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# Participative strategic analysis. Tourism observatory of Holguin destination, Cuba

## Análisis estratégico participativo. Observatorios turísticos sostenibles en el destino Holguín, Cuba

**Lianet Suárez-Cuba[1*], Arle Cruz-Sintes[2], Miguel Ángel González Infante[3] & Marilka Iserns-Escalona[4].**

[1] Student of the Bachelor's Degree in Tourism, Department of Tourism, University of Holguín, Holguín, Cuba.
* Corresponding author: lianetsc02@gmail.com
[2] Master of Science, Holguín Tourism Delegation, Holguín, Cuba.
[3] Bachelor in Tourism, Department of Tourism, University of Holguín, Holguín, Cuba.
[4] Student of the Bachelor's Degree in Tourism, Department of Tourism, University of Holguín, Holguín, Cuba.

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**ABSTRACT**

Tourism observatories in Holguin play a key role in collecting and analyzing information to enhance decision-making in the tourism sector. This study aims to identify the strengths, weaknesses, opportunities, and threats (SWOT) of these observatories to improve their planning and management within sustainable tourism. A comprehensive review of the literature on tourism observatories and sustainable tourism was conducted, and the SWOT analysis was utilized to evaluate these observatories. Several strengths were identified in Holguin, such as its strategic location, specialized personnel in tourism management, and the capacity to collect and process relevant information about tourism in the destinations. However, weaknesses were also noted, including a lack of funding and resources, limited data processing capabilities, a shortage of trained personnel in information management and data analysis, and insufficient collaboration with other stakeholders in the tourism destination. Opportunities were identified, such as collaboration with academic institutions and research, the adoption of innovative technologies, and the formation of partnerships with tourism companies to implement sustainable measures. Threats included economic and political changes in Cuba, competition from other tourist destinations, and shifts in tourist preferences and behaviors. These findings could be utilized by the managers of the observatories to make informed decisions and enhance their effectiveness and efficiency. It is essential to address the identified weaknesses and capitalize on the opportunities to achieve sustainable tourism in Holguin.

**Keywords:** Tourism observatories, SWOT, tourism destination, Cuba, tourism, sustainability, tourism information.

**RESUMEN**

Los observatorios turísticos en Holguín desempeñan un papel clave al recopilar y analizar información para mejorar las decisiones en el sector turístico. Este estudio busca identificar las fortalezas, debilidades, oportunidades y amenazas (DAFO) de estos observatorios con el objetivo de mejorar su planificación y gestión dentro del turismo sostenible. Una revisión exhaustiva de la literatura sobre observatorios turísticos y turismo sostenible fue realizada y se utilizó el análisis DAFO para evaluar estos observatorios. Se encontraron varias fortalezas en Holguín, como su ubicación estratégica, personal especializado en la gestión del turismo y capacidad para recopilar y procesar información relevante sobre el turismo en los destinos. Sin embargo, también se identificaron debilidades relacionadas con la falta de financiamiento y recursos, capacidad de procesamiento de datos limitada, escasez de personal capacitado en la gestión de la información y análisis de datos y falta de colaboración efectiva con otros actores del destino turístico. Se identificaron oportunidades, como la colaboración con instituciones académicas e investigación, adopción de tecnologías innovadoras y formación de alianzas con empresas turísticas para implementar medidas sostenibles. Se observaron amenazas como cambios económicos y políticos en Cuba, la competencia de otros destinos turísticos y cambios en las preferencias y comportamientos de los turistas. Estos hallazgos podrían ser utilizados por los gestores de los observatorios para tomar decisiones informadas y mejorar su eficacia y eficiencia. Es importante abordar las debilidades identificadas y aprovechar las oportunidades para lograr un turismo sostenible en Holguín.

**Palabras clave:** Observatorios turísticos, DAFO, destino turístico, Cuba, turismo, sostenible, información turística.

## INTRODUCTION

Sustainable tourism has become a priority for many tourist destinations worldwide due to its impact on the environment, economy, and local society. Sustainable tourism observatories have emerged as effective tools for monitoring and evaluating the impact of tourism in a region, as well as for planning and managing sustainable tourism.

The tourism industry in Cuba has experienced significant growth in recent years, becoming one of the country's most important economic sectors. However, Cuba, like many other tourist destinations, faces significant challenges in the effective implementation of sustainable tourism. To ensure the long-term sustainability and competitiveness of the tourism sector, Cuban policy has promoted the establishment of tourism observatories as an important tool for the management and development of the sector. Nevertheless, the implementation of tourism observatories in Cuba faces several challenges, including a lack of investment, insufficient trained personnel, infrastructure issues, limited collaboration, and a lack of quality data. Therefore, it is crucial to identify the determining factors for the management of tourism observatories in Cuba, specifically in the Holguin destination, and to propose effective solutions to address these challenges.

This article presents a strategic analysis of the current situation regarding the management of tourism observatories in Cuba, discusses the main barriers and challenges faced in implementing sustainable tourism observatories, particularly in the Holguin tourist destination, and proposes recommendations for improvement. The results of this study can be highly beneficial for decision-makers, researchers, and professionals in the tourism sector in Cuba and in other countries facing similar challenges.

## LITERATURE REVIEW

Sustainable tourism has become a priority for many tourist destinations worldwide due to its impact on the economy, local society, and the environment (Kalaitan et. al., 2021). According to González-Infante et. al. (2021), sustainable tourism is defined as a form of tourism that takes into account the economic, social, and environmental impacts of tourism, aiming to maximize benefits while minimizing negative effects. Sustainable tourism focuses on planning and managing tourism in a way that maintains a balance between the needs of tourists and those of local communities and the environment (Céron & Dubois, 2003). This highlights the increasing need for statistical information for all stakeholders directly or indirectly involved in tourism.

According to Godínez (2014), tourism information is no longer solely the purview of public administrations for defining tourism policies and action plans; it is of interest to multiple stakeholders who require access to and analysis of information for rational decision-making regarding marketing plans, sector investments, strategy design, identification of new tourism products, human resource development, market analysis, and other related issues. Additionally, it promotes knowledge management and innovation according to the interests of different stakeholders (Censi Borges et. al., 2021). The benefits of tourism activities will be greater when timely, systematic, and reliable information is available to facilitate the systematic monitoring of sustainability and the impact of tourism, thereby improving the management of sustainable tourism.

In this regard, sustainable tourism observatories have been established as effective tools for monitoring and evaluating the impact of tourism in a region, as well as for planning and managing sustainable tourism (Farinha et. al., 2019). Sustainable tourism observatories can collect relevant information about tourism, analyze the data gathered, and utilize it for decision-making in the planning and management of sustainable tourism (Oliveira et. al., 2019). These observatories can be used by tourism authorities and other stakeholders to obtain real-time information about the impact of tourism and to identify areas that require improvement (Bertocchi et. al., 2021).

At the same time, tourism observatories promote the development of conceptual and methodological frameworks for planning and managing sustainable tourism in other regions (Bienvenido-Huertas et. al., 2020). Furthermore, collaboration with academic and research institutions, the use of innovative technologies, and

the establishment of partnerships with tourism companies and organizations can enhance the effectiveness and efficiency of tourism observatories (Alvares et. al., 2020; Barandiarán et. al., 2019; Fantoni Alvares et. al., 2020).
Tourism observatories are entities or institutions responsible for collecting, analyzing, and disseminating relevant information about tourism activities in a specific destination or region (Rivas Bravo et. al., 2019).

According to Ribeiro dos Santos & Mendes Pinheiro (2019), they are a tool for tourism intelligence that, through data collection, allows for the observation of reality and analysis of dynamics in tourist destinations. By employing ICT, the data is processed and presented in the form of tables, graphs, maps, and statistical indicators that facilitate the study and monitoring of tourism behavior, as well as its effects on the economy, environment, and society, providing this information to all stakeholders in a tourist destination.

Sustainable tourism observatories are the result of a clear evolution from traditional tourism observatories. According to Molina Velásquez & Báez Alcocer (2017), tourism observatories emerged in the 1980s, but it was not until the early 2000s that there was a significant increase in the establishment of tourism observatories at the international level. In 2004, the World Tourism Organization (WTO) created the International Network of Sustainable Tourism Observatories to monitor the economic, environmental, and social impacts of tourism in destinations. Following this milestone, the number of observatories for this purpose began to increase globally. Another finding of this study is that the diversity of tourism observatories varies based on their level (national, regional, local) and the modalities for which they were created, with only 77% of these still operational; the remainder has struggled to maintain operations primarily due to a lack of funding.

Existing literature has identified several key factors for the management of tourism observatories. In a study conducted by Censi Borges et. al. (2021), the importance of investment in technology and digitalization for the effective implementation and management of a tourism observatory is emphasized. Additionally, it is noted that a lack of investment could be one of the main obstacles to the creation of high-quality tourism observatories (Molina Velásquez & Báez Alcocer, 2017).

Moreover, other studies have highlighted the importance of having trained personnel and human resources for the management of tourism observatories. According to Bregolin et. al. (2019), the lack of trained personnel in statistics, data analysis, and information technology could limit a tourism observatory's capacity to efficiently collect and analyze data.

On the other hand, collaboration among different stakeholders in the tourism sector is a determining factor for the success of a tourism observatory. A study by Bertocchi et. al. (2021) emphasized the importance of public-private collaboration for the effective implementation and management of a tourism observatory. Similarly, Blasco Franch & Cuevas Contreras (2013) stressed the need for effective collaboration and coordination among various stakeholders in the tourism sector to create and maintain an effective tourism observatory.

## Sustainable tourism observatories in Cuba

In Cuba, tourism has been an important sector of the economy for decades, and the government has established policies and strategies to develop sustainable tourism (Díaz-Pompa et. al., 2020) with the aim of ensuring balanced and sustainable economic growth while minimizing the negative impact of tourism on the environment and local communities. Cuba's tourism policy has focused on promoting sustainable and responsible tourism and has established a series of measures to ensure the protection of the country's cultural and natural heritage (Leyva Fernández et. al., 2017).

In this context, Cuba aims to ensure sustainable development in line with the objectives and goals of the National Economic and Social Development Plan (PNDES) until 2030. This plan outlines six strategic pillars that will structure, concretize, and implement the development strategy, ultimately achieving the national vision (Ministerio de Economía y Planificación, 2019). At the same time, it identifies 11 strategic sectors, including tourism. This important sector represents a potential source of foreign revenue for the country's economic and

social development. Additionally, it exerts a spillover effect on other economic activities, such as food production and industrial and service activities, while also contributing to job creation in various territories (Ministerio de Economía y Planificación, 2019). Finally, the PNDES is closely aligned with the Sustainable Development Goals (SDGs) as part of the Cuban state's commitment to adopting the 2030 Agenda.

From the perspective of sustainable tourism and the role that tourism observatories play in this regard, the PNDES 2030 provides necessary arguments to promote the creation and development of sustainable tourism observatories throughout the Cuban tourist destination. Firstly, from a governmental standpoint, it aims to ensure a transparent, agile, effective, and efficient public administration system; improve mechanisms for public access to information to ensure accountability at all levels; achieve territorial development by strengthening planning and management capabilities, social actor participation, and coordination with other state entities; comprehensively promote the country's image as an attractive and safe destination, with tourism as a priority; and strengthen the competitiveness, diversification, and sustainability of the tourism sector to increase service export revenues, create employment opportunities, promote national and local culture, and enhance linkages with internal markets and national production (Ministerio de Economía y Planificación, 2019).

From an environmental and social perspective, the plan aims to promote strategic environmental assessment, ensuring the integration of environmental dimensions into development policies, plans, and programs, as well as into territorial and urban planning; promote and develop various cultural processes and expressions that reaffirm and preserve national identity and the best values of art created by the peoples of the world; and maintain a program for the conservation and dissemination of the historical memory of the Revolution (Ministerio de Economía y Planificación, 2019).

At the same time, from the perspective of human potential development, science, technology, and innovation, there is a need to strengthen the integration and rationality of the science, technology, and innovation system, as well as to develop human potential and material infrastructure; paying special attention to supporting activities such as knowledge and information management and strengthening technological foresight and surveillance capabilities in Cuba (Ministerio de Economía y Planificación, 2019).

As can be seen, there exists a comprehensive government policy that forms the basis for promoting and implementing sustainable tourism observatories as a key tool for planning and managing sustainable tourism from the local to the national level. These observatories will allow for the monitoring and evaluation of the impact of tourism on the economy, society, and environment, providing key information for decision-making in the sustainable tourism management of the various stakeholders involved and contributing to the promotion of innovation. However, advances in this area, beyond what is outlined from a policy perspective, are more evident from an academic standpoint, with research identifying the relevance of tourism observatories in the development and management of tourism in Cuba (David-Mena et. al., 2022; González Herrera et. al., 2019; Rodríguez Zaldumbide, 2017), compared to the practical perspective, as the number of tourism observatories created for such purposes is limited. These results indicate that the development of the statistical apparatus in the tourism sector has been slow, and related statistical research is dispersed and not readily available to all stakeholders involved in a tourist destination.

In Cuba, for example, the main tourism statistics are published by the National Office of Statistics and Information (ONEI) (ONEI, 2020). In this regard, the study by David-Mena et. al. (2022) highlights inconsistencies in the data, as prospective indicators and data on average spending are not taken into account, limiting the acquisition of valuable information for analyzing key source markets and potential markets, as well as behavior in receiving destinations. Additionally, publication delays can sometimes reach up to a year, compromising the objectivity and timeliness of the data provided by this platform. Furthermore, data related to the fulfillment of the Sustainable Development Goals or sustainability elements are

rarely addressed in Cuban tourism statistics; that is, the data is scattered across other chapters of the ONEI platform. Similarly, the study reveals that, compared to data provided by the World Tourism Organization, the ONEI only accounts for 22.75% of the WTO indicators. Among the main conclusions of the study is the lack of an adequate information system to perform control at decision-making levels and in the decision-making processes.

Rodríguez Zaldumbide (2017) states that the creation of tourism observatories in Cuba would demonstrate advancements in environmental or tourism information and contribute to improving the Sustainability Indicators system. The author also notes the existence of the Tourism Observatory of the Ministry of Tourism (MINTUR), which is known to operate only internally. Therefore, one of the main limitations is that it does not comply with the policy established by the Cuban government in the PNDES 2030 regarding data treatment and information from different sectors, which should be accessible to all actors involved in the economic and social framework.

The study by González Herrera et. al. (2019) focuses on characterizing the tourism system of San Juan de Los Remedios to understand the sustainability challenges in the tourist destination. Among the main conclusions of the study, they suggest that for proper tourism planning in the destination, the creation of local-regional tourism observatories is required to favor a more comprehensive management of the destination based on informed decision-making.

In the context of the Holguin destination, the Holguin Sustainable Tourism Observatory was created on April 16, 2021, to promote the destination in foreign markets, focusing on increasing the commercialization of the area. Additionally, the main statistical indicators analyzed by the observatory include tourist movement and the behavior of source countries, and it will be managed through alliances between MINTUR, travel agencies, tour operators, experts, and professors related to tourism activities in the destination. Like previous experiences, this observatory is designed solely for the Tourism Delegation in Holguin.

Another experience in the Holguin territory is the Tourism Observatory of the University of Holguin. This observatory aims to monitor the most relevant scientific results conducted in the Holguin destination, as well as some tourism indicators. Similarly, this observatory is intended only for the work of the interested parties managing it within the university.

Regarding the Holguin Tourist Destination, statistical information has shown a significant deficit over the years. This situation is currently of interest to the Delegation of the Ministry of Tourism in Holguin, CITMA, and the University of Holguin, leading to the creation of the territorial project "Holguin Tourism Observatory: A Tool for Integrated Management and Competitive Intelligence of the Destination." This proposal aims to promote active collaboration with academia, government, and various stakeholders in the destination to begin inquiries into tourism activities at the regional and local levels and to obtain timely, systematic, and reliable information that contributes to the systematic and timely monitoring of sustainability and the impact of tourism in the Holguin destination.

A review of the literature on tourism observatories in Cuba reveals that they have faced significant challenges due to factors such as the lack of indicators that allow for a comprehensive analysis of different tourist destinations, the financing deficit for acquiring and maintaining technology and specialized software, the lack of trained and specialized human resources in information management and technological surveillance, and the insufficient collaboration and coordination with other actors in the tourist destination, all of which have hindered the effective implementation of tourism observatories and consequently limited the development of sustainable tourism in the Holguin destination and in Cuba.

In this context, this study aims to conduct a SWOT analysis of the sustainable tourism observatory in Cuba to identify its strengths, weaknesses, opportunities, and threats, and from there, discuss the theoretical and practical implications of the study. Identifying the strengths, weaknesses, opportunities, and threats of the tourism observatory can provide valuable information for

the planning and management of sustainable tourism in the Holguin tourist destination.

## METHODOLOGY: MATERIALS AND METHODS

This research is qualitative, with a descriptive approach. In this sense, SWOT analysis is a strategic analysis tool that allows for the evaluation of the current situation of an organization or project by identifying its weaknesses, threats, strengths, and opportunities, and formulating strategic solutions to support the planning process (Nezha et. al., 2021).

The SWOT analysis enables managers of sustainable tourism observatories to identify areas that require improvement and to develop strategies to address the identified issues (Bizzarri & Micera, 2021). This analysis focuses on identifying the internal strengths and weaknesses of the observatories, as well as the external opportunities and threats that may affect their success.

In the framework of the current study, the SWOT analysis was conducted following these steps:

Characterization of the organization or project: This stage provides information about the role of observatories in the Cuban destination and offers details about the Tourism Observatory of the Holguin Destination.

Data collection: The next stage involved gathering the necessary data for the SWOT analysis. This included information about tourism in Cuba, existing tourism observatories, the policies and measures implemented by the Cuban government to promote the creation of tourism observatories, as well as information on competition among tourist destinations.

Internal analysis: The internal analysis involved evaluating the strengths and weaknesses of the tourism observatory in the Holguin destination. For this, the SWOT matrix (Strengths, Weaknesses, Opportunities, Threats) and the internal evaluation matrix were employed. These tools allowed for the assessment of the internal capabilities of the tourism observatory, including its ability to collect and analyze data, the quality of the data collected, staff training, collaboration among different stakeholders in the tourism sector, among others.

External analysis: The external analysis involved evaluating the opportunities and threats facing the tourism observatory in the Holguin destination. The PESTEL matrix (Political, Economic, Social, Technological, Environmental, Legal) and the external evaluation matrix were used. These tools assessed the external factors influencing the management of the tourism observatory, including competition among tourist destinations, government policies, technological trends, and environmental impacts, among others.

SWOT analysis: With the results of the internal and external analyses, the actual SWOT analysis was conducted. This involved identifying the strengths, weaknesses, opportunities, and threats of the tourism observatory in the Holguin destination and designing strategies to leverage strengths and opportunities while mitigating weaknesses and threats to improve the management of the Holguin tourism observatory.

Data collection and analysis methods: Data collection was conducted using various methods, including 39 interviews with stakeholders (managers of the Holguin tourist destination, entrepreneurs from both the public and private sectors related to tourism activities in the destination, and academic experts from the University of Holguin and FORMATUR [Training Center of MINTUR in Holguin]). Based on the collected information, a survey was administered in which 115 stakeholders participated, gathering insights on strengths, weaknesses, opportunities, and threats. Each identified factor was assigned a score (from 1 to 5). Subsequently, an average value was calculated for the survey results based on the research sample, as well as an overall average for each identified factor and category. This approach allowed for exploring perceptions from a more participatory perspective among the various stakeholders involved in the Holguin tourist destination, determining the main challenges faced by the Holguin tourism observatory in fulfilling its mission and becoming a tool that facilitates technological monitoring, informed decision-making, and stimulates innovation within the destination through public-private relationships and effective governance.

## RESULTS AND DISCUSION

### Characterization of the Holguin destination

The province of Holguin was established in 1977 with the creation of the country's political-administrative division. It comprises 14 municipalities and occupies 8.4% of Cuban territory. In terms of area, it ranks third among the largest provinces in the country. It is located in the northwest of the eastern region of the country, covering a territorial area of 9,215.7 km², including adjacent cays. Its geographical position is defined by the coordinates of 21°15' to 20°24' north latitude and 76°19' to 74°50' west longitude (Díaz-Pompa et. al., 2020).

The Holguin tourist destination, dubbed the "Most Beautiful Land," has a tourism potential of over 64,000 rooms and is considered to be one of the most important tourist destinations nationally in the future. For better study and management, it is structured into two subregions (see Figure 1). The first region is located in the northwest and is known as the North Atlantic Coastal Subregion, which includes the destinations of Guardalavaca, Estero Ciego-Caleticas (Esmeralda), Bahía de Naranjo–Yuraguanal, Pesquero Nuevo, the city of Holguin, Cayo Bariay, and the Gibara destination. The historic center of Gibara was declared a National Monument in 2014 and possesses unique cultural, heritage, and natural attractions. This region accounts for the majority of tourism development in the province.

The other subregion is called Nipe, covering approximately 2,495 km², extending from the Ramón de Antilla Peninsula to Cayo Moa in the north and the Pinares de Mayari plateau in the south. Current tourism development in this area is localized in Cayo Saetia and the Pinares de Mayari plateau.

According to the updated tourism inventory of the destination (Palao Fuentes et. al., 2021), there are over 220 sites with tourist attractions, including 34 rivers, areas suitable for immersion, historical and cultural sites, 21 caves, 6 mud and mineral-medicinal water deposits, 12 protected areas, and 41 high-quality beaches. There is also a significant concentration of endemic species of Cuban flora in this area, where more than a thousand species of animals native to the island can be observed, especially birds and butterflies.

The study by Palao Fuentes et. al. (2021) indicates that in 2019, prior to the impact of COVID-19, the destination welcomed 352,729 foreign visitors, reflecting a decrease of 0.5% compared to the previous year. Canada emerged as the primary source market, contributing 42% of foreign visitors. That year saw a decline in visitors from Germany, Italy, the Netherlands, and the United Kingdom, with the latter experiencing a 39.3% drop due to the bankruptcy of the British tour operator Thomas Cook. However, Russia, with two years of operations in the destination, contributed 5.3%, incorporating a new route from Moscow. Conversely, the domestic market increased its stays by 21.7%.

Among the main deficiencies identified in the improvement of the development plan for the Holguin destination (Palao Fuentes et. al., 2021) is the insufficient advancement of other tourism modalities within the destination, with sun and beach tourism being the primary reason for travel. They also state that not all existing tourism potentials and resources are being utilized to diversify and differentiate the offer, primarily due to travel agencies and the insufficient integration of stakeholders, which limits tourism development.

Furthermore, the aforementioned research proposes that one of the main strategies for the upcoming period is to enhance the information system of the destination, allowing for continuous monitoring and analysis of the main indicators of sustainable tourism and serving as an early warning system for the manifestation or mobility of international trends and their changes, enabling timely action. To implement this strategy, the destination has two tourism observatories and the Tourist Information Office (INFOTUR).

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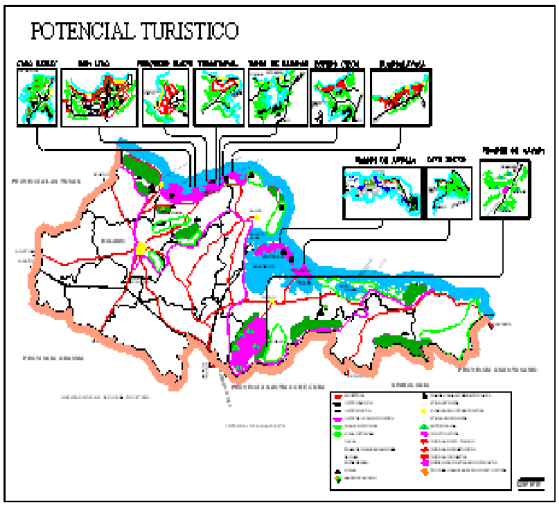
**Figure 1. Tourist potential of the Holguin destination**




Source: (Palao Fuentes et al., 2021).

## SWOT Analysis

The identification of opportunities and threats as external factors influencing the development of sustainable tourism observatories in the Holguin destination reveals a predominance of opportunities. Table 1 lists a total of seven opportunities, among which the most valued are the existence of a policy aimed at developing sustainable tourism and the implementation of technological monitoring through the creation of tourism observatories. Other significant opportunities include the increasing demand for sustainable and culturally authentic tourism, the growth of tourism in Cuba, the potential of this destination to promote sustainable tourism, and the existence of a policy that encourages the integration of various stakeholders in building sustainable tourism. Additionally, other factors that could stimulate the creation of sustainable tourism observatories in the Holguin destination are also mentioned.

Among the main threats listed in Table 2, a total of six are identified. The most significant threats, according to the study sample, that are believed to have a greater influence on sustainable tourism observatories in the Holguin destination include changes in tourist preferences and market trends, the degree of centralization in the country's tourism and statistical policies, and competition from other tourist destinations in the region.

The analysis of strengths and weaknesses as internal factors related to tourism observatories in the Holguin destination that facilitate or limit their development reveals several important strengths (see Table 3). These include the observatories' ability to access reliable and specialized data sources related to sustainable tourism, the relationship with the university and researchers from the tourism department located in the tourist destination, the presence of trained and specialized personnel in tourism management, and the capacity to collect and process relevant information about tourism in the destination. Other strengths recognized by respondents are also noted.

Regarding the main weaknesses, Table 4 lists a total of 12, among which the most impactful on the functioning of sustainable tourism observatories include limitations in data processing and analysis capacity, insufficient use of tools for data analysis and the development of prospective studies, the lack of clear and common standards for measuring and evaluating sustainable tourism in the destination, the failure to share data with various stakeholders involved in the tourist destination, the lack of software, tools, and digital platforms to collect, process, disseminate data, and promote the Holguin tourist destination, as well as the inability to process data on a large scale, among other weaknesses currently affecting the effective management of tourism observatories in the Holguin destination.

**Table 1. Strengths**

| Strengths | Average |
|---|---|
| Strategic location of the tourism observatories. | 4 |
| Ability to collect and process relevant information about tourism in the destination. | 4.2 |
| Highly trained and specialized personnel in tourism management. | 4.2 |
| Access to reliable and up-to-date data sources about the tourism industry in Holguin and the region. | 4.7 |
| Possession of a robust and reliable cybersecurity system. | 4 |
| Close relationship with the University of Holguin and researchers from the Tourism department. | 4.5 |
| Collaboration with the Electronics and Telecommunications Group for Tourism in Holguin. | 4 |
| Availability of the tourist information center (INFOTUR) in the Holguin destination. | 4 |
| **Average** | **4.2** |

**Table 2. Weaknesses**

| Weaknesses | Average |
|---|---|
| Insufficient funding for the acquisition and maintenance of specialized technology and software. | 4 |
| Insufficient capacity for large-scale data processing. | 4.5 |
| Lack of trained and specialized human resources in information management and technological monitoring. | 4 |
| Lack of collaboration and coordination with other stakeholders in the tourist destination | 4.3 |
| Lack of potential for conducting innovative tourism research and studies with an impact on decision-making. | 3 |
| Limitations in data processing and analysis capacity. | 4.9 |
| Lack of integration and coordination with other tourism observatories and stakeholders in the tourism sector in Cuba. | 3 |
| Problems in sharing data among different stakeholders in the tourism sector in Holguin. | 4.7 |
| Lack of tools for data analysis and absence of prospective studies. | 4.8 |
| Lack of software, tools, and technological platforms to collect and process data. | 4.6 |
| Lack of clear and common standards for measuring and evaluating sustainable tourism. | 4.7 |
| Insufficient promotion of sustainable tourism in the Holguin destination. | 3 |
| **Average** | **4.1** |

**Table 3. Opportunities**

| Opportunities | Average |
|---|---|
| Growth of tourism in Cuba | 4.4 |
| Increase in investment in technology and innovation in the tourism industry. | 4.1 |
| Collaboration with other tourism observatories and national and international tourism organizations. | 4 |
| Increase in demand for sustainable and culturally authentic tourism. | 4.6 |
| Existence of a policy focused on the development of sustainable tourism and the implementation of technological monitoring through the creation of observatories. | 4.7 |
| Existence of laws for data protection and their application. | 4 |
| Policy that encourages the integration of different stakeholders in building a sustainable tourism product. | 4.3 |
| **Average** | **4.3** |

**Table 4. Threats**

| Threats | Average |
|---|---|
| Competition from other tourist destinations in the region. | 4.2 |
| Political and economic instability in the country. | 4 |
| Changes in tourist preferences and trends in the tourism market. | 4.6 |
| Possible decrease in tourist demands due to economic or public health factors. | 3.9 |
| High degree of centralization in the country's tourism and statistical policies. | 4.3 |
| The impact of the digital divide at the international level and in Cuban society. | 4 |
| **Average** | **4.1** |

## Strategies

The results of the analysis of strengths, weaknesses, opportunities, and threats have allowed for the definition of strategic options based on the paired combination of external and internal parameters of the SWOT matrix. The intersection of these parameters corresponds to four groups of options that can be defined as maxi-maxi strategy (attack), maxi-mini strategy (defense), mini-maxi strategy (adaptation), and mini-mini strategy (crisis). After analyzing each of the combinations, the proposed strategies to be developed are those presented in Table 5.

**Table 5. Stategies**

| Points | Opportunities | Threats |
|---|---|---|
| **Strengths** | **Attack strategy / Maxi-Maxi** | **Defense strategy / Maxi-Mini** |
| | Promote sustainable and culturally authentic tourism in the Holguin destination to attract more tourists interested in this type of tourism.<br>Develop partnerships with other tourism observatories and national and international tourism organizations to exchange information and best practices in monitoring and evaluating sustainable tourism.<br>Promote the creation of sustainable tourism observatories at different levels where tourism is developed. | Continue strengthening the cybersecurity system of the observatory to ensure the confidentiality and security of data.<br>Seek additional funding for the acquisition and maintenance of specialized technology and software for large-scale data processing and analysis. |
| **Weaknesses** | **Adaptation strategy / Mini-Max** | **Crisis strategy / Mini-Mini** |
| | Train and specialize staff in information management and technological monitoring to improve data processing and analysis capacity.<br><br>Strengthen collaboration and coordination with other stakeholders in the tourist destination, such as local authorities, tourism companies, and non-governmental organizations, to obtain more resources and relevant data for the observatory | Establish clear and common standards for measuring and evaluating sustainable tourism to ensure data comparability and the effectiveness of the observatory.<br>Monitor and evaluate trends in the tourism market and tourist preferences to adapt to changes and market opportunities.<br><br>Develop prospective studies and innovative analyses to increase the value and utility of the observatory.<br>Develop a technological ecosystem that allows for data collection and processing. |

Source: Prepared by the authors.

The SWOT analysis is a key tool for providing a comprehensive view of the internal and external factors that can affect the success of sustainable tourism observatories in the Holguin destination. By identifying the strengths, weaknesses, opportunities, and threats of tourism observatories, strategies can be designed to leverage opportunities and address weaknesses and threats.

In the specific case of creating sustainable tourism observatories in Cuba, particularly in the Holguin destination, it is important to note that tourism is a significant industry for the country's economy (Ministry of Economy and Planning, 2019), and that the development of sustainable tourism observatories can contribute to more effective and sustainable tourism planning and management.

The study identified among the main strengths the strategic location of tourism observatories in Cuba, which represents a significant advantage as it allows for the collection of relevant information about the tourism industry based on the tourist destination. The geographical location of a tourism observatory is a key factor for its success, as it allows for greater efficiency in the collection and analysis of relevant information for decision-making according to the interests of each place where tourism is developed (national, regional, or local) (Bertocchi et al., 2021; Torres-Delgado & López Palomeque, 2014). Having the capacity to collect and process relevant information about tourism in the Holguin tourist destination is another important strength of the tourism observatory. According to Buhalis (2003), the collection and analysis of information is fundamental for effective planning and management of sustainable tourism.

The training and specialization of staff in sustainable tourism management is a key strength for the success of the tourism observatory. Training personnel regarding the development of sustainable tourism is essential for the effectiveness of tourism observatories. The ability to access reliable and up-to-date data sources about the tourism industry in Holguin and the region is another strength. According to Carvalho Santos & Borges Inácio (2018) and Censi Borges et al. (2021), access to relevant and updated data is a critical factor for the success of tourism observatories. Additionally, the presence of a robust and reliable cybersecurity system is another strength of tourism observatories in the Holguin destination. This allows for the protection of

collected and processed information, as well as ensuring data confidentiality. According to Bertocchi et al. (2021), information security is fundamental for the effectiveness of tourism observatories.

On the other hand, as mentioned in the SWOT analysis, there are some weaknesses that need to be addressed to improve the effectiveness of tourism observatories. To address these weaknesses, it is important to develop effective strategies that involve different stakeholders in the tourism sector in planning and managing sustainable tourism. According to studies by Brigand & Berre (2007) and Fantoni Alvares et al. (2020), collaboration among various stakeholders in the tourism sector is essential for the development of sustainable tourism observatories and the implementation of a technological monitoring strategy in the tourism sector.

The lack of funding for the acquisition and maintenance of specialized technology and software is a significant weakness of tourism observatories. This can limit the observatories' ability to collect and analyze information effectively. According to Carvalho Santos & Borges Inácio (2018), the lack of funding is one of the main challenges for the implementation of tourism observatories.

The insufficient identification, standardization, and capacity for large-scale data processing is another significant weakness of tourism observatories in the Holguin destination. The absence of a balanced scorecard with key indicators measuring the impact of tourism on economic, social, and environmental aspects is one of the challenges facing sustainable tourism observatories in Holguin. These results are consistent with previous research (David-Mena et al., 2022; Rodríguez Zaldumbide, 2017) in the Cuban context and with Rivas Bravo et al. (2019) in the international arena. The lack of primary information, standardization of data, absence of indicators, lack of transparency, and delays in obtaining data can limit the observatories' ability to analyze large amounts of information effectively. Limited data processing capacity is a common challenge for many tourism observatories (Font et al., 2023). The availability of reliable and updated information, according to Rivas Bravo et al. (2019), is essential for effective decision-making and proper planning of management strategies.

Utilizing sustainability indicator systems is fundamental if sustainable tourism is to be developed (Blancas et al., 2011; Cannas, 2019). The main virtue of having an indicator system is to provide updated information quickly and in an easily interpretable manner, allowing for accurate situational diagnostics that contribute to defining the model of future tourism (Farinha et al., 2019; Font et al., 2023; Modica et al., 2018), as well as evaluating the proposed development strategies to achieve the established tourism models.

Data analysis using software and digital platforms is a necessity in managing sustainable tourism observatories in the Holguin destination. These results are consistent with those of Censi Borges et al. (2021), who suggest that technologies have not been fully accepted and implemented in managing tourist destinations, and their research highlights the need to develop and implement digital platforms. In this regard, Varra et al. (2012) state that tourism observatories must adopt and integrate ICT, as these provide support for the creation, storage, distribution, and application of information and knowledge flexibly, through multichannel and multimodal systems, allowing for real-time information and knowledge capture. This assists in the planning and administrative processes of tourist destinations (Censi Borges et al., 2021), where innovations such as Big Data can be incorporated (Brito Aguiar & Szekut, 2020; Iorio et al., 2020). Additionally, having a website to raise awareness about sustainable tourism development and initiatives to focus on the main tourist destinations in the area can contribute to promoting these tourist destinations (Rodríguez Zaldumbide, 2017).

The lack of trained and specialized human resources in information management and technological monitoring is a significant weakness of the tourism observatory. This can limit the observatory's ability to collect and analyze information effectively. According to Bregolin et al. (2019), the lack of trained personnel is one of the main challenges for implementing tourism observatories. Similarly, insufficient collaboration and coordination with other stakeholders in the tourist destination is another significant weakness

of the tourism observatory. According to Brigand & Berre (2007), collaboration among different stakeholders in the tourism sector is fundamental for the success of tourism observatories, as it enhances their capacity to obtain relevant information and implement effective measures for sustainable tourism.

Sustainable tourism observatories in Holguin find opportunities in their environment that will allow for better management. It is important to highlight that the growth of tourism in Cuba and the increase in investment in technology and innovation in the tourism industry can be key factors for the success of tourism observatories. The possibility of collaborating with academic and research institutions (Holguin University), as well as the existence of the Tourism Informatics Group (Margetis et al., 2017) and the Tourist Information Office (INFOTUR), can significantly contribute to improving the quality and relevance of the collected information. The opportunity to collaborate with academic and research institutions is an important opportunity for the tourism observatory. According to Font Aranda & Alvaro Silva (2019), collaborations with universities and research centers can enhance the quality and relevance of the collected information. The opportunity to utilize innovative technologies for data collection and analysis is another important opportunity for the tourism observatory. According to Ardito et al. (2019), Brito Aguiar & Szekut (2020), Carvalho Santos & Borges Inácio (2018), and ORRALA ALAY (2022), the use of innovative technologies, such as Big Data and artificial intelligence, can improve the effectiveness and efficiency of tourism observatories. Furthermore, the possibility of establishing alliances with companies and organizations in the tourism sector is another important opportunity for the tourism observatory. According to Brigand & Berre (2007), collaboration with companies and organizations can facilitate the implementation of sustainable measures in tourism.

On the other hand, it is important to consider the threats identified in the SWOT analysis. Competition from other tourist destinations in the region, political and economic instability in the country, as well as changes in tourist preferences and market trends, are factors that can negatively affect the sustainable tourism observatories in the Holguin destination. Additionally, the impact of the digital divide at the international level and in Cuban society, as well as the high degree of centralization in tourism and statistical policies in the country, are threats that must be considered in the planning and management of sustainable tourism observatories, not only in Holguin but also in Cuba.

Economic and political changes that may affect tourism in Cuba are a significant threat to the tourism observatory. According to Bertocchi et al. (2021) and Martelli et al. (2015), political and economic stability is a critical factor for the success of tourism observatories. At the same time, competition from other tourist destinations in the region is another significant threat to tourism observatories. According to Argote & Ingram (2000), Brandão (2007), and Font et al. (2023), competition can affect tourist demand and the profitability of the tourism sector in the region. Changes in tourist preferences and behaviors are a significant threat. According to Céron & Dubois (2003), changes in tourist preferences and behaviors can affect tourist demand and the profitability of the tourism sector.

Finally, the SWOT analysis is a useful tool for planning and managing sustainable tourism in Cuba and in any tourist destination worldwide. Identifying the strengths, weaknesses, opportunities, and threats of sustainable tourism observatories allows for the development of effective strategies that leverage opportunities and address the weaknesses and threats in the tourism sector.

## CONCLUSIONS

The strategic location of tourism observatories, the ability to collect and process relevant information about tourism in tourist destinations, and the specialized training of staff regarding the development of sustainable tourism are key strengths that enable the observatory to play an important role in planning and managing sustainable tourism in the region.

The lack of funding for the acquisition and maintenance of specialized technology and software, insufficient large-scale data processing capacity, the lack of trained and specialized human resources in information management and

technological monitoring, and the lack of collaboration and coordination with other actors in the tourist destination are weaknesses that limit the observatory's ability to collect and analyze information effectively and to implement effective measures for sustainable tourism.

The opportunity to collaborate with academic and research institutions to improve the quality and relevance of the collected information, the possibility of utilizing innovative technologies for data collection and analysis, and the potential to establish partnerships with companies and organizations in the tourism sector for the implementation of sustainable measures are opportunities that can enhance the effectiveness and efficiency of the tourism observatory.

Economic and political changes that may affect tourism in Cuba, competition from other tourist destinations in the region, and changes in tourist preferences and behaviors are significant threats that tourism observatories must consider in their planning and management. These conclusions can help those responsible for managing the observatories make informed decisions to improve their effectiveness and efficiency in planning and managing sustainable tourism in the region.

The practical implications of this research are fundamentally that the SWOT analysis applied to sustainable tourism observatories in Cuba can guide informed decision-making by those in charge of managing the observatory to improve its effectiveness and efficiency in planning and managing sustainable tourism in the region. Identifying the strengths, weaknesses, opportunities, and threats of tourism observatories can provide valuable information for planning and managing sustainable tourism in the region. Collaboration with academic and research institutions, the use of innovative technologies, and the establishment of partnerships with companies and organizations in the tourism sector can enhance the effectiveness and efficiency of the tourism observatory. Addressing the identified threats, such as economic and political changes affecting tourism in Cuba, competition from other tourist destinations in the region, and shifts in tourist preferences and behaviors, can help ensure the sustainability of tourism in the region.

Among the main theoretical implications of the study is that the SWOT analysis applied to sustainable tourism observatories in the Holguin destination can contribute to the development of conceptual and methodological frameworks for planning and managing sustainable tourism in other regions. Identifying strengths, weaknesses, opportunities, and threats can help improve understanding of the factors that affect the effective implementation of tourism observatories. Addressing the identified threats, such as economic and political changes affecting tourism in Cuba, competition from other tourist destinations in the region, and changes in tourist preferences and behaviors, can enhance understanding of the external factors that impact tourism sustainability in a region. Collaboration with academic and research institutions, the use of innovative technologies, and the establishment of partnerships with companies and organizations in the tourism sector can contribute to developing effective strategies for planning and managing sustainable tourism.

The limitations of the study focus on the fact that the SWOT analysis is based on subjective information and may vary according to the perspective of different stakeholders involved in sustainable tourism in the region. The research focuses on a specific case study in the Holguin destination and, therefore, may not be generalizable to other regions or contexts.

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