Guesthouses as a form of sustainable tourism initiatives in Algeria: The case of the province of Tizi-Ouzou

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Abstract:

This article aims to analyze the extent to which guesthouses are part of a sustainable approach in their business by reviewing the dimensions of sustainable tourism (economic, social, and environmental) applied by guesthouses. We used a qualitative method based on an interview guide addressed to 15 guesthouse owners in the Wilaya of Tizi-Ouzou. This study examines the role of guesthouses in the development of sustainable tourism in a territory, identifying current challenges and opportunities for applying this approach to other territories. This article illustrates the role of guesthouses in promoting sustainable tourism in the Wilaya of Tizi-Ouzou. The main results confirm, according to the dimensions of sustainable development, how guesthouses have contributed to the revitalization of the local economy, the preservation of the cultural heritage of local communities and the protection of the environment by collaborating with stakeholders.

Keywords: sustainable tourism, sustainable development, guesthouses, heritage, local culture

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Introduction:

Tourism represents a major economic force worldwide. Data from the World Tourism Organization (UNWTO, 2020) show that in 2019, this sector contributed approximately 10.4% of global GDP and employed 10% of the global workforce. Despite its significant economic contribution, the rapid expansion of tourism raises questions about its impacts on various levels. According to (UNWTO, 2019), transportation in the tourism sector is responsible for approximately 22% of CO2 emissions of total transport emissions. Furthermore, according to a recently published study (Sun, YY., Faturay, F., Lenzen, M., Gössling S. & Jaes Higham, J., 2024), greenhouse gas emissions from tourism accounted for 8.8% of global emissions in 2019 and increased by 3.5% per year between 2009 and 2019. Unsustainable tourism practices pose a threat to natural ecosystems, local cultures and socio-economic balance. In response to these findings, the concept of sustainable tourism has developed as a solution to minimize the negative impacts of tourism and optimize its benefits. As highlighted by (Bramwell & Lane 1993), in the face of the adverse environmental and social effects of traditional tourism, sustainable tourism has developed as an alternative approach aimed at balancing economic development, environmental protection and social well-being.

Sustainable tourism aims precisely to safeguard the tourist destination and protect it in the long term for future generations (avoiding the negative effects of mass tourism on the tourist destination while maintaining the positive economic benefits of tourism).

This analysis aims to explore the theoretical foundations of sustainable tourism and sustainable development, in order to identify their essential principles, analyze the obstacles to their implementation, and propose a comprehensive framework for their practical application. It is important to note that the conceptualization and implementation of sustainable tourism remain complex processes, generating numerous discussions both theoretically and practically.

To better deepen our understanding of the issue of sustainable tourism, we opted for a case analysis of guesthouses in the Wilaya of Tizi-Ouzou. This choice is justified by the tourism and territorial assets (Abada & Foura, 2019), given that the Wilaya is rich in cultural and natural heritage, representing an attractive tourist destination. Furthermore, by revisiting the socioeconomic context characterizing Algeria, we observe a heavy reliance on fossil fuels, which are

considered harmful to the ecological and urban environment, hence the need to opt for sustainable development and diversify the economy (Amarouche, 2012). Applying sustainable development concepts to the Algerian context, in the field of tourism, is subject to the conditions that take into account cultural and social specificities, as well as the Algerian economic reality.

In light of what has been said, our research focuses on the actions undertaken by guesthouse owners to promote sustainable tourism by analyzing the example of the Wilaya of Tizi-Ouzou. This is done within the context of guesthouses' implementation of sustainable tourism development dimensions, including economic, sociocultural, and environmental. Therefore, the research question would be to examine the extent to which guesthouses are committed to a sustainable approach in their operations.

To conduct this study, a qualitative data collection and analysis methodology was applied. The goal was to explore the various facets of the guesthouse owners' efforts.

Firstly. Sustainable Tourism:

This analysis aims to explore the theoretical foundations of sustainable tourism and sustainable development in order to identify their essential principles, analyze the obstacles to their implementation, and propose a comprehensive framework for their practical application. Before addressing the issues of sustainable tourism in this study, however, it is essential to address the concept of sustainable development, which, as we shall see, lies at the origin of sustainable tourism.

The notion of sustainable development emerged in the 1980s in response to growing concerns about the environmental, social, and economic consequences of human activities (Froger, 2001). This concept seeks to reconcile economic progress, social equity, and environmental preservation (Elkington, 1997). The proposed development model emphasizes the dynamic interactions between economic, social, and environmental aspects, recognizing their interdependence. The 1987 Bruntland Report popularized this notion, defining it as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 51). At the territorial level, this implies prudent management of natural resources and consideration of the long-term effects of human activities. The roots of sustainable development date back to the 1970s, when critics began to

question the dominant economic growth model. The 1972 report "The Limits to Growth" published by the Club of Rome highlighted the risks associated with the excessive exploitation of natural resources (Meadows, Randers, Behrens, 1972). In 1987, the Bruntland Report of the World Commission on Environment and Development helped popularize the term "sustainable development" and laid the foundations for a new paradigm. The evolution of the concept of sustainable development has continued through various international initiatives, including the Rio Earth Summit in 1992, the United Nations 2030 Agenda for Sustainable Development, and the adoption of the Sustainable Development Goals (SDGs) in 2015 (United Nations, 2016).

As highlighted by (Bramwell & Lane, 1993), in the face of the negative environmental and social impacts of traditional tourism, sustainable tourism has developed as an alternative approach aimed at balancing economic development, environmental protection, and social well-being. Sustainable tourism safeguards the tourist destination and protects it in the long term for future generations. This vision is part of the broader paradigm of sustainable development, the founding definition of which was established by the Bruntland Report of 1987. This pioneering vision during this period was subsequently adapted and applied to the tourism sector, giving rise to the concept of sustainable tourism. Although this concept highlights the essential interconnection between the economic, social, and environmental spheres, its practical implementation remains a considerable challenge, requiring the development of a solid theoretical framework to guide both policies and practices.

According to the World Tourism Organization (UNEP & UNWTO, 2005), sustainable tourism takes into consideration its social, environmental and economic impacts, without neglecting the needs of tourists, host communities and professionals of this activity, whether in the immediate future or in relation to future generations. This approach is structured around three interdependent pillars: economic viability, social equity and environmental preservation. Furthermore, the World Tourism Organization (UNEP & UNWTO, 2005) emphasizes that the concept of sustainable tourism concerns the principles of sustainability covering the economic, socio-cultural and environmental dimensions of the development of tourism activity, with the objective of balancing these dimensions to ensure long-term viability. The development guidelines and management methods of sustainable tourism are adapted

to all types of tourism and different destinations, thus the various segments, specialized niches and mass tourism are included.

Beyond these fundamental principles, sustainable tourism is part of a broader vision that includes several determining factors. First, sustainable development, which aligns with the definition of the World Commission on Environment and Development (1987) and aims to meet the needs of the present without compromising those of future generations. According to (Weaver, 2005, p. 10) "Sustainable tourism can be fundamentally seen as the application of the idea of sustainable development to the tourism sector". Second, carrying capacity, a concept borrowed from ecology, refers to "the maximum number of individuals that a habitat can support indefinitely without suffering irreversible degradation" (Pearce, 1989, p. 21). Its application in the tourism context would be the determination of the maximum threshold of visitors for a destination for the preservation of the environment and local culture. Third, the ecological footprint, which is defined by (Wackernagel & Rees, 1996) as a measurement tool that assesses the pressure of human activities on ecosystems, calculates the areas required for the production of consumed resources and the assimilation of generated waste. Its applications in tourism would be the assessment of the environmental impact of tourist activities and the identification of impact reduction strategies. Finally, community participation, in which (Tosun, 2000) states that sustainable tourism requires the active involvement of local communities in tourism development planning and management of tourism activities to ensure respect for local cultures and ensure equitable distribution of benefits.

Although this concept highlights the essential interconnection between the economic, social, and environmental spheres, its practical implementation remains a considerable challenge, requiring the development of a solid theoretical framework to ensure its broad and relatively accepted capacity to guide both policies and practices. This being said, given that this concept has not achieved the expected consensus within the international community.

Secondly. Methodology:

We adopted a qualitative data collection approach supported by interview guides for guesthouse managers to gather data on their understanding, practices, and suggestions regarding sustainable tourism. Individual semi-structured interviews were conducted to give respondents ample opportunity to express their perspectives. In fact, a

combination of open and multiple-choice questions presents owners with an open interview tailored toward their realities.

The main themes of the interview guide focus on:

- Presentation of the guesthouses, objectives and motivations, types of activities offered to visitors, prices (overnight stays, meals, other activities); monthly, seasonal, and/or annual revenues, etc;
- Stakeholders (participating actors) and marketing strategy;
- Economic, social, and environmental dimensions of the guesthouses;
- Constraints, prospects, and recommendations.

To achieve this, our work is divided into three parts. The first part focuses on the theoretical framework relating to sustainable tourism. The second part is devoted to evaluating the implementation of its principles in a specific context within the Wilaya of Tizi-Ouzou through the analysis of the interview results in order to identify key success factors for potential applications in other Algerian destinations. We will conclude with a conclusion and recommendations for promoting sustainable tourism in Algeria.

To conduct interviews with guesthouse owners, we visited them in their locations to conduct face-to-face interviews, namely the municipalities of Sahel, Belloua, Iboudraren, Ait Boumahdi, Beni Yenni, Ain Hammam, Yatafen, and Iferhounene. The capacity of these guesthouses varies between 10 and 15 people.

The duration of each interview was 45 to 60 minutes, depending on the respondent's willingness to dwell on the questions asked. The survey period spanned three (03) months, from March to May 2025.

Thirdly. Main Results:

Located in the heart of Greater Kabylie in northern Algeria, the Wilaya of Tizi-Ouzou covers an area of approximately 2,958 km². It is distinguished by the Djurdjura mountain range to the south (which reaches an altitude of 2,308 meters) and has a coastline of approximately 70 km along the Mediterranean. Thanks to a Mediterranean climate that favors almost year-round tourism and exceptional biodiversity, this territory possesses significant tourism potential, which nevertheless remains underutilized. With its mountains, Mediterranean coast, and rich

Berber cultural heritage, this region provides fertile ground for the development of sustainable tourism. The Wilaya is home to a primarily Berber-speaking population that preserves a rich cultural heritage. This heritage is manifested through a variety of crafts, including silver jewelry, pottery, and textile, as well as an oral tradition, musical events, and festivals such as Yennayer. This cultural diversity constitutes a valuable asset for sustainable tourism development, as long as it is promoted with the active involvement of local communities.

1. Guesthouses as a Tool for Sustainable Tourism Development in the Wilaya of Tizi-Ouzou:

In a world where mass tourism is revealing its constraints and with a growing demand for unique experiences, guesthouses stand out as a form of accommodation that reflects the region's unique characteristics. Within this framework, there have been guesthouse opening projects that initially emerged individually before becoming integrated into more and more structured development plans. The guesthouses of Tizi-Ouzou represent an updated adaptation of traditional hospitality concepts, incorporating several characteristics such as the human dimension of fraternity, traditional meals, additional cultural activities such as tours and craft workshops, and a kind of family management of the buildings that ensures a strong community attachment.

1.1. Guesthouses: Motives, Objectives, and Activities:

The originality of guesthouses in the Wilaya of Tizi-Ouzou reflects culture and nature. Each guesthouse is distinguished by its unique character, often evident in its name and presentation. These names, whether inspired by the surrounding nature or drawn from original appellations, are a window onto the identity of the place. For example, we find evocative names such as Mount "Thaletat" (meaning Finger), located in a place called "La Main du Juif" (meaning the hand of the jew), also Mount "Azrou N'thour," nestled in the heart of Djurdjura National Park. Other names emphasize this connection with the landscape, like "Cairn" (meaning stone pyramid) or "Agama" (which means nature in Tamazight). It is also common for guesthouses to simply bear a surname, such as "Ogal" or "Tamaazouzt". The style of each guesthouse is strongly influenced by its geographical location. In the mountains, where space is more limited, narrow establishments focus more on culture and natural relaxation, targeting a rather adult clientele. Conversely, coastal guesthouses are often large and geared toward family vacations, with a particular focus on younger guests. There are original stories behind the idea for creating guesthouses, such as a

passion for nature and discovering others, the demand from guests for accommodation after visits to the region, as well as business opportunities for others, given the need in the tourist accommodation market (mountain and coastal), or following a resolution to promote the region by a committee of notables from the Beni-Yenni region.

The first guesthouses we explored were established in 2017, and openings of this type of accommodation continue to this day (2025). It should be noted that the Inter-ministerial circular regulating this type of accommodation, relating to homestays "as a form of tourist accommodation," dates from June 16, 2012. Moreover, before this date, some residents welcomed visitors into their homes as a form of hospitality. This circular stipulates that "the owner may rent out part of their home or their entire property." In this case, they are not required to live on the premises. However, a 100% of the owners we surveyed are living on-site, but sometimes, some owners are forced to leave the entire home to tourists and find accommodation elsewhere when the house is full. The law limits the maximum number of tourists in a guesthouse to 15, so the majority of owners have adapted their premises to accommodate tourists within this limit. But, some owners allow themselves to accommodate a larger number during peak seasons or during festivities when thousands of visitors are expected for the celebrations.

Financial and economic objectives are present in the majority of motivations for creating guesthouses. However, there are other non-economic objectives that are very strong, such as personal satisfaction, love of nature, the desire to discover, helping the local community, and promoting local culture. To shed light on the question of motivations, we asked guesthouse owners to inform us about the reasons that led them to open their houses to visitors. The majority of respondents (67%) highlighted the demand from guests themselves who were looking for a refuge after visiting the premises, plus the need in the hospitality sector noted by the owners in a high demand market. These constant requests from guests and market needs have blended with the owners' passions, such as the desire to share the beauty of the place, the love of the region, to introduce foreigners to a place of sharing, encounters, and transmission, to provide them with a unique experience and a sense of belonging, to introduce and promote the region's environment and local culture to tourists, and to allow the local community to benefit from the economic benefits of tourism (40% of respondents).

We noted a diversity of activities and services offered by guesthouses. They offer a wide range of activities, varying according to their location and local culture. A universal offer is available in all guesthouses (100%), including those on the coast, characterized by hikes and guided tours along tourist routes (mountains, countryside, villages). This omnipresence is explained by the geography of these regions, where the coastline often overlooks the mountains and vice versa. These activities include cultural and historical village tours, with the birthplaces of figures such as the writer Mouloud Mammeri and the artist Idir, as well as religious visits to Maraboutic tombs.

Traditional meals are a major feature of mountain guesthouses, where 86.66% offer them. On the coast, however, visiting families tend to prepare their own meals, often with local products provided by the community, such as bread, fermented milk, olive oil, or figs. If coastal guesthouses do not provide meals, this is due to the high number of tourists, which means hosts cannot meet the needs of all guests. Visitors can then either cook with products from local shops or visit the region's restaurants, which offer a mix of traditional and modern dishes (popular with young people).

Cultural and leisure activities are balanced between festivities and immersion. Thus, the organization of cultural events, such as musical evenings, is present in 65% of guest houses. However, wild camping and bivouacs are less common, as some hosts prefer to avoid activities that could cause inconvenience to families, especially young women. Important cultural festivals in the region include Yennayer, the Spring Meeting, and the Jewelry Festival.

Less common activities, but with positive environmental, psychological, and cultural impacts, include quiet evenings of discussion, fruit picking, mental relaxation, and immersion in jewelry-making workshops. These workshops allow visitors to discover the crafting and handling of ancient jewelry materials, and some visitors even create and take home their own jewelry as souvenirs. Horseback riding excursions are also offered. In terms of specific facilities, only one in fifteen guesthouses has a swimming pool.

1.2. The Concept of Sustainable Tourism in Guesthouses:

According to the World Tourism Organization (UNEP & UNWTO, 2005), the development of sustainable tourism follows economic, sociocultural, and environmental aspects. In this sense, sustainable tourism represents for 93% of respondents the conservation and respect

of local culture and its intangible heritage, as well as the respect and preservation of the environment of their region. A rate of 73% of them understand sustainable tourism in relation to its effects on local communities by using expressions such as: "solidarity tourism towards the local community", "fair tourism towards the host community", "respectable tourism of the host community", "tourism that makes the local community benefit from the advantages of tourism" "tourism that encourages to work for the local community and to promote that community ". In 67% of cases, respondents believe that sustainable tourism is synonymous with development of the region aimed at contributing to its promotion. Furthermore, guesthouse owners have a vision of sustainable tourism represented by several terms, such as: hospitality, contact, pleasure, ecological tourism respecting flora and fauna, ecotourism, solidarity tourism, tranquility, mountain tourism, welcoming visitors, harmony, importance, alternative, exchange, villages, chalets, etc.

1.3. Marketing Strategy and Promotion of Sustainable Tourism:

In addition to domestic tourists and the Algerian diaspora, including dual nationals, who come from all over the world, foreign tourists also come from all over the world, including European countries, North American countries, Latin America, Africa, Asia, and New Zealand. A rate of 100% of guesthouses welcomed Algerian nationals and the Algerian diaspora, including dual nationals. A rate of 93% of guesthouses welcomed Europeans in addition to official figures such as ambassadors and consuls.

For almost all respondents (98%), the main marketing strategy for guesthouse owners revolves around customer satisfaction to obtain positive feedback, which will serve as a basis for word of mouth. Social media is then used by 86.66% of respondents, and 53% use online search engine marketing. Another 40% use online tourism platforms (such as booking.com and Airbnb.com), while only 20% of respondents use travel agencies as a marketing tool, and only two (02) guesthouses out of 15 cooperate with other hotel establishments as a means of attracting customers. The most used social media platforms are: “Facebook”, “Instagram”, and “What's up”. Search engine marketing includes both SEO (search engine optimization) and SEA (search engine advertising).

87% of guesthouse owners have developed a concept of e-reputation or feedback on social media, search engines, and tourism platforms to track guest comments and try to improve their service based on the

needs and concerns expressed by visitors. Those who have not developed this concept rely on word-of-mouth methods to keep up with new tourist trends.

2. Dimensions of Sustainable Tourism for Guesthouses:

We observed a sustainability orientation on the part of guesthouses based on the economic dimension, the preservation and enhancement of cultural heritage, the environmental dimension and governance.

2.1. The Economic Dimension of Guesthouses:

Eighty percent of respondents believe that running a guesthouse is an economically viable business, and the remaining 20% believe that economic viability depends on several factors, including the seasonality of tourism activity. In 86.66% of the cases, tourism activity is annual. For the remaining days of the year when the guesthouses are not occupied by tourists, the owners are preoccupied with handling their personal affairs, which were on hold during the days when they were caring for their guests. Some even pay for tourist outings elsewhere in Algeria or abroad.

Guesthouse owners are unanimous about the difficulty of determining the annual income of their business, due to the instability of the activity. Overnight prices vary depending on the services offered: half-board or full-board, one room or several, the facilities available on site, and the inclusion or exclusion of activities offered in the price. The average price is 5.000 for half-board and meals between 1.400 and 2.000; the lowest price recorded is 500 (symbolic) for accommodation.

Meals range Between 1.400 – 2.000 and are sometimes included in the price, ranging from traditional to modern according to the guests' tastes. Modern dishes are requested especially for children. Sometimes, the price of other activities is included in the price of the room or apartment, especially when the owner provides guided tours of the tourist circuits. Sometimes, tour guides or travel agencies are responsible for collecting the compensation for these visits. These prices are determined based on each activity, or a single price of 3.000 applies to all offered activities.

In mountain guesthouses, the length of stay is short compared to the coastal areas, where stays are longer. In the mountains, stays range from 1 to 7 nights, with an average duration of 3 to 4 days.

53% of the surveyed establishments hired an employee to help with guesthouse maintenance, compared to 47% who do the maintenance

themselves or with the help of family members. Skilled labor for tourism in Algeria is in serious short supply for various reasons: first, the tourism industry is underdeveloped, meaning there is less contact with international expertise; second, the lack of training in the sector; and third, the seasonal nature of the industry leads to disinterest among the workforce. Guesthouses can play an economic role by creating jobs (direct and indirect) and not outsourced, through local economic exchange, the promotion of the region's artisanal and agricultural products, low seasonality of tourism activity, and the participation of women in the local economy.

2.2. Preservation and Promotion of Cultural Heritage:

To support local culture, all the cases surveyed promote handicrafts (pottery, textiles, jewelry, etc.) and various local products, such as the culinary products of local women, and they include artisans in the tourist circuits. In some cases, they have these products sent abroad for promotion there. A representation of 100% of the respondents include in their activities related to tourist circuits, historical and cultural places. In 73% of cases, they organize traditional cultural receptions following events, as well as the organization of traditional heritage festivities such as Yennayer, the spring festival, the jewelry festival, Azrou Nthour… etc. All those efforts are for the promotion of local cultural heritage. Some owners have opted for collaboration with cultural associations and even organize exhibitions in this direction.

Tizi-Ouzou' guesthouses contribute to the preservation of local culture through the maintenance and rehabilitation of traditional local architectural heritage, the conservation and transmission of artisanal know-how, the preservation of culinary and gastronomic heritage, as well as the revival of cultural practices such as dances, songs, and storytelling, and especially the various cultural mediation activities carried out by the managers of these tourist establishments.

2.3. The Environmental Dimension of Guesthouses:

Guesthouse owners have implemented environmental practices to develop sustainable tourism; in 100% of cases, they clean up their local environment by organizing occasional volunteering. 80% of guesthouse owners have developed a habit of sorting their waste, particularly by setting aside plastics, so that it can be collected by other operators for recycling.

An 80% of respondents have reported saving on electricity and drinking water consumption. An estimated 40% saved energy by installing solar panels, 27% saved water resources by using rainwater, and 80% have created gardens by planting fruitful and non-fruitful trees. Others raise environmental awareness, install forest fire safety systems, and offer reusable water bottles to tourists to reduce plastic use.

A rate of 60% of respondents has homes or cabins that meet sustainability standards, such as ancestral homes, country houses, old inns made from recyclable materials, and an old house dating back to 1830. 27% of respondents reported having eco-label certifications such as ATES (Association for Fair and Solidarity Tourism). A rate of 93% of guesthouse owners encourage and educate their guests on environmentally friendly behavior, including banning nighttime visits, which, according to one respondent, are harmful to good neighborliness, peace, and the safety of visitors. However, only one owner surprised us by saying that he does not raise awareness because his guests are already aware of the issue. This owner is part of the "ATES" network and the association "Paysans du Monde" (meaning Peasants of the World).

There are owners who have refused to install an electric air conditioning system in the summer and prefer natural breezes; in winter, they use wood from dead trees for heating and thus reduce energy consumption.

To reduce their carbon footprint, 100% of guesthouses use local products from small local village shops and organic local products from local farmers who are linked to local expertise, whether agricultural or artisanal. These products are made according to local traditions passed down from generation to generation, linked to the region's culture. Distinguished by their quality and uniqueness, these local products enhance local culture and support local artisans and small producers, contributing to a more sustainable and environmentally friendly agriculture by favoring traditional practices and offering consumers unique flavors.

The use of those products contribute to territorial development by creating sustainable jobs, and tourists seek to discover authentic flavors such as vegetables, fruits, meats, cheeses, eggs, olive oil, honey, figs, jams, bread, pasta, plants, grains, mushrooms, artisanal fishing products, as well as artisanal products such as pottery, textiles, jewelry, natural soap, and certain culinary specialties such as different types of couscous. It should be noted that all respondents (100%) do not do business with

the outside suppliers to avoid the negative effects of freight transport on the environment and thus reduce their carbon footprint.

From an environmental perspective, these behaviors offer several advantages, such as a smaller ecological footprint compared to traditional hotel establishments, a greater emphasis on traditional products and local resources, as well as the protection of local agro-biodiversity, particularly by raising tourists' awareness of environmental challenges.

2.4. Governance and Stakeholders:

Guesthouses interact with a variety of stakeholders and partners essential to their operation and development. These stakeholders are as follows:

Public authorities play an important role in the existence of this activity, primarily through security services, which are essential contacts according to respondents. Similarly, the local authority (APC) is an important player in administrative procedures related to rental declarations, as stipulated by Inter-ministerial Circular No. 01 of June 16, 2012. However, only a minority (13%) of guesthouses have interacted with the Wilaya tourism department.

The local community, including small businesses, farmers, artisans, village committees, and housewives, interacts with 100% of guesthouses. This strong connection underscores the integration of guesthouses into the local socio economic fabric.

Cultural and sports associations are partners for 73% of respondents. These interactions are manifested by welcoming tourists during themed stays (tourism and sports), and cooperation in the organization of cultural events, such as musical evenings.

Tour guides are involved in the majority of guided tours, representing 73% of interactions. It should be noted that some guesthouse owners take on this role themselves, thanks to their in-depth knowledge of the region and their expertise in tourism. Among them, some have prior experience in tourism agencies, one is a forestry officer, and one co-owner is a qualified guide. Travel agencies are used by only 20% of respondents. This low rate is explained by a lack of interest on the part of these agencies in the tourism model promoted by guesthouses.

Stakeholders in the social and solidarity economy play a significant role in the success of guesthouse operations. Indeed, 13% of guesthouses

are members of the international association "Paysans du Monde" and ATES “Paysans du Monde” is an association that promotes agro-ecology and the hosting of tourists by experienced, environmentally friendly farmers. Its founders develop various forms of hospitality on their farms and are committed to fair and sustainable tourism. ATES, on the other hand, is a professional network of fair and solidarity tourism stakeholders. It created the "Fair Tourism" label in 2014 to provide information and guarantees for more responsible tourism.

3. Constraints encountered and recommendations for sustainable tourism:

Although their perceptions vary, guesthouse owners face various constraints, but spare no effort in finding solutions.

3.1. Constraints encountered by guesthouse owners:

Some owners highlight financing difficulties. Others cite the lack of essential infrastructure such as transportation, internet access, and means of communication. The unavailability of skilled labor and human resources also poses a challenge for some, impacting the quality and consistency of services.

However, 47% of guesthouse owners express dissatisfaction with the bureaucratic constraints associated with local governance. They believe that it does not encourage entrepreneurs, citing tight deadlines for submitting police records, unresolved land issues, and a near absence of local authorities in their tourism process. Some deplore a lack of genuine commitment to development on the part of public stakeholders, preventing them from effectively intervening on the ground.

Another major challenge, shared by 47% of respondents, is the general lack of tourism culture, and more specifically, the culture of guesthouses, at both the national and local levels. This observation is manifested by ambivalent behavior: some villagers are opposed to welcoming tourists, which reduces the influx of visitors for those who support tourism. Furthermore, certain tourist behaviors, notably a lack of awareness of sustainable tourism among young people (disrespectful behavior, alcohol abuse), are worrying. Finally, it should be noted that 20% of respondents did not identify any particular constraints.

3.2. Perspectives:

All guesthouse owners are interested in expanding their business through several ideas and future projects they hope to implement, such as training tour guides in each village, particularly on the environmental

aspects of flora and fauna, installing solar panels, opening a traditional craft profession training school, establishing marketing on digital platforms, building a swimming pool, purchasing vehicles to receive tourists (at the airport, port, bus station, train station), developing a larger space that would offer other on-site activities, such as cultural activities and events, literary cafes, artistic creation workshops, and outdoor relaxation areas such as camping, bivouacs etc. They hope to invest in tourism, whether by expanding, extending, or even building other guesthouses, even building a tourist village, constructing wooden chalets, or even creating a chain of guesthouses, etc.

3.3. Solutions considered by respondents:

As part of the guesthouse owners' recommendations for developing tourism in general and sustainable tourism in particular, the majority of owners call for the development of tourism infrastructure in particular and development infrastructure in general (roads, internet, drinking water, electricity, gas, hostels, guesthouses, hotels, entertainment venues, cinemas and theaters, game rooms, spas, Moorish baths, saunas, swimming pools, etc.).

It is essential for them to establish organized transport circuits to facilitate mobility, which, according to some, is the backbone of tourism. Others call for the development of local administration and the involvement of national authorities to help with stands at exhibitions such as the International Tourism and Travel Show (SITEV) held in Algiers, to liberate and encourage tourism investments, to facilitate permits by local administration, to simplify administrative services, to facilitate administrative procedures, and to allow for flexible schedules for guests (entry and exit).

On the other hand, some propose public awareness campaigns at the national or local level on the benefits of tourism and respect for local cultures, using the media to educate and spread the culture of tourism to as many people as possible. Furthermore, these owners encourage the development and promotion of guesthouses, and then cooperation among themselves to accommodate more tourists. Some recommend promoting rural and mountain tourism through funding, encouraging women to work in their homes, organizing festivals, exhibitions, and other activities, developing crafts, which are inseparable from tourism, and promoting and highlighting local resources. Others, however, emphasize the training of tour guides and investment in human resources training.

Conclusion:

Research shows that guesthouses represent a suitable example for encouraging sustainable tourism in Algeria. The data indicates considerable development potential, particularly in rural and mountainous areas, which can generate significant local economic benefits based on the following dimensions of sustainable tourism:

- A social impact resulting from local job creation, the preservation of cultural heritage, and the improvement of local skills.
- Environmental sustainability is achieved through the adoption of green practices, resource conservation, and minimizing the ecological footprint of tourism.
- Economic viability ensured by sustainable business models, the creation of long-term jobs, local supply chains, and socio-economic innovations.
- A solid governance model with multi-stakeholder and partner interactions, essential for proper operation and development. These stakeholders are institutional, local and associative, and international.

The guesthouses in Tizi-Ouzou embody a promising model of sustainable tourism, combining economic development, cultural conservation, and environmental considerations. These organizations serve as centers of social and cultural innovation, going beyond their purely accommodation role. However, their potential is partially hampered by several challenges requiring a joint approach involving public authorities, tourism entrepreneurs, and local communities.

The future of this model will depend on its ability to strike a balance between the necessary professionalization and the preservation of the culturally embedded character of communities. On a broader scale, this experience could serve as an example for other regions of Algeria rich in heritage, culture, and nature, demonstrating how entrepreneurial approaches can foster territorial development that preserves local identities.

It is therefore necessary to consolidate cooperation and exchange networks, as well as investing in HR training to develop a skilled workforce. Our study highlights crucial elements for success, including strong local roots, participatory governance, ongoing social innovation, and the local reinjection of profits.

However, public authorities could provide assistance to help the tourism sector improve in these areas through regular evaluations to monitor results, as well as through training, education, and practical advice for tourism professionals.

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