Innovations

Potentials and Challenges of Sahara Tourism in Algeria Case study of **Oued Souf province**

Zohier Saifi

Department of Sciences of Earth and the Universe (geography and planning territory), The Faculty of exact sciences natural and life sciences, University of Biskra, Algeria.

Corresponding Author: Zohier Saifi

Abstract.

All studies conducted on the tourism sector in Algeria indicate the various natural resources of the country and its rich cultural and artistic heritage, allowing a variety of tourism activities to be exploited adequately. This research paper aims to analyse the possibilities and obstacles of Sahara tourism in the province of Oued Souf by studying the gap between the local potentials of tourism and the reasons for the continued underdevelopment of this sector. The research is based on data from the Tourism Directorate and it is supported by field investigations and oral interviews. By analysing SWOT points (strengths, weaknesses, opportunities, and threats), the results of the current study indicate attraction of tourists to Oued Souf province. However, tourism in this province has many internal and external limitations, is still underdeveloped and unable to stimulate local economic and social potentials such as a lack of competitive advantage for tourism, the absence of supplementary and recreational activities, absence of the role of the state in development, and lack of equipment.

Keywords: 1.Algerian Sahara, 2.Oued Souf province; 3.Analysis SWOT, 4.Potentials, 5.Challenges.

Introduction

Desert tourism is a tool for economic and social development, which makes it unique, especially if it is based on effective foundations and ingredients that contribute to the national and local economy. However, promoting tourism in desert countries and regions requires policies and strategies that work hard to build infrastructure (airports, roads, railways, hotels), provide services of all kinds, provide security, and hire experts in tourism consulting (Benaissa et al., 2022). The Algerian Sahara alone represents 84% of the country, and it is endowed with magnificent contrasting landscapes like the Mzab, Hoggar, and Tassilin'Ajjer, etc. Recognized by its architectural style and its natural and cultural richness, the Algerian Sahara has several UNESCO World Heritage Sites. Nevertheless, and despite all these advantages, Algeria in general and the Algerian Sahara in particular attract only a small number of tourists from around the world, which represents a real shortfall, taking into consideration the economic crisis witnessed in the country (HananeandFares, 2019). Where tourism is related to desert areas there will be many dilemmas such as the harsh climatic conditions (Very hot in summer and freezing in winter) and like the seasonal variation that is strongly present in these areas, as well as the conditions of accessing to them, which are not always easy. Therefore, the quality of tourism that can be performed remains very special and cannot satisfy everyone. Forms of tourism that are well compatible and adapted to the needs of local populations, to the sensitivity, and weakness of the concerned environments are as follows: Ecotourism, solidarity or balanced tourism, cultural tourism and agricultural tourism. These forms are the closest by their behavior, but they differ in their presentations (Sara et al.,2022).

Oued Souf, a tourist area par excellence, is well known for its original architecture typical of the region; the dwellings are equipped with domes to cool the interiors of the houses during periods of high temperatures. Moreover, El Oued; capital of Souf, is well known by its name: city with a thousand domes (Remini and Miloudi, 2021). The domes make an aesthetic palette covering most of the region, which inspires viewers coming from inside and outside of Algeria. Oued Souf also has some tourist sites, such as the city of Guemar, the city of Zugum the old Oued Souf market and museums, in addition to some traditional arts and industries, and the traditional cooking that characterizes the region (Sami,2022). Based on the tourism potential available in the state of Oued Souf, the Development and Tourism Plan proposed four tourist poles for the Saharan regions to become symbolic fronts of the Algerian Saharan tourism, of whichthe privileged Tourist Pole of Southeast Oasis and the province of Oued Souf will be part of it. The main aim of this research is to try to explore the various tourist attractions of the Algerian Sahara, especially in the oasis region, which contains important basic elements for sustainable tourism for people, the environment, and the economy(Saida et al., 2022). To answer these questions, we identified the tourism potential that characterizes the state of Oued Souf, and through SWOT analysis, the main elements of the matrix were set(strengths, weaknesses, opportunities, and threats), and in the end we proposed some solutions.

Material and Method

In geography, the case study refers to a method of investigation and analysis that consists in studying in details every bit of the characteristics of a problem or a phenomenon in a particular situation. Besides, the case study takes on the meaning of an example that allows showing and making understand the dysfunction of a particular territory (Lahcen et al, 2022).

Analysis SWOT is one of the instruments of strategic planning, and since it can include all the dimensions of a matter strategically; it is a good instrument for tourism analyses (Ghanbari et al, 2012). SWOT can introduce a perspective of reality to tourism planners and professionals through investigating its internal and external factors and finally attempts to identify the superior advantages of a given tourism region through compilation and evaluation of the existing resources and calculation of the tourism capability of that region. SWOT is one of the instruments by which managers compare information and can offer four kinds of strategies by suing it: SO, strategies, WO strategies, ST strategies, and WT strategies (konon Bagrii, 2022).

The aim of this research paper is to answer some related questions to understand the current situation of Saharatourism in the province of Oued Souf, which has not been closely examined except for a few studies conducted by the Direction of Tourism and Handicrafts of Oued Souf. Therefore, we will attempt to analyse the potential of tourism in the region and the reasons behind the lack of development in this sector. Hence, this research paper addresses the following questions:

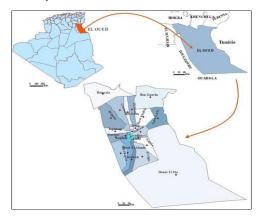
- -What are the strengths and weaknesses in the tourism potential of Oued Souf province?
- -What are the obstacles to tourism in the study area?
- -How can Sahara tourism play a role in local economic development?
- -What can be done to enhance the Sahara tourism in Oued Souf province?

The Tourist Potential of Oued Souf Province

The geographical location

El-Oued province is composed of 21 Communes and 12 Dairas. It occupies an area of 44.586.80 km² (1.87% of the territory's area) and has borders with Tebessa province in the northeast, Khanchala province in the north, Biskra province in the northwest, El M'ghair and Touggourt province in the West, Ouargla province in the South, and Tunisia in the east, 260 km from the borders.

El Oued Province is located between longitudes 6º and 8º, and latitudes 33º and 34º in the northern part of the Grand Erg Oriental, which is characterized by dunes of continental origin, that is a sedimentary basin featured by a chain of sand heights and unstable heights where the highest ones are of 127 m located in the South, and continue to fall shorter as we head northward reaching 35m below sea level in the Shatt Melghegh region, which is deemed the largest lake in Algeria with an area of 2,600 km². In other words, the dunes increase in height and thickness as we head to the South whereas the decline in height is just 2%. Oued Souf has a hyper-arid climate characterized by low precipitation, high temperatures and intensive evaporation. Based on climatic data from the meteorological station of Geumar Airport over 42 years (1978-2020), the total annual rainfall was 67.63 mm/year. The maximum total rainfall was observed in 2009 at 233.7 mm/year, and the lowest annual total rainfall was remarked in 2020. The maximum value of temperature recorded between (1978-2020) is 37.43 °C during July, while the minimum observed temperature is 14.76 °C during January. The hydrological year of the study area is branded by the presence of a dry period and the total absence of a wet period over the year. (Ayoub et al.,2022)



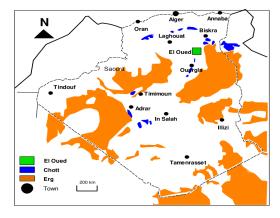


Figure 1. Location of El Oued province in Algeria (Source: Authors, 2022)

Figure 2. Geographical location of the study region (source: Remini and Miloudi,2021)

Natural potential

Dunes

In the Algerian region of the Sahara Desert, there are wonderful dunes and small villages. In some parts of the desert, you will not find life for miles, and the sand is varied in shape and color. These areas of sand are called ergs. The Grand Erg Oriental is the biggest erg in the country, and it is considered one of the main sites of Algeria because of its attractiveness and its natural and cultural heritage. Common in this erg are seif dunes: here the air currents form dunes parallel to the prevailing direction of the wind. There are other types of dunes, as well as "complex" dunes. Saharan winds are also known to clear an area of sand altogether, leaving bare rock (hamada) or gravel (reg). In addition, there are saline lakes located in the north of the province like Chott El Melghir and Chott Meruane. Tendla, Ayata and Mrara lakes (Oued Righ, near to Djamaa) are obligatory routes for migratory avifauna in winter (as flamingos, herons, storks, ducks...) (medomed, 2013).







Figure 3. Sand dunes (source: D.T.H,2021)

Figure 4. The ghout (source: D.T.H,2021)

Figure 5. Lake Sidi Omran (source: D.T.H,2021)

Ghout

During the 15th century, ghout oasis system has been developed resulting from the adaptation of the farmers to the arid climate. The ghout is a traditional hydro-agricultural system from the Souf region. It is unique in the sense of using scarce water resources in the desert to grow a high number of food plants sustainable and adapted to the environment. Ghout system consists in digging a crater in the soil in order to plant the date palm to the groundwater top. The digging is ingenuity because it is done depending on the direction and the speed of the wind on the dunes. To maintain the ghout in these conditions, farmers protect it by using palm leaves and taking out the sand regularly (Fao, 2011).

The Historical Potential

The Old District El Aachache

This famous district was established in El Oued city in the 16th century. It is characterized by an ancient and distinctive urban style with its narrow alleyways, and its technical character adapted to the climate of the region, reflecting the customs and traditions of the inhabitants.

Zaouya Tijaniya

It is one of the most significant historical monuments of this province that was established in 1789, deemed as a masterpiece of Islamic architecture and decoration.

Souk El Oued (El Oued Market)

It is one of the oldest covered markets in the world, with its tight streets, offering sellers and peddlers plenty of shade and freshness on summer days. It is also one of the most active national markets so far because it is considered an international destination.

The archaeological site of Al-Shakshak

It is located in Ben Qasha Commune, and was discovered in 2009. It dates back to the Roman presence in Northern Algeria who left some of ceramics and pots found on the site.

Architectural heritage

El Oued province is endowed with an original and diverse urban textile through which it is characterized by adjacent one-floor buildings and narrow alleyways. There are some spaces used for taking rest or nap. The most distinctive architectural feature in this province is half spherical domes on rooftops in response to tough nature, and this is the reason why the city is called the city of one thousand and one domes.







Figure 6. The old El Aachache district Figure 7.ZaouiaTijaniya (source : D.T.H,2021) (source: D.T.H,2021)

Figure 8. El Oued market (source: D.T.H,2021)

Customs and Traditions

Traditional industries

Among the handicrafts, for which El Oued province is famous, is pottery in all its forms (botijo, plates), carpets and traditional clothing (Bernous). These industries are widely spread in the city, with an estimated number of 5,294 artisans and 1,411 craftswomen distributed throughout the province's territory.

Traditional meals

El Oued is also famous for its own traditional meals, where the food is basically made of goat and cow meat until now. The most known fatty meals that are still cooked in Sufi cuisine to the present day, especially in some villages, are Seffa, El M'tabeq, Batout and Bertlag.

Cultural events and occasions

One Thousand and One Domes Feast is among the popular events in El Oued that was founded 56 years ago. It includes several cultural and entertainment activities organized by local authorities and featured by the participation of active local and non-local parties in the domain of culture, arts and folklore. Therefore, this event attracts many visitors from Algeria and abroad. In addition to this, there are other events such as Qmar City Tourist Days, National Day of Traditional Industry, and National Festival of Sand Skiing.





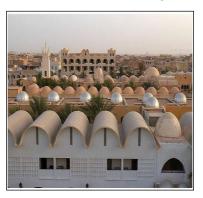


Figure 9. The clothes and carpets Figure 10. The couscous dish Figure 11. The domed dwelling **Bedding**

(source: D.T.H,2021) (source: D.T.H,2021) (source: D.T.H,2021)

Tourism infrastructure review

Hotels

El Oued province has 9 hotels (table 1), 6 of them are ranked and the others are not, with a total number of rooms of 627 and 1267 beds handled by 384 workers, 222 are permanent while 162 workers are temporary. Most of these hotels are in the city center, whereas one hotel is in Kouinin Commune. In terms of ranking, there is just one private 5 stars hotel, three hotels of 3 stars, and two hotels of 1 star. The rest of hotels are unranked; therefore, we should take into consideration that the coverage is limited, so it does not include the whole province, what requires from visitors to commute to the city center as a departing point every day. We can also notice the dominance of the private sector over hotel services while the public sector is quite absent, which indicates that local authorities lack interest in tourism.

Table 1. Distribution of hotel establishments at the level El Oued

Hotel'sname	Ranking	Number of	number of	number of	location
		rooms	beds	workers	
The Golden Gazelle	5 stars	255	504	184	El Oued
souf El kabir	3 stars	89	196	37	El Oued
El lousse	3 stars	96	192	64	El Oued
The Golden Sands	1 star	20	20	05	El Oued
El almi	1 star	32	70	52	El Oued
Ghouts place	3 stars	53	106	52	Kwinin
Si moussa	Unranked	42	76	03	El Oued
Central hotel	Unranked	28	56	02	El Oued
The golden Dimlond	Unranked	12	27	05	El Oued

(source: D.T.H,2021





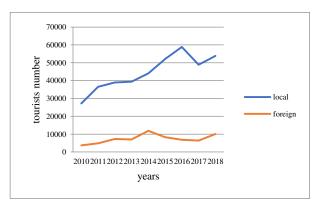
Figure 12. The Golden Gazelle hotel's (source: D.T.H,2021)

The development of tourist's number, the tourist movement in El Oued

Based on (Table2) and (figure13), we notice an annual increase in the number of local and foreign tourists arriving to El Oued Province as it increased from 30928 tourists in 2010 to 41367 tourists in 2011 with a difference of 10439 tourists. This number continued to rise until 2016 when the province has recorded the largest wave of tourists reaching 65720. Then the tourists' number decreased in 2017 and 2018. For local tourists, their number is constantly increasing annually, so it reached 27238 tourists in 2010, and doubled to 588234 tourists in 2016. The province also records a constant increase in the number of foreigntourists from 3690 in 2010 to 11892 in 2014. These statistics indicate the intensity of tourism activity in El Oued Province, which enjoys a geographical specificity and good tourism conditions.

Table 2. The development of the tourists' number coming to El Oued

Years	local	foreign	The total
2010	27238	3690	30928
2011	36494	4873	41367
2012	38942	7272	46214
2013	39441	6989	46430
2014	44102	11892	55994
2015	52137	8320	60457
2016	58834	6886	65720
2017	48880	6370	55250
2018	53844	10017	63917



(Source: Zahawani& Abadi, 2019)

Figure 13. The development of tourists' numbers (Source: Zahawani & Abadi, 2019)

Results and Discussion

The SWOT analysis is a strategic analysis tool. It combines the examination of the strengths and weaknesses, of an organization, a territory, a sector, etc. in addition to the opportunities and threats of its environment, to help define a development strategy. It is a decision-making tool designed to take into account a strategy for developing internal and external factors by maximizing the potentials of strengths and opportunities and minimizing the effects of weaknesses and threats. To interpret the SWOT matrix, we use the following reading grid (Saida et al., 2022)

High Strengths/Opportunities: The odds factors are high=> Take advantage of opportunities by building on your strengths.

High Forces/Threats: Challenge factors are high=> Use your strength to make a place for yourself.

High Weaknesses/Opportunities: Conflict (decision) factors are high=> Neutralize weaknesses to take advantage of opportunities.

High Weaknesses / Threats: Risk factors are high =>Circumvent difficulties by revising positions or taking measures to reduce weaknesses and neutralize threats.

Weaknesses (-)	Strengths (+)		
1.Mediocre tourist services	1.A distinct natural area (dunes, lakes)		
2. Few rated hotels	2.the climate is mild in winter		
3.Absence of tourism culture among citizens	3.rich cultural heritage		
4. Tourism is limited only to the winter season.	4.Ancient archaeological sites		
5. Fragility of natural areas	5. urban mesh specific to the Sahara		
6.Disruption of tourism-related projects, such as the	6. Tourism expansion area project		
tourism expansion area	7. Known for agricultural activity		
7.Not providing transportation adapted to the nature	G ,		
of the desert			
Threats (-)	Opportunities (+)		
1.Lack of tourism investment (foreign or local)	1.Border province with the state of Tunisia		
2.Absence of real publicity for desert tourism	2.local tourist destination		
3.Marginalization of desert tourism by the state	3. Next to major tourist areas such as Ghardaia and		
4. Degradation of tourist route	Biskra		
5.risks of unsustainability	4. Availability of roads and transportation network		
6. competition from other desert provinces	5.Promoting desert tourism internally and externally		
	6. A huge multi-service tourist complex		
	7. the SDAT study is an opportunity for the		
	development axes assigned to it		

Produced by the author based onfield visits, 2022

From the matrix analysis, the situation allows to identify the following major issues:

- Reconsidering tourism investment policy in Algeria and linking it to the principles of sustainable development
- Activating the participation of local communities and tourism associations
- Implementation of SDAT directions in the tourism field.
- Value natural and cultural sites by attributing them normative tourist qualities.
- Completion of all projects related to the tourism expansion area
- Supporting the private sector to invest in tourism
- Reconsider the laws that frame the tourism sector
- Statistics, classification, and maintenance of heritage sites
- Supporting traditional activities and industries that preserve the authenticity of the region.

The province of Oued Souf will possess many tourism potentials that will makeit distinct among other Algerian provinces, located in the desert in the great eastern erg (the sand), ancient cultural heritage, unique urban character, palm oases, popular customs and traditions, the presence of hotels and tourism agencies, cultural and economic activities over the year. However, there are many impediments that face tourism sector in the province of Oued Souf including:

- Lack of maintenance and protection of heritage sites
- Exploitation of tourism in one season (winter), which limits economic income
- Environmental degradation as a result of pollution
- The considerable weakness of front office structures which are not up the level of global services, and they are only specific to lodging and food services.

Conclusion

Oued Souf province, located in the Algerian, has considerable tourism potential with a promising future due to its geographical location and the diversity of its historical urban and architectural heritage. It is a destination for domestic and foreign tourists; however, this potential faces many impediments including the lack of basic services and structures, the problem of preserving the environment, the role of the state, the role of the private sector, the legal texts that govern the tourism sector, and tourism investment. Therefore, the tourism sector in the study area needs to be reassessed by reorganizing it, increasing its attractiveness, preserving natural resources, and introducing new and effective curricula for tourism and entertainment development.

The future development of tourism in the region should be based on economic, legislative, and investment components, infrastructure development, introducing tourism culture to investors, and activating the role of the state (Saifi, 2023)

References

- 1. Ayoub, A., Foued, B., Tamas, M., Mahmoud, D., György, S (2022). Assessment of Spatial Distribution and Temporal Variations of the Phreatic Groundwater Level Using Geostatistical Modelling: The Case of Oued Souf Valley—Southern East of Algeria. mdpi journal water, 14(1415), 2-22.
- 2. Benaissa, F.T., Toufik, H. L, Dehimi, S., Allal, A (2022). Desert tourism between the need for development and response to demand. The case of the city of Béni Abbés – Algeria. Technium social science journal, (38): 903-917.
- 3. DTH, Direction of Tourism and Handicrafts (2021). Monographies wilaya d'el Oued [monograph wilaya of El Oued]. in French
- 4. Ghanbari, H., Mohamed Ali, A., Abdolhossein, B (2012). Using SWOT analysis in tourism studies with system approach. Advances in Environmental Biology, 6(11): 2953-2957. Google Scholar
- 5. Hanane, A., Fares, H (2019). Le tourisme durable quelles perspectives au Sahara algérien [sustainabletourismwhich perspectives in the Algerian Sahara]. Humanities Journal, 30(1), 65-81, in French,
- 6. Konon Bagrii (2022). SWOT Analysis as a Basis for Strategies Designed for the Management of Tourism Development in Ukraine, Tourism and Rural Space, 48(02): 21–36. Google Scholar
- 7. Lahcen, F., serine saloua, L., Mohamed Nassim, B (2022). Test of the New Approach of Taxonomic of Tourist Resources for Development, Case of the Province of Setif, Algeria, GeoJournal of Tourism and Geosites, 43(3): 878-886.
- 8. Remini, B., Miloudi, A (2021). Souf alegria, the revolution pf crater palm groves (ghouts). Larhyss Journal, 18(03), 47-74.
- 9. Saida, M., Ouahiba, B., Houria, B (2022). The possibility of exploiting the tourism potentials in biskra province south eastern Algeria. Geo Journal of Tourism and Geosites, 42(02), 718-726,
- 10. Saifizohier (2023). Potentials and Challenges of Thermal Tourismin Algeria: A Case Study the Hammamet of Teleghma, Mila Province, YMER journal, 22(3):1536-1547.
- 11. Sarra, K., Yamina, A., Adel, S., Soumia, B., Djamel, A (2022). The Role of Sustainable Tourism in Integrating and Maintaining the Architectural Heritage in the Old Cores. Case Study: Architectural Heritage of the Ziban's Region Ksour. International Journal of Innovative Studies in Sociology and Humanities, 7(11):149-161.

Innovations, Number 72 March 2023

- 12. Toute l'actualité touristique et culturelle en Algérie. Le Grand Erg oriental El Oued Top Destinations Algérie - (topdestinationsalgerie.com)
- 13. Zahwani, A.; Abadi, M (2019). The Viability and Factors of Tourism Attraction in El Oued Province (Fact and Prospects Analytical and Impartial Study). Journal of economic and administrative research, 13(02),257-280,
- 14. Zermane, K., Barhoum, A., Badis, N (2021). The development of tourism in Algeria within the master plan for tourism development SDAT2025. Economic Sciences, Management and Commercial Sciences Review, 14 (02), 324-336.

Corresponding E-mail: zohir.saifi@univ-biskra.dz