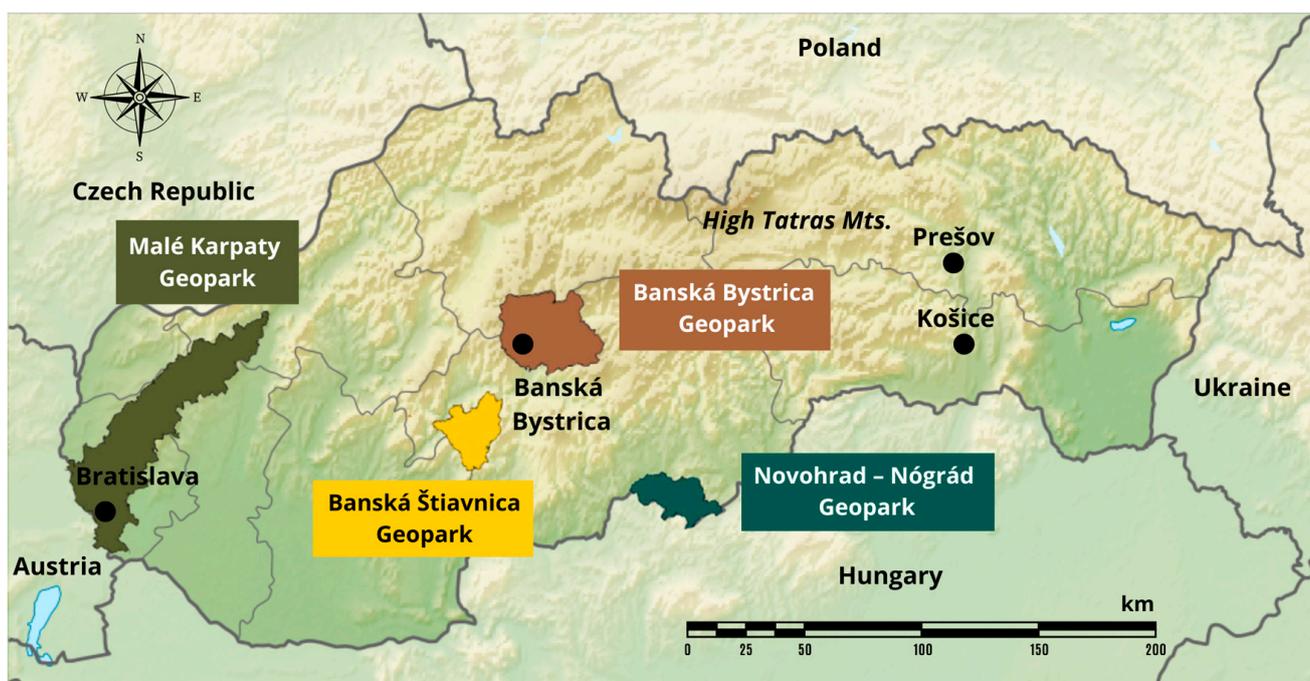


Figure 2. Map of the geoparks of the Slovak Republic. Modified by the authors according to [30].

These geoparks, along with potential future ones, offer a diverse array of territorial presentations and significant sites. They include locations that showcase geological and geomorphological processes of Earth's development, mining heritage sites where historical

human intervention in the natural environment through mining activities can be observed, and mineral deposits. Additionally, these geoparks include natural sites that highlight the relationship between fauna, flora, and abiotic components of nature. Archaeologically significant areas and regions of cultural and historical importance are also featured. Given the variety of attractions these areas provide, their recreational, leisure, and educational value is noteworthy.

4. Management Status within the Slovak Geoparks Network (SGN)

4.1. Management Status of Novohrad–Nógrád Geopark

The legal form of the Novohrad–Nógrád Geopark in the Slovak Republic is an association of legal entities. The geopark focuses on medium-term and short-term operational plans for its activities and projects. There is no need for long-term strategic planning since the fundamental goals and functions of geoparks are outlined in the conceptual and strategic documents that the geopark follows. Within this framework, the geopark develops specific plans such as a financial plan (covering a three-year period), an annual activity plan, a marketing plan, and others.

The organization (geopark) has a well-established structure with clearly defined roles, designated governing bodies, and allocated responsibilities. Notably, in the planning process, feedback is actively solicited and utilized to manage and evaluate processes within the geopark, facilitating continuous improvement. Furthermore, the personnel structure is clearly outlined and visualized in the following graph (Figure 3), depicting the distribution of employees across their respective areas of operation.

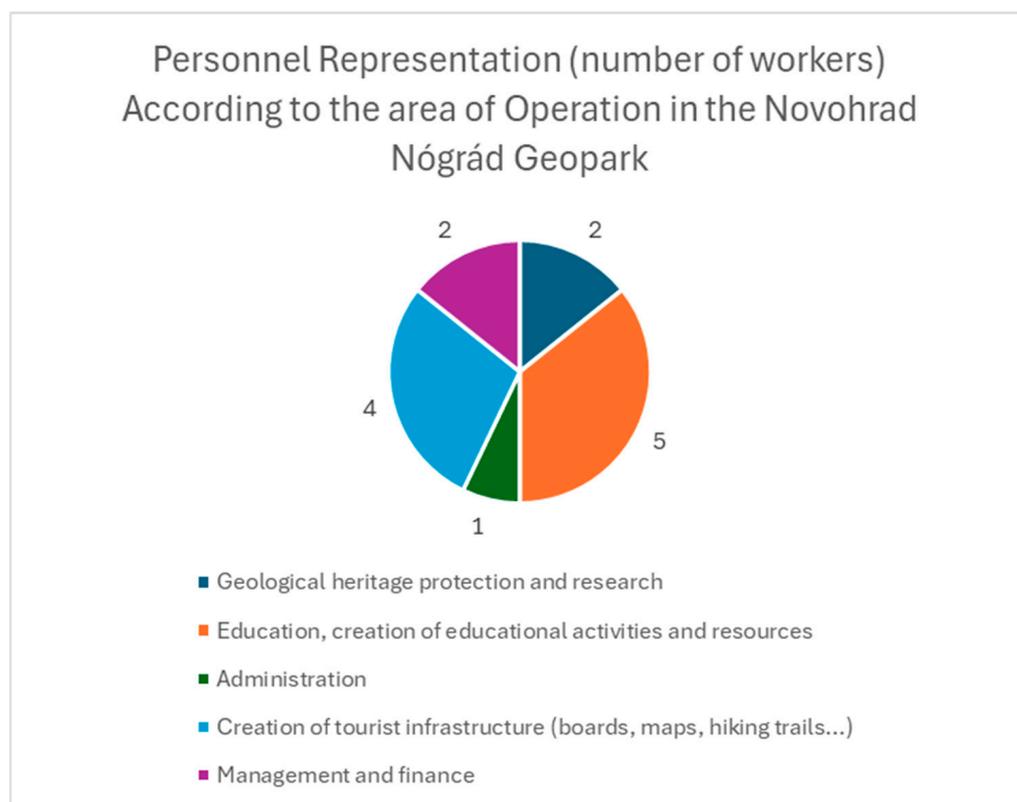


Figure 3. Staff structure in the Novohrad–Nógrád Geopark.

Regarding employment regulations, the workforce structure of the geopark consists of one permanent internal employee, four external employees on fixed-term contracts, and an additional eight contracted workers who are not formally employed. Regarding qualifications, the geopark boasts a 100% representation of qualified personnel. While local residents are not part of the geopark team, one local producer actively collaborated on

activities without using the geopark logo. Partnership establishment, a crucial geopark activity, occurs through contractual agreements, though a drawback is the lack of support from service providers like catering and accommodation facilities. Collaboration with educational institutions covers a diverse portfolio, including preschools, primary schools, secondary schools, and tertiary institutions. Although the initiative for collaboration primarily comes from the geopark towards educational institutions, it signified an active form of communication. Educational offerings include outdoor classes, educational materials, and hiking trails featuring educational signage. Educational activities of the geopark consist of thematic workshops (such as workshops on raw materials, Slovak volcanoes, water systems), summer camps in the geopark, geotouristic activities, gold panning, thematic lectures (e.g., discovering animate and inanimate nature), and thematic quizzes and competitions (for example, the photographic competition “Medveš photomathon” on various topics including mushrooms, landscapes, and animate nature).

Within the operational structure, marketing is a pivotal responsibility managed by a dedicated employee. The geopark maintains an active, user-friendly, and contemporary website complemented by Facebook accounts for disseminating current updates, engaging descriptions of activities, and communicating the geopark’s values. Expanding social media presence, particularly on platforms like Instagram, and strengthening connections with local organizations on social media platforms (to broaden existing networks) could significantly enhance visibility. Furthermore, considering the frequency of post-publishing is essential for maximizing outreach. Developing marketing strategies for product packages represents an untapped opportunity for geoparks. Additionally, the geopark reinforces its visibility through infrastructure elements such as notice boards, the geopark logo, and collaborations with service providers. While the geopark currently offers geotourism and educational activities, plans are in place to diversify and expand these offerings in the future. Significantly, the geopark lacks a portfolio of presentation products and an event plan, areas that warrant attention for future development and promotional efforts.

4.2. Management Status of Banská Štiavnica Geopark

Banská Štiavnica Geopark operates as a civic association. Despite its rich heritage structure, there is a notable deficiency of functional efficiency. The geopark admits to not formulating specific management plans. Its workforce is comprised solely of volunteers, which has affected management effectiveness and organization. Moreover, a clearly defined and managed organizational structure delineating roles and competencies is lacking. Expertise is represented by one employee and another responsible for tourist infrastructure, with no dedicated marketing or management personnel. Residents are not integrated into the framework. Collaboration is restricted to primary and secondary schools and conducted informally. A significant shortfall lies in the absence of partnerships with service providers like catering or accommodation facilities. Education initiatives primarily involve outdoor classes, educational trails, and accompanying materials. While the geopark claims collaboration with residents, it lacks specificity, which is particularly evident in the lack of support for local producers. Inter-geopark collaboration is limited to mutual visits and presentations. A key strategic challenge is the absence of management and marketing oversight, leading to operational inefficiencies. Marketing efforts are limited to leaflet distribution, and a digital presence on social media platforms is lacking. Strategically, the geopark does not offer product packages, missing an opportunity to target specific audience segments effectively. There’s a clear need for concerted efforts to foster collaboration and develop a marketing strategy within the geopark. Future plans involve expanding activities such as geotourism, presentation products, and educational initiatives.

4.3. Management Status of Malé Karpaty Geopark

The Malé Karpaty Geopark, the newest addition to the Slovak Geoparks Network, operates under the auspices of the non-profit organization Barбора. Its management boasts a well-established organizational structure with clearly defined competencies overseen by

a single individual. In terms of planning, the geopark formulates a long-term strategic development plan spanning 5 to 10 years, complemented by medium-term plans covering 3 to 5 years. However, implementation monitoring and feedback mechanisms are absent, which could improve operational efficiency. Plans encompass financial, marketing, and activity-related aspects. From a legal perspective, the geopark's workforce structure comprises three permanent employees and one voluntary worker. The graph below (Figure 4) provides insight into the specific operational areas within the Malé Karpaty Geopark, with residents not included in the team structure.

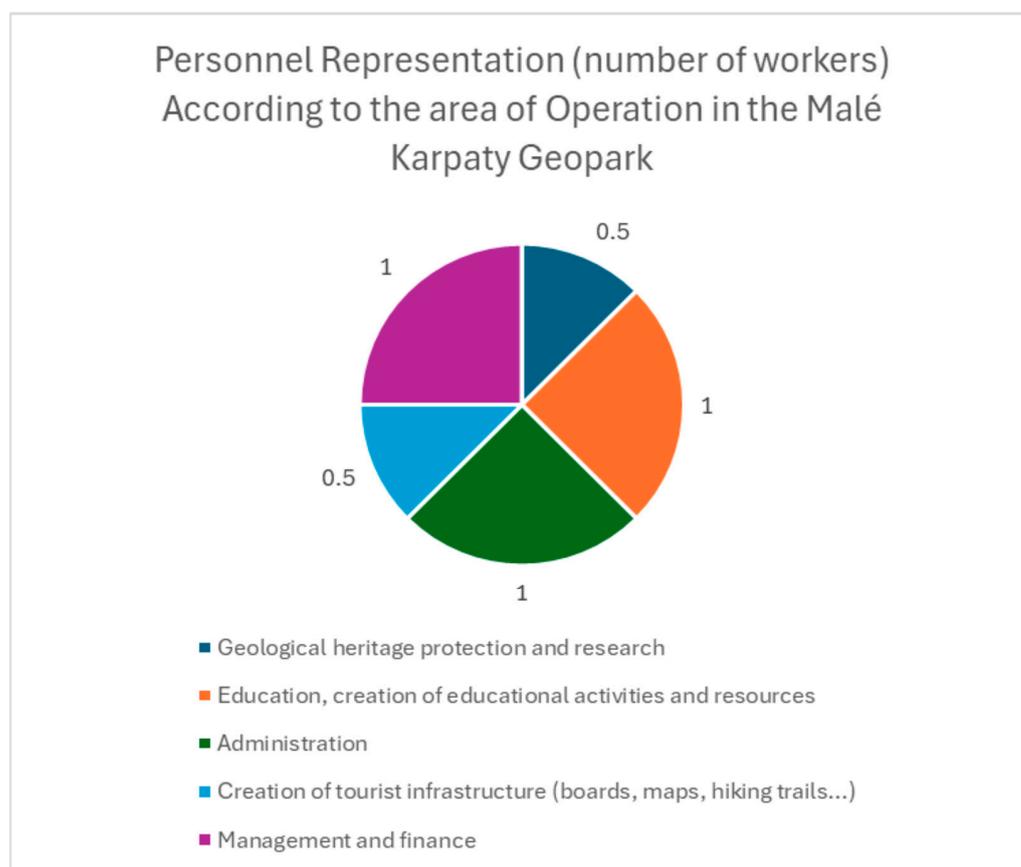


Figure 4. Staff structure in the Malé Karpaty Geopark.

The geopark establishes collaboration both verbally and through contracts with entities within and outside the geopark's territory. Educational institutions, including preschools, primary schools, and universities, are actively involved in partnership activities. Education is delivered through outdoor classes, educational materials, and nature trails. Additionally, the geopark offers alternative educational formats in collaboration with recreational centers, interest groups, Montessori schools, nature kindergartens, and clubs. It has to be mentioned that communication with educational institutions is bilateral and proactive. Examples of educational activities in the Malé Karpaty Geopark include the following:

- Playful geology at the Natural and Mining Open-air Museum Budúcnosť;
- Playful geology at the Geological Museum Barbora;
- Seas hidden in our mountains;
- Journey to the center of the Earth;
- Dinosaurs;
- Fossil and mineral hunting;
- Gold panning;
- Precious gemstone hunting;
- Visiting the underground of the Malé Karpaty Geopark;

- History of the Earth in decorative stones;
- Art competition with various themes.

Additionally, the geopark hosts various cultural events, such as the Geological and Mining Literature Fair; the Story of Rocks and Fossils from Prašník; the Mushroom Festival “Pezinský modrák”; the “Pezinský permoník”—Exhibition of Minerals, Fossils, and Precious Stones; Huncokárske Festivities; and conferences.

Collaboration and support with other geoparks in Slovakia occur through informal partnerships via activities within geopark territories. Marketing efforts are supported by dedicated staff members focused on marketing. Promotion is performed through a sophisticated website and a Facebook account with weekly posts. The geopark’s Facebook account is linked with partner accounts, enhancing visibility. Flyers are also distributed within the geopark’s territory and through partnerships.

The geopark plans to expand its portfolio of geotourism and educational activities and focus on improving representative products. The portfolio of cultural events is clearly defined.

4.4. Management Status of the Banská Bystrica Geopark

Legally, the Banská Bystrica Geopark operates under the purview of a civic association. As per official documentation, the geopark has crafted a 5-year strategic plan alongside an approved organizational framework. This structure outlines responsibilities and the scope of management overseen by a governing body. The geopark diligently monitors plan execution, incorporating feedback for continuous improvement.

The geopark strategically manages various aspects, reflected in detailed plans including a 1-year financial plan, a 5-year marketing strategy, and a 5-year activity plan. Financial support for geopark initiatives stems from diverse sources, including internal funds, project grants, a 2% tax contribution, sponsorships, and membership fees.

The organizational structure comprises seven skilled volunteers (with no resident members) operating independently of formal employment contracts. Figure 5 depicts the distribution of staff members across different functional areas within the geopark.

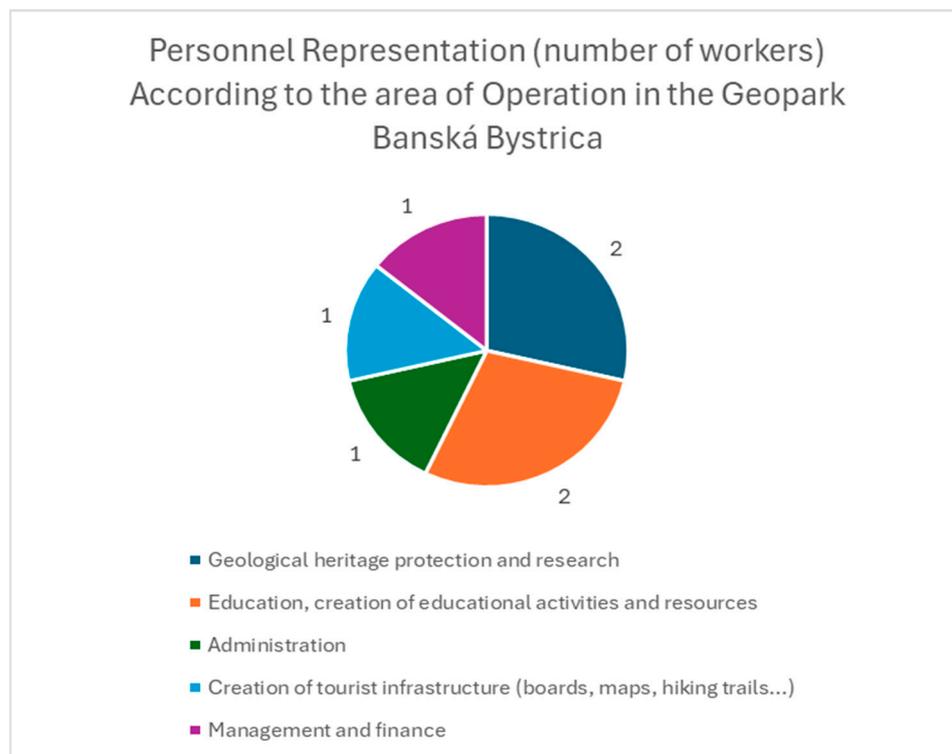


Figure 5. Staff structure in the Banská Bystrica Geopark.

The geopark actively collaborates with external partners, both within and beyond its boundaries, primarily through verbal communication channels. It fosters relationships with educational institutions, often initiating partnerships or responding to proposals from these entities. Educational initiatives span all levels, from primary to tertiary education, offering outdoor classes, educational materials, nature trails, and animated programs tailored to schools within the geopark's vicinity.

Moreover, the geopark supports local producers by endorsing their products with its logo and facilitating activities within the geopark. Regarding the educational and cultural activities in the Banská Bystrica Geopark, visitors can attend events such as the "Imperial Visitation of Mining", workshops (on mining, raw materials, and geology), guided tours, geological excursions, photographic competitions, seminars, and conferences. It also cultivates connections with other geoparks in Slovakia, promoting mutual consultation and coordinated activities.

A dedicated staff member oversees marketing management, devising strategies to increase the geopark's visibility. This involves maintaining an online presence through a website and active engagement on Facebook, with regular updates. The distribution of leaflets within the geopark and through partnerships further amplifies promotional efforts. Using social media platforms, the geopark strengthens collaborations with partners, enhancing its reach and promotion. Additionally, geopark management developed tailored products to cater to diverse demographics, with plans for future growth in geotourism and educational offerings. However, the absence of a portfolio showcasing representative products poses a challenge to brand-building and visibility both locally and beyond the geopark's borders.

5. Discussion

Despite geoparks having existed for several years, an analysis of their management revealed that their current management status needs to align with their period of operation. How geoparks were established and accepted by the local community and stakeholders significantly influences their success. The oldest geopark, Banská Štiavnica, illustrates that local acceptance was initially challenging. The state and its institutions established this difficulty through a top-down approach. Consequently, despite its employees being from the geopark's territory, it faces significant issues with personnel resources and overall functioning. Other geoparks were developed from the ground up, with the local community recognizing their potential and initiating their creation. These geoparks, supported by the local community, do not face personnel resource issues, as shown in Table 1.

Table 1. Management and employees—current state of Slovak geoparks.

Type of Manager/Employee	Novohrad–Nógrád Geopark	Malé Karpaty Geopark	Banská Štiavnica Geopark	Banská Bystrica Geopark
General manager	2	1	1	1
Administration employee	1	1	0	1
Education employee	5	1	0	2
Tourism employee	4	0.5	0	1

The personnel structure of geoparks is largely heterogeneous despite being within the same legislative framework, having similar conditions for accessing financial resources, and sharing comparable geographical locations, partners, and offerings. Although the target groups are almost identical, the number of employees and their tasks vary. From the analysis, we found that many employees are volunteers or enthusiasts in the field of geology, motivated more by personal satisfaction and internal drive than by financial compensation.

The financial coverage of geoparks is weak, as there is no direct subsidy scheme, and geoparks depend solely on membership fees and sponsorships or must obtain financial support through grant schemes. However, these grants do not come at regular intervals

and sometimes are insufficient to cover the needs of the geopark, not only for development but also for basic management.

The offerings of geoparks primarily focus on geotourism, educational activities, and infrastructure development, with almost all geoparks having a similar range of services. However, upon closer examination of the product offerings, we observe a strong emphasis on education, particularly targeting primary and secondary schools. Employees primarily focus on educational and guiding activities. Yet there is a deficiency in offerings that would attract more affluent customers capable of providing the essential financial support for the management's sustenance.

Table 1 shows that in Slovak geoparks, only one manager is present, while the other employees handle administrative tasks and educational and tourism activities. Managers focused on addressing the critical deficiencies or needs of geoparks, which are currently not being fulfilled at all, are absent. These primarily include managers for marketing, financial resources, local development, destination tourism, and collaboration with the local community. These are the main areas in which geoparks should thrive.

The findings reveal that all Slovak geoparks face varying degrees of existential challenges, primarily stemming from inadequate and unprofessional management practices. Numerous scholars [6,18,31–35] scrutinize geoparks' functions, underscoring the significance of effective management strategies. Recent research on geopark management suggests adopting a tailored management model suited to the unique environment of geoparks [19]. This entails directing attention to various management approaches across different activities within the geopark. We advocate for the implementation of an integrated management model grounded in theory. In practical terms, this requires the geopark to recruit qualified professionals capable of applying these management methodologies based on current needs, posing significant challenges. A proficient and knowledgeable workforce is pivotal for ensuring effective management practices.

The model (Figure 6) outlines a management framework covering marketing, finance, project execution, destination management, education, and personnel management. This structured approach aligns with the geopark's requirements and delineates critical focal points for management efforts to achieve desired objectives. Neglecting any facet of management risks compromising activity quality and efficiency and may impede the attainment of strategic goals.

This model implies that the geopark must hire around seven specialists to supervise different management domains. Additionally, it sheds light on the proportion of these managerial roles, elucidating each manager's significance within the overarching management framework. Upon applying this model to the circumstances prevalent in Slovak geoparks, it becomes evident that maintaining entirely professional management across all areas is initially financially unfeasible.

Therefore, we propose to prioritize the dominant management components. Geopark management should be structured as follows: 36% through destination management, 33% through cooperative management, and 31% through marketing management. This suggests that three employees could facilitate geopark management. The following graph (Figure 7) illustrates the streamlined management model by excluding previous partial management components.

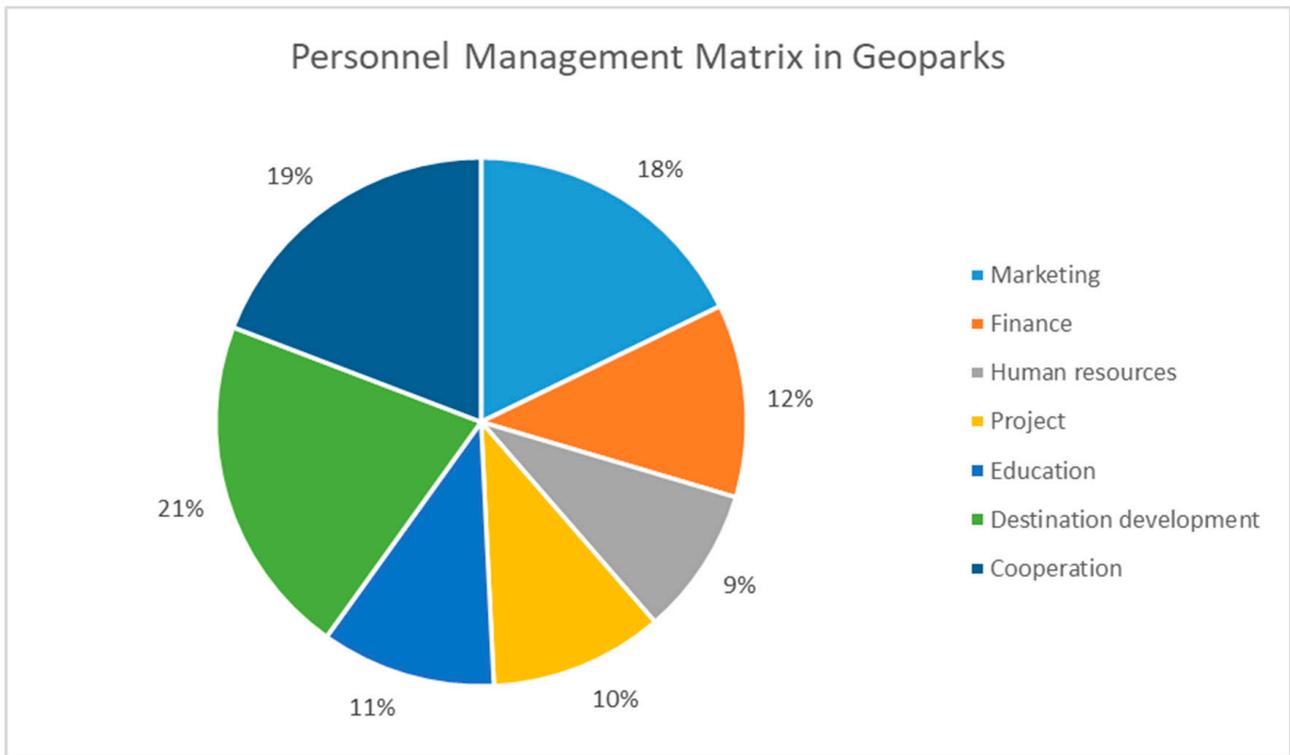


Figure 6. Integrated expanded model of geopark management structure. Processed according to [20].

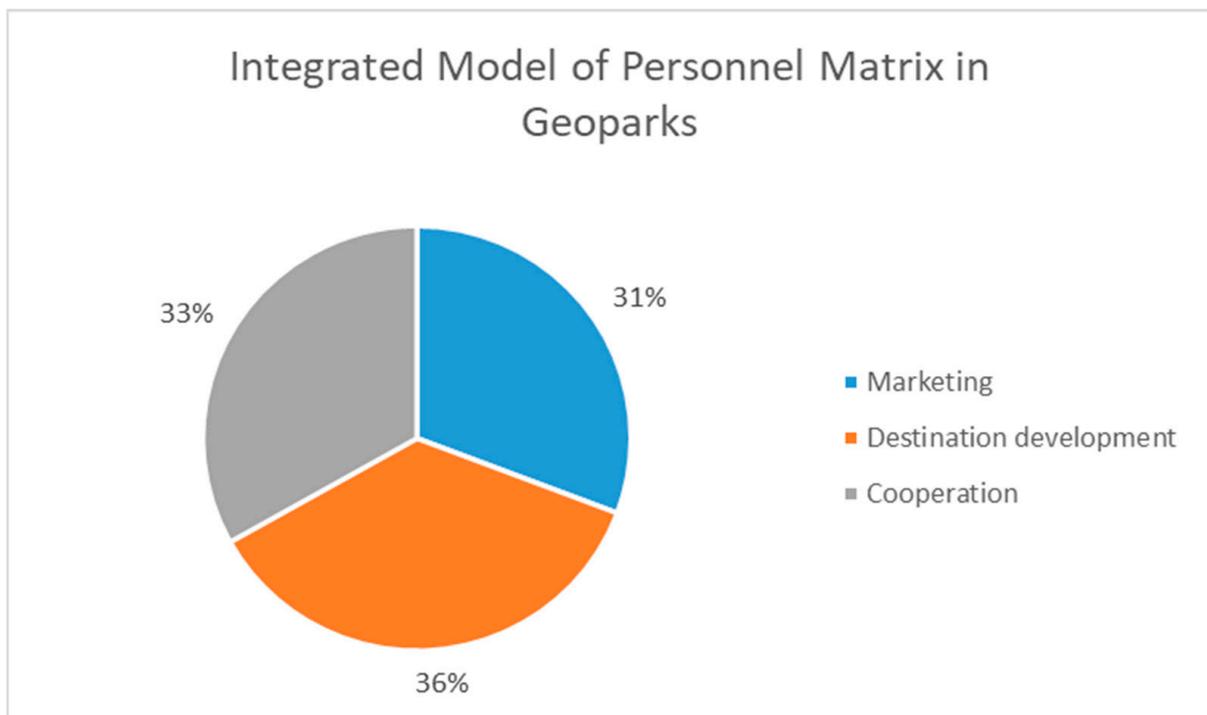


Figure 7. Integrated model of geopark personnel staffing structure. Processed according to [20].

While a geopark shares similarities with a company in certain aspects of its nature and behavior, there are fundamental differences. Unlike a company aiming for profit and financial success, a geopark thrives through cooperation rather than competition. It achieves this by fostering purposeful partnerships and ensuring its territory’s protection and sustainable development. A geopark’s prosperity and development are contingent

upon the support of the local community, as its effectiveness relies heavily on the initiative of local stakeholders [5,36–39].

The integrated model underlines the necessity of managing the geopark as a destination, with the destination manager playing a pivotal role. Collaborating closely with the marketing manager, the destination manager aims to boost the geopark’s value by increasing the standard of living, improving environmental quality and protection, promoting sustainability strategies, and generating overall added value for the territory. Marketing efforts should embrace a broader scope, acknowledging the increasing influence of online platforms as primary sources of information for potential visitors to tourism destinations, including geoparks [40,41]. The cooperative manager, meanwhile, focuses on fostering prosperity through collaboration rather than competition, with the primary goal of establishing purposeful partnerships. Geoparks should assemble a proficient management team in line with the conclusions drawn from the analysis and the developed model.

The proposal for the provision of personnel is founded on the imperative of elevating management skills, ensuring the attainment of all primary geopark objectives while adhering to the minimum staffing requirement. As indicated in Table 2, the distribution of managers and employees is a balanced ratio of 50/50, ensuring coverage of all marketing domains.

Table 2. Management and employees—proposal with the application of integrated management model.

Type of Manager/Employee	Novohrad– Nógrád Geopark	Malé Karpaty Geopark	Banská Štiavnica Geopark	Banská Bystrica Geopark
Destination manager (also manager in regional development field)	1	1	1	1
Marketing manager (also manager in tourism field)	1	1	1	1
Cooperation manager (also manager in finance field)	1	1	1	1
Administration employee	1	1	1	1
Education employee	1	1	1	1
Conservation and research employee (also professional guarantor)	1	1	1	1

The chief manager oversees the geopark’s destination management while concurrently facilitating developmental initiatives. Likewise, the marketing manager operates within the tourism sector, while the cooperation manager is responsible for sourcing vital financial resources for the geopark’s operations. It is important to note that all three managerial positions are responsible for securing financial means within their respective domains to sustain geopark operations, thereby ensuring a steady and diversified financial inflow.

Our initial concern, rooted in the proposal for management professionalization, was the potential for excessive workforce growth. However, these concerns were allayed upon closer examination of role consolidation. In the Novohrad–Nógrád Geopark, the proposal led to a reduction in staff numbers. Regarding labor regulations, the geopark’s workforce structure comprises one permanent internal employee, four external employees on fixed-term contracts, and an additional eight contractual workers who are not formally employed. Although these eight individuals are counted in the geopark’s workforce statistics, they work on a part-time basis with minimal hours. In essence, they collectively perform tasks that would conventionally require 1–2 full-time employees. Some of them may also be volunteers with contractual agreements, albeit unable to fulfill the workload of a full-time employee. At the same time, in the Banská Bystrica Geopark, there was only a marginal

increase of one employee. Regarding Banská Štiavnica Geopark, significant increases are challenging to ascertain due to its non-functional status concerning personnel resources.

The implementation of these management changes should catalyze transformation within Slovak geoparks. A professionalized management structure is expected to foster sustainability and growth, positioning geoparks as instrumental entities in the development of their respective territories. The following text outlines the main strengths and weaknesses of geopark management within the context of the Slovak Republic:

Strengths:

- **Volunteer Support:** The presence of dedicated volunteers aids in the development of geoparks, even during periods without financial resources.
- **Geoheritage Enthusiasts:** Individuals passionate about geoheritage can effectively manage geoparks without financial support.
- **Collaborative Efforts:** Partnerships with organizations responsible for state-level protection enhance the management and conservation efforts.
- **Geoscience Education:** Enthusiasts in geosciences play a crucial role in engaging and inspiring visitors.

Weaknesses:

- **Inconsistent Funding:** Management operations suffer from a lack of stable financial support.
- **Lack of Professional Management:** Geoparks are hindered by the absence of professional full-time managers.
- **Limited Local Community Engagement:** The connection with the local community is weak and not formalized through contracts, impacting collaborative efforts.
- **Inadequate Professional Marketing:** There is a significant deficiency in professional marketing strategies.

Generally, geoparks all around the world have diverse staffing structures and capacities, but all UNESCO Global Geoparks require a core staff—relying solely on volunteers is insufficient for managing a UNESCO designation.

In comparison to the situation in Slovakia, it is noteworthy that, for example, in the Adamelli Brenta UNESCO Global Geopark, Italy, there are 35 staff members, including 1 geoscientist. The Geopark is supervised by the Natural Park Authority, which serves as the responsible body. This authority establishes the legal framework, sets the strategic partnerships, manages the budgets, and other related tasks [42].

Similarly, in France, geoparks receive financial support from the state. The Luberon UNESCO Global Geopark employs 37 full-time staff members, including 2 geologists, to manage its operations [43].

In neighboring Poland, the Holy Cross Mountains Geopark is overseen by the Local Authority for Kielce. It operates under a formal cooperation agreement among five municipalities, organized into the Association of Municipalities known as “Geoland Świętokrzyski”. The geopark employs a team of 10 staff members, including 3 geoscientists: 4 from member municipalities, 1 from a partner organization (a member of the Geopark Management Board) and five educators based at the Geoeducation Center in Kielce [44].

The situation in the Czech Republic resembles that of Slovakia to some extent. In the Bohemian Paradise UNESCO Global Geopark, there are two staff members, including one geoscientist, funded by a partner, along with one part-time contractor. The geopark’s financial stability, bolstered by diverse funding sources and fixed incomes, was affected by the reduction of subsidy programs due to the COVID-19 pandemic [45].

Another example is the Copper Coast Geopark in Ireland, which operates as a volunteer-driven community organization under a Company Limited by Guarantee with charitable status. It functions as a non-profit social enterprise focused on community development through sustainable tourism and partnerships. The Geopark team comprises two full-time employees (a manager/geologist and a visitor center manager), along with one part-time administrative assistant, supplemented by voluntary guides and workers [46].

The Spanish Maestrazgo Cultural Park UNESCO Global Geopark has two staff members, including one geoscientist. The management entity is an association composed of 43 municipalities and 6 county councils [47].

In contrast to European geoparks, staffing in China differs significantly. For instance, the Wudalianchi UNESCO Global Geopark employs 1801 individuals. The Geopark has achieved robust financial stability with balanced payments. In 2023, it generated tourism revenue totaling 0.27 billion Chinese Yuan [48].

In another Chinese geopark, the Tianzhushan UNESCO Global Geopark, there are 256 employees, including 6 geoscientists, 41 administrative staff, over 140 forestry staff and rangers, and operational staff, showcasing a robust organizational framework. The Tianzhushan Global Geopark Administration Committee oversees planning, administration, protection, and geopark development. The Geoheritage Protection Office was established by the Committee in 2011 [49].

The Unzen Volcanic Area UNESCO Global Geopark in Japan has 21 staff members, including 5 geoscientists, with 5 dedicated exclusively to Geopark management. The financial situation remains stable, with consistent budget allocations from the three cities within the geopark's jurisdiction [50].

It is evident that the number of employees in geoparks varies significantly. Central European geoparks often operate with just 2–3 employees, whereas Western European geoparks usually have 30–40 staff members. China stands out with hundreds of employees. These differences are due to the size of the geopark territories and their visitor numbers, where European geoparks cannot compare with those in China.

State support plays a crucial role in enabling geoparks to expand their staff, professionalize management, and enhance marketing strategies to attract more visitors and increase revenues. This creates a positive cycle, but insufficient funding hinders the hiring of professional managers essential for geopark development and sustainability. Establishing effective management becomes a catalyst for further geopark growth. Observations from Slovak geoparks underscore the need for state support, especially in ensuring skilled staffing. Effective management, supported by strong marketing, quality offerings, and advertising, can draw adequate visitors and partners, securing the financial resources necessary for the geopark's sustainability and longevity.

Currently, the concept of sustainability is an essential part of the functioning of any sphere, as confirmed by many authors [51–56] who address this issue. The concept of geoparks and sustainability are closely linked, and their invaluable importance and relevance as a modern geotourism product are highlighted by many studies [57–64].

6. Conclusions

Tourism is rapidly evolving today, driving demand for a wide range of recreational, educational, sports, and similar activities, all supported by secondary offerings. Geoparks, as sustainable tourism products, provide answers to how we can mitigate the negative impacts of tourism. The growing trend of establishing and backing geoparks necessitates a well-defined management structure tailored to their specific needs. Before delving into the analysis, it is crucial to build a theoretical foundation that outlines the management aspects within geoparks. This approach sheds light on the operational conditions of geoparks in Slovakia, offering an in-depth perspective on effective management practices.

The article provides precise delineations regarding the staffing requirements for geoparks based on an up-to-date analysis of geoparks and their needs, along with the implementation of an integrated management framework. As a foundational element for the proficient administration of geoparks, geoparks should enlist managers with expertise in destination management, marketing, and cooperative management. Additionally, other members within the geopark should actively contribute to achieving its core objectives, including protection, education, presentation, and regional development. This carefully created team possesses the capability to efficiently oversee a geopark, guided by a vision of sustainability and advancement.

The research limitation is its exclusive focus on Slovak geoparks. However, other European geoparks with comparable legislative frameworks and management systems could generalize the proposed management model.

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References

- Ólafsdóttir, R.; Tverijonaite, E. Geotourism: A systematic literature review. *Geosciences* **2018**, *8*, 234. [CrossRef]
- Ólafsdóttir, R.; Dowling, R. Geotourism and Geoparks—A tool for geoconservation and rural development in vulnerable Arctic environments. A case study from Iceland. *Geoheritage* **2014**, *6*, 71–87. [CrossRef]
- Dowling, R.; Newsome, D. *Handbook of Geotourism*; Edward Elgar Publishing Limited: Cheltenham, UK, 2018; p. 520. ISBN 9781785368851.
- Hose, T.A.; Vasiljevic, D. Defining the Nature and Purpose of Modern Geotourism with Particular Reference to the United Kingdom and South-East Europe. *Geoheritage* **2012**, *4*, 25–43. [CrossRef]
- Halim, S.A.; Ishak, N.A. Examining Community Engagement in Heritage Conservation through Geopark Experiences from the Asia Pacific Region. *Kaji. Malays.* **2017**, *35*, 11–38. [CrossRef]
- Farsani, N.T.; Coelho, C.; Costa, C.; Amrikazemi, A. Geo-knowledge Management and Geoconservation via Geoparks and Geotourism. *Geoheritage* **2014**, *3*, 185–192. [CrossRef]
- Zouros, N. Lesvos Petrified Forest geopark, Greece: Geoconservation, Geotourism and Local development. *J. Parks Prot. Areas Cult. Sites* **2010**, *27*, 19–28.
- Wang, J.; Zouros, N. Educational Activities in Fangshan UNESCO Global Geopark and Lesvos Island UNESCO Global Geopark. *Geoheritage* **2021**, *13*, 51. [CrossRef]
- Pförr, C.; Dowling, R.; Newsome, D. Geotourism: A sustainable development alternative for remote locations in Western Australia? In *Resource Curse or Cure: On the Sustainability of Development in Western Australia*; Brueckner, M., Durey, A., Mayes, R., Pförr, C., Eds.; Springer: Berlin/Heidelberg, Germany, 2014; pp. 153–164.
- Farsani, N.T.; Coelho, C.; Costa, C. Rural geotourism: A new tourism product. *Acta Geoturistica* **2013**, *4*, 1–10.
- Knoshraftar, R. Geoparks: Research and Pedagogical Values. In Proceedings of the The 1 Symposium on Iran’s Geoheritage, Tehran, Iran, 23 January 2013.
- UNESCO. *Statutes of the International Geoscience and Geoparks Programme and Operational Guidelines for UNESCO Global Geoparks*; UNESCO: Paris, France, 2015; 16p, Available online: <https://unesdoc.unesco.org/ark:/48223/pf0000260675> (accessed on 1 April 2023).
- UNESCO. World Heritage Centre. 2017. Available online: <https://unesdoc.unesco.org/search/6d1ae112-16f9-4dea-872f-4667a8427ab0> (accessed on 30 April 2023).
- GGN. About GGN. 2015. Available online: https://globalgeoparksnetwork.org/wp-content/uploads/2015/03/Geoparks_Guidelines_Jan2014.pdf (accessed on 30 April 2023).
- Pásková, M. *Udržitelnost Rozvoje Cestovního Ruchu*, 2nd ed.; Gaudemus: Hradec Králové, Czech Republic, 2009; p. 172.
- Fauzi, N.S.M.; Misni, A. Geoheritage Conservation: Indicators Affecting the Condition and Sustainability of Geopark—A Conceptual Review. *Procedia Soc. Behav. Sci.* **2016**, *222*, 676–684. [CrossRef]
- UNESCO. Revalidation Process of UNESCO Global Geoparks. 2017. Available online: http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/IGGP_UGG_Statutes_Guidelines_EN.pdf (accessed on 11 May 2023).
- Henriques, M.H.; Brilha, J. UNESCO Global Geoparks: A Strategy towards Global Understanding and Sustainability. *Episodes* **2017**, *40*, 349–359. [CrossRef]
- Larwood, J.G.; Badman, T.; McKeever, P.J. The Progress and Future of Geoconservation at a Global Level. *Proc. Geol. Assoc.* **2013**, *124*, 720–730. [CrossRef]
- Kornecká, E.; Molokáč, M.; Gregorová, B.; Čech, V.; Hronček, P.; Javorská, M. Structure of Sustainable Management of Geoparks through Multi-Criteria Methods. *Sustainability* **2024**, *16*, 983. [CrossRef]

21. Nevřelová, M.; Ružek, I. Geoparky—Potenciál pre exteriérovú výučbu predmetov Geografia a Biológia. *Sci. Educ.* **2017**, *8*, 81–96. [CrossRef]
22. Definition of Protected Landscape Area. Available online: <http://uzemia.enviroportal.sk/about#CHKO> (accessed on 15 January 2023).
23. Press Release, the Ministry of Environment of the Slovak Republic from 6 December 2016. Available online: <https://www.minzp.sk/tlacovy-servis/tlacove-spravy/tlacove-spravy-2016/tlacove-spravy-december-2016/mzp-sr-vyhlasilo-siet-geoparkov-slovenska.html> (accessed on 16 April 2023).
24. Logo of the Geoparks Network of the Slovak Republic. Available online: https://www.geopark.sk/wp-content/uploads/2022/01/SGSR_Black_Grey_sk.png (accessed on 1 April 2023).
25. Draft Concept of Geoparks of the Slovak Republic. Available online: <https://www.geopark.sk/wp-content/uploads/2019/08/1.pdf> (accessed on 11 April 2023).
26. Concept of Geoparks in the Slovak Republic. Available online: <https://www.geopark.sk/wp-content/uploads/2018/12/03-vlastnymat.pdf> (accessed on 10 April 2023).
27. Updated Concept of Geoparks in the Slovak Republic. Available online: <https://www.geopark.sk/wp-content/uploads/2018/12/03vlastnymat2015.pdf> (accessed on 19 April 2023).
28. Information on the Implementation of the Updated Concept of Geoparks in the Slovak Republic. Available online: <https://www.geopark.sk/informacia-o-plneni-aktualizacie-koncepcie-geoparkov-sr/> (accessed on 19 April 2023).
29. Methodology for Destination Management. Available online: <https://www.geopark.sk/wp-content/uploads/2018/12/Metodika-pre-destinacny-manazment-geoparku.pdf> (accessed on 19 April 2023).
30. Relief Map of Slovakia with Marked Geoparks. Available online: <https://www.geopark.sk/> (accessed on 17 April 2023).
31. Hose, T.A. Selling the Story of Britain’s Stone. *Environ. Interpret.* **1995**, *10*, 16–17.
32. Hose, T.A. Geotourism—Selling the Earth to Europe. In *Engineering Geology and the Environment*; CRC Press: Boca Raton, FL, USA, 1997.
33. Hose, T.A. European Geotourism—Geological Interpretation and Geoconservation Promotion for Tourists. In *Geological Heritage: Its Conservation and Management*; IGME: Madrid, Spain, 2000; pp. 127–146.
34. UNESCO. UNESCO Geoparks Programme Feasibility Study. Paris. 2000. Available online: <https://unesdoc.unesco.org/ark:/48223/pf0000120350?posInSet=1&queryId=c6e52c75-f677-4510-88e4-b999d3d07158> (accessed on 12 April 2023).
35. National Geographic 2023. Geotourism Principles. Available online: <https://www.nationalgeographic.com/maps/article/geotourism-principles> (accessed on 12 April 2023).
36. Zouros, N.; Valiakos, I. Geoparks Management and Assessment. *Bull. Geol. Soc. Greece* **2010**, *43*, 965–977. [CrossRef]
37. Turner, S. Geoheritage and Geoparks: One (Australian) Woman’s Point of View. *Geoheritage* **2013**, *5*, 249–264. [CrossRef]
38. Norris, L.; Sanders, D.; Dowling, R. Geotourism product development and stakeholder perceptions: A case study of a proposed geotrail in Perth. *West. Aust. J. Ecotourism* **2014**, *13*, 52–63. [CrossRef]
39. Fyall, A.; Garrod, B. Destination management: A perspective article. *Tour. Rev.* **2020**, *75*, 165–169. [CrossRef]
40. Wang, Y.; Xiang, Z. Toward a theoretical framework of collaborative destination marketing. *J. Travel Res.* **2007**, *46*, 75–85. [CrossRef]
41. Molokáč, M.; Kornecká, E.; Pavolová, H.; Bakalár, T.; Jesenský, M. Online Marketing of European Geoparks as a Landscape Promotion Tool. *Land* **2023**, *12*, 803. [CrossRef]
42. GGN Italy Geopark Annual Report. 2022. Available online: https://globalgeoparksnetwork.org/wp-content/uploads/2023/03/AdamelloBrenta_UGG_Annual_Report_2022-.pdf (accessed on 16 July 2024).
43. GGN France Geopark Annual Report. 2020. Available online: https://globalgeoparksnetwork.org/wp-content/uploads/2021/06/Luberon_UGG_Annual_Report_2020.pdf (accessed on 16 July 2024).
44. GGN Poland Geopark Annual Report. 2023. Available online: <https://globalgeoparksnetwork.org/wp-content/uploads/2024/04/Holy-Cross-Mts.-UGGp-Poland.pdf> (accessed on 16 July 2024).
45. GGN Czechia Geopark Annual Report. 2021. Available online: https://globalgeoparksnetwork.org/wp-content/uploads/2022/05/Bohemian_Paradise_Annual_report_2021.pdf (accessed on 16 July 2024).
46. GGN Ireland Geopark, Annual Report 2020. Available online: http://www.globalgeopark.org/UploadFiles/2020_11_3/Copper-Coast_UGG_Annual_Report_2020.pdf (accessed on 16 July 2024).
47. GGN Spain Geopark Annual Report. 2023. Available online: https://globalgeoparksnetwork.org/wp-content/uploads/2024/05/Maestrazgo_UGG_Annual_Report_2023.pdf (accessed on 16 July 2024).
48. GGN Wudlianchi China Geopark Annual Report. 2023. Available online: <https://globalgeoparksnetwork.org/wp-content/uploads/2024/03/2023Wudlianchi-UNESCO-Global-Geopark-Annual-Report-.pdf> (accessed on 16 July 2024).
49. GGN Tianzhushan China Geopark Annual Report. 2023. Available online: https://globalgeoparksnetwork.org/wp-content/uploads/2024/03/TianzhushanUGGp_Annual_Report_2023.pdf (accessed on 16 July 2024).
50. GGN Japan Geopark Annual Report. 2023. Available online: https://globalgeoparksnetwork.org/wp-content/uploads/2024/04/UnzenVolcanicArea_UGG_Annual_Report_2023.pdf (accessed on 16 July 2024).
51. Bramwell, B.; Lane, B. Sustainable tourism: An evolving global approach. *J. Sustain. Tour.* **1993**, *1*, 1–5. [CrossRef]
52. Clarke, J. A framework of approaches to sustainable tourism. *J. Sustain. Tour.* **1997**, *5*, 224–233. [CrossRef]
53. Butler, R.W. Sustainable tourism: A state-of-the-art review. *Tour. Geogr.* **1999**, *1*, 7–25. [CrossRef]

54. Byrd, E.T. Stakeholders in sustainable tourism development and their roles: Applying stakeholder theory to sustainable tourism development. *Tour. Rev.* **2007**, *62*, 6–13. [[CrossRef](#)]
55. Lane, B. Thirty years of sustainable tourism: Drivers, progress, problems—And the future. In *Sustainable Tourism Futures*; Routledge: Abingdon-on-Thames, UK, 2009; pp. 39–52.
56. Yoopetch, C.; Nimsai, S. Science Mapping the Knowledge Base on Sustainable Tourism Development, 1990–2018. *Sustainability* **2019**, *11*, 3631. [[CrossRef](#)]
57. Canesin, T.; Brilha, J.; Díaz-Martínez, E. Best Practices and Constraints in Geopark Management: Comparative Analysis of Two Spanish UNESCO Global Geoparks. *Geoheritage* **2020**, *12*, 14. [[CrossRef](#)]
58. Rios, C.; Amoroch, R.; Villarreal Jaimes, C.; Mantilla, W.; Velandia, F.; Castellanos, O.; Muñoz, S.I.; Atuesta, D.; Jerez, J.H.; Acevedo-Charry, O.; et al. Chicamocha Canyon Geopark project: A novel strategy for the socio-economic development of Santander (Colombia) through geoeducation, geotourism and geoconservation. *Int. J. Geoheritage Parks* **2020**, *8*, 96–122. [[CrossRef](#)]
59. Özgeriş, M.; Karahan, F. Use of geopark resource values for a sustainable tourism: A case study from Turkey (Cittaslow Uzundere). *Environ. Dev. Sustain.* **2021**, *23*, 4270–4284. [[CrossRef](#)]
60. Ibrahim, M.S.; Abdul Halim, S.; Ishak, M.; Hassan, S. The local community awareness on Langkawi UNESCO Global Geopark Status: Case of Kampung Padang Puteh, Langkawi, Malaysia. *Int. J. Geoheritage Parks* **2021**, *9*, 233–241. [[CrossRef](#)]
61. Wu, L.; Jiang, H.; Chen, W.; Peng, W. Geodiversity, Geotourism, Geoconservation, and Sustainable Development in Xiangxi UNESCO Global Geopark—A Case Study in Ethnic Minority Areas. *Geoheritage* **2021**, *13*, 99. [[CrossRef](#)]
62. Deng, L.H.; Zou, F.H. Geotourism and geoparks for sustainable rural development and poverty alleviation: Huanggang Dabieshan UNESCO Global Geopark, China. *Aust. J. Earth Sci.* **2021**, *69*, 286–301. [[CrossRef](#)]
63. Xu, K.; Wu, W. Geoparks and Geotourism in China: A Sustainable Approach to Geoheritage Conservation and Local Development—A Review. *Land* **2022**, *11*, 1493. [[CrossRef](#)]
64. Briggs, A.; Dowling, R.; Newsome, D. Geoparks—Learnings from Australia. *J. Tour. Futures* **2023**, *9*, 351–365. [[CrossRef](#)]

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