

THE PRESERVATION OF WORLD ARCHAEOLOGICAL SITES AND PROMOTION OF TOURISM: QALA'AT BANI HAMMAD (M'SILA) ALGERIA

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Abstract: Archaeological sites are currently considered as one of the most important tourism industry drivers, becoming an autonomous economy. Among the most outstanding archaeological sites in Algeria is the fort of Bani Hammad. This site is the first archaeological site classified by UNESCO in 1980, located in central Algeria in M'sila province. Given its importance, we conducted a scientific study to highlight its beautiful archaeological tourism components and national and international tourist attractions. Then, we revealed the tourism challenges and the physical and moral deterioration affecting this site. Also, we propose a preservation plan to promote this site's touristic assets, enabling its transformation into a tourist destination competing with other archaeological sites in Algeria and the Maghreb; through a sustainable development plan of archaeological tourism, while preserving its historical identity and role. To this aim, we used a descriptive and quantitative analytical approach, starting with a theoretical and analytical analysis of various studies, plans, and documents related to this archaeological site's components. Then, we analyzed the geographical and statistical data of the tourist traffic over five years using the SPSS statistical program. Finally, we presented the results, developed a rehabilitation plan for the site, and suggested an essential set of recommendations.

Key words: archaeological sites, Qal' at Bani Hammad, M' sila, tourism industry, sustainable tourism development, preservation, UNESCO.

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INTRODUCTION

Archaeological sites play a crucial role in promoting tourism because they attract many tourists, especially history lovers who have a culture of learning about ancient civilizations (Falconer et al., 2020) and because awareness of the past in its reality is society's awareness of its continuity. Algeria is one of the countries that have experienced numerous successions of civilisations. Its northern part includes the coastline, the northern plains, and the atlas plateaus, and monuments from the Roman, Arab and Muslim eras. Simultaneously, in the great south lies the Tassili and Hoggar region, home to the largest open-air natural Museum (Amershi, 2006). Therefore, Algeria's great cultural heritage must be exploited and managed by developing the tourism industry while preserving the cultural values and identity of the society and creating new income and employment opportunities (Lazzarotti, 2003).

The Bani Hammad fortress is one of the most beautiful and important archaeological reserves and the first world archaeological site classified by UNESCO in Algeria on 05/09/1980 (OGEBC, 1991). Thus, it must be preserved and exploited to attract and satisfy domestic and international tourists (Aara and Sofi, 2018) since, in the implementation of any tourism development project, both internal and external tourism must be taken into account to achieve a balance of payments on one hand, and access to human development, the central axis, and tool of tourism, on the other hand. Today, tourism is an essential factor and a typical social ecosystem (Reddy et al., 2020). It adapts to the environment and local communities through appropriate planning and management. This is only possible with an environment of natural beauty and attractive terrain, abundant wildlife, fresh air, and clean water suitable for tourism. In such a case, tourism planning and development are as important as protecting the cultural heritage and historical records (Nwankwo et al., 2017) of any archaeological site. The city of Bani Hammad is one of the most important archaeological sites and an exceptional testimony of the second Islamic civilisation in the central Maghreb after Rustumiya (Gilali, 1983). To carry out this study, many questions were asked: How to preserve the first archaeological site classified by UNESCO in Algeria? What are the archaeological and tourist components of the site? What is the extent of tourism activity in this site at the local, national, and international levels? How to promote the tourism industry in this world archaeological site?

STUDY GOAL AND METHODOLOGY

This study highlights the archaeological assets of the historical, cultural, tourist, and economic aspects and attempts to convince the authorities of the importance of resuming the archaeological excavations and transforming this site into an international tourist destination. To conduct this study, we followed these steps: collecting historical and statistical data on tourist traffic over five years, reviewing previous studies, organizing field visits to learn more about the archaeological values of the existing heritage, exploring the site's museum, and using its vast collection of archaeological artefacts to generate results and recommendations, using a descriptive and quantitative analytical approach, and also computer softwares such as Microsoft Office Word, Excel, the statistical program Microsoft Office SPSS, the geographic information system ArcGIS (Figure1) and ARCHICAD an architectural BIM CAD software.

LITERATURE REVIEW

Preservation of archaeological sites: UNESCO distinguishes two types of World Heritage Sites: cultural heritage sites and natural

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heritage sites (Rössler, 2006). As part of UNESCO's agreements, all countries must protect archaeological sites from degradation, vandalism, and extinction, since preservation is the major key to their sustainability for present and future generations (Newsome et al., 2012). Among preservation indicators, there is a need to complete archaeological excavation at the site. In some institutes, data obtained are digitized and then processed in the field to create a consolidated knowledge approach for archaeological research (Marchetti et al., 2018). The protection of these sites from different pollution types is essential by using modern remote sensing techniques. The latter targets the development and design of appropriate actions for the preservation of antiques, reduce erosion and prevent additional damage (Sakka et al., 2020). It is also important to plan the restoration of archaeological sites, in an exact and modern way, particularly on damaged and difficult to recover organic materials such as (wood chips, hazelnut shells, and seeds). As science advances, three-dimensional X-ray microscopy imaging techniques are now used to identify the quality of damaged materials that need to be restored (Ngan-Tillard et al., 2015). These components ensure the protection, sustainability, and integration of the heritage. Hence, archaeological sites management and exploitation must be based on the idea that it is a physical recording of human history, using various activities since it provides a valuable resource for gaining better knowledge on the past. According to various international regulations, archaeological monuments and sites must be preserved, notably the 1964 Venice Conference in Italy (Heritage and Copithorne, 2018). Concerning preservation and protection of archaeological sites, Algeria was part of the Convention for the protection of the World Cultural and Natural Heritage concluded in Paris and organised by UNESCO on November 16, 1972. Its most important clause in Article No. 4 is that each State Party recognizes the duty to cede the cultural and natural heritage within its region, its protection, preservation, repair, and transmission to future generations (1972 World Heritage Convention). Locally, Algeria adopted Law 98-04 of June 15, 1998, to protect cultural heritage, most importantly Article 30, which provides a protection and restoration plan in an archaeological site and its protected area. This protection and enhancement plan define the general rules of building and architectural planning when required, along with the consequences of land use, particularly concerning the activities allowed within the vicinity of the classified site or a protected area (law 98-04).

The promotion of tourism in world archaeological sites: archaeological sites are a form of the tourism industry. Their economic return differs from one country to another and one site to another, including their protection, preservation, and classification. For instance, China is one of the largest countries attracting foreign tourists to archaeological sites. Its total classified sites went from 7 in 1990 to 35 in 2007 (Yang et al., 2010). Local community understanding of heritage's importance directly impacts tourism marketing in the site (Teo et al., 2014). Studies indicate that the initiatives taken by the site managers, like financial discounts or free entrance to archaeological sites, will transform them into an open space that can become part of their daily life, and therefore help to bring the local community closer to this architectural and archaeological heritage connected to their identity (Burch et al., 2019). The promotion of tourism is not limited to governmental organizations only; it must involve the private sector, an important factor in developing tourism and economic expansion (Heierland, 2009). These archaeological sites can also be promoted through development programs involving tourist expansion zones near these sites where different accommodation facilities are established, including hotels and eco-villages, cultural and sports facilities, leisure parks, green spaces, and an equestrian zone. All these projects (Kherrou et al., 2020) are designed to meet national and international standards consistent with local characteristics.

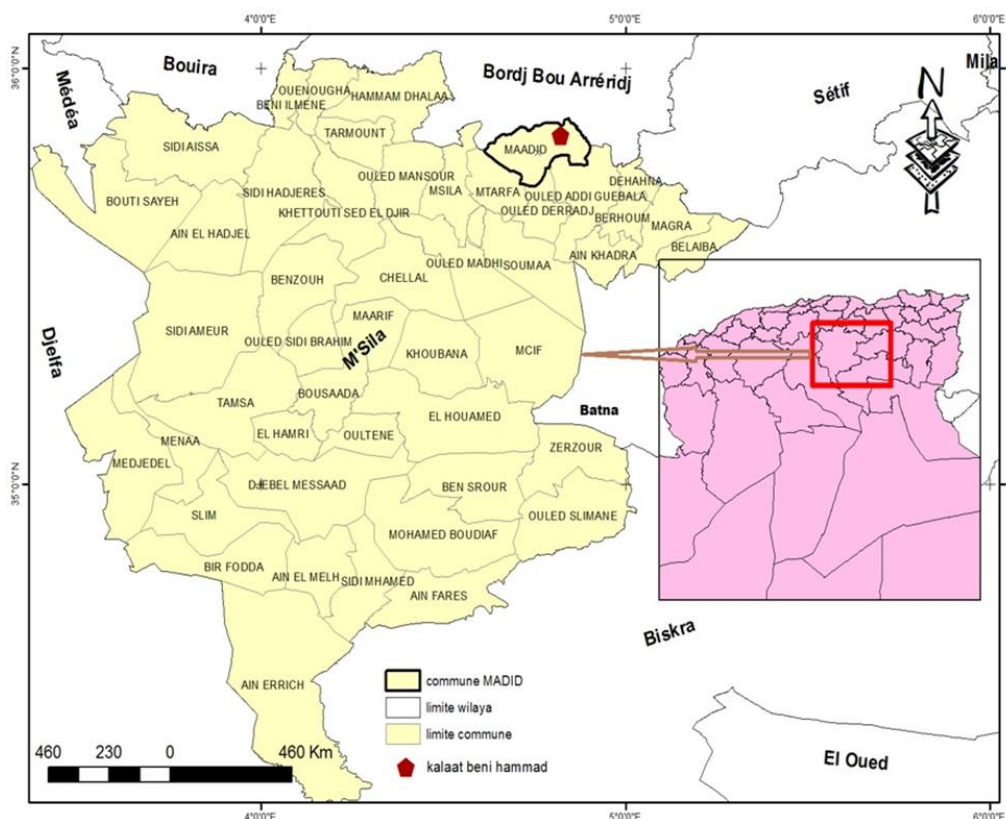


Figure 1. The geographical location of Bani Hammad Fort

Geographic setting of Bani Hammad fort

The archaeological site of Bani Hammad is located in Al-Ma'adhid municipality, in M' sila, 200 km south-east Algiers, on the slope of Mount Tekrbost (1418 m), at the north-eastern limit of al-Hudna plains, 36 km from M' sila town, the capital of M' sila province, as a plateau of about 950 meters above sea level (Glovin, 1962). Surrounded by mountain peaks, the city of M' sila is a naturally fortified site. It is limited to the west by the Jabal Qurain (1190 AD) and the east by the Aduqa mountain range, the peak of Sidi Sahab (1000m / 1400m) (Marc, 1996). Its position allowed it to control al-Hudna's plains from a defensive position against many other tribes (Saleh,

2009). The site is a highly famous tourist attraction given its proximity to tourist movement regions (Europe, the Middle East, Asia, and America). However, its climate is semi-dry with a precipitation rate of 50 mm per year and an average temperature of 15 degrees (PDAU, 2014), which favours recreational tourism beneficial for both blood circulation and pressure and the nervous and respiratory systems. The area also experiences snowfall in January and February, which gives it an elegant white suit.

The attractiveness of Bani Hammad's morphological planning

The Bani Hammad Fortress is one of the 7 sites in Algeria classified by UNESCO (The Beni Hammad Fortress, Tassili, Oued M'zab, Jamila, Tipaza, Timgad, Kasbah of Algeria) (Boutemedjet, 2011). It is also the second capital of a state established in the central Maghreb (Algeria) after the Rustamid dynasty. It was built by Hammad bin Belkin bin Zairi Al-Sunhaji Al-Barbari, following an agreement signed with "Badis bin Al-Mansur bin Belkin bin Manad Al-Sanhaji" in 1004 AD. It was built during the period 1007 - 1008 AD (Ibn Khaldun, 1961) to be the Hammadid state's capital, not by chance, but it was built according to a strategy of great importance in the conception of that period. Its principal strength was the military power. Hammad bin Belkin, the founder of the state, chose to establish his capital, "Qal' at Bani Hammad," in the center of the region, between the sea and the desert, to improve the lives of its inhabitants.

Qal' at Bani Hammad succeeded in ensuring the quality of coexistence between all the different communities and races united by the Islamic religion; a task rarely achieved in the cities of that time. It extended to the city of Kairouan in Tunisia, in the east, and to Fez's city in Morocco, in the west. Among the essential components of its urban planning, we find: - **The mosques:** Hammad bin Belkin built the Great Mosque and the Small Mosque in Qasr Al-Manar palace, where prayers and religious classes were held. The minaret of the Great Mosque is considered one of the oldest minarets in Algeria, composed of one single 24.70 m high tower Made of stones (Figure 2). This minaret is distinguished for its decoration and is considered as an architectural masterpiece. Some researchers suggest that it has influenced the Almohad minarets, especially the Seville Mosque minaret, which features structured decorations, forming three standing panels. Engineers and archaeologists consider the Great Mosque one of the most impressive archaeological remains of the Hammadid dynasty. It is illustrated in the figures and manuscripts found in the museum archives. In addition to the Great Mosque, in 1968, Algerian archaeologists discovered a small mosque at Qasr al-Manar palace, 160 meters long and 120 meters wide (Bourouiba, 1981).



Figure 2. The great mosque minaret and prayer hall (authors)

Walls and towers: The Hammadid princes surrounded the city of Bani Hammad, the base of their reign in the Middle Maghreb countries, by a 7km long wall making it impregnable difficult to reach, and strong easy to defend. The wall starts from the west coast of Wadi Faraj and then heads north until it reaches Mount Takerbost, then descends to Mount Qurain towards the eastern Shatt. Ibn Hammad in 1007 DC declares that the city and its wall was built by a roman called Buniyash (BinKhirbash, 2009). The Princes of Bani Hammad also constructed high and strong observation towers. Researchers highlight the Al Manar watchtower, distinguished by its height, which significantly contributed to its surveillance and defense. It is a square tower with a 20-meter side and surrounded by a guards' corridor.

Palaces and gates: There are three main gates in the Bani Hammad site (Bourouiba, 1977). Guard posts have been built on either side of each of them; these are small square towers designed to watch over the quarters, surrounding areas, entrances and exits. The three gates are Bab-aqwas, Bab al-Jinan, and Bab Jirawa. Archaeologists discovered three palaces within site: Qasr al-Manar palace, Qasr el-Bahr (the Lake palace), and Qasr el-salam (IbnKhaldun, 1961). Qasr Al-Manar palace consists of several buildings and halls of different shapes, including the Hall of Honour and the small mosque mentioned above. This palace was built in an exquisite artistic and architectural style. This is evidenced by the rectangular marble panels on the palace's north wall, crowned by a band decorated with geometric elements carved into the stone. There are also water basins, fruit trees, and fountains, making this palace a distinctive element of the beautiful hammadid architecture.

Qasr el-Bahr (the Lake palace) discovered during excavations carried out by the researcher Doble in 1908 A.D. Among its characteristics: an eastern cross-shaped entrance, two rows of rectangular rooms oriented from south to north, and a corridor paved with bricks (Figure 2). This palace comprises nine distinct and interconnected architectural groups (Balkherat, 1993). The Qasr Al-salam palace consists of four

rooms and a small hall that opens onto a rectangular 17.75-meter long chamber. The palace contains several rooms of different shapes and sizes. Some archaeologists claim the existence of a fourth palace in the fortress, named Qasr Al-kawkeb, yet nothing is known about it.

Accommodation: Discussing housing and habitat in Qal'at Bani Hammad requires historical texts, planning documents, excavations, and field research, which unfortunately are not available. Regarding the city's districts, it is evident that Qal'at Bani Hammad included several districts. Like other towns in Hammadid state, it was inhabited by different social groups. However, it is challenging to describe the districts' structure since most of them are still buried underground, except the Jarawah district, located near Bab Jarawah (Bourouiba, 1977).

The fortress preserves the remains of three basins and two bridges. Two of the basins are located in the Qasr Al-Manar palace and the third in the city's southern section. The upper basin of Qasr Al-Manar Palace is rectangular with a length of 4.90 m and a width of 1.30 m and a depth of 4.90 m, reached by an underground canal through its northern and eastern corners. The lower basin is located southwest of the upper basin, two meters shallower. The third basin is located in the southern part of the city. It is also rectangular with an internal length of 12 m, a width of 6 m, and a depth of 1 m, with well-fortified walls built with cylindrical fittings (Bourouiba, 1977). As for the bridges, Qala'at Bani Hammad included several bridges, and the remains of two of them can be found today, one in the western part of the city, over the valley between Qasr Al-salam palace and Jabal Qurain, and the second, called Sidi Issa Bridge, in the southern part of the city. The development of Qal'at Bani Hammad is mainly due to the arrival of scientists, engineers, and artisans who worked in the palaces and contributed to its prosperity through the diversity of trades such as decoration and forging (Andrey, 1984). According to the paper, modern remote sensing techniques are used to detect the extent of artifact susceptibility and reduce the occurrence of further damage (Sakka et al., 2020).

As we noticed from traces of trades, decoration, and many artefacts during our visit to the fort museum (Figure 3).



Figure 3. Some of the discovered pieces displayed inside the museum of Qala'at Bani Hammad

Through the above description and analysis, Bani Hammad fortress's morphological setting is suitable for tourism due to its natural, urban, historical, and even human resources, thus requiring an assessment of its tourist attractions, which we will examine in the following element. Based on (Figure 4), a three-dimensional representation of this beautiful fortress's components, including the houses, the protective walls, and the gates was obtained.



Figure 4. Three-dimensional representation of components of Bani Hammad fortress (authors)

Tourist traffic at Qal'at Bani Hammad archaeological site:

Tourism demand is defined as the total number of visitors to a specific region and over a given time (Gérard and Michel, 1999). Globally, tourism is influenced by two critical factors, the temporal factor and the spatial factor (Filipe et al., 2018). In the study area, we conducted a statistical analysis of tourist traffic over five years (2015-2019) on a group of tourists from inside and outside M'sila, considering that the municipality of Al-Ma'adhid, the host of the archaeological site, has 29,898 inhabitants, for a total number of M'sila residents estimated at 1.364,858 inhabitants (DPM, 2020), and also according to age groups (children, young adults, adults) using the SPSS statistical program, which is mainly based on a numerical basis (Vallabh et al., 2017). After processing the data, we established the following table:

Table 1. Statistical analysis of tourist traffic over five years using SPSS (DTAM, 2020)

	Fort BH			Museum BH			M'SILA		total	M'SILA	outside M'SILA	nation-al	
Years	Young Adults	Adults	Children	Young Adults	Adults	CHild-ren	S'fort visitors	Museum visitors	total	Rresult SPSS	S'fort visitors	Museum visitors	results SPSS
2015	3031	4339	2565	276	464	504	9935	1244	11179	0.18	5687	646	3
2016	2317	2706	2201	168	190	256	7224	614	15676	0.26	5375	487	28
2017	2760	2108	2997	110	218	592	7865	920	17570	0.3	3287	129	331
2018	4241	3413	3663	100	276	828	1204	11317	12521	0.2	12	0	645
2019	1938	3338	1287	137	285	310	6563	732	7295	0.12	19	6	357

In our analysis, we used spatial variables (fortress (Qala'a) - museum - local (province) - national - international), and age-related variables (children - young adults - adults). We used the SPSS statistical program specified for the parameter, 95% reached, and 5% not reached (Nicolae, 2020). Based on the above table, the fort attracted most foreign tourists during the years (2015 - 2016 - 2017), compared to the museum. No visits were recorded in the fort and the Museum from June 2017 because of the fencing construction around the archaeological site to protect it from vandalism (DTAM, 2020). The number of foreign visitors continued to decrease in 2018 and 2019, as shown in table (1). Visits were limited to foreign delegations from different countries, from 3 tourists in 2015 to 357 tourists in 2019, considering that the relative importance index of foreign tourists during the five years is not reached (<0.05) (Figure 5). Also, the percentage of foreign tourists is very low, compared to some recent international sites such as the Louvre Museum, reaching 9 million visitors per year (UNESCO, 2013).

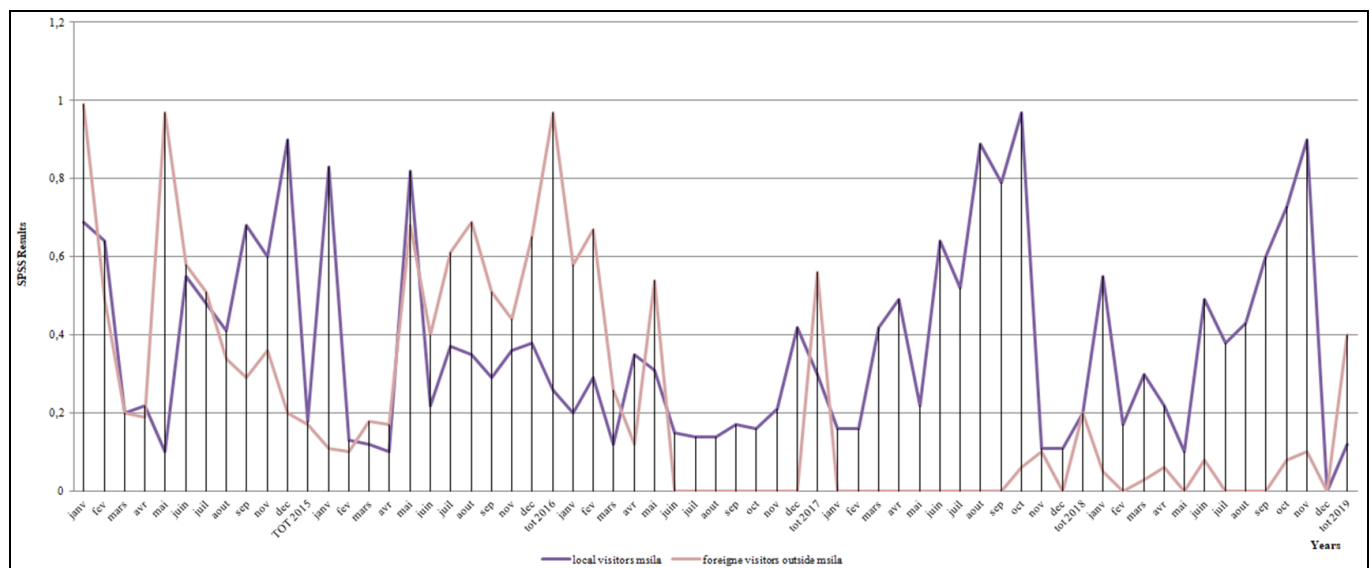


Figure 5. Comparison between local (from M'sila) and national tourists over the five years (Directorate of tourism and handicraft of M'sila Province, 2020)

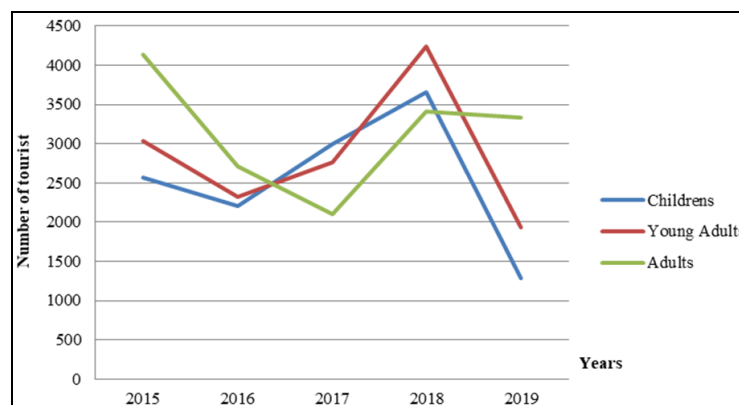


Figure 6. The Variation in tourism traffic by age groups over the five years (directorate of tourism and handicraft of M'sila Province, 2020)

We note that the number of visitors to the fortress exceeded that of the museum over the four years (2015, 2016, 2017, and 2019), while in 2018, the museum recorded a higher number of visitors with 1204 visitors against 828 visitors to the fortress. This was caused both by the lack of media and advertising and the fencing construction interrupted by Algeria's financial crisis in 2017 (Directorate of Culture M'sila, 2019). As for the age-group variables, we note that children are the most numerous to visit this touristic area, notably the museum, during the five years. In the first place, we find children with 504 visits, in second place young adults with 464 visits, and the third-place adults with 276 visits in 2015 (Site's Museum, 2020). The high number of children visiting the museum is due to the school trips for pupils to discover the archaeological tourist components of their region. Also, most families introduce their children to the history of their country by visiting museums and discovering the different periods of the region's history, plus visits organized by university students from different specialties, such as the archaeology department and the urban and tourist development department. Thus, the relative importance index is verified (>0.05) for the museum's visits by age group. We also note variations in visitors' numbers to the fortress: 1938 young adults, 3338 adults, and 1287 children visiting the fort in 2019. This disparity in the attraction of the age

groups is due to the steep field and the limited facilities available there, which makes it difficult for children to visit (Figure 6). These children prefer visiting the museum with its precious archaeological artefact of Qal'at Bani Hamad and its civilization. Based on these results, we considered elaborating a preservation plan for this archaeological site.

RECOMMENDATIONS

Based on this study, and within the sustainable tourism development approach, that takes into account the extent of the present generation exploitation of tourism resources without compromising the future generations, we designed a preservation plan for the Bani Hammad archaeological site, relying on UNESCO legal guidelines and studies, free from personal jurisprudence, to preserve archaeological sites and monuments (Kherrou et al., 2020), and from the 1904 Madrid conference known as the Sixth Meeting of Architects, where specific points discussed monuments, most importantly dividing antiques into living and dead monuments; and the most important conference about the restoration and rehabilitation of archaeological sites: the Charter of Venice in Italy in 1964, from which sixteen guidelines on the field of restoration of antiques emerged, and from this point of view we have divided the rehabilitation plan of the fortress into the following operations.

Archaeological excavations: Archaeological excavations are defined as investigating historical sites to reveal the architectural or artistic ruins likely to be found there (Asim, 1996). In this process, we target an area classified by UNESCO, estimated to 150 hectares, to continue the excavation work that has revealed only 30% of the Bani Hammad fortress. The first excavation in the area was carried out by the archaeologist (Blanchet, 1897), which lasted eight years, and UNESCO carried out the last excavation in 1982. Through our monitoring of tourist traffic, we had to improve the tourists' condition inside the reserve by advising and protecting them during the process of their visit, using environmentally friendly procedures without damaging the historical identity and function of the site, and using all scientific procedures in the restoration process, taking into account some of the following conditions:

- Archaeological remains: historic buildings that must remain unaltered or unchanged and cannot be removed from their place as they represent and reflect its history unless required by the national interest.

- Antiques from any building, such as statues and oil paintings, can be transferred from the original building to a safe place, like museums or equipped warehouses if keeping them in their place endangers them according to the Charter of Venice, Italy 1964

- The restoration process is very sophisticated and must comply with the requirements to avoid altering the building and to preserve and maintain the original construction materials together with the necessity to preserve any building documents, and avoiding personal bias or intuition during the process, and keeping records of all restoration work on monuments.

In this sense, we propose this project as part of this archaeological area's protection and preservation plan to become a tourist destination in line with the sustainable development of archaeological tourism, as shown in the following images with three-dimensional technology.

This intervention process is conducted at the fort external wall with the installation of orientation panels. The intervention procedure requires careful consideration of the existing wall features (structure, construction materials, size) to ensure that the new fencing wall does not affect the monuments' visual aesthetics. The intervention must also consider the protection of buried archaeological sections by not subjecting them to damage during fence installation. As for advertising signs, they are used to define the archaeological site and guide tourists; it is best to have archaeological symbols in several languages and different places (Figure 7).



Figure 7. Intervention process at the main gate entrance and external walls of the fortress (authors)



Figure 8. Intervention involving the construction of a protective roof on the Al Manar palace (authors)

They should accurately illustrate the castle's history in the advertising panels and entrances to its protected area. The construction of the site's protection wall is built 200 meters away from the site, away from any negative impact on antiquities, according to the recommendations of the 1964 Vienna Conference approved by UNESCO and the Algerian law 98-08 related to it. The second intervention process is where the archaeological excavations are left incomplete, leaving the site carved and exposed to vandalism and degradation. The idea here is to install wooden roofs over these pits, which does not deform the view and allows the tourists to experience this stage of archaeological study, which is the excavation (Figure 8). This proposal protects excavated areas from deterioration, mostly caused by rain, in which case, the excavations are stopped because the buried monuments will be affected. The roof is movable and secured only with sand to avoid altering the existing environment in line with UNESCO recommendations.

The third intervention concerns the al-Manar palace, one of the most important parts of the fortress. Its excavations are almost completed, and it houses massive buildings and columns. Visiting this palace takes a long time, and since the climate of the region is semi-arid, it is necessary to think about placing eco-friendly wooden roofs on the corridors to avoid the sun's harmful rays in summer and the rain in winter. These wooden roofs cover the intervention process in places frequented by tourists to protect. This intervention will not change the function and identity of the archaeological site according to the UNESCO regulations for the protection of the site.

Since the preservation process of archaeological sites involves restoration, reconstruction, and protection, some restoration and protective measures are required in this site, especially on the collapsing roof of the Great Mosque, which is causing structural damage to the building and depletion of its cohesion elements, along with a vegetation growth inside the cracks. Therefore, restoration must be carried out with the same original materials and same colour, giving it a new aesthetic shape, with great caution not to exert pressure on the structure during the restoration process while strengthening some of the curved parts. Its construction is beginning to fade, to preserve it some wooden pillars can be placed ensuring to maintain its identity according to UNESCO rules and regulations (Figure 9).

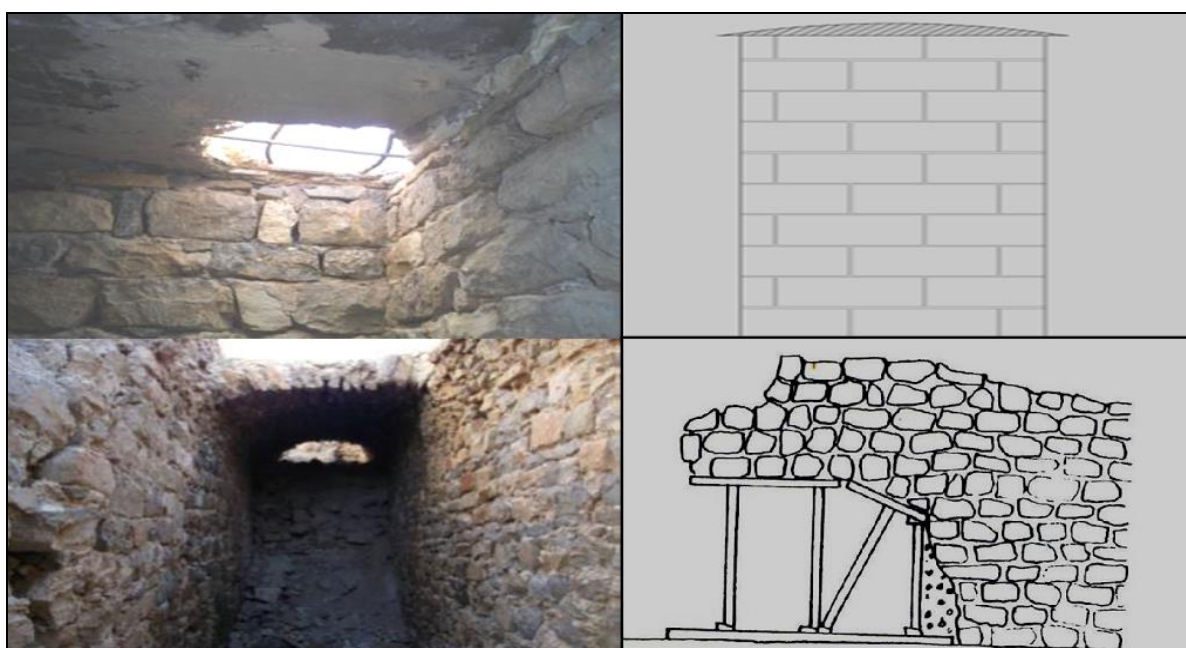


Figure 9. Some operations of restoration and protection of parts of the archaeological site (authors)

Improving tourist advertising and services

Tourism offers are the combination of a tourist site's natural and human resources. International museums and archaeological sites have taken significant steps to develop focused strategic policies, including attending international tourism exhibitions in Europe and Asia, to advertise them. One of the challenges in developing the Qal'at Bani Hammad site as a future tourist destination is the integration of new programs and views, including digital screen displays with 3D views of the site and its palaces and artefacts (Banfi, 2020), which will help to reshape the incomplete parts of the site. The Internet is now widely used worldwide, and promoting the introduction of cultural heritage as a cultural, educational, scientific, and tourist resource, enabling millions of its users to become familiar with the most important collections of both the fort's museum and its archaeological city. International museums and archaeological sites have also taken important steps to develop targeted strategic policies, including participation in international tourism fairs to promote them (Kimbu and Tichaawa, 2018).

Funding of the fort's rehabilitation plan

To implement this rehabilitation plan, it is necessary to find funding sources that contribute to the economic development of these underprivileged or hidden areas, this type of tourism do not require substantial advance investment, where the government is committed to supporting private and joint investment operations and remains the only monitor and legally authorised to control implementation of agreements and regulations for the rehabilitation of archaeological sites. Such investment defines a usable past (Van Der Vleuten, 2020).

CONCLUSION

Based on the cultural elements mentioned above at the archaeological site of the Qal' at of the Bani Hammad, and on what is presented in the archaeological preservation plan, this site and other listed monuments and archaeological sites can, in the short and long term, become a distinguished tourist destination for their natural, archaeological and human resources, as well as for their exceptional beauty and attractiveness. To preserve these sites for future generations, authorities must respect and comply with UNESCO's various regulations and agreements, thereby ensuring a sustainable tourism industry in our study area. The site can also become a permanent source of support for the public treasury and balance of payments and contribute effectively to the diversification of national revenue sources, which is the greatest challenge facing the Algerian economy today.

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