

Touristic Fluxes and Carrying Capacity

Batroun scale, Lebanon





Analysis of Threats and Enabling Factors for Sustainable Tourism at Pilot Scale

Touristic Fluxes and Carrying Capacity

Batroun scale, Lebanon



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OVERVIEW

The present document was produced in the framework of **Co-Evolve4BG** project “*Co-evolution of coastal human activities & Med natural systems for sustainable tourism & Blue Growth in the Mediterranean*” in relation to Threats and Enabling Factors for maritime and coastal tourism development on a national scale” Co-funded by ENI CBC MED Program (Grant Agreement A_B.4.4_0075).

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REVIEW

Contributors

Sana ABI DIB, PhD

📍 Lebanese University, Faculty of Literature and Human Sciences, Lebanon

Rima CHEBL, Architect

📍 Julfar Engineering, Lebanon

Reviewer

Hamouda DAKHLAOUI, PhD

📍 National School of Architecture and Urbanism, Tunisia

Supervisors

Béchir BEJAOU, PhD

📍 National Institute of Marine Sciences and Technologies, Tunisia

Nahed MSAYLEB, PhD

📍 Lebanese University, Faculty of Agriculture and Veterinary Sciences, Lebanon

LAYOUT

Khouloud ATHIMEN, Engineer, Technical Coordinator

📍 National Institute of Marine Sciences and Technologies, Tunisia

Houaida BOUALI, Engineer

📍 National Institute of Marine Sciences and Technologies, Tunisia

Mohamed Ali BRIKI, Engineer

📍 Coastal Protection and Planning Agency, Tunisia

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List of abbreviations

AC	Air Conditioning
BC	Before Christ
F&B	Food and Beverage
LED	Light-Emitting Diode
MPWT	Ministry of Public Works and Transport
UN	United Nations
UNEP	United Nations Environment Program
UNWTO	United Nations World Tourism Organization
USD	United States Dollar

I. Introduction

Batroun is a coastal city in the North of Lebanon, located 54 km north of the Capital Beirut and 30 km south of the city of Tripoli (Figure 1). It is the capital city of Batroun District. It overlooks the coast of the Mediterranean Sea with about 4 km in length. Even though it is one of the most ancient cities in the world, there was hardly any excavation performed there and early written documents are missing as well. Nonetheless, little is known about the history of this city, but what is confirmed is that it was once a flourishing city that hosted a vibrant port (Figure 2) in the region during Phoenician times (3000 to 64 BC). In fact, its history of human occupation goes back at least to 5,000 years, as published on ArattaWordpress in January 2020.



Figure 1. Location map of Batroun.

The name Batroun is likely the ‘Batruna’ mentioned in the 14th-century BC Tal el-Amarna tablets of Egypt. It derives from the Greek etymology, “Botrys”, which means “bunch of grapes”, referring to the vineyards that covered the area. It was later “Latinized” to “Botrus”. Historians believe that the Greek name of the town originates from the Phoenician word “Bater”, which means “to cut”. This definition refers to the maritime wall built by the Phoenicians in the sea to protect them from tidal waves (Figure 3). This ancient Phoenician Sea wall was originally a natural structure consisting of petrified sand dunes. Later, it was reinforced gradually by the Phoenicians with rocks, and the wall took its present shape in the first century BC. Phoenicians used this wall as protection against sea storms and invaders, while during Roman times it was again used as a quarry. The wall is 225 meters long and 1 to 1.5 meters thick. Unfortunately, today many parts have already crumbled. Yet, the ruins that remained still stand as a bulwark against the sea for the ancient city dwellers. Finally, they were the Arabs who gave it the name “Al-Batroun”.

In 551, the town suffered greatly from Lebanon's devastating coastal earthquake and tidal wave that destroyed the city and caused mudslides and cracks. It is believed that these natural events led to the reshaping of the large natural harbor of Batroun and Tripoli isolation from Batroun and Byblos, as published on ArattaWordpress in January 2020.



Figure 2. Batroun Port¹.

The best-known period in Batroun's history was the era under Ottoman rule that lasted from 1861 to 1918. During that period, the city flourished not only in religion and culture, but also in architecture and economics, as still reflected by the beautiful Ottoman houses, Saint George, and St Stephen Cathedrals. During that time, Batroun also prospered and benefited from its surrounding trees, vineyards, and citrus groves, as published on "Living Lebanon" website.



Figure 3. Ancient Phoenician Sea Wall².

Finally, during the 1960s and 1970s, the main street of Batroun was part of the old Beirut - Tripoli highway. Therefore, traffic went right through the city, which led to further developments and expansion within the city and along the highway, as published on "Living Lebanon" website.

¹ retrieved from www.bohemianvagabond.com

² retrieved from www.bohemianvagabond.com

II. The economy of Batroun

Historically, the city of Batroun was settled at the interface between the sea and the national highway linking Beirut to Tripoli. Over the last years, this strategic location as well as the natural, cultural, historical, and touristic assets favored trade and economic activities in Batroun over several coastal cities. Thereby, leading to the city thriving.

In the last couple decades, the historical functions radical shift of the local economic sectors into a leisure service-based economy is so obvious. This transition led to the tourism establishments' development. In fact, there is a diverse variety of accommodation such as hotels, resorts, guesthouses, restaurants, nightclubs, and bars, etc. Following the real estate market overvaluation in the city center, this economic metamorphosis has resulted in the housing resettlement heading towards the emerging city suburbs in the nearby hills. It clearly reveals the objective as well behind establishing a business city center. It is mainly dedicated to leisure and business. Besides, it has been balanced by the residential suburbs constitution, where accelerated urban sprawl has led both to the natural lands destruction (pinewood and orange groves) and to the fatal rise in land prices, as published on "Marefa.org/Batroun" website. Additionally, old sandstone houses are being restored, and historic monuments are being enhanced and renovated by the municipality, in addition to the private sector making new investments in the hospitality services sector. It is so obvious that the number of small companies as well as large brands is multiplying in Batroun, especially in the hospitality, food, and beverage sectors. thereby, proving that Batroun, today, is witnessing a major tourist boom with a potential of the area for developing religious, cultural, and nature/marine ecotourism as one of the most strategic priorities for the region's socio-economic growth.

Today, Batroun relies on its dynamic and multi-sectoral economy based mainly on tourism, hospitality, leisure, and agriculture.

III. The tourism sector in Batroun

Batroun region lies among the districts of Byblos to the South and Bcharre/Koura to the North, all famous for their touristic offer and cultural heritage, hosting several UNESCO Human Heritage sites. This location granted Batroun socio-economic and cultural importance. In fact, today, Batroun coastal town represents a major tourist destination in North Lebanon. It hosts historic churches and monasteries from Roman Catholicism and Greek Orthodox, such as the “Miraculous Lady of the Sea Church” (Figure 4) located on the seashore near the Phoenician Wall and “Saint Estephan Church” located to the north of the harbor that is known for its square towers (Figure 5).

Thanks to its citrus groves that surround Batroun, the city has become widely known, since the early twentieth century, for its fresh lemonade that is sold at the cafés and restaurants on its main street. Besides, tourists who are looking forward to visiting historic monuments and sightseeing will enjoy the tourist walk through the old town. The traditional Ottoman houses and cobble-stoned narrow streets of the old town and Phoenician fishing port provide a pleasant environment for a stroll along its well signposted historical sites or to enjoy a lunch or dinner in one of its seafood restaurants.



Figure 4. Miraculous Lady of the Sea Church³.

The town is also a major summer attraction thanks to being highly popular for its vibrant nightlife that includes pubs and nightclubs, beach resorts and water sports such as surfing. Batroun is well known for its cleanest rock and pebble beaches in Lebanon. In addition, biking along the Batroun coastline is a major activity, namely on late summer days (Figure 6). Outside the old town, one can easily spend a day at one of Batroun’s southern beach clubs (Figures 7, 8, 9 and 10). In addition, in 2009, the Batroun International Festival was inaugurated hosting leading local and international artists. The festival usually takes place in July and/or August of each year in the old harbor area. Therefore, Batroun city possesses all the potential to be called a “major tourism hub”. While the tourism industry is growing in Batroun, it is inevitable to mention that

³ retrieved from <https://www.molon.de/galleries/Lebanon/Batroun/img.php?pic=17>

awareness about “sustainable tourism” is being spread among business owners, employees, and tourists.



Figure 5. Saint Estephan Church⁴.



Figure 6. Biking routes⁵.



Figure 7. Bahsa public beach⁶.

⁴ retrieved from <https://www.molon.de/galleries/Lebanon/Batroun/img.php?pic=24>

⁵ retrieved from <https://www.bohemianvagabond.com/things-to-do-in-batroun/>

⁶ retrieved from <https://www.bohemianvagabond.com/things-to-do-in-batroun/>



Figure 8. Sunset bars⁷.



Figure 9. Lemonade shop⁸.

⁷ retrieved from <https://lebanonexplorer.com/batroun-ultimate-guide-top-places-restaurants-bars-getaways-and-beaches/>

⁸ retrieved from <https://www.annahar.com/english/article/1128169-hilmis-an-ancient-lemonade-shop-with-a-story>



Figure 10. Historic streets of Batroun⁹.

⁹ retrieved from <https://www.pinterest.com/pin/68046644359608273/>

IV. Sustainable Tourism Development

The tourism industry has always been a complex set of different physical resources, activities, and services. In any region, the strategies that are intended to develop Tourism must necessarily implement plans and actions that aim at extending and harnessing its life cycle. Therefore, sustainable tourism development is not only perceived through increasing tourists' numbers or boosting profits, but it must ensure the balance between the institutional, environmental, and socio-cultural aspects in the long term as well. With sustainable tourism, sociocultural and environmental impacts are neither permanent nor irreversible. In fact, the United Nations Environment Program (UNEP) and UN World Tourism Organization (UNWTO) define sustainable tourism as "tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities". Moreover, they add that sustainable tourism refers to the "environmental, economic and socio-cultural aspects of tourism development and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability".

Developing more sustainable forms of tourism promotes new products and services that enhance tourists' experiences while meeting the criteria of sustainability. In fact, it has become fundamental in all tourism development and management rather than being an optional component. A sustainable tourism destination is a unique location where the concerned stakeholders as well as the tourism establishments' operators facilitate the creation of experiences that are mutually beneficial for the tourists and the destination at several levels. Sustainable tourism is implemented in a tourism destination by considering the following four dimensions, as mentioned in "Sustainable Tourism Management - A Collection of Studies from Malta, Lebanon and Jordan", Published by Heland Project:

- 1. Institutional aspect:** the aim of tourism management is firstly to maintain tourists' satisfaction, then to ensure they get meaningful experience through sustainable tourism products and next increase tourist awareness about issues related to sustainability. In fact, tourists' satisfaction is a potential factor in both supporting and measuring sustainable tourism development.
- 2. Environmental aspect:** the aim is raising awareness and fostering positive behavior towards biodiversity and local ecosystems conservation among tourists. It focuses also on the local resources used as a key element in tourism development by balancing the tourists with those of the destination.
- 3. Economic aspect:** the aim is to ensure proper operation of tourist destinations and long-term economic benefits to stakeholders, such as jobs and income creation and social services to the community to reduce poverty. Revenues from visitor spendings are often channeled back into nature conservation or capacity building programs for local communities to manage protected areas.

- 4. Socio-cultural aspect:** the aim is to promote practices that respect the specificities of local culture, that also maintain the community cultural heritage and traditional values as well as to promote tolerance and understanding between different cultures.

Therefore, sustainable tourism refers to sustainable practices within the tourism sector that are committed to acknowledge all Tourism influences, both positive and negative. The aim is to enhance the positive impacts and reduce the negative ones, to promote a better experience for tourists, the local community, and the tourism industry operators. Sustainable tourism should aim towards developing new policies and legislation to ensure that the benefits of sustainable tourism will benefit the local community.

Based on the above, a prism of tourism sustainability includes the four dimensions: institutional, environmental, economic, and socio-cultural (Figure 11). These interactive factors allow the sustainability indicators establishment (Figure 12) and Batroun potential to maintain a sustainable tourism within the region.

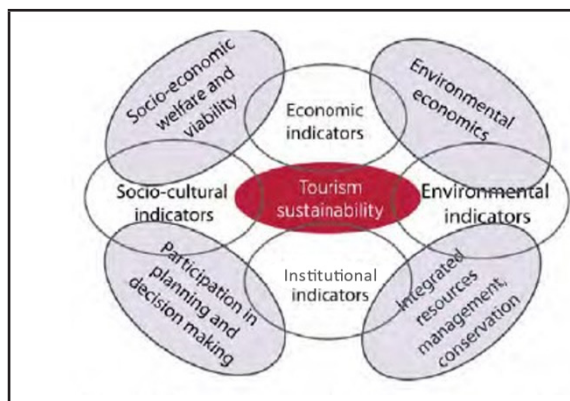


Figure 11. The prism of sustainable tourism

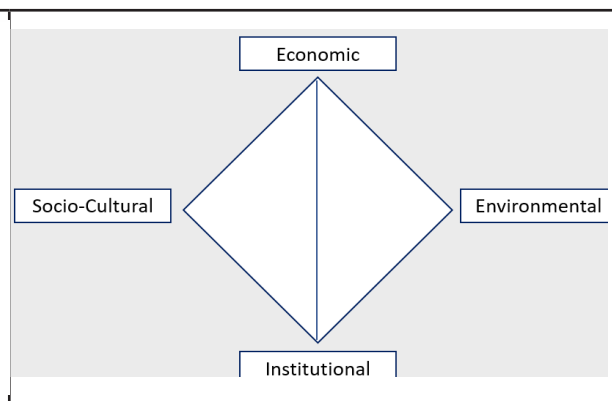


Figure 12. Integrated approach of tourism sustainability indicators

V. Tourism Sustainability in Batroun

The main purpose sustainable tourism promotion is to protect and sustain the world's natural and cultural heritage while ensuring that tourism meets its potential as a tool for economic development and poverty alleviation and reduction, as well as for the environment and cultural heritage preservation. Therefore, tourism sustainability assessment depends mainly on evaluating the parameters and criteria for sustainable tourism development.

The pilot study aimed at collecting quantitative evidence about the sustainability of the tourism development in Batroun and its ability to promote the city as a touristic hub while preserving all its assets and enhancing them for the future. The data presented was gathered relying on interviews conducted on December 13, 2021, with owners, employees, and users of the major touristic establishments (Table 1) in Batroun City to analyze tourism sustainability and tourist satisfaction. It is essential to highlight that the outcome of the interviews might have been affected by the season where the interviews were conducted, and different results could have emerged if the interviews were done in summertime. The population sample was nine tourism business owners, seven of their staff members and eleven local users.

This data is organized around the four dimensions of sustainable tourism: effective sustainability planning, reduction of negative impacts to the environment, maximizing economic benefits to the local community and reduction of negative impacts to socio-cultural heritage. Finally, this analysis is visualized through different types of charts and Figures. The findings of the study are quantified to reflect the current situation of the tourism sector in the city.

V.1. Institutional Aspect

V.1.1. Aim

The institutional dimension analyzes the destination potential to engage in tourism development and management. In fact, tourism is a people-oriented business, and it depends greatly on planning and quality management. Understanding the destination actual and potential tourism management schemes and procedures is crucial in determining the community's potential in contributing to sustainable tourism development. In fact, the indicators in question such as locals' engagement and users' satisfaction aim to reveal to what extent Tourism sustainability implementation is effective.

Table 1. Interviewed establishments by the team.

Hotels	Aqualand
	Sawary
	San Stephano Resort
	Batroun Village Club
	Arnaoon Village
	L'Auberge de la Mer
	Batroun boutique suites
	Nazel Saada Boutique Hotel
Restaurants	Merchak groups
	Stephano Café
	Taiga
	Le Marin
	Limon Café
	Oysters
	Chez Maguy
	Bistreau
	Jessy Juice
	Helmi
	Jammal
	Royal
	Pierre y amigos

V.1.2. Findings and analysis related to indicators

Only 50% of the interviewed tourism business owners confirmed that they are involved in a local authority or organization related to the planning and Tourism development. 70% of people are not aware of Tourism sustainability efforts within the pilot site. most of the interviewees were not aware of the value and importance of culture preservation sites and their integration within the tourism plan in Batroun.

Concerning tourists' satisfaction, 70% of the users tend to be highly satisfied with their tourism experience in Batroun and they consider it an ultimate destination (Figure 13).

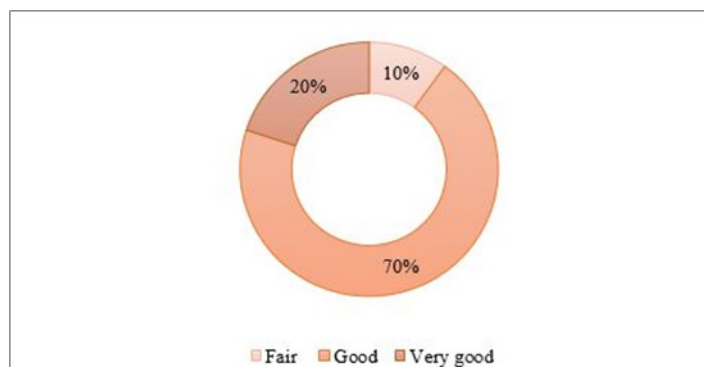


Figure 13. Assessment of user satisfaction by tourism activities in Batroun.

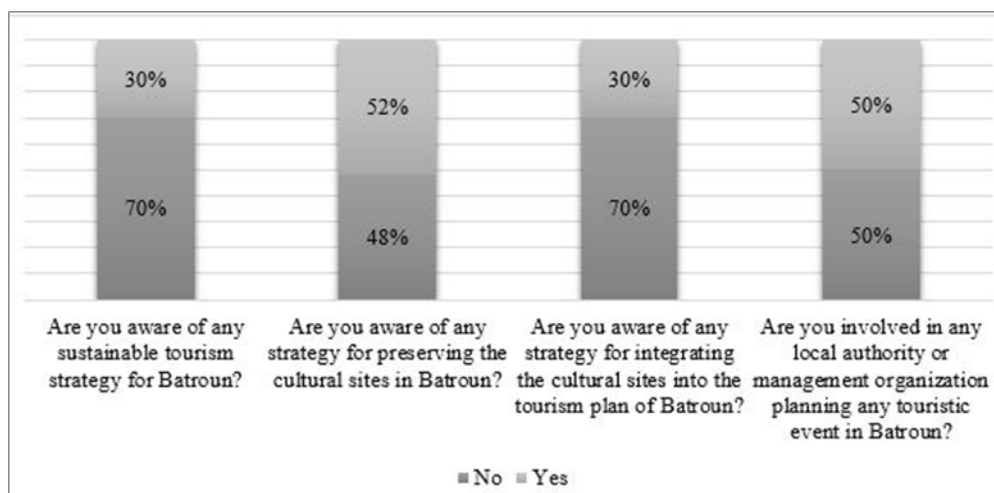


Figure 14. People engagement in tourism development strategies.

It is obvious that Batroun City lacks a sustainable tourism strategy (Figure 14). Thereby, providing an opportunity for future actors' engagement. As for the tourism establishments, they are licensed and act in harmony with the local authority and stakeholders. The municipality is the main actor in the city and contributes to regulating the urban sprawl and any construction violations.

Recently, the local's engagement in tourism planning and development has been improved thanks to the collaboration between the authorities in charge and the business owners who are willing to promote Batroun's assets and potential as concluded from the interviews with the owners.

V.2. Environmental Aspect

V.2.1. Aim

The environmental dimension does not measure Tourism influence on infrastructure, services, and activities but also on the natural resources and their potential benefits for landscape protection and biodiversity conservation. The indicators aim to show how much Tourism can reduce the negative impacts on the environment.

V.2.2. Findings and analysis related to indicators

Environmental sustainability is not only rated through the material types used in furnishing or decorating the establishments, whether they are used or up-cycled, rather it is related to how much the practices are committed to preserving the environment.

Concerning the energy consumption dedicated to cooling and heating the rooms, as shown in Figure 15, a total of 73% of the tourism establishments have all their rooms fully equipped with heating and AC. Thereby, leading to a significant increase non-renewable energy consumption. No accurate data could be compiled about the source or nature of used energy. On the other hand, Figure 16 shows that 77% of the establishments are applying measures to reduce energy consumption and resources exploitation. In fact, these practices are clearly mirrored in solar power energy use as well as the LED lighting system. Additionally, another environmental sustainability aspect was also researched, it is the local Lebanese products use proportion in the targeted establishments. The aim was to estimate the level of self-sufficiency. Results revealed that a total of 80% of the establishments' services are based mainly on local products use.

Finally, there was a lack of data regarding the water and energy consumption rates per year since there is no single data source to refer to for this kind of information.

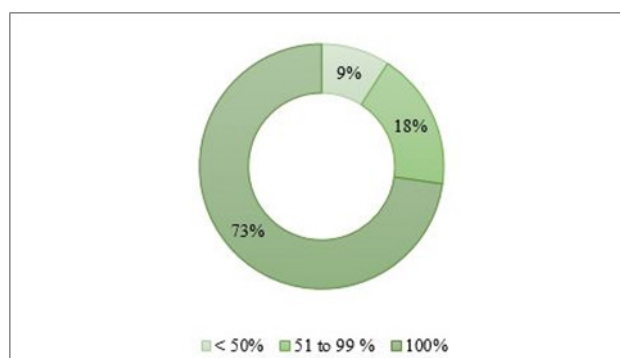


Figure 15. Percentage of rooms with heating /AC.

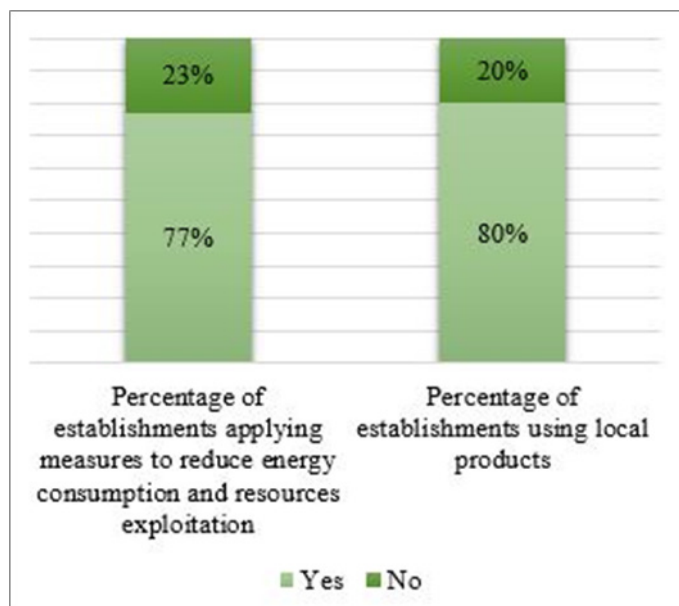


Figure 16. Energy and products consumption.

V.3. Economic Aspect

V.3.1. Aim

The economic dimension explores the positive impact of tourism on the local economy and its potential to address development and urbanization problems such as employment, income generation and poverty alleviation. The parameters used aim to test how much the tourism sector is maximizing economic benefits and reflecting on the wellbeing of the local community.

V.3.2. Findings and analysis related to indicators

The available number of beds within each establishment determines its capacity. As shown in Figure 17, a total of 62% of the hotels in question have a capacity of 10 to 50 beds. They can cater to an average of 15 to 100 tourists at once.

The visitor expenditure is based on items such as accommodation, transportation, food, and drinks. Figure 18 reveals that the expenditure by visitors to Batroun ranges from less than 50 USD to more than 200 USD with the majority, which is 46%, claiming that they spend less than 50 USD during their visit. This might be explained by considering the relatively short tourist stays that vary from one day to less than four days (Figure 19).

Figure 20 shows the occupancy rates in hotels, the majority is occupied between 50 to 70%. Due to the current crisis in Lebanon and the COVID restrictions that were imposed by the government, the occupancy rate was relatively lower than before COVID occurrence.

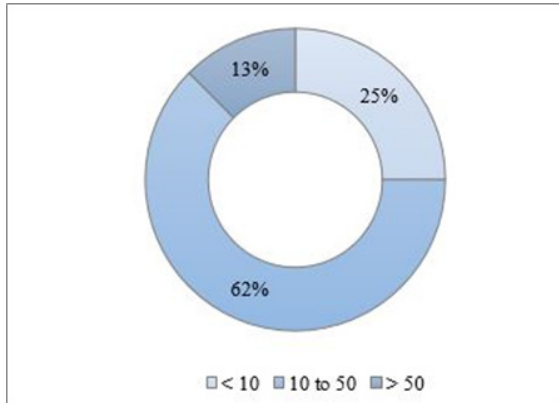


Figure 17. Number of available beds.

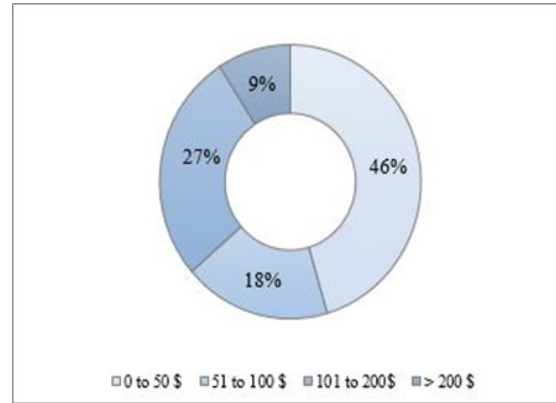


Figure 18. Visitor expenditure/visit.

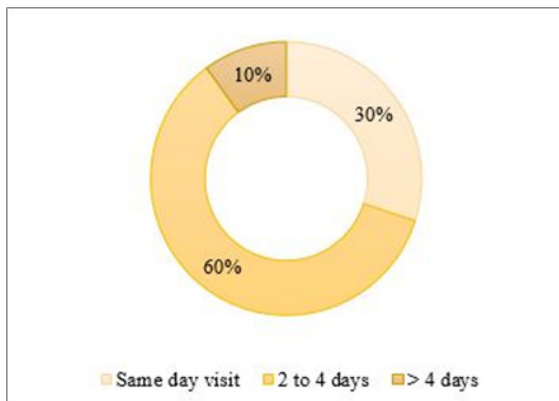


Figure 19. Average length of stay.

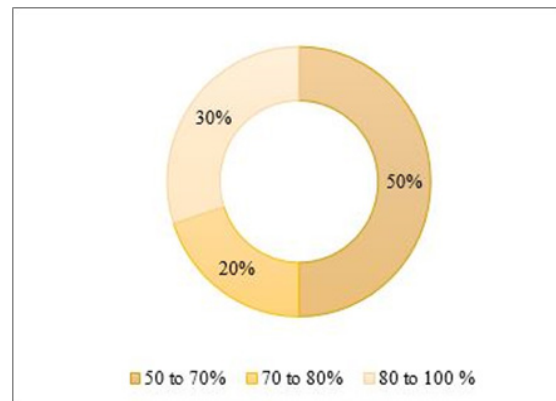


Figure 20.Occupancy rate in hotels.

V.4. Socio-cultural Sustainability

V.4.1. Aim

The socio-cultural dimension gauges the community's involvement and acceptance of the tourism activities within its landscape. The parameters in question in this part aim to test how much the tourism sector is maximizing social benefits to the local community and is reducing the negative impacts on cultural heritage.

V.4.2. Findings and analysis related to indicators

Further attention was paid during the survey to the safety concerns. Results showed only 70% of establishments are equipped with fire extinguishers. However, access to these resorts and points of touristic services is easy and supported by Google Maps (Figure 21).

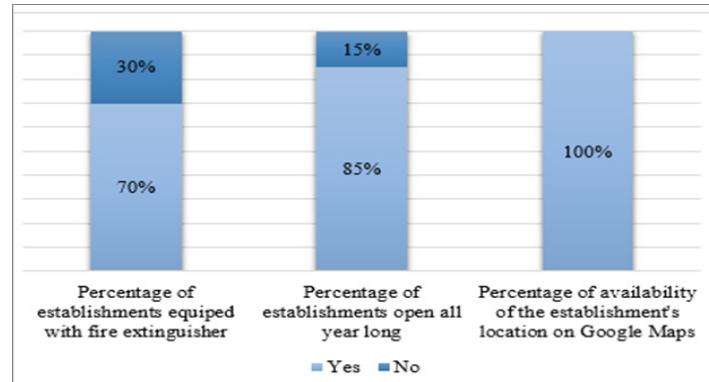


Figure 21. Safety and seasonality.

Regarding the employees' quality and quantity, 45% of the employees were employed throughout the year full time, while 49% are on a part-time basis (Figure 22). As for the gender split between the employees, 70% of the seasonal employees are female while, in average, almost one third of the full-time and part-time employees are female (Figure 23).

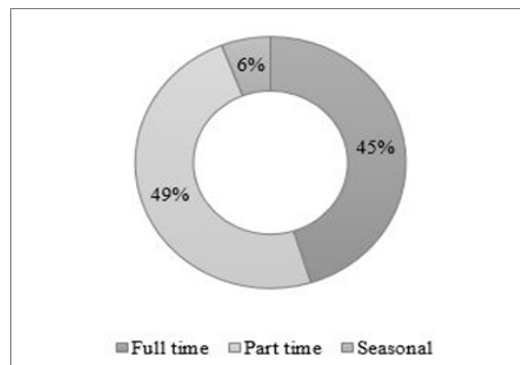


Figure 22. Percentage of employees by category.

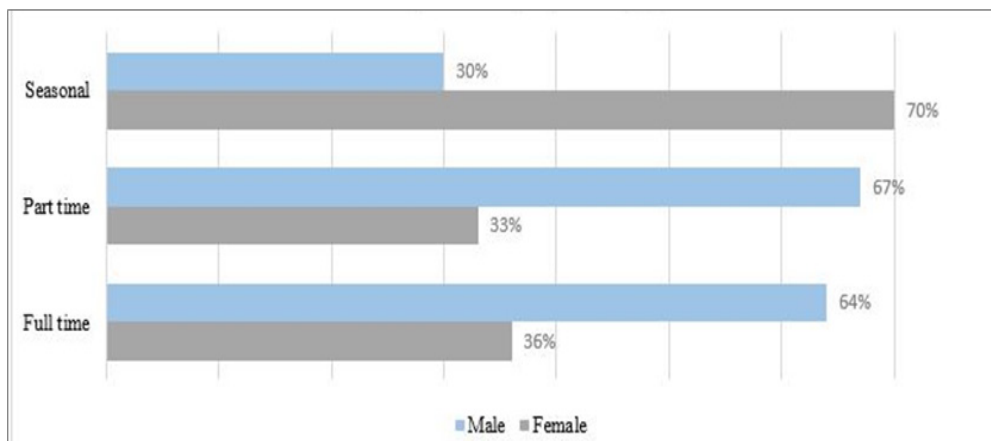


Figure 23. Percentage of employees by gender.

As for the access, Figure 24 shows that 85% of the establishments provide easy access for people with disabilities with 100% percentage of rooms easily accessible for people with disabilities. Moreover, results show that all the interviewed establishments are equipped with soft mobility infrastructure such as bike racks and parking and are easily accessible by public transport.

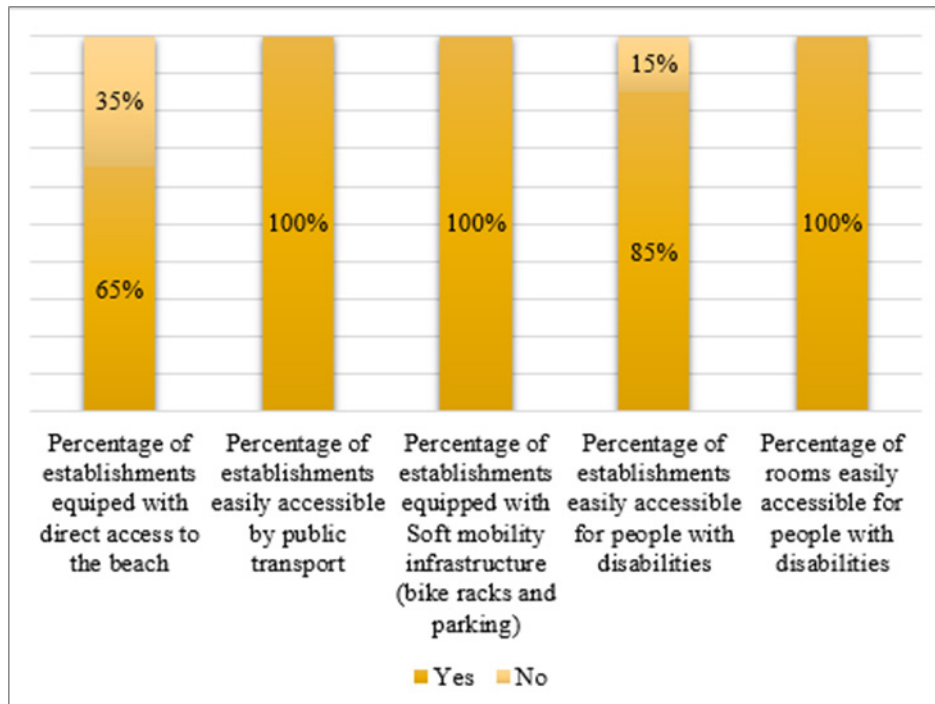


Figure 24. Ease of access to the touristic establishments.

VI. Conclusions

To sum up, authentic in its identity and diverse in its economy, Batroun managed to withstand throughout the years and despite all the inconveniences as one of the most attractive destinations. In fact, it has been able to preserve its role as a major “tourism hub” in the region until today and has always contributed to a more prosperous economy.

In fact, today, as Lebanon suffers from a severe financial crisis and struggles with the Covid pandemic, Batroun thrives on local tourism. The crowd stroll along its historical streets, visit its archeological and religious sites, discover the local cultural heritage, sunbathe on its beaches, drink their nights away, enjoy their authentic meals and practice sporting activities such as cycling and recreational fishing. *“This atmosphere was not created overnight, we knew our city is a touristic city par excellence, what you are seeing now is the result of 22 years of work”*, declares the head of Batroun municipality, Marcelino al-Hark when interviewed by Yara Abi Nader, Reuters News.

Nowadays, most of the tourism establishments are trying to reduce their non-renewable energy consumption and to rely more on local products to save the environment and to boost local economy. However, while the business investments are booming in Batroun and the hospitality as well as the F&B industry is thriving, the main problems remain the lack of proper urban infrastructure together with the unorganized and unregulated expansion of touristic and sport activities coupled with the lack of any sustainable development plan.

Finally, to mitigate these detrimental issues in Batroun, prioritizing the local community needs and boosting the blue economy as well as implementing a holistic sustainable tourism plan are a necessity for all stakeholders.

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