

Archaeological Heritage Management as a Tool for Achieving Sustainable Development Goals (Case Study: Religions Complex in Historic Cairo, Egypt)

Sara Hamdy Younes Ahmed

Master's student, Faculty of Archaeology, Luxor University

Dr. Wael Abdel-Rahim Hemimy

Associate Professor of Islamic Archaeology and Vice Dean of the Faculty of Archeology for Postgraduate Studies, Luxor University

Dr. Othman Salama Attia Mohamed

Lecturer of Islamic Archaeology and Numismatics, Faculty of Archaeology, Luxor University

Dr. Ahmed Motawea Shaikhon

Archaeologist, Archeological Sites Management Specialist Supreme Council of Antiquities, Ministry of Tourism and Antiquities

Abstract

The management of archaeological heritage plays a pivotal role in promoting sustainable development through preserving cultural heritage while enhancing economic, social, and environmental benefits. This study focuses on the Religious Complex in Historic Cairo, Egypt, a site of exceptional historical and cultural significance that embodies interfaith heritage. Despite its importance, the site faces numerous challenges that necessitate effective and integrated management. Accordingly, this research aims to develop a comprehensive management plan aligned with the United Nations Sustainable Development Goals (SDGs). The approach integrates diverse methodologies within a coherent framework to achieve these goals effectively. It begins with an exploration of the principles of archaeological site management, aligning them with international recommendations and the SDGs. These foundational principles inform the formulation of an action plan enriched with specific performance indicators that reflect the unique characteristics of the site and its surrounding context. The proposed management plan seeks to enhance visitor infrastructure, develop educational programs, strengthen community engagement, and incorporate sustainable tourism practices—ensuring both the conservation of heritage and the delivery of tangible benefits to the local community. Furthermore, field data play a critical role in assessing the physical condition of the site. A structured SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis is employed to systematically identify key challenges and potential opportunities, guiding the development of strategic and sustainable interventions.

Keywords

SDGs; AHM; Historic Cairo; Religions Complex; SWOT; Action plan.

Article History

Received: 16/11/2024

Accepted: 24/5/2025

DOI: 10.21608/lijas.2025.336921.1054

إدارة التراث الأثري كأداة لتحقيق أهداف التنمية المستدامة (دراسة حالة: مجمع الأديان في القاهرة التاريخية، مصر)

سارة حمدي يونس أحمد

طالبة ماجستير، كلية الآثار، جامعة الأقصر

أ.م.د. وائل عبد الرحيم هميمي

أستاذ الآثار الإسلامية المساعد، والقائم بعمل وكيل كلية الآثار لشؤون الدراسات العليا والبحوث، جامعة الأقصر

د. عثمان سلامة عطية محمد

مدرس الآثار الإسلامية والنميات، كلية الآثار، جامعة الأقصر

د. أحمد مطاوع شيخون

أثري، وأخصائي إدارة المواقع الأثرية، المجلس الأعلى للآثار، وزارة السياحة والآثار

الملخص

تلعب إدارة التراث الأثري دورًا محوريًا في تعزيز التنمية المستدامة من خلال الحفاظ على التراث الثقافي، مع تعظيم الفوائد الاقتصادية والاجتماعية والبيئية. تركز هذه الدراسة على مجمع الأديان في القاهرة التاريخية، مصر، باعتباره موقعًا ذا أهمية تاريخية وثقافية استثنائية يجسد تراث التعايش بين الأديان. وعلى الرغم من أهمية الموقع، فإنه يواجه تحديات متعددة تستدعي إدارة فعالة ومتكاملة. وبناءً على ذلك، تهدف هذه الدراسة إلى وضع خطة إدارة شاملة تتماشى مع أهداف التنمية المستدامة للأمم المتحدة (SDGs). تعتمد المنهجية على دمج أساليب متنوعة ضمن إطار متكامل لتحقيق هذه الأهداف بفعالية. وتبدأ الدراسة باستعراض مبادئ إدارة المواقع الأثرية وربطها بالتوصيات الدولية وأهداف التنمية المستدامة، مما يساهم في صياغة خطة عمل مدعومة بمؤشرات أداء محددة تعكس الخصوصية الفريدة للموقع وسياقه العمراني والثقافي. وتسعى الخطة المقترحة إلى تحسين البنية التحتية للزوار، وتطوير برامج تعليمية، وتعزيز مشاركة المجتمع المحلي، واعتماد ممارسات السياحة المستدامة، بما يضمن الحفاظ على التراث وتقديم فوائد ملموسة للمجتمع. علاوة على ذلك، تلعب البيانات الميدانية دورًا حاسمًا في تقييم الحالة الفيزيائية للموقع. كما تُوظف أداة تحليل SWOT (نقاط القوة، نقاط الضعف، الفرص، التهديدات) بشكل منهجي لتحديد التحديات الرئيسية والفرص المحتملة، مما يوجه وضع تدخلات استراتيجية ومستدامة.

الكلمات الدالة

أهداف التنمية المستدامة؛ إدارة التراث الأثري؛ القاهرة التاريخية؛ مجمع الأديان؛ تحليل نقاط القوة والضعف؛ خطة العمل.

1. Introduction

Archaeological heritage has been impacted by many factors over the past decades, such as industrialization, urbanization, and pollution, as well as climate change and intense pressures like population growth and tourism. There were no appropriate practices or strategies for managing archaeological sites before the 1970s, and the only policy followed in most of these sites was conservation. However, heritage conservation organizations realized that effective and comprehensive protection of heritage could only be achieved through integrated management strategies that ensure its sustainability for future generations. This interest increased significantly after UNESCO issued its guidelines in 1972. The concept of management was first introduced by the International Committee for Archaeological Heritage Management (ICAHM) under ICOMOS. Subsequent publications and significant changes followed, with ICOMOS and UNESCO issuing updated guidelines for cultural heritage management, which were revised in 1993 and 1998, respectively. These principles have been applied in many European projects, and during the same decade, attention was directed towards the importance of sustainability in the protection of heritage sites.¹

Many studies, including those conducted by Martha Demas and Jukka Jokilehto, have highlighted the recurring challenges in implementing management plans for archaeological sites. These studies indicate that many countries, including Egypt, are merely "paper plans" without effective actions or implementation of what is outlined in the plan. In many cases, delays occur due to a lack of adherence to the established timelines, especially for sites not listed on the World Heritage List.² Additionally, there is frequently an inaccurate link between the plan and conservation policies.³ Conservation is not merely a fundamental procedure applied to individual artifacts; rather, it represents a critical preliminary step aimed at achieving the temporary stabilization of the site and establishing a foundation for the development and implementation of a future management plan.⁴

2. Archaeological Heritage Management:

The concept of heritage management began to emerge in the late 1940s, following the adoption of the World Heritage Convention in 1972. The operational guidelines for implementing the Convention declared that every World Heritage site must have an effective system and strategy for managing and protecting the nominated property for future generations. Henry Cleere noted in 1984 that until then, there had been no initiatives or discussions related to heritage management. However, in the 1990s, the focus shifted toward institutional approaches to managing landscapes by limiting the concept of national parks to protect the specific area. Therefore, international charters and conventions play a key role in providing guidelines and general principles for the management and protection of historical and cultural sites. In 1999, the Burra Charter developed a management framework and introduced the concept of significance, and the values associated with a place as key factors in heritage assessment.⁵

A management system represents an integrated framework of goals, policies, and procedures that can be activated to facilitate the organization's ability to carry out its tasks effectively, these systems are complementary, not conflicting. In the early 20th century, Henri Fayol defined management as "the process of forecasting, planning, organizing, leading, and coordinating." Management can be clearly defined as "a system aimed at achieving the effective conservation of the archaeological site for the benefit of present and future generations." The management plan should include the identification of goals and objectives, as well as incorporating sustainable thinking that addresses development challenges, the legitimate needs of local communities, visitor density control, and environmental preservation. The success of a management plan requires it to be an ongoing process of implementation and monitoring, not limited to the completion and development of the plan itself. It is a forward-looking

¹ Yilmaz, Y., & EL-Gamil, R. (2018). "Cultural Heritage Management in Turkey and Egypt: A Comparative Study", *An International Journal of Akdeniz University Tourism Faculty*, 6(1), p69.

² Yilmaz, Y., & EL-Gamil, R. "Cultural Heritage Management", p85.

³ Feilden, B., & Jokilehto, J. (1998). "Management guidelines for World Cultural Heritage sites", ICCROM, Italy, p 36.

⁴ Atallah, M., & Tawfik, T., (2023). "Using Public Archaeology towards protecting and managing the archaeological sites in Dakhla Oasis", *JOURNAL OF THE FACULTY OF ARCHAEOLOGY*, 14(26), p312.

⁵ Amin, S., (2016). "An outlook on Heritage Management in Egypt, Ministry of Tourism and Antiquities", ITP, p 23.; Available on: Egypt Media Center, <https://www.sis.gov.eg/>

process that highlights current decisions and their impact on the future route of conservation. It encourages proactive thinking to address threats, exploit opportunities, and overcome challenges.¹

The concept of the management processes encompasses several key elements:

- 1- Identifying and anticipating problems and preparing plans to resolve them.
- 2- Allocating the necessary resources to implement the plans.
- 3- Defining employees' tasks and guiding them during the implementation process.
- 4- Reviewing and evaluating results and making necessary changes.

The final stage can be leveraged to continue the planning process iteratively. These steps are cohesive and interconnected, helping managers increase efficiency by accomplishing tasks with fewer resources and more effective organization. This contributes to achieving the site's expected outcomes within a site management framework that ensures long-term sustainability.²

2.1 International Conventions and charters related to Archaeological Heritage and its management:

International conventions and charters provide essential guidelines and principles for the preservation and management of sites with cultural and heritage significance. They play a critical professional and ethical role in guiding conservation practices for archaeological heritage. While each country has its national laws and regulations to protect its heritage, they often lack a comprehensive and effective methodological framework for conservation practices. Despite this, these conventions do not directly address the management process but rather focus on specific recommendations and principles related to site management issues.³

In 1919, the League of Nations was established as an international organization. In 1926, the International Museums Office in Paris proposed holding international meetings in Athens focused on the challenges associated with the conservation of architectural monuments. This meeting became the Athens Charter in 1931, which focused on the conservation of historical monuments and included seven main topics: aesthetic improvements, causes of deterioration, appropriate restoration materials, conservation techniques and methods, international cooperation, general principles, and management and legislative procedures. This charter became the guiding principle for preserving heritage sites.⁴ In 1964, the Italian government organized a meeting in Venice attended by various international organizations, including ICOM, ICOMOS, ICCROM, UNESCO, and the Council of Europe. The outcome of this meeting was the Venice Charter, one of the most significant international charters, which outlined the principles for the conservation and restoration of cultural and historical sites. ICOMOS, founded in 1965, later adopted this charter.⁵

The philosophy of this conference was summarized in the preamble of the Venice Charter:

"It is important to agree on a set of principles and guidelines for the conservation of old historic buildings and the use of the most appropriate conservation methods and techniques, and to generalize these principles at the international level, taking into account the culture and customs of each country" (Venice Charter, [Preamble], 1964)⁶.

The World Heritage Convention was issued in 1972, as an international treaty ratified by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). Its primary objective is to

¹ Shafie, R. (2022). "Developing an Effective Management Plan for Cairo Egyptian Museum as a World Heritage Nominated Site", Unpublished Master thesis, Faculty of Tourism and Hotel Management, Helwan University, Egypt, p7.

² Sullivan, S., & Mackay, R. (Eds.). (2012). "Archaeological Sites: Conservation and Management", Los Angeles: Getty Conservation Institute, p.15.

³ Taylor, K., (2004). "Cultural Heritage Management: A Possible Role for Charters and Principles in Asia", International Journal of Heritage Studies, 10(5), p425.

⁴ Sullivan, S., & Mackay, R. "Archaeological Sites: Conservation and Management", p 16.

⁵ Shaikhon, A. "Culture Heritage Legislations: International and National Laws", p350.

⁶ Venice Charter: International charter for the conservation and restoration of monuments and sites, (1964), Adopted by ICOMOS in the 2nd International Congress of Architects and Technicians of Historic Monuments, Venice, p 1.

protect cultural and natural sites of outstanding global significance from threats and deterioration, ensuring their preservation for present and future generations. This convention is considered the cornerstone of efforts to preserve world heritage.¹

Before 1972, many historical and natural sites were under threat due to urban development, armed conflicts, environmental changes, and natural deterioration. UNESCO member states recognized the need for an international framework to protect these sites and ensure their sustainability. As a result, the World Heritage Convention was adopted in Bruges, Belgium, on November 16, 1972, and it entered into force in 1975 after ratification by member states.²

The World Heritage Convention aims to achieve the following objectives:³

- **Protecting World Heritage:** Identifying and protecting cultural and natural sites of outstanding universal value.
- **International Cooperation:** Enhancing cooperation among member states in the conservation and preservation of World Heritage.
- **Awareness and Education:** Raising public awareness about the significance of world heritage and the importance of its conservation.
- **Shared Responsibility:** Emphasizing that the preservation of World Heritage is a collective responsibility of all nations.

The Venice Charter had a significant impact on two important charters: the Burra Charter, developed by Australia ICOMOS in 1979, and the ICHAM Charter, developed by ICCROM in 1989.

The Burra Charter marked a turning point in the concept of heritage conservation, as it began to discuss the concept of "place" and its "special significance" in historical sites, in the context of historical sites, rather than focusing solely on the material aspects of heritage. In its preamble, the charter addresses the question of intangible value, as follows:

"Places of cultural significance are intertwined with people's lives and give them a deep sense of belonging to the environment, landscapes, and the past" (Burra Charter, [Preamble], 1979).⁴

This charter proposes the development of strategies and policies for decision-makers and advisors involved in managing culturally significant sites, such as site managers, archaeologists, and researchers. The charter's guidelines define a specific conservation methodology by linking site management with the preparation of a significance statement and evaluating the various cultural values of the site. The charter consists of 34 articles that address specific areas, including: ⁵

- Concepts
- Conservation principles
- Conservation processes
- Conservation practices and methods

It provides key guidance on:

1. Establishing the cultural significance of a site
2. Developing a conservation policy
3. Procedures for studies and reports

Before the Burra Charter, the concept of "heritage" was not clearly defined as a component carrying spiritual meanings within a "place". Based on these prominent investigations into the importance and value of place, it became possible to develop management plans based on policies that respect the

¹ UNESCO. (1972). Convention Concerning the Protection of the World Cultural and Natural Heritage, Adopted by the General Conference at its seventeenth session, Paris, p1.

² UNESCO Website: <https://whc.unesco.org/en/convention/>; Accessed on (12.2.2023; at 3:24:30 PM)

³ Abdullah, N. (2017). "The Impact of the World Heritage Convention on the Protection of Antiquities in Jordan." Master's Thesis, Yarmouk University, Irbid, p15.

⁴ Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (1979), Australia ICOMOS, Preamble, p2.

⁵ Taylor, K. "Cultural Heritage Management", p426.

unique characteristics of each site.¹

The New Delhi Recommendation in 1956 represented a meeting that discussed archaeological excavation processes, while the ICAHM Charter, issued in 1989, was more concerned with planning related to the economic, social, and legal factors of archaeological sites and their subsequent management. In fact, guidelines for managing archaeological sites were not available until 1989, and the main content focused on preserving archaeological monuments and international cooperation, rather than focusing on management planning processes.²

Despite the initial lack of emphasis on describing and establishing management processes for heritage sites in international charters, most of these documents contained principles and recommendations aimed at addressing site-related issues. During this period, a standardized framework for the planning process was proposed by Martha Demas in 2000, along with Bernard M. Feilden and Jukka Jokilehto, utilizing the AMP guidelines established in 1993. Based on the selected international charters related to archaeological sites, a general management plan was created. (Table.1) As the flow chart shows, this can be divided into three different parts- (1) recording, (2) assessing current conditions and their values, and Preparing Action Plans including conservation intervention as a final process, as follows:

Table (1): Phases of the management planning process

Planning	Process one	Process Two	Process Three
Burra Charter (1991)	Understand Significance	Development Policy	Management
Martha Demas (2000)	Identification Description	Assessment Analysis	Response
Bernard M.Feilden Jukka Jokilehto (2000)	Description	Evaluation and Objectives	Prescription for overall site management
New Guidelines (2005)	Documentation	Analysis	Response

The Nara Document was subsequently formulated during a conference held in Nara, Japan, in November 1994. This document addresses the importance of a broader understanding of cultural heritage to more objectively assess its authenticity. It was drafted by 45 representatives from 28 different countries, as proposed by the sixteenth session of the World Heritage Committee through ICOMOS. The conference was organized in collaboration with ICCROM, UNESCO, and ICOMOS. The experts at this conference reached a set of goals, which were as follows:³

- Recognizing intangible values and spiritual traditions.
- Respecting cultural diversity and different beliefs.
- Clarifying the authenticity of a place through a set of information and resources, which may encompass materials and essence, form and design, traditions and techniques, spirit and feeling, as well as site and management.

The Burra Charter (1999) also proposed three distinct steps in the management process related to decision-making and implementation: understanding significance, developing policy, and management. These two approaches were integrated with international principles and processes extracted from an analysis of international charters to create the final plan.⁴

¹ Feilden, B., & Jokilehto, J. "Management guidelines", p 37.

² Lim, H. (2005). "Archeological Site Management Planning: Management Guidelines for Hwangryong Temple Historic Site", Master Thesis, University of Pennsylvania, USA, p16.

³ Taylor, K. "Cultural Heritage Management", p430.

⁴ Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (1999), Australia ICOMOS, p5.

3. Sustainable Development:

3.1 The Concept:

The term (sustainability) is derived from the ancient Latin word (Sustenre), which means preserving and maintaining something. The term dates to the 18th-19th century AD when it was used by the Germans in the management of German forests, which means (Referring to) long-term use.¹ As for economic literature, the American scientist D.H. Meadows, in his book "The Limits of Development," used the term sustainability to express how to achieve economic and environmental stability while placing limits on the excessive consumption of non-renewable natural resources on the planet. On the other hand, sustainable development is defined as the maintenance of net biomass production over the long term. It is the change that aims to enhance and develop society in economic, social, environmental, cultural, and technological perspectives, with the optimal use of natural, human, and material resources to achieve the common good of society².

Many developed and developing countries have adopted the concept of sustainable development, and the perception of this concept has evolved. Previously, it focused only on the environmental dimension, while it now encompasses sustainable development as a process that includes economic, social, and environmental objectives. The definition of sustainable development in Webster's dictionary is "the development that utilizes natural resources without allowing them to be depleted or destroyed partially or totally³." In the early 1980s, the concept of sustainable development acquired new meanings and attracted renewed scientific and intellectual interest, and this interest was highlighted in the report of the IUCN (the International Union for Conservation of Nature), which was entirely dedicated to sustainable development. It was issued in 1981 under the title (International Strategy for Environmental Conservation), where a specific definition of sustainable development was established as "the constant endeavor to Improve the quality of human life while considering the capacities and potentials of the ecosystem that sustains life." This definition was impacted by the extensive use of the concept of sustainability in agriculture and the necessity of maintaining the fertility of agricultural land⁴.

The real gestures of the idea of sustainable development emerged in the report entitled "Our Common Future" prepared by the World Commission on Environment and Development in 1987, also known as the "Brundtland Commission" named after its chair, "Gro Harlem Brundt Land," In the introduction to 'Our Common Future,'⁵ Brundtland explained that she was invited in December 1983 by the Secretary-General of the United Nations to conduct an investigation and prepare a report present a global agenda for change, More specifically, the terms of reference from the United Nations General Assembly stipulated the following:

Proposing long-term environmental strategies to achieve sustainable development by the year 2000 and beyond.

- Pinpointing the possibility of merging the relationships between individuals, resources, environment, and development into national and global policies.

In its report, the committee developed a method through which individuals in different countries can create appropriate policies and applications. It introduced the most comprehensive and concise definition of sustainable development as follows: "It is development that meets the needs of the present generation without compromising the ability of future generations to meet their needs⁶."

¹ Klarin, T. (2018). "The Concept of Sustainable Development: From its Beginning to the Contemporary Issues", Zagreb International Review of Economics & Business, 21(1), p70.

² Abdel Ghani, M. (2020). "The Evaluation of the Concept of Sustainable Development and Its Dimensions and results in Egypt", Scientific Journal of Economics and Commerce, Ain Shams University, 50 (2), p. 407.

³ Makhoul, M., & Ghanem, A. (2009). "Environmental Management Systems and their Role in Sustainable Development," Damascus University Journal of Economic and Legal Sciences, 25 (2), p. 38.

⁴ Tisdell, C. (1988). "Sustainable development: differing perspectives of ecologists and economists, and relevance to LDCs", world development, 16 (3), p. 373

⁵ World Commission on Environment and Development (WCID), uniting countries to pursue sustainable development together.

⁶ World Commission on Environment and Development (1989), Our Common Future, translated by: Muhammad Kamel Arif, World of Knowledge Series, No. 142, National Council for Culture, Arts and Literature, Kuwait, p. 83.

3.2 Sustainable Development Goals (SDGs):

In 2015, the United Nations analyzed and translated the dimensions of sustainable development (economic, environmental, and social) into about 17 basic goals, including 169 purposes. All countries in the United Nations adopted the 2030 Agenda for Sustainable Development, which allows for the assessment of sustainable development achievements across various countries of the world¹. The goals include indicators that can be used to measure progress in most countries. The Sustainable Development Goals (SDGs) aim to transform the world by protecting the planet, eradicating poverty, and ensuring that all people enjoy justice and prosperity. The goals are as follows:²

Table (2): Sustainable Development Goals (SDGs)

Sustainable Development Goals (SDGs)	Description		
1 NO POVERTY 	The elimination of poverty in all places and countries.	10 REDUCED INEQUALITIES 	Reducing inequality within countries.
2 ZERO HUNGER 	Ending hunger, ensuring food security, and promoting sustainable agriculture.	11 SUSTAINABLE CITIES AND COMMUNITIES 	That cities and human settlements be safe for all and have a great ability to be sustainable and resilient.
3 GOOD HEALTH AND WELL-BEING 	Ensuring the well-being of all ages and comprehensive health development.	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	Ensuring sustainable consumption and production patterns.
4 QUALITY EDUCATION 	Ensuring and promoting lifelong education opportunities for all.	13 CLIMATE ACTION 	Take rapid action to address climate change and its impacts (recognizing the United Nations Interim Convention on Climate Change).
5 GENDER EQUALITY 	Achieving gender equality and providing the principle of parity.	14 LIFE BELOW WATER 	The conservation of marine resources, oceans, and seas to achieve sustainable development.
6 CLEAN WATER AND SANITATION 	Ensuring the availability of water and sanitation.	15 LIFE ON LAND 	Protect and conserve terrestrial ecosystems, and enhance their sustainable use, and preserve biodiversity.
7 AFFORDABLE AND CLEAN ENERGY 	Ensuring universal access to advanced and sustainable energy services.	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 	Ensuring the establishment of non-aggressive and peaceful societies in which no one is marginalized in order to achieve sustainable development, and the trial of all and their access to justice.
8 DECENT WORK AND ECONOMIC GROWTH 	Promote inclusive economic growth for all and provide suitable job opportunities for them.	17 PARTNERSHIPS FOR THE GOALS 	Activate and strengthen the means of implementation and achieve the global partnership for sustainable development.
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	Establishing resilient infrastructure, encouraging inclusive industrialization and sustainable innovation.		

¹ Lotfy, W. (2023). "Integration of Biophilic Design Principles with Sustainable Development Goals (SDGs)", Art and Architecture Journal, 4(1), p 247.

² United Nations, "Sustainable Development Goals Report 2017," New York - USA, pp. 16-57.

4. Management Plan Framework for the Religions Complex in Historic Cairo

4.1 Historical Background:

The Religions Complex in Historic Cairo is a significant archaeological zone, strategically situated between the Nile River and the Mokattam Hills. It lies adjacent to the site of al-Fustāt, Egypt's first Islamic capital, enriching the area's historical stratigraphy. The complex encompasses a rare concentration of religious monuments, particularly early Christian churches, which provide crucial architectural and material evidence of Late Antique and medieval ecclesiastical heritage. As part of Historic Cairo—inscribed on the UNESCO World Heritage List—the site illustrates the urban continuity and multi-religious character of Cairo across centuries¹.

After the siege led by 'Amr ibn al-'As (41 AH/ 640AD), the Fortress of Babylon underwent a significant transformation, turning into a residential quarter. Many of the people who had lived scattered around the area fled inside the fortress during the siege and subsequently settled there permanently. Nearby, the new city of al-Fustāt emerged, centered around the mosque of 'Amr ibn al-'As, which became the focal point of the early Islamic community in Egypt. To improve access between al-Fustāt and the fortress, part of the northern wall of the fortress was demolished, and an old canal was filled in to create a street. Despite these changes, the fortress's internal road system remained intact, and many Roman structures were repurposed and continued to be used up until the tenth or eleventh century.²

Archaeological findings suggest that the northwestern part of the fortress was originally occupied by sophisticated urban structures, while the area within the defense walls evolved into a predominantly Christian quarter. This section was notable for its relatively high concentration of churches. Although the ground plans of residential buildings do not explicitly indicate the religious affiliations of their inhabitants, it is possible that the northwestern area was also part of the Christian neighborhood.³

The earliest churches established within the fortress include the Church of St. Cyrus and John, later known as the Church of St. Barbara, and the Church of St. Sergius and Bacchus is the church believed to have sheltered the Holy Family after they escaped from King Herod's persecution.⁴

These churches, alongside others in the Christian quarter, would eventually play a central role in the religious and cultural identity of the Christian community in Old Cairo⁵.

¹ Matar, A. (2023). "Developing a visitor management plan for heritage sites: Case Study: The Religions Complex in Historic Cairo", Unpublished master thesis, Faculty of Tourism and Hotel, Helwan University, p 39.

² Vorderstrasse, T., & Treptow, T (EDs). (2015). "A cosmopolitan city: Muslims, Christians, and Jews in old Cairo", the oriental institute of the university of Chicago, oriental institute museum publications 38, p36.

³ Halim, S., El.Gendy, A., & Salama, A. "The Fatimid Cairo Religions Complex", p168.

⁴ **The Journey of the Holy Family:** Saint Joseph fled to Egypt with Mary and her son, Jesus Christ, after hearing that King Herod intended to kill the children in that region. They spent some time in Palestine before moving to Egypt, where the Holy Family stayed for approximately three years and eleven months. During their time in Egypt, they traveled through numerous cities in both Upper and Lower Egypt, such as Bilbeis, Samannoud, Sakha, Wadi El-Natrun, and Gebel El-Teir. However, the route they took was not recorded in the Bible. Egyptian Coptic Christians have identified around 25 locations where they believe Mary, Joseph, and Jesus resided during their journey in Egypt.; see: A.Aziz, M., & Abouzied, F., (2021). "Reviving the Trail of the Holy Family to Egypt: Applied for the Tourism and Hospitality Sector", The International Journal of Association of Arab Universities for Tourism and Hospitality, 20(2), p199.

⁵ Mohamed, M. (2020). "An integrated site management plan for the religious complex in Fatimid Cairo: a case study of the second religious complex in Egypt", Unpublished master thesis, Faculty of Tourism, Helwan University, p 46.

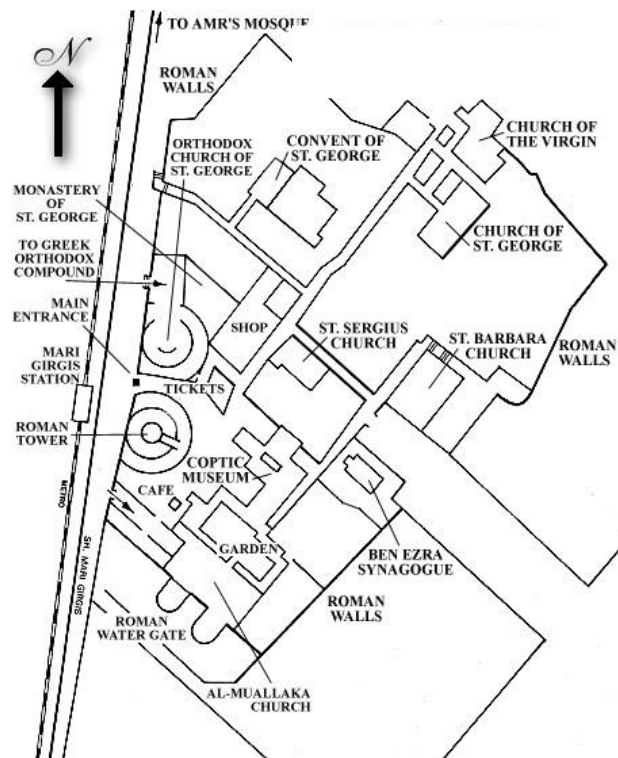


Fig (1): A map of the components of the Religious Complex in Old Cairo

© SCA Website: <http://www.coptic-cairo.com/oldcairo/map/map.html>

4.2 The History of Interventions and Development:

In the late 19th century, Butler, who documented Old Cairo's churches between 1880-1884, highlighted the widespread neglect and greed causing these historic buildings to deteriorate. His concerns were echoed by British architect Somers Clarke, who advocated for the preservation of Cairo's Christian monuments. Clarke criticized the excessive renovations undertaken by well-meaning patrons, such as the over-restoration of the Hanging Church, which he described as being "restored to death." He also lamented that ancient Egyptian monuments were cared for by the Department of Antiquities, and Islamic monuments by the Committee for the Preservation of Antiquities, but Christian monuments were largely neglected.¹

The Committee, formed in 1881 under the Ministry of Awqaf, was tasked with the restoration of Islamic monuments but had no mandate for Christian structures. Somers Clarke, seeking to raise awareness, wrote to a newspaper in 1895, urging for greater attention to Christian heritage. Though the Committee eventually inspected some Christian sites, it lacked the authority to oversee their protection. Nevertheless, the group did express interest in registering the Roman remains of the Babylon Fortress as a historical monument.²

By 1897, changes began to take shape, with 10% of the Committee's funds earmarked for Coptic monuments, contingent on contributions from the Coptic Patriarchate. At the request of Patriarch Cyril V, a report was compiled on the churches around the Babylon Fortress, leading to a large-scale restoration project in the area. For the first time, Christian church buildings were officially included in the list of registered monuments in 1910, marking a turning point for the preservation of Cairo's

¹ Sedky, A. (2004). "Assessment of Area Conservation in the Arab -Islamic City: The Case of Historic Cairo", PhD thesis, Heriot-Watt University, Edinburgh, Germany, p 196.

² Karelin, D., Karelina, M., & Zhitpeleva, T. (2018). "Reconstruction of the Diocletianic fortress in Babylon of Egypt: sources and reconstruction argumentation", Virtual Archaeology (from Air, on Earth, under Water and at Museum) Proceedings of the International Forum held at the State Hermitage Museum, Russia, p 224.

Christian heritage.¹

Several notable churches, including St. Mercurius and St. Shenute, were registered, and others like the Chapel of St. George and the Church of Sts. Cyrus and John were added to the restoration list. The Committee's restoration philosophy was to stabilize the structures, often removing later additions in favor of returning the buildings to their original states. However, this approach was part of a broader debate in Europe regarding preservation practices, ranging from minimal intervention to complete architectural restoration. The Committee took a middle-ground approach, focusing on documentation and preservation to halt further deterioration while restoring essential functions of the buildings.²

Before restoration commenced on churches in Old Cairo, extensive documentation was undertaken. Photographs were taken, and detailed plans and elevations were drawn to assess the existing condition of the buildings. This was especially true for large projects, such as the restoration of the Church of St. Barbara between 1918 and 1922, where the process was meticulously recorded in both photographs and written reports. Valuables from the churches were often transferred to the newly founded Coptic Museum to ensure their preservation.³

At that time, Old Cairo was a densely populated, run-down residential area, and the church buildings were deeply integrated into the fabric of daily life. Homes and shops surrounded the churches, and domestic and administrative additions had been built in areas like the western parts of the Church of St. Shenute, St. Barbara, and Sts. Sergius and Bacchus. The Committee's goal was to remove these accretions, isolating the churches from their surroundings and transforming them into standalone monuments, rather than parts of the community. Fire hazards were also a significant concern due to the narrow and cluttered streets, which hindered any quick response from fire brigades. One such event occurred in 1904, when a fire destroyed the Greek Orthodox Church and the surrounding buildings. This inadvertently helped clear parts of the area, aligning with the Committee's goals. Over time, Old Cairo gradually lost its residential function and transformed into a primarily historic and tourist district.⁴

The restoration of the Ben Ezra Synagogue took place from 1985 to 1989. During the late 1980s, the walls of the Coptic Museum and some building foundations were strengthened, which fortunately occurred just months before the 1992 earthquake. However, the earthquake still caused damage to several historical buildings in Old Cairo, such as the Hanging Church and the old wing of the Coptic Museum.⁵ The situation was so critical that a parliamentary committee, accompanied by the Secretary General of the Supreme Council of Antiquities, Mohamed Bakr, monitored and investigated the issue, prioritizing the provision of necessary funding to save the antiquities of Old Cairo. It is worth noting that several private, bureaucratic, and governmental entities are involved in the site, including Old Cairo Municipality, the Coptic Patriarchate, the Greek Orthodox Church, and the Egyptian Antiquities Organization (EAO).⁶

Some restoration work was undertaken on the towers of the Babylon Fortress in 2003, which included a variety of structural, architectural, electrical, and mechanical activities. These activities involved addressing cracks to enhance the structural integrity of the building, cleaning all wall surfaces with sand to remove pollutants, and applying a dust-resistant coating to the brick layers to enhance their visual appearance. The significant wooden doors, reflecting Roman-Byzantine and Islamic architectural styles, were meticulously restored. The restoration efforts also included completing the stone flooring and installing new architectural lighting to highlight the historical features of the tower. Regarding electrical and mechanical work, a fire alarm system was installed to enhance safety. Collectively, these restoration interventions aim to preserve the historical integrity of the Babylon fortress while ensuring

¹ Lapiere, J. (2018). "Architectural History of the Coptic Museum", Claremont Graduate University, UK., p 6.

² Penelis, G. et.al. (2014). "Restoration of the historic church of St. George in Cairo and the Roman Tower underneath", Second European Conference on Earthquake Engineering and Seismology, Istanbul, p 6.

³ Yilmaz, Y., & EL-Gamil, R. "Cultural Heritage Management", p72.

⁴ United nation development program/ SCA (1997) "Rehabilitation of Historic Cairo", Final Report, Chapter-6 on Framework Plan, Cairo, p13.

⁵ Gabra, G. et al. (2016) "The history of the religious heritage of old Cairo: its fortress, churches, synagogue, and mosque", Edited by Carolyn Ludwing, The American University in Cairo Press, Cairo, Egypt, p 11.

⁶ State of Conservation Report (2006), Historic Cairo, <https://whc.unesco.org/en/soc/1172>, Accessed on: (11/9/2024, 4:30 Pm)

its continued functionality and safety for future generations.¹



Figure 10. Crack Stitching

Fig (2,3): Restoration work on the Babylon Fortress tower

© Penelis, G. et.al. "Restoration of the historic church of St. George in Cairo", p 6.

4.3 Statement of Significance:

The Religious Complex is a renowned cultural and tourism center, serving as a confluence for civilizations and the Abrahamic religions. It holds immense historical and religious significance and exemplifies religious tolerance as it encompasses key places of worship for the three monotheistic faiths: Islam, Christianity, and Judaism. This historical and cultural convergence has established it as one of the most prominent heritage sites worldwide.²

4.3.1. Historical Value:

The religious complex is located in southern Cairo, around the Roman-era Babylon Fortress. This area contains a distinctive array of monuments that embody the shared cultural heritage of ancient Egyptians, Christians, Jews, and Muslims. Old Coptic Cairo, the oldest part of Cairo, predates modern Cairo and is believed to have been settled as early as the 6th century BC when the Persians constructed a fort near the Nile, north of Memphis. The Persians also built a canal connecting the Nile to the Red Sea. During the Roman period, the area was visited by the Holy Family during their escape to Egypt, finding shelter in a crypt that subsequently became the Church of Saints Sergius and Bacchus.³

The spread of Christianity in Egypt, initiated by Saint Mark in the 1st century CE, saw the majority of Egyptians embracing the new faith. However, they faced severe persecution under Roman rule until the Edict of Milan in 313 CE, which officially recognized Christianity within the Roman Empire. Consequently, many churches were constructed, and by the 11th century, Coptic Cairo had become the seat of the Coptic Orthodox Pope of Alexandria, with the Hanging Church serving as the papal residence. Many of the churches in the area date back to the 3rd and 4th centuries CE.⁴

4.3.2 Religious Value:

The Religious Complex holds great religious significance for the three Abrahamic faiths. The Hanging Church is one of the oldest Christian places of worship, alongside the Mosque of Amr ibn al-As, the first mosque in Egypt and Africa, in addition to the Ben Ezra Synagogue. The complex remains vibrant with daily prayers, fostering a strong connection between the local community and the site. The significance of the Church of Abu Serga is further amplified by its relation to the journey of the Holy

¹ Penelis, G. et.al. "Restoration of the historic church of St. George in Cairo", p 7.

² Matar, A. "Developing a visitor management plan for heritage sites, p 49.

³ Karelin, D & Et al. "Reconstruction of the Diocletianic fortress in Babylon of Egypt", p 226.

⁴ Mahmoud, H. (2024). "Coptic Churches in old Cairo, An Archaeological, Architecture and Artistic Study" International Journal of Cultural Inheritance & Social Sciences (IJCISS), 6(12), ISSN: 2632-7597, p39.

Family in Egypt.¹

4.3.3 Aesthetic Value:

The art found in the churches, mosques, and synagogues of the Religious Complex reflects Egyptian artistry across different eras. Despite the differences in religions, one can distinguish them through their unique symbols. The site is home to the three monotheistic religions and features some of the oldest religious buildings in Egypt. It forms part of Old Cairo, which was inscribed on UNESCO's World Heritage List in 1979.

4.3.4 Architectural Value:

The architectural styles in the complex are diverse: the basilica style dominates in Christian and Jewish architecture, while Islamic architecture is embodied in the Mosque of Amr ibn al-As, which is similar to the style plan of the Prophet's Mosque in Medina, with a central courtyard surrounded by four arcades².

4.3.5 Economic Value:

The Religious Complex in Fustat offers significant economic value through cultural tourism. Preservation efforts create jobs and stimulate the local economy by sourcing materials and services locally. The complex hosts cultural events that boost income and promote local artisans. Educational opportunities through workshops and partnerships with institutions enhance its economic impact. Additionally, the complex increases property values in the surrounding area and encourages infrastructure improvements. Overall, the Religious Complex not only supports the local economy but also fosters cultural exchange and community development, reinforcing its economic importance.³

4.3.6 Scientific Value:

The scientific significance of the site lies in the discovery of the Genizah in the Ben Ezra Synagogue, which was originally a Christian church known as the Syrian Church. It was sold to the Jews during the reign of Ahmad ibn Tulun and later became known as the Ben Ezra Synagogue. The synagogue is located east of the Church of Abu Serga within the Babylon Fortress. It was demolished and rebuilt in the late 19th century, during which the Genizah documents were discovered inside⁴.

4.4 Outstanding Universal Value – OUV:

It is a concept used within the framework of the UNESCO Convention for the Protection of Cultural and Natural Heritage. OUV refers to the characteristics that render a site of exceptional significance. A site must satisfy at least one of the ten criteria—six cultural criteria and four natural criteria. Since the Religious Complex is part of Historic Cairo,⁵ it shares with it the criteria for Outstanding Universal Value as follows:

Table (3): The Outstanding Universal Value of Religions Complex in Historic Cairo.

The Criterion of OUV (NO.)	Inquiries	Attributes of the criteria
(i)	Representing a masterpiece of human creative genius	<p>Criterion (i): Architectural Masterpieces:</p> <p>The Religious Complex in Ancient Egypt is home to a unique collection of architectural landmarks that reflect the diversity of cultures and religions throughout history. Notable examples include the Ben Ezra Synagogue, the Church of Abu Serga, and the Mosque of Amr ibn al-'As, each showcasing distinct artistic and architectural styles influenced by various historical periods.</p> <p>The synagogue features a unique design with intricate architectural details, while the church and mosque illustrate the influences of Islamic and Christian architecture, enhancing their</p>

¹ Gabra, G. et.al. "The history of the religious heritage of old Cairo", p 10.

² Mahmoud, H. "Coptic Churches in old Cairo", p 41.

³ Gabra, G. et.al. "The history of the religious heritage of old Cairo", p 10.

⁴ Saperstein, M. (2007). "Geniza." In *Encyclopaedia Judaica*, edited by Michael Berenbaum and Fred Skolnik, 2nd ed. Detroit: Macmillan Reference USA, vol. 7, p 188.

⁵ Vorderstrasse, T., & Treptow, T (EDs). "A cosmopolitan city: Muslims, Christians, and Jews in old Cairo", p 33.

		global significance.
(ii)	Exhibiting an important interchange of human values	Criterion (ii): Cultural Convergence The site reflects the historical coexistence and mutual influence of Christianity, Islam, and Judaism in Egypt. The interactions among these faiths over centuries contribute to a broader understanding of cultural exchange and religious tolerance.
(iv)	Be an Outstanding Example of a Type of Building, Architectural or Technological Ensemble, or Landscape that Illustrates a Significant Stage in Human History	Criterion (iv): Architectural Milestones The complex exemplifies a significant stage in the architectural and cultural history of Cairo, with structures that demonstrate the distinct architectural features of each religion. This includes the early Islamic Mosque design and Coptic church architecture, representing significant milestones in religious building traditions.
(v)	Being an outstanding example of traditional human settlement or land or sea use representative of a culture.	Criterion (v): Cohesive Urban Fabric: The Religious Complex exemplifies a cohesive urban fabric that embodies cultural coexistence and human interaction with the environment. Situated near the Nile River, the area fostered trade and interaction among diverse communities. The layout of the complex reflects the religious diversity, with historical landmarks developed in a traditional context that supports daily life and social activities. The narrow streets and alleys provide opportunities for citizens and visitors to engage and explore the area.
(vi)	Being directly associated with events, living traditions, ideas, beliefs, or artistic and literary works of outstanding universal significance.	Criterion (vi): Historical Significance: The Religious Complex in Ancient Egypt serves as a material testament to Cairo's political, intellectual, and commercial importance during the medieval period. The Ben Ezra Synagogue and the Church of Abu Serga represent cultural intersections between Judaism and Christianity, while the Mosque of Amr ibn al-'As showcases architectural and intellectual advancements in Islamic civilization. These landmarks highlight Cairo's role as a vital center for cultural and intellectual exchange, where diverse religious dialogues enriched the region's cultural fabric. Furthermore, they reflect architectural and artistic development across different eras, enhancing the area's value as a historical and tourist destination.

4.5 Authenticity:

Authenticity refers to preserving the meaning that makes a site unique and reflects its cultural value across different historical periods. The Religions Complex includes historically significant buildings such as the Ben Ezra Synagogue, the Abu Serga Church associated with the Holy Family's journey during their flight to Egypt, and the Amr ibn al-'As Mosque, the first mosque in Egypt and Africa. These buildings have managed to maintain their original design, with construction materials and techniques reflecting the time periods in which they were built. From a religious perspective, the site continues to preserve its spiritual significance, as these structures are still used for worship today. This continuity in religious function strengthens the site's connection to its historical and cultural heritage. Many of the monuments have undergone restoration using traditional materials and techniques to preserve their authenticity.¹

4.6 Integrity

The physical condition of the site and the extent to which it remains complete. The Religions Complex is considered a cohesive site, with its key landmarks intact and free from major alterations that would affect their historical design or form. It has preserved most of its principal features, despite being surrounded by urban development and population pressures. While urban growth poses

¹ Conducted by researcher according to the criteria of Authenticity and Integrity for Historic Cairo on WHL; UNESCO Website: <https://whc.unesco.org/en/list/89>; Accessed on (21.3.2024; at 1:54 PM).

challenges, the site still maintains relative integrity. However, this urban expansion may require additional measures to safeguard the complex's environment in the future. The site is protected by the state, and restoration projects are actively being carried out to prevent degradation and ensure the continuity of its historical value¹.

4.7 The Current Management Structure:

4.7.1 Administrative framework:

The MOTA serves as the official authority responsible for the World Heritage site of Historic Cairo, acting as the primary liaison with UNESCO and the World Heritage Committee. This responsibility includes contributions to the Supreme Council of Antiquities as the responsible authority for managing antiquities in Egypt. ²The Council monitors conservation and restoration efforts on the site and collaborates with local authorities and various communities, also The Cairo Governorate plays a significant role in managing the area by coordinating local activities and enforcing laws and regulations related to the protection of historical monuments.³ Various entities, such as the Ministry of Culture, collaborate to support cultural and artistic events in the area, alongside civil society organizations that may contribute to restoration and preservation efforts, and for Local authorities are responsible for daily operational tasks, including the management of public services and infrastructure in the area, with a focus on promoting sustainable tourism.⁴

Additionally, a proposed administrative structure for Historic Cairo was presented by the Urban Regeneration of Historic Cairo (URHC) Team, based on a comprehensive study of management and partnership strategies. This structure includes an inter-ministerial steering committee chaired by the Prime Minister and a Historic Cairo Agency Board of Directors, which is chaired by the MOTA or their representative. The proposed framework also encompasses a Historic Cairo Saving Fund, the Head of the Historic Cairo Agency, an Administrative Unit from the Ministry of Antiquities, an Executive Unit from the Cairo Governorate, and a Technical Support Unit from the Engineering Centre for Archaeology and Environment.⁵

Religions complex site is managed by several authorities and institutions that contribute to the preservation of cultural and religious heritage, as follows:

Table (4): the ownership of historical buildings in Religions Complex

The property	Responsible party	The role
Amr Ibn Al-A'as Mosque	MOTA	Responsible for the management and maintenance of historic mosques, including the Mosque of Amr Ibn Al-A'as, which is considered the oldest mosque in Egypt and Africa.
	Ministry of Endowments	
Coptic Churches and Monasteries	MOTA	The churches hold independent ownership under the Coptic Church, with restoration and maintenance operations supervised by the Ministry of Tourism and Antiquities."
	Coptic Orthodox	
The Ben Ezra Synagogue	MOTA	Responsible for the protection of Jewish heritage in Egypt. The Ben Ezra Synagogue, in particular, despite being part of the Jewish heritage, is maintained and protected by the Egyptian authorities due to the absence of a significant Jewish community in Egypt."
	the Jewish community	
Babylon Fortress and the Coptic Museum	MOTA	They are directly connected to the Supreme Council of Antiquities in terms of restorations.

¹ UNESCO Website: <https://whc.unesco.org/en/list/89>; Accessed on (21.3.2024; at 2:05 PM).

²Fahmy, H. (2013). "Egyptian Legislations in Relation to the Rehabilitation of Historic Cairo", Final Report, (URHC) – UNESCO, World heritage center, Cairo, p 66.

³ Elmenshawy, A; El-Shihy, A. (2024). "Management of World Heritage Sites: A Case Study of Historic Cairo", Journal of Urban Research, Faculty of Urban & Regional Planning, Cairo University, 48(3), p 50.

⁴ Feilden, B. & Jokilehto, J. (1998). "Management guidelines for World Cultural Heritage sites", p 54.

⁵ Fahmy, H." Egyptian Legislations in Relation to the Rehabilitation of Historic Cairo", p 68.

It is well known that each archaeological site has its internal administrative structure, appointed by the ministry, to manage the site comprehensively. This structure works to protect the site from various risks through continuous conservation, and restoration efforts, ensuring the site's sustainability for future generations. The administrative structure for the Religious Complex consists of the following:

- General Director of the site.
- Director of the Archaeological Site.
- Inspectors.
- Engineers and Conservators.
- Police Department and Protection Unit.
- Security.
- Support Services.

4.7.2 Stakeholders Assessment:

Stakeholders are public and private organizations, as well as individuals who live under the influence of the site or may be affected by an administrative decision or action that controls the site. Engaging stakeholders is essential through the exchange of information and consultations via public hearings. Participation in community projects is a means to ensure stakeholder involvement.¹

The various stakeholders and their interests related to the Religious Complex site are listed in the table as follows":

Table (5): Stakeholders Assessment in Religions Complex

Stakeholder	The role	Level of Interest
Ministry of Tourism and Antiquities	Manage and preserve archaeological sites, oversee restoration work, ensure the protection of cultural heritage according to international standards, and promote sustainable cultural tourism in the area.	High
Ministry of Endowments	Manage religious affairs of Islamic sites within the Religious Complex, ensure the respect of religious aspects of the locations, and collaborate on community awareness to maintain the sanctity of the place.	High
Ministry of Culture	Enhance cultural and historical heritage through cultural and educational programs, organize cultural events to raise awareness of the heritage, and support outreach programs that foster a connection between local heritage and the community.	Moderate
Ministry of interior	Ensure the security of the area and protect visitors and archaeological sites, manage access and crowd control, and address any security threats to the region or its visitors.	Moderate
Cairo Governorate	Coordinate between government bodies to implement development plans, provide logistical support and infrastructure, and improve public services such as transportation and the surrounding environment.	Moderate
The Coptic Orthodox and Jewish Communities	Oversee and manage the religious and cultural aspects within the complex, such as churches, monasteries, and synagogue. They ensure the preservation of these religious sites' spiritual and historical integrity, organize religious events, and participate in community awareness initiatives to promote the importance of these locations.	High
Local community	Participate in preserving and promoting the area, benefit from economic opportunities related to tourism, and contribute to cultural heritage preservation through local customs and traditions.	Moderate
Visitors	Respect the rules and regulations regarding archaeological sites, contribute to the preservation of the area by not causing damage, and support sustainable tourism through their visit and positive interaction.	Moderate

¹ Mohamed, M. " An integrated site management plan for the religious complex", p 45.

Tourism companies	promote the area as a sustainable tourism destination, organize environmentally conscious tours that respect cultural heritage, and provide visitors with accurate and detailed information about the historical and religious significance of the site.	Low
NGOs	Support environmental and heritage-related projects, provide technical and financial assistance for cultural heritage preservation, and contribute to community awareness regarding the importance of safeguarding archaeological and heritage sites.	Low

Table (5) lists all stakeholders who have a direct or indirect link with the site, as well as those who benefit from it. This is obvious, for example, in the Ministry of Tourism and Antiquities' responsibility in conserving the site and overseeing everything related to it, as well as collaboration with other stakeholders beyond the government sector; the ministry's function is the strongest and most significant in this system. The table also includes an evaluation of each of their roles as well as a measure of the strength of their relationship or effect on the site.¹

4.8 The current state of conservation:

The Religious Complex has faced significant challenges related to its infrastructure, including rising groundwater levels, an outdated sewage system, and dust caused by traffic on unpaved roads. The increase in groundwater levels has threatened parts of the Babylon Fortress, such as the inner courtyard, the southern gate, and the crypt believed to have sheltered the Holy Family. However, in recent years, the state has made efforts to preserve several buildings within this historic complex, which spans various religious and historical periods. Parts of the Babylon Fortress, including the walls and columns supporting the Hanging Church, have been restored. In addition, renovations were carried out in both the new wing of the Coptic Museum and the old wing on the upper floor, with new display techniques introduced for its collections.²

A master plan for the development of the area was established in 1999 through a collaborative effort initiated by the American Research Center in Egypt (ARCE). The project outlined in this plan addressed all major issues, ranging from archaeological sites and landscapes to infrastructure and architectural preservation, serving as a blueprint for the area's development. At the beginning of the 21st century, ARCE launched a large-scale project funded by the U.S. Agency for International Development (USAID). The primary goal of this project was to reduce the groundwater levels at the site, a process that took five years to complete, concluding in 2005. There is no doubt that this project and its improvements will provide significant benefits to Old Cairo for decades to come.³

The site has recently undergone extensive restoration and development efforts aimed at preserving the rich cultural and religious heritage while enhancing its infrastructure to meet the needs of tourists and visitors without compromising the preservation of the location. In this context, the MOTA, represented by the Supreme Council of Antiquities, initiated in 2022 the restoration of the religious complex, including the Hanging Church, which underwent comprehensive restoration work. The wooden ceilings were meticulously renewed, with damaged parts replaced by identical components to maintain the site's historical value.⁴ Byzantine icons were also carefully cleaned by specialized experts to preserve their original colors and form. The Church of Abu Serga, had its foundations restored, as they had been damaged by groundwater. The restoration works also involved repairing the altar, and stone walls that had eroded due to moisture, and refurbishing the old stained-glass windows. The Ben Ezra Synagogue also saw restoration, which included cleaning the walls and decorative plant motifs, waterproofing the roofs to protect them from rain-induced moisture, and addressing cracks caused by environmental factors.⁵

Similarly, the Amr ibn al-‘As Mosque, the first mosque built in Egypt and Africa after the Islamic

¹ Linde, S.J. & Williams, T. (2006) “Archaeological site Management: Theory, Strategies, and Implementation for the archaeological landscapes of JERICO”, Rome”La Sapienza”, Leiden University, p117

² Elmenshawy, A; El-Shihy, A. “Management of World Heritage Sites”, p 59.

³ Gabra, G. et.al. “The history of the religious heritage of old Cairo”, p 11.

⁴ Sedky, A. “Assessment of Area Conservation in the Arab -Islamic City”, p199.

⁵ Gabra, G. et.al. “The history of the religious heritage of old Cairo”, p 10.

conquest, underwent significant improvements. Ventilation and sound systems inside the mosque were upgraded, and the main entrance and stone columns that had deteriorated over time were restored. The large wooden ceiling was also carefully maintained, with damaged sections replaced to match the original structure. Pedestrian paths were created, and shade trees were planted. Throughout the restoration, environmentally friendly materials, such as natural paints and organic components, were used to minimize negative environmental impacts. A waste management system was implemented to recycle materials and reduce environmental damage from restoration activities.¹

The Egyptian Prime Minister inaugurated several of the restored archaeological sites in the area, which were reopened after the developments at the start of Ramadan in 2023. The developments were not limited to religious buildings but also extended to the area's infrastructure. Pathways and roads leading to the archaeological sites were repaved to facilitate visitor movement, with the addition of informational signs providing details about each site to guide visitors. Modern LED lighting systems were installed around the historical buildings to highlight the architectural design at night without affecting the ancient structures.²

To ensure the continued preservation of these sites, monitoring systems were installed to track any changes or cracks that might occur in the ancient structures due to time or environmental conditions, enabling quick intervention for necessary repairs. Specialized teams were trained to ensure that all restoration efforts adhere to international heritage conservation standards.³

4.9 The SWOT Analysis:

SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis is an effective tool for managing archaeological heritage sites. It highlights the importance of coordinating efforts to capitalize on strengths and opportunities while minimizing or mitigating threats and addressing weaknesses. The procedures undertaken during the field study, along with interviews and open discussions conducted with five groups, are as follows:

- **Group 1:** Administrator of the Religions Complex site.
- **Group 2:** Archaeological inspectors responsible for site management.
- **Group 3:** Priests and monks at the site.
- **Group 4:** Security personnel responsible for site protection (they declined to be named or quoted for security reasons).
- **Group 5:** Local Community (Residents of the area surrounding the site)

¹ Vorderstrasse, T. & Treptow, T (EDs). "A cosmopolitan city: Muslims, Christians, and Jews in old Cairo", p 39.

² Matar, A. "Developing a visitor management plan for heritage sites, p 50.

³ Mohamed, M. " An integrated site management plan for the religious complex in Fatimid Cairo", p 49.

Table (6): The SWOT analysis for the site of the religions complex.

S	W
<ul style="list-style-type: none"> • The Religions Complex site is part of Historic Cairo, which has been listed as a World Heritage Site since 1979. • It is the first Religions Complex in Egypt. • The site holds great religious values for the three Abrahamic faiths. It includes the Hanging Church, one of the oldest Christian places of worship, alongside the Mosque of Amr ibn al-A'as, the first mosque in Egypt and Africa, and the Ben Ezra Synagogue. • The site fulfills the world heritage requirements for authenticity. • The site satisfies multiple criteria for OUV. • Multiple authorities and institutions manage the site, enhancing efforts to preserve its cultural and religious heritage. • The scientific significance of the site is underscored by discoveries such as the Genizah in the Ben Ezra Synagogue. • Centrally located, the complex is easily accessible via various transportation options, including metro, buses, and private cars. • Ongoing preservation projects are supported by the Ministry of Tourism and Antiquities, including internationally recognized initiatives. • The complex contains the Church of Abu Serga, where the Holy Family is believed to have stayed in its crypt during their journey through Egypt. • The site is well secured by the Ministry of Interior and the Ministry of Tourism and Antiquities, with surveillance cameras in place. • The site has a fire extinguishing system. 	<ul style="list-style-type: none"> • Some structures, including the Babylon Fortress, suffer from deterioration due to groundwater issues, although efforts are underway to mitigate these problems. • The site has faced many hazards, including fires, earthquakes, and other risks. • The absence of a visitor center hinders the provision of interpretive materials and information for visitors. • Insufficient presentation and interpretation system. • The lack of a clear management plan limits structured site oversight and development . • On-site medical provisions for visitors and workers are lacking, posing health and safety concerns. • Previous poor interventions. • Site carrying capacity is not evaluated. • Lack of up-to-date recording and documentation of site conditions.
O	T
<ul style="list-style-type: none"> • International and national organizations, such as UNESCO, ICOMOS, and MOTA, are committed to preserving culturally significant heritage sites, presenting collaboration opportunities. • Increased collaboration among cultural heritage stakeholders can enhance preservation efforts and site management. • New research initiatives focused on heritage management and preservation can lead to innovative conservation methods. • The proposed management plan will provide a well-structured framework for site preservation. • The site can be effectively utilized as a tool to achieve SDGs. • The state has begun to adopt modern technology, as demonstrated by showcasing archaeological sites like the Church of Abu Serga and the Coptic Museum on the Ministry of Tourism and Antiquities' website. • Development initiatives for Mary Gerges Street can enhance tourist facilities and interpretive materials, improving the visitor experience. • The interest of the government in cultural tourism aligns with broader national development goals, including Egypt Vision 2030. 	<ul style="list-style-type: none"> • There is only one main entrance to the site, which causes congestion. Additionally, the narrow alleys leading to the churches and the close proximity of residential buildings to the historical structures add to this issue. • Direct lighting on the icons inside the churches may deterioration of the original colors. • Insufficient awareness and management of WHS can lead to decisions that negatively impact the complex. • Climate change poses risks of natural disasters that could threaten the site's integrity. • Renovations and inappropriate interventions have negatively affected the site. • Graffiti and vandalism are ongoing issues, threatening the site's visual appeal and Authenticity. • Poor marketing and advertising can limit the site's visibility to potential visitors, affecting tourism revenue. • Infrastructure challenges, including inadequate facilities and services, may deter visitors and impact the overall experience.

4.10 Action Plan for the Management of the Religions Complex Site:

Many archaeological sites lack effective management, despite being an essential part of tangible heritage that must be preserved for future generations. The absence of well-defined management plans has been a major factor in the neglect of these important historical sites by both site employees and the local community. The proposed action plan to develop the Religions Complex in Historic Cairo will include all key stakeholders¹.

Strategies represent the most extensive planning stage, outlining how goals will be achieved and specifying the resources, timeframe, and responsibilities to complete each task. Based on the vision and aims presented above, the table below (Table 7) incorporates a sequence of strategies and particular actions necessary to accomplish each aim within a 5-year time frame.² This phase represents the pinnacle of the planning process. At this point, responses are made based on assessments of conditions, significance, and the management context including the SWOT Analyses. Demas identifies three hierarchical response levels: establishing the overall vision and guiding principles, setting objectives, and finally defining strategies that outline methods of implementation³.

¹ Mohamed, M. " An integrated site management plan for the religious complex in Fatimid Cairo", p ٤٦.

² Ripp, M., & Rodwelly, D. (2018). "Aspects of management planning for cultural world heritage sites: Principles, Approaches and practices", In Makuvaza, S. (Eds), Springer International Publishing, ISBN 978-3-319-69856-4, p250.

³ Demas, M., (2000). "Planning for Conservation and Management of Archaeological Sites", the international Corinth workshop organized by the Getty Conservation Institute and Loyola Marymount University, Corinth, Greece, p 39.

Archaeological Heritage Management as a Tool for Achieving Sustainable Development Goals

Table (7): The Proposed Action Plan for the site of Religions complex in Historic Cairo.

Action Plan							
Objective	Activities	Outcomes	Responsibility	partner	Priority	Duration	
						Short term	Long term
Conservation and regular maintenance of the site	<ul style="list-style-type: none"> - Reconstructing damaged or collapsed parts inside churches and monasteries. - Ongoing restoration of historical icons and wooden artifacts. - Reinforcing areas susceptible to ground subsidence, such as the Babylon Fortress due to groundwater. - Utilizing modern technology for the restoration and display of artifacts in the Coptic Museum. 	Sustaining the archaeological site while preserving its authenticity, integrity, and OUV.	MOTA/SCA	ICCROM Restorators Engineers Researchers	High		√
Documenting and recording the ongoing Condition of the Site	<ul style="list-style-type: none"> - periodic accessible documents, databases, photographs, and drawings that illustrate each part of the site using 3D laser Scanning and BIM 	Recording reports before, throughout, and after any interventions	MOTA/SCA The National Center for Documentation of Cultural and Natural Heritage (CultNat)	Technicians Academics	High	√	
Regular maintenance of the electrical and firefighting system	<ul style="list-style-type: none"> - Conduct Routine Inspections - Upgrade Fire Safety Equipment - Staff Training - Install Monitoring Systems 	Enhance site safety by reducing fire and electrical hazards while ensuring compliance with national safety standards	MOTA/SCA	Local Fire Department NOUH	High		√
Enhance Visitor Facilities and Infrastructure in accordance with the Heritage Pattern	<ul style="list-style-type: none"> - Providing the area with high-quality restaurants and cafes. - Toilet services should be improved, especially for the disabled. - Rehabilitating the Fustat market and its traditional crafts. - Providing the site with guides to direct visitors, explain the site to them, and organize them during peak times. - Install more ATMs 	Providing a unique experience for visitors that enhances their satisfaction with the site	MOTA Tourism Development Authority Ministry of Local Development Ministry Of	Investors Tourist Agencies	High	√	

			Investment				
Improve Presentation and Interpretation Methods	<ul style="list-style-type: none"> - Increase the number of interpretive and guideline signs on the site with a different language. - Integrate the site with modern technological tools that assist in interpretation, such as Simultaneous translation, interactive screens, and the display of artifacts using holograms and 3D technology. - Hold a sound and light show in the amphitheater of the Babylon Fortress. - Improve a visitor center that provides information and interpretive materials. 	Increase visitor awareness about the site, achieving a balance between providing a unique experience for visitors and preserving the site.	Site Staff MOTA Tourism Development Authority MOC	Academics Technician Local Community	Medium	√	
Strengthening Capacity Building	<ul style="list-style-type: none"> - Conduct Workshops and Training Programs. - Train Beneficiaries on Key Topics: <ol style="list-style-type: none"> 1. World Heritage Charters and Regulations. 2. Conservation of Cultural and Natural Heritage 3. New Trends in Heritage Management. 	Increasing awareness among onsite staff and stakeholders related to the site.	MOTA MOC MOLD	UNESCO ICCROM	Medium	√	
Securing the site and maintaining surveillance cameras	<ul style="list-style-type: none"> - Securing the site's entrances and exits and monitoring any unusual visitor behavior. - Conduct regular inspections and maintenance checks on surveillance cameras. - Protection against theft. 	Enhanced security for the site, reducing incidents of vandalism or unauthorized entry; improved visitor and staff safety	MOTA MOI	private security contractors	Ongoing		√

5. The Role of Archaeological Sites Management to Achieve SDGs:

The 26th session of the WHC in 2002 adopted the Budapest Declaration, marking the first official document that directly linked sustainable development and heritage. This declaration aims to balance sustainability, conservation, and development through activities that stimulate economic growth and improve local quality of life without compromising World Heritage properties. The declaration addresses economic growth and social equity, aligning with the three pillars of sustainable development (economic, social, and environmental) introduced at the Rio Earth Summit in 1992. Consequently, the Budapest Declaration represents the first explicit mention of sustainable development in the World Heritage Convention's formal documents⁶⁹.

Following this declaration, international meetings continued to explore the intersections of sustainable development, world heritage, and conservation. The first meeting was held in Paraty in 2010, followed by a second in Ouro Preto in 2012. Participants in these meetings highlighted that unregulated or poorly managed development poses significant risks to WHS. They concluded that criteria and guidelines should be established to integrate management, preservation, and sustainable development issues into the convention's operational guidelines. In line with these discussions, the WHC, during its 2012 session, requested the development of a proposal to integrate the Convention's policy with sustainable development. Despite previous dialogues and visions, this was the first time the committee explicitly requested the incorporation of sustainability principles into the convention's mechanisms, making it a tool for achieving sustainable development⁷⁰.

In this context, the relationship between sustainable development and archaeological sites can be summarized as “meeting current tourism demands without compromising the rights of future generations of visitors, while ensuring the continuous preservation of archaeological sites and achieving ongoing balance with the surrounding environment and local communities.” Reviewing the specific management plan for the Religions Complex and analyzing the state party's conservation reports—filed in compliance with WHC resolutions to mitigate potential risks to the historic area—it can be observed that strategic efforts by the state have made significant strides toward achieving sustainable development goals, even if they are not yet fully comprehensive. The state remains committed to ensuring the sustainability of its historic cities, particularly WHS, by implementing contemporary policies and strategies.⁷¹ Specifically, the Religions Complex in Old Cairo has successfully met several SDGs, as follows:

Table (8): The role of ASM in achieving SDGs in Religions Complex According to SOC reports, Analytical study of the interventions, and management methods used at the site.

SDGs ⁷²	The role of ASM in achieving SDGs in Religions complex (Old Cairo)	level of Implementation
Goal (1): No Poverty Goal (8): Decent Work and Economic Growth	Egypt has implemented various projects to promote sustainability at the site, focusing on rehabilitating and restoring archaeological locations affected by natural or human-induced challenges such as fires, groundwater issues, and earthquakes. Notable examples include the reconstruction and restoration of the Greek Orthodox Church, the Hanging Church, and Qasriyat al-Rihan following fire incidents, as well as groundwater reduction efforts at the Babylon Fortress and the Church of Abu Serga. All restoration efforts and area development aim to achieve	High

⁶⁹ Badawy, S., & Shehata, A. (2018). “Sustainable urban heritage conservation strategies—case study of historic Jeddah districts, Cities’ Identity Through Architecture and Arts – Catalani et al”. (Eds), ISBN 978-1-138-05409-7, London. p86.

⁷⁰ Labadi, S. UNESCO, World Heritage, and Sustainable Development, p50.

⁷¹ Abdel Ghani, M. (2020). “The Evaluation of the Concept of Sustainable Development, p406.

⁷² United Nations: Sustainable Development Goals; <https://www.un.org/sustainabledevelopment/ar/sustainable-development-goals/>, Accessed on: (12/1/2024, 6:20:30 PM)

	sustainability and establish the site as a continuous economic resource capable of attracting the maximum number of visitors. This revitalization of the location also seeks to attract investors to initiate projects that support tourism facilities, thereby creating more job opportunities for local residents. Inclusive economic growth fosters sustainable employment, promotes equality, and reduces poverty.	
Goal (9): Industry, Innovation and Infrastructure	<p>Recently, the government has cleared the area of the Religions Complex to alleviate the pressure caused by urban congestion. This initiative aims to address recurring fires and infrastructure challenges while creating space for suitable infrastructure developments, such as revitalizing traditional markets like Fustat Market and enhancing transportation services to reduce congestion for visitors.</p> <p>Additionally, the area is being revitalized through commercial and cultural activities, including a sound and light show at the Babylon Fortress and the implementation of interpretive systems for the site utilizing innovative technology. These initiatives signify a considerable advancement toward achieving the ninth sustainable development goal.</p> <p>The government has begun moving in this direction, particularly in terms of infrastructure, further progress and international funding are necessary to accelerate the execution of the planned projects.</p>	Medium
Goal (13): Climate Action	<p>Egypt has implemented significant measures to safeguard the Religions Complex from the impacts of climate change through various initiatives and strategies:</p> <ul style="list-style-type: none"> – In 2022, the MOTA launched a series of restoration projects, including work on the Ben Ezra Synagogue, where roof surfaces were insulated to protect them from moisture caused by rain, and cracks resulting from environmental factors were addressed. – Following UNESCO's recommendations, the government rehabilitated archaeological buildings in the area affected by the 1992 earthquake, including the Hanging Church, the old wing of the Coptic Museum, and the Greek Orthodox Church. These efforts successfully preserved these historically significant structures.⁷³ – Due to the site's proximity to one of the branches of the Nile River, it has faced continuous flooding during the Nile's flood seasons, impacting several low-lying buildings, including the Church of Abu Serga and the Babylon Fortress. In response, the Supreme Council of Antiquities initiated a groundwater rescue project, which continued until 2006, successfully protecting many of the sites. 	High
Goal (17): Partnerships for the goals	<p>The government has engaged several local and international organizations to participate in preservation projects for the entire Historic Cairo, including the Religions Complex, recognizing its significance as part of Historic Cairo. These efforts align with Goal 17 of the Sustainable Development Goals, which emphasizes strengthening partnerships for sustainable development. Key participants in these initiatives include:</p> <ul style="list-style-type: none"> • Ministry of Tourism and Antiquities: This ministry is responsible for the preservation of cultural and archaeological heritage, the promotion of sustainable tourism, and the development of infrastructure for historical sites. 	High

⁷³ State of Conservation Report (1993), submitted by the State Party to WHC, Historic Cairo, <https://whc.unesco.org/en/soc/2963>, Accessed on: (11/9/2024, 12:00 Pm)

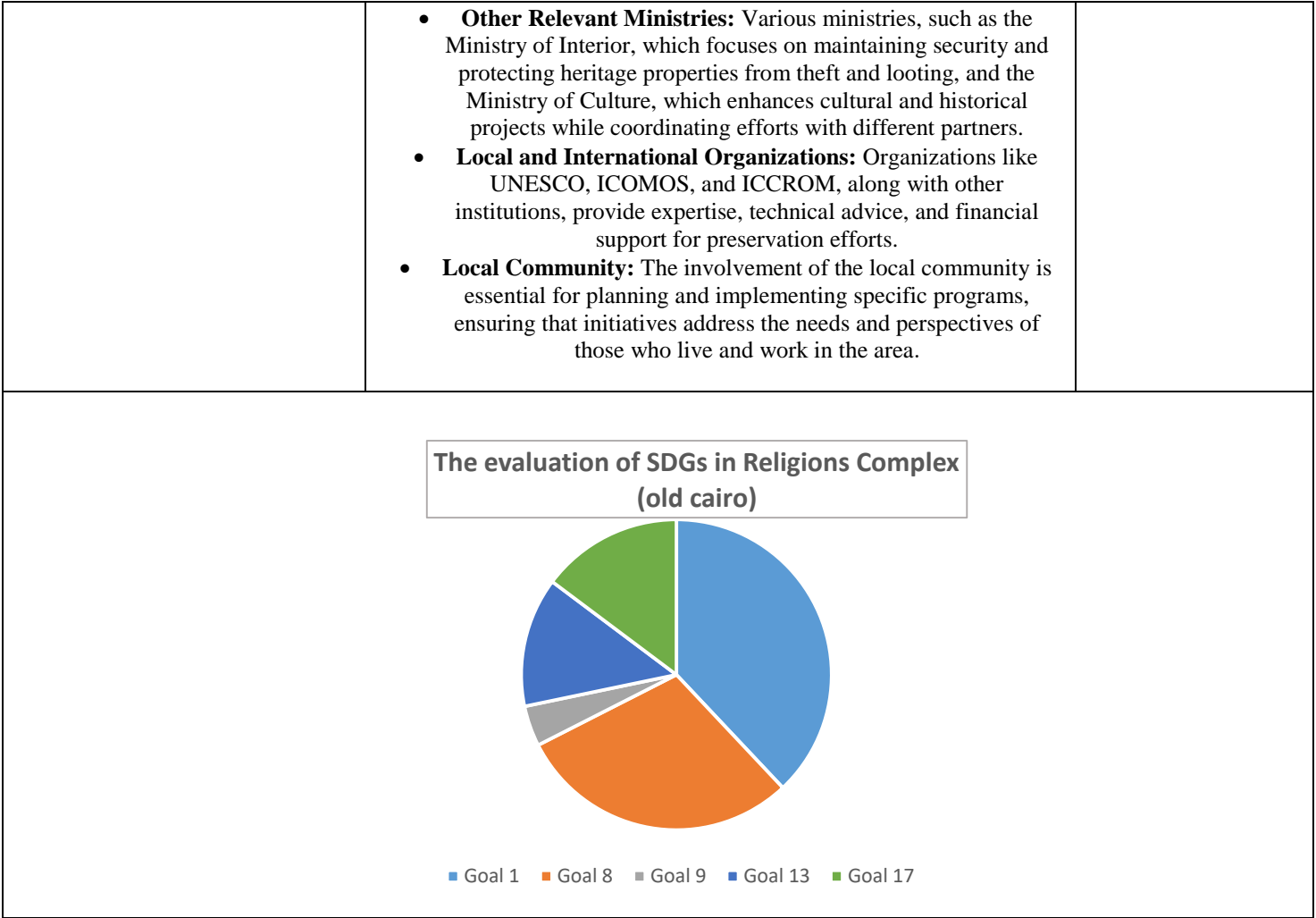


Table (8) highlights that Egypt has successfully advanced several SDGs in the development of the Religions Complex in Old Cairo, specifically goals 1 (No Poverty), 8 (Decent Work and Economic Growth), 13 (Climate Action), and 17 (Partnerships for the Goals). However, achieving the remaining goals will require more effective strategies and improved implementation. As previously indicated, Egypt stands as a leader in sustainable development among Arab nations, ranking 6th place, which reflects a solid success rate. This progress supports Egypt's adherence to specific indicators tailored to its context, facilitating the realization of targeted SDG outcomes.⁷⁴

⁷⁴ Zakzak, L., Subramani, K., Luomi, M., Fuller, G., Salem, F. and Lafortune G. (2023). Arab Region SDG Index and Dashboards Report 2023. Dubai and Paris: Mohammed bin Rashid School of Government (MBRSG) and UN Sustainable Development Solutions Network (SDSN), p 16.

Conclusion:

Effective management of archaeological sites is crucial for achieving sustainable development, particularly through the preservation of cultural heritage, promoting economic growth, developing infrastructure, ensuring environmental sustainability, and enhancing local community involvement. In terms of rehabilitating and developing heritage buildings, these sites can be transformed into cultural assets that attract millions of tourists and encourage investors to launch projects supporting tourism facilities in the region. This creates job opportunities for youth, promotes equality, and contributes to poverty alleviation, aligning with the first and eighth SDGs. Additionally, the development and management of archaeological sites contribute to the revitalization of surrounding areas by providing infrastructure that includes various commercial and cultural activities such as “transport and traffic – road paving – hotels and restaurants – revival of traditional markets,” which is a significant step toward achieving SDGs 9.

Furthermore, the Religious Complex has engaged multiple stakeholders in archaeological site management and conservation projects, aligning with the SDGs 17.

The findings indicate that effective site management, based on clear guidelines, plays a pivotal role in preserving the integrity and value of these historical sites. At the Religious Complex, gaps were revealed in visitor guidance, with a lack of interpretive and directional tools, making access more challenging, especially in the absence of facilities for people with disabilities, which excludes a significant portion of potential visitors. Moreover, overcrowding in main areas and the absence of nearby parking negatively impact visitor comfort and satisfaction.

Recommendation:

1. Relevant authorities should seek adequate funding, both from government and non-governmental sources, to support the site's management budget, making it a key factor in promoting domestic and international tourism in Egypt.
2. Placing the Religious Complex with its diverse monuments on the international tourism landmarks list through a comprehensive site management plan and a strong marketing strategy is essential to attract foreign tourists from around the world. This could include brochures, guided tours, signage and panels, interpretive media, and websites.
3. Crowding is most noticeable at the main entrance and within the church buildings, particularly the Hanging Church, which attracts many visitors. For this reason, visitor movement in these areas must be organized to avoid congestion and reduce the risk of incidents or damage to the site.
4. Implement regular maintenance schedules and comprehensive risk management plans for the Religions Complex and Historic Jeddah.

List of References:

- Abdel Ghani, M. (2020). “The Evaluation of the Concept of Sustainable Development and Its Dimensions and results in Egypt”, Scientific Journal of Economics and Commerce, Ain Shams University, 50 (2).
- Abdullah, N. (2017). "The Impact of the World Heritage Convention on the Protection of Antiquities in Jordan." Master's Thesis, Yarmouk University, Irbid.
- Amin, S. (2016). “An outlook on Heritage Management in Egypt, Ministry of Tourism and Antiquities”, ITP. Available on: Egypt Media Center, <https://www.sis.gov.eg/>
- Atallah, M. &Tawfik, T., (2023). “Using Public Archaeology towards protecting and managing the archaeological sites in Dakhla Oasis”, Journal of the faculty of archaeology, 14(26).
- Badawy, S., & Shehata, A. (2018). “Sustainable urban heritage conservation strategies—case study of historic Jeddah districts, Cities’ Identity Through Architecture and Arts – Catalani et al”. (Eds), ISBN 978-1-138-05409-7, London.

- Demas, M., (2000). "Planning for Conservation and Management of Archaeological Sites", the international Corinth workshop organized by the Getty Conservation Institute and Loyola Marymount University, Corinth, Greece.
- Elmenshawy, A., & El-Shihy, A. (2024). "Management of World Heritage Sites: A Case Study of Historic Cairo", *Journal of Urban Research*, Faculty of Urban & Regional Planning, Cairo University, 48(3).
- ERDOĞAN, M., & ÇOBANOĞLU, Ş. (2019). "Sustainable Cultural Heritage Management: Example of Troy Archaeological Site", *Journal of Gastronomy and Travel Research*, 3(1).
- Fahmy, H. (2013). "Egyptian Legislations in Relation to the Rehabilitation of Historic Cairo", Final Report, (URHC) – UNESCO, World heritage center, Cairo.
- Karelin, D., Karelina, M., & Zhitpeleva, T. (2018). "Reconstruction of the Diocletianic fortress in Babylon of Egypt: sources and reconstruction argumentation", *Virtual Archaeology (from Air, on Earth, under Water and at Museum) Proceedings of the International Forum held at the State Hermitage Museum, Russia*.
- Klarin, T. (2018). "The Concept of Sustainable Development: From its Beginning to the Contemporary Issues", *Zagreb International Review of Economics & Business*, 21(1).
- Lapierre, J. (2018). "Architectural History of the Coptic Museum", Claremont Graduate University, UK.
- Lim, H. (2005). "Archeological Site Management Planning: Management Guidelines for Hwangryong Temple Historic Site", Master Thesis, University of Pennsylvania, USA.
- Linde, S.J. & Williams, T. (2006). "Archaeological site Management: Theory, Strategies, and Implementation for the archaeological landscapes of JERICO", Rome" La Sapienza", Leiden University.
- Lotfy, W. (2023). "Integration of Biophilic Design Principles with Sustainable Development Goals (SDGs)", *Art and Architecture Journal*, 4(1).
- Makhoul, M., & Ghanem, A. (2009). "Environmental Management Systems and their Role in Sustainable Development," *Damascus University Journal of Economic and Legal Sciences*, 25 (2).
- Matar, A. (2023). "Developing a visitor management plan for heritage sites: Case Study: The Religions Complex in Historic Cairo", Unpublished master thesis, Faculty of Tourism and Hotel, Helwan University.
- Mohamed, M. (2020). "An integrated site management plan for the religious complex in Fatimid Cairo: a case study of the second religious complex in Egypt", Unpublished master thesis, Faculty of Tourism, Helwan University.
- Mahmoud, H. (2024). "Coptic Churches in old Cairo, An Archaeological, Architecture and Artistic Study" *International Journal of Cultural Inheritance & Social Sciences (IJCIS)*, 6(12), ISSN: 2632-7597.
- Penelis, G. et.al (2014). "Restoration of the historic church of St. George in Cairo and the Roman Tower underneath", *Second European Conference on Earthquake Engineering and Seismology*, Istanbul.
- Ripp, M & Rodwelly, D. (2018). "Aspects of management planning for cultural world heritage sites: Principles, Approaches and practices", In Makuvaza, S. (Eds), Springer International Publishing, ISBN 978-3-319-69856-4.
- Sedky, A. (2004). "Assessment of Area Conservation in the Arab -Islamic City: The Case of Historic Cairo", PhD thesis, Heriot-Watt University, Edinburgh, Germany.
- Shafie, R. (2022). "Developing an Effective Management Plan for Cairo Egyptian Museum as a World Heritage Nominated Site", unpublished Master thesis, Faculty of Tourism and Hotel Management,

Helwan University, Egypt.

- Sullivan, S., & Mackay, R. (Eds.) (2012). "Archaeological Sites: Conservation and Management", Los Angeles: Getty Conservation Institute.
- Saperstein, M. (2007). "Geniza." In *Encyclopaedia Judaica*, edited by Michael Berenbaum and Fred Skolnik, 2nd ed. Detroit: Macmillan Reference USA, vol. 7.
- Taylor, K. (2004). "Cultural Heritage Management: A Possible Role for Charters and Principles in Asia", *International Journal of Heritage Studies*, 10(5).
- A.Aziz, M., & Abouzied, F. (2021). "Reviving the Trail of the Holy Family to Egypt: Applied for the Tourism and Hospitality Sector", *The International Journal of Association of Arab Universities for Tourism and Hospitality*, 20(2).
- Tisdell, C. (1988). "Sustainable development: differing perspectives of ecologists and economists, and relevance to LDCs", *world development*, 16 (3).
- Yilmaz, Y. & EL-Gamil, R., (2018). "CULTURAL HERITAGE MANAGEMENT IN TURKEY AND EGYPT: A COMPARATIVE STUDY", *An International Journal of Akdeniz University Tourism Faculty*, 6(1).
- Zakzak, L., Subramani, K., Luomi, M., Fuller, G., Salem, F. and Lafortune G. (2023). *Arab Region SDG Index and Dashboards Report 2023*. Dubai and Paris: Mohammed bin Rashid School of Government (MBRSG) and UN Sustainable Development Solutions Network (SDSN).

Charters and Conventions:

- The Athens Charter for the Restoration of Historic Monuments (1931), Adopted at the First International Congress of Architects and Technicians of Historic Monuments, Athens.
- Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (1979), Australia ICOMOS.
- Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (1999), Australia ICOMOS.
- Venice Charter: International charter for the conservation and restoration of monuments and sites, (1964), Adopted by ICOMOS in the 2nd International Congress of Architects and Technicians of Historic Monuments, Venice.
- UNESCO. (1972). *Convention Concerning the Protection of the World Cultural and Natural Heritage*, Adopted by the General Conference at its seventeenth session, Paris.
- The Nara Document on Authenticity of 1994, included as an annex 6 in the "Operational Guidelines for the Implementation of the World Heritage Convention".