

Rehabilitation of Open-air Archaeological Sites in Light of International Charters and Standards (with a proposal to use the Ashir site as a rehabilitation model)

إعادة تأهيل المواقع الأثرية المفتوحة في ضوء المواثيق والمعايير الدولية
(مع اقتراح موقع أشير أنموذجاً لإعادة التأهيل)

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Astract:

The rehabilitation of open-air archaeological sites is one of the fundamental processes for supporting and utilizing cultural and historical heritage. These operations face various challenges that encompass many aspects, including legal, touristic, and social issues, among others. This article reviews the key principles and strategies for rehabilitating open archaeological sites and aims to provide a comprehensive theoretical overview of them, especially those that are internationally recognized. It also includes a review of international charters and the latest advancements in restoration to derive the most important international standards for preserving cultural heritage, in step with the development of conservation and restoration processes. Furthermore, it discusses practical strategies that achieve a balance between preservation and development, highlighting the role of community involvement and modern technologies, while shedding light on the current challenges related to the exploitation of heritage. This article presents a comprehensive vision to enhance understanding of how to apply best practices in preserving open-air archaeological sites and ensuring their sustainability for future generations. Finally, it offers recommendations to strengthen legal frameworks as well as international and local cooperation, in addition to calling for further research and field applications. Our article concludes by proposing the city of Ashir as an open-air site and an excellent model for rehabilitation, where all techniques of restoration, reconstruction, and rehabilitation are practiced to attract visitors and researchers, highlighting its importance and assets and culminating in the desired outcomes.

Keywords: Open-air Archaeological Sites; Rehabilitation; International Standards; Conservation And Restoration; Ashir Site.

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1. INTRODUCTION

Open-air archaeological sites are an inseparable part of the cultural memory of peoples, serving as living records of human history. However, these sites face numerous challenges, including natural deterioration, unregulated human interventions, and climate change. This necessitates the adoption of robust principles and strategies for their rehabilitation, balancing the preservation of authenticity with enabling sustainable future use. And focusing on how to apply international standards to ensure that rehabilitation efforts are effective and sustainable, while maintaining the intrinsic value of the sites. So, what are the internationally adopted principles and strategies for rehabilitating open-air archaeological sites? What are the most important scientific criteria that can be derived from international charters and that contribute to the preservation of cultural heritage? Are the foundational frameworks and principles provided by UNESCO sufficient to guarantee the protection of sites and achieve effective and sustainable rehabilitation?

The primary goal of this article is to try to discern and define the most important international standards for protecting open-air archaeological sites based on international charters, to measure their effectiveness, and to offer recommendations suitable to the findings to reinforce legal frameworks and foster international and local cooperation after reviewing the relevant international literature. To achieve these objectives within an academic and scientific framework, we need to employ the inductive scientific method to review all data related to international agreements and charters and to identify the key international standards that have been explicitly or implicitly incorporated into these agreements.

1. Conceptual Framework

1.1. The concept of open-air archaeological sites

Open-air archaeological sites are outdoor areas that contain visible or buried archaeological or historical structures, typically including remnants of ancient cities, temples, tombs, natural relics, or ancient settlement sites. These sites represent a historical heritage that can be studied and visited without the need to enter buildings or museums, and are characterized by showcasing antiquities in their original natural environment.¹

1- Al-Dabbagh, Taqi et al.: *Methods of Archaeological Excavations*, University of Baghdad, Iraq, 1983, p.63.

1.2. The Concept of Rehabilitation

1.2.1. Linguistically: The verb أَهَّلَ in Arabic means “to qualify” and the noun “qualification.” To qualify someone for something means to deem them fit for it;² the person is “qualified,” and the result is “qualified.” To qualify someone for a profession means making them capable and able to practice it. To qualify a place means to make it suitable for hosting or habitation.³

1.2.2. Terminologically: Rehabilitation, within the archaeological context, is defined as the process of intervention at an archaeological site through its conservation, restoration, or both, while permitting its use for other sustainable purposes, whether touristic or economic, all while ensuring the preservation of its historical and cultural value.⁴ This distinguishes it from routine interventions that focus on maintenance, repair, or reconstruction of damaged elements, without preparing the site for additional uses that allow for activities beyond those originally present. It is crucial to adhere to principles that protect the site, prevent its deterioration, and support its sustainability.⁵

2. Principles and Foundations of Rehabilitation

- Preserving cultural and historical value: This is the core of heritage conservation, aiming to strike a balance between protection and use.
- Minimum intervention: Avoiding random interventions that lead to radical changes and ensuring the minimization of unnecessary interventions as much as possible.⁶
- Distinguishing between original and added parts: This helps guarantee authenticity and prevents the presentation of misleading or deceptive information regarding the state of the heritage.

2- Ibn Manzur: *Lisān al-‘Arab*, edited by Abdullah Ali al-Kabir et al., Dar al-Ma‘arif, Egypt, Vol. 1, p.164.

3- Ahmed Mukhtar Omar et al.: *Contemporary Arabic Language Dictionary*, Vol. 1, 1st Edition, 2008, p.135.

4- United Nations Educational, Scientific and Cultural Organization (UNESCO): *Guidance and Toolkit for Impact Assessment in the Context of World Heritage*, 2023, p.03.

5- UNESCO: *Operational Guidelines for the Implementation of the World Heritage Convention*, UNESCO World Heritage Centre, Paris, 2017, p.13.

6- Salvador Muñoz Viñas: *Contemporary Theory of Conservation of Cultural Heritage*, translated by Hossam Mahdi, Al-Arabi Publishing & Distribution, 2024, pp.209–211.

- Sustainability: Ensuring that additions serve sustainable development without harming the site, thus guaranteeing its continued use and the preservation of its current state.⁷
- Reversibility: This approach allows for interventions that can be removed or altered in the future, making it possible to restore the site's previous state should new scientific or natural developments occur.
- Comprehensive documentation: Every rehabilitation project, including conservation and restoration processes, requires precise documentation of the site's initial condition, historical phases, building materials, techniques used, added materials, and any modifications made. This documentation serves as a primary reference for any future interventions and as an informational source for researchers.⁸

3. International Charters and Standards for Rehabilitation

It is impossible to discuss international standards for the rehabilitation of archaeological sites without referring to their sources and evolution through numerous historical milestones, including conferences, charters, or international agreements. These have played a significant role in updating the framework of these standards and in outlining their future direction over time.

3.1 International Charters

Since global interest in heritage began to take shape, the need has arisen to hold conferences and draft international charters that contribute to the coordination and the intensification of international efforts to diligently preserve cultural heritage in its humanistic and universal dimension. The starting point was the Athens Charter in 1931, which paved the way for the establishment of global institutions such as UNESCO and the International Council of Museums, both of which now play a pivotal role in setting these standards and protecting the world's cultural heritage. This was followed by many other charters, whether at the local level such as the American Charter of 1935 or the international level, such as the Hague Convention of 1954. All of these contributed to the crystallization of the concept of international standards for heritage protection, not to mention the emergence of what is known as the philosophy of art history, which revealed a variety of scientific schools and indirectly contributed

7- International Council on Monuments and Sites (ICOMOS): The Burra Charter – The Australia ICOMOS Charter for Places of Cultural Significance, ICOMOS, Sydney, 1999, pp.7–8.

8- Regional Office for the Preservation of Cultural Heritage in the Arab World: International Charters for the Conservation and Restoration of Monuments and Historic Sites, Sharjah, 2023, p.39.

to enhancing the concepts of international standardization in the protection of cultural heritage.

Perhaps the most important charters and conventions upon which international standards are based include, but are not limited to, the following:

3.1.1. The 1954 Hague Convention: Comprising forty articles, this convention at the time sought to provide protection for archaeological heritage, especially in cases of armed conflict,⁹ as that period was marked by increasing movements for liberation as well as covert conflicts between major powers within what became known as the Cold War. It entered into force in 1956 and now counts more than 100 countries as parties.

3.1.2. The Venice Charter (Italy) 1964: Containing 23 documents, this is considered one of the most significant international charters that contributed to laying the foundational principles for heritage protection. It emphasizes documentation, preservation of the authenticity of cultural property, and the requirement of limited intervention.¹⁰

3.1.3. The Convention for the Protection of the World Cultural and Natural Heritage, 1972: This convention was adopted by UNESCO on November 16, 1972, and is considered among the most important international agreements aiming to protect sites of exceptional cultural and natural value. This convention obligates member states to identify sites of cultural and natural heritage within their territories, to work on their maintenance, preservation, rehabilitation, and transmission to future generations, as well as to protect their cultural and natural heritage of outstanding universal value according to strict standards.¹¹ It is considered the first agreement to include a clause encouraging the rehabilitation of archaeological sites, especially open sites.¹²

3.1.4. The Burra Charter (Australia), 1981: This document consists of a set of basic guidelines and procedures followed for the conservation of historic and archaeological sites in Australia. It was well received by the International Council on Monuments and Sites and was officially adopted. It emphasizes the need for consultation among stakeholders with a shared heritage, enhancement of cultural

9- UNESCO: Convention for the Protection of Cultural Property in the Event of Armed Conflict, The Hague, UNESCO, 1954, p.10.

10- International Council on Monuments and Sites (ICOMOS): The International Charter for the Conservation and Restoration of Monuments and Sites, ICOMOS, Venice, 1964.

11- UNESCO, Operational Guidelines for the Implementation of the World Heritage Convention, UNESCO World Heritage Centre, Paris, 2017, p.13.

12- UNESCO: Guidance and Toolkit for Impact Assessment in the Context of World Heritage, 2023, p.03.

value protection, and the importance of sustainable development for cultural heritage as a whole.¹³

3.1.5. The Seville Charter (Spain): Also known as the Charter of International Principles for Virtual Archaeology, this charter emphasizes the use of modern technology in documentation and maintenance, and calls for local community participation in the heritage conservation process.¹⁴ It established a set of fundamental principles for virtual archaeology, which may be summarized as:

- Taking into account the multiplicity and overlap of disciplines.
- Purpose.
- Integration.
- Authenticity.
- Historical accuracy.
- Efficiency.
- Scientific transparency.
- Training and evaluation.

3.1.6. The Guidelines of the International Council on Monuments and Sites (ICOMOS): These are a set of scientific guidelines issued almost annually, providing a scientific basis for risk management, damage assessment, and preventive maintenance. They give detailed instructions on best practices for conservation, maintenance, and sustainable management of archaeological sites.¹⁵ These guidelines have evolved since the Venice Charter, which serves as the theoretical foundation for the work of the International Council on Monuments and Sites.

3.2. International Standards for Rehabilitation

3.2.1 Providing Protection for Archaeological Heritage

Providing protection for archaeological heritage, including both immovable and movable heritage, is the most important element emphasized by all international charters, especially in the early days of interest in heritage. This emphasis was due to the prevailing conditions at that time, which were rife with wars, military interventions, liberation movements, and even military provocations characteristic of the Cold War period. These factors led to instability in global security and encouraged opportunists whether individuals or, in particular, colonial states to seize the heritage of others, either by confiscating and selling it or by distorting collective memory through erasing and destroying it for political purposes. There are many examples of

13- Ibid., p.13.

14- Victor Manuel López-Menclero, Alfredo Grande: The Principles of the Seville Charter, 2011.

15- ICOMOS: Guidelines for World Cultural Heritage Management, 1998.

this: what French colonialism did in Algeria and what British colonialism did in Egypt goes beyond what can be described in this article. Thus, those charters and treaties that obligated signatory states to protect their archaeological heritage, and even the heritage of colonized countries, were not established arbitrarily. Rather, the first step before any intervention or rehabilitation of a site must be preceded by protective measures at several levels, at the very least to keep the site in its original condition. Among these measures are:

- **Legal Protection:** This is reflected in the legal frameworks that states develop, such as decrees and laws, to regulate and deter anything that could directly or indirectly damage archaeological sites and artifacts in general. Extreme caution must be exercised when enacting laws for heritage protection, as there are many variables especially when the legal framework remains outdated for a long time. This is the case in Algeria, where Law 98/04 for heritage protection is approaching 30 years without updates and does not keep pace with the significant changes in heritage protection, especially regarding the necessary mechanisms and the use of modern technology.
- **Field Protection:** Laws alone may sometimes fail to deter violators and prevent deliberate damage to sites, whether for political, social, or purely commercial reasons, particularly in multi-ethnic countries. This difficulty is often due to the challenge of linking crimes to perpetrators, especially at unmonitored sites. Therefore, it is necessary to provide multiple levels of field protection, such as fencing off sites, providing 24/7 security guards, and enhancing surveillance with cameras. At the same time, it is essential not to overlook the need for measures to counter natural disasters that threaten heritage sites, particularly in light of the ongoing climate change.
- **Community Protection:** The effectiveness of the aforementioned mechanisms is closely linked to community awareness. Sometimes, legal and field protections fall short against the will of the entire community, especially in sites that are still in active use, such as desert palaces, historic cities, and religious buildings that remain inhabited and continue to serve their intended functions to this day. This form of protection is rooted in the need to educate and raise awareness among all segments of society individuals and groups alike about the importance of preserving heritage and safeguarding it for future generations. This can be achieved through school and university curricula, as well as cultural activities, conferences, and awareness initiatives that inspire a love of heritage and strengthen the sense of belonging to this rich history.

3.2.2 Documentation

Documentation is a comprehensive term for a range of processes, such as numbering, registration, description, digital and photographic imaging, inventory in records, digital inventories, and taking measurements and dimensions. Documentation is a critical process in the field of heritage and is undertaken both before and after any intervention. Thus, all international charters emphasize the importance of documentation in heritage protection. Documentation records the current state of an archaeological site and registers all events that have occurred, including signs of damage, emergency interventions, or restoration work. This allows for comparison between the previous and current states of the site and protects it from failed interventions, theft, intentional alterations, or damage.

3.2.3 Preserving the Authenticity of the Artifact

Preserving the authenticity of an artifact is a fundamental principle in heritage protection and is the cornerstone of conservation and restoration activities. Respecting the authenticity of an artifact safeguards heritage from uncalculated interventions that might change one of its characteristics or introduce additions that could affect its unique nature or its environment. In this way, it helps maintain the integrity and distinctiveness of the artifact and allows for the continued existence of its informational record, as well as its artistic, historical, and scientific value.

3.2.4 Limited Intervention Requirement

In intervention operations that strive in any way to preserve sites and monuments in general, it is always required to draw boundaries for the intervention those monuments undergo, limiting it only to the necessary preservation or required restoration processes. The truth is, this is a philosophical idea rooted in the theories of restoration schools, which believe that indiscriminate or unnecessary restoration leads to a complete modernization of the monument, stripping it of the beauty imparted by its antiquity and age. As a result, the monument begins to convey a sense of modernity rather than reflecting its historical richness, telling its cultural heritage, or preserving its distinctive unitary features within its geographical or cultural context. The essential requirement here is not to intervene in monuments except in critical cases that threaten their safety, with a focus on limiting the intervention to what serves the goal of ensuring their preservation for as long as possible.

3.2.5 Identification of Cultural and Natural Heritage Sites

This element was first included in the Convention Concerning the Protection of the World Cultural and Natural Heritage in 1972. It obliges signatory states to identify archaeological sites, which involves two main aspects: firstly, inventorying, documenting, naming, and presenting the sites as archaeological landmarks reflecting a cultural history; secondly, defining the geographical and astronomical boundaries encompassing these sites, making their area clear, measurable, and eliminating any confusion or ambiguity. Therefore, identifying the archaeological site before any intervention is considered an essential and necessary action, and a key criterion in its rehabilitation.

3.2.6 Utilizing Cultural Heritage in Sustainable Development

Sustainable development represents one of the most efficient and modern approaches, serving various sectors and promoting optimal use of resources, especially cultural resources. It thereby enhances the role of heritage in economic, tourism, and social fields. This idea is clearly manifested in inhabited archaeological areas, where a service sector has emerged to meet the needs of residents, while care is taken not to affect the authenticity and cultural essence of the area. However, the concept is new for sites far from populations, visited only by specific groups such as tourists, if any, or researchers. Here, sustainable development comes into play by reviving those sites through their rehabilitation and the provision of various services and basic and tourism infrastructure, allowing for the reception of large numbers of tourists and enabling their movement within the site in an optimal manner, thus achieving the set frameworks and objectives, whether they are touristic, economic, educational, or cultural.

3.2.7 Adoption of Modern Technology in Documentation and Maintenance

Technology has witnessed a tremendous leap since the beginning of the millennium, advancing mechanization and technical fields. The heritage protection sector has been able to benefit from these modern tools and techniques in research, documentation, preservation, and restoration. For the past half-century, those in charge of heritage and site protection, such as the International Council on Monuments and Sites and the International Council of Museums, have recognized the importance of using modern techniques as a means for preservation and restoration, and even for conducting studies, whether scientific or preliminary for intervention. There are clear references to the need to adopt modern technology in documentation in particular, and in interventions in general, in scientific papers, research, and even international charters since the early 2000s. This is due to the solutions provided by technology,

which save time, increase accuracy, and solve problems that used to present major obstacles in protecting cultural heritage.

4. Practical Strategies for Rehabilitation

Rehabilitating open-air archaeological sites requires adopting comprehensive practical strategies that include the following:

4.1. Comprehensive Documentation: This involves all possible documentation processes, from classical documentation to the use of surveying, aerial photography, and Geographic Information Systems (GIS) techniques to provide an accurate database of the site's current field condition.¹⁶

4.2. Field Assessment and Setting Priorities: Field assessment identifies and determines the extent and degree of damage to the site, in addition to material surveys, examinations, and careful monitoring of environmental changes.¹⁷

4.3. Preventive Maintenance: This consists of implementing regular programs to prevent ongoing deterioration, exacerbation of damage, and to ensure the site's stability.¹⁸

4.4. Designing a Rehabilitation Plan: This involves considering numerous data points, defining needs while respecting the site's uniqueness and adhering to fundamental principles in accordance with international standards.

4.5. Environmental Risk Management: Although this component may fall under preventive maintenance, given the increasing global risks due to climate change, solutions must be developed to adapt to these changing climatic conditions.¹⁹

4.6. Limited Functional Re-use: Where necessary, this may involve allowing carefully considered community uses of archaeological sites, especially those still inhabited since their establishment – ensuring continued local benefit without threatening the site's heritage value, such as traditional markets or places of worship.²⁰

16- Mohammed Selim et al.: The Revitalization of Endangered Heritage Buildings – A Decision-Making Framework for Investment and Determining the Highest and Best Use in Egypt, p.12.

17- Ali Majeed Yassin: Gully Erosion Model of the Archaeological Site of Eridu Ziggurat in the Southern Plateau of Iraq Using RS–GIS Technology, p.4–5.

18- Cronyn, J.M.; Robinson, W.S.: Fundamentals of Conservation of Antiquities, translated by Abdul Nasser bin Abdul Rahman Al-Zahrani, King Saud University, 2006, pp.96–97.

19- UNESCO: World Heritage Resource Manual – Managing Disaster Risks for World Heritage, 2016, p.10.

20- ICCROM: Shelters for Archaeological Sites in the Mediterranean Region, Proceedings of the Herculaneum Symposium, Italy, 23–27 September 2013, p.18.

4.7. Restoration: Restoration is usually the final intervention at sites, aimed at repairing structural damage, consolidating threatened areas, and reconstructing collapsed sections, all while strictly abiding by established standards.

4.8. Community Awareness and Education: Engaging the community in cultural heritage preservation requires ongoing awareness, educational, and instructional activities. This can only be achieved by devising short-term cultural programs like seminars and events involving local residents as active participants, as well as long-term programs such as integrating heritage into school curricula and organizing field visits for students to establish a culture of preservation, raise awareness of the site's value, and strengthen the sense of belonging to heritage and nation.

4.9. Visitor Management: Create and develop designated visitor pathways and tourism infrastructure that do not negatively impact the site, allowing visitors to circulate smoothly throughout, with informational signs and educational materials provided.²¹

5. Existing Challenges Facing Effective Rehabilitation

5.1. Social Challenges: These lie in the difficulty of influencing society and even individuals, especially when the rehabilitation process conflicts with community or personal interests. There is also the challenge of educating and raising awareness in an entire society aspiring to modernity and comfort, particularly in developing countries and the third world where basic living necessities are lacking, and heritage preservation is not a priority unless living conditions improve. Furthermore, social issues such as illicit trade and trafficking in antiquities also contribute, in one way or another, to the deterioration of societal attitudes towards heritage.

5.2. Economic Challenges: The rehabilitation of open archaeological sites requires massive budgets, which even wealthy countries sometimes cannot afford, especially for sites of medium and large geographic size such as ancient cities. This is due to the maintenance and restoration operations, which are extremely expensive compared to the costs of new constructions, not to mention the addition of new structures to provide necessary services. Meanwhile, the anticipated revenues from utilizing these sites are sometimes insufficient to encourage moving forward with rehabilitation unless there are compelling reasons, such as the site's

21 - Ben Saidani, Youssef: Developing Methods of Archaeological Tourism in Algeria The Archaeological Site of Tipaza as a Model, Journal of Scientific Research Notebooks, Vol. 9, No. 1, 2021, p.124.

national or cultural significance, or the presence of grants from international organizations particularly if the site is classified as a World Heritage Site.

5.3. Scientific and Technical Challenges: Scientific studies serve as the cornerstone before any intervention and help to shed light on the site from multiple perspectives. They contribute to simplifying scientific knowledge, whether historical or related to architectural styles or building materials, and also grant the site credibility within scientific circles. Such studies help gather as much information as possible and correct errors and misconceptions. On the other hand, archaeological sites that have not undergone sufficient scientific or technical study or at least not enough of it face the risks of neglect, deterioration, and poorly planned interventions, which may lead to incorrect practices when the site is utilized for sustainable development.

5.4. Tourism Challenges: Tourism is considered an important driver in the wheels of the economy and sustainable development, as it represents a clean source of wealth. It has the potential to dominate the national income if countries are able to harness their cultural resources in service of tourism activities. However, where there is action, there is always a reaction; thus, one cannot overlook the deterioration caused by tourists to cultural activity and heritage in general, leading to their degradation over time especially in the absence of regular maintenance after rehabilitation. Conversely, political events such as wars or pandemics, like the COVID-19 pandemic for example, can have devastating consequences on tourism sector revenues in general and on newly rehabilitated open archaeological sites in particular, especially regarding the operating and management expenses of these sites. As a result, many vital activities that contribute to keeping the site in optimal condition may be disrupted.

6. Proposal to Use the Ashir Site as a Model for Rehabilitation

Owing to its vast area and rich history, Algeria is home to many open-air archaeological sites, which vary in terms of their historical classifications from one era to another. The Ashir site, located in the province of Médéa, stands out as one of the most significant open archaeological sites, symbolizing a golden era in Algeria's Islamic history the **Zirid** period, named after **Ziri ibn Menad**, the founder of the city of Ashir.

6.1. Significance and Features

The city of Ashir was founded during the Fatimid era by **Ziri ibn Menad al-Sanhaji** around **324AH / 936AD**, with the aim of making it a formidable fortress against the attacks of the Zenata tribes and as a launch point for military campaigns

against them. He chose a location with a high hill on the Titri mountain heights, near a place called **El-Kaf El-Akhdar**, about 150 kilometers from Algiers, to establish and develop the city.²² Many contemporaries spoke about the circumstances of its founding, its structure, its architecture, its economic prosperity, its religious influence, and its political importance among the cities of the Maghreb at that time. Among those who have mentioned it are **al-Himyari (Al-Istibsar fi 'Aja'ib al-Amsar)**, **al-Nuwayri (Nihayat al-Arab fi Funun al-Adab)**, **Ibn Khallikan (Wafayat al-A'yan wa Anba' Abna' al-Zaman)**, **Ibn Athir (Al-Kamil fi al-Tarikh)**, **Ibn Khaldun (Kitab al-Ibar)**, **Ibn Hawqal (Al-Masalik wa Al-Mamalik)**, and others...

It is clear here that the city of Ashir was a cultural and religious landmark, a remarkable city among the urban centers of the Maghreb, and an important capital in the Central Maghreb. Its economic, scientific, and military prosperity contributed to its fame among nations and attracted significant attention from historians. This rich history has provided many strengths for the site's archaeological value, including:

- An excellent geographic location in the heart of northern Algeria.
- A highly suitable climate for tourism activities, characterized by its mildness in both summer and winter.
- The city's elevated position overlooking the surrounding areas, allowing for panoramic views of the natural landscapes.
- The site served as a military fortress but also as a civilian center with all the features of a full-fledged city.
- The variety of structures makes it an excellent site for rehabilitation, offering a truly unique experience.
- Proximity to roads and ease of access.
- Descriptions of the city and its architecture exist in historical sources, along with layouts that aid reconstruction efforts and an abundance of archaeological information from previous interventions.
- The current state of the site and the deterioration it has suffered allow for all rehabilitation techniques to be applied, from reconstruction to full utilization.

6.2. Objectives

- Reviving the archaeological site and highlighting the region's rich history and its political and religious roles through the ages.
- Utilizing the site as an important asset for domestic tourism.
- Creating new job opportunities.
- Revitalizing the region and boosting its economic activity.

22- Al-Arabi, Ismail: The Capitals of Banu Ziri, Beirut, 1984, p.14.

- Providing opportunities for researchers, scholars, and students in the fields of history, archaeology, economics, and tourism alike.
- The project could serve as a detailed and exemplary model to be emulated and a pioneering experience if carried out according to international standards.

6.3. Allocated potentials

The chain of potentials consists of a set of elements:

- **Human Resources:** It is represented by specialists in archaeology, including researchers and professors at research centers, institutes, universities, and centers affiliated with the Ministry of Culture and its executive bodies, which are rich in skilled professionals and well-trained personnel. This also includes students of archaeology in all its specializations at the three current LMD levels and graduates. In addition, specialists in auxiliary sciences such as geology, topography, engineering, materials science, computer science, and other required specialties in such projects are included.
- **Material resources:** Since the site is of great importance and reflects a significant historical period, exceptional financial resources can be allocated as part of a heritage rehabilitation plan, especially from the cultural sector responsible for managing and protecting archaeological and historical sites. This cost is recoverable if the sites are exploited for attracting tourists. Associations and organizations working in the field of heritage can also be involved to participate actively in the project and cover some expenses through volunteer work. This introduces a social value to the process and provides additional support from those seeking voluntary activities to protect ancient heritage. Material resources also involve providing the means and specialized tools, which can often be produced locally in light of developments in national industries. The transfer of supporting technologies is also possible if opportunities are given to those working in the field, such as by creating private enterprises specializing in restoration and conservation of antiquities in general.
- **Research and scientific resources:** Many sources have addressed the city of Ashir, as previously mentioned, and numerous studies have since been conducted, starting with the work of the French colonial missions in 1850 led by Berberuguer, then Chabassière in 1869, and Captain Rodet in 1908, up to the exploration work of a large group of French researchers between 1954 and 1956, which uncovered many archaeological findings. And the story doesn't end there; after independence, the National Agency for

Antiquities and the Protection of Historical Monuments, which was the legally authorized body at the time for excavation operations, was able to send a scientific mission to excavate the site, successfully uncovering most of the city's landmarks and components. Meanwhile, many modern studies—articles, doctoral dissertations, and master's theses—have addressed various aspects of the city of Ashir, including archaeological studies that discussed conservation and preservation efforts, and even proposals for restoration materials. It is not possible to list them all here.

6.4 Expected results:

The project of rehabilitating the site of the city of Ashir represents a challenge in itself, which can be achieved if there is genuine will and active participation from all sectors of society. Its results will be impressive, eye-catching, and a model to be followed in the field of scientific archaeological studies and in the field of conservation and restoration. The expected outcomes of this project can be summarized in several key points:

- Reviving a vanished archaeological site that represents an important epoch in Algeria's history and was once a significant capital among its capitals.
- Promoting tourism by making the site an attractive destination for tourists.
- Boosting economic activity by revitalizing the area and making it a tourism hub.
- Advocating for the idea of sustainable projects that generate income outside the hydrocarbons sector.
- Creating new job opportunities both during the rehabilitation works and after the site's opening.
- Reviving extinct traditional activities such as pottery, weaving, and the manufacturing and sale of souvenirs.
- Providing a heritage facility that allows school visits to introduce students to their heritage, as well as a space for students to conduct field training and graduation projects.

7. Conclusion

The means to preserve cultural heritage in general, and archaeological heritage in particular, for future generations, and the attempts to protect it, require diligent efforts that involve the mobilization of numerous mechanisms, scientific methodologies, qualified human resources, and adequate financial budgets, all within the framework of internationally recognized and periodically updated standards. These allow for

achieving the best possible outcomes from the rehabilitation processes of archaeological sites, especially those open to the air, or from their preservation as part of heritage conservation strategies adopted by nations.

Meanwhile, the path remains long for the world as a whole to give this heritage the attention it deserves. Too often, it remains nothing more than ink on paper and does not rise to the level of genuine protection mandated by international conventions. This is due, firstly, to the difficulty in monitoring the extent of compliance by countries, individuals, and societies, and secondly, due to political and social considerations within global or local agendas. This necessitates a renewed perspective on heritage that contributes to:

- Strengthening international legal frameworks through new conventions and regular meetings, especially with countries that have proven unable to protect their heritage.
- Assisting countries and communities striving to safeguard their archaeological heritage by identifying their needs, whether material or scientific.
- Focusing on the principle of protecting heritage as a global heritage and combating agendas that restrict that.
- Paying more attention to heritage protectors, whether individuals, groups, or associations.

As for the proposal to rehabilitate the Ashir site discussed in this article, it provides a unique environment for applying all rehabilitation techniques in accordance with the provisions of international conventions. It serves as a comprehensive model compared to other sites, as it is at risk of disappearing, yet it can be reconstructed due to the availability of information about it, without fear of erasing or distorting its identity because of its deteriorated condition. In turn, this would be a pioneering experience, both nationally and internationally.

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