

# Assessment of Potential Inscription of Wadi El-Natroun Monasteries in World Heritage List and the Possibilities of Development its Religious and Heritage Tourism

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#### **Abstract**

**Objectives**: The primary objective of this study is to evaluate the tourism potentials of the site of Wadī el-Natroun monasteries in Egypt, which holds religious and historical significance. Currently, only four monasteries remain intact: St. Macarius, Anba Bishoi (or Bishoy), Baramus and Surian. They date back to the 4th and 5th centuries AD when monasticism was initiated in Egypt. These monasteries comprise valuable artistic treasures such as icons, murals, manuscripts, unique books, etc. Additionally, the area holds importance as it is part of The Holy Family Journey in Egypt, with the desert of Scété in Wadi el-Natroun playing a role. The Egyptian Ministry of Antiquities has made several efforts to nominate this site for inclusion on UNESCO's World Heritage list.

**Methodos**: The study employed various approaches, with the most important being historical and descriptive analytical approaches. Field studies were conducted to assess the cultural heritage of Wadi El-Natroun Monasteries according to UNESCO's criteria.

**Results**: The study revealed the outstanding universal value of both the monasteries and the contiguous area. However, there are threats jeopardizing the site, such as some lakes drying up as a result of pollution and waste disposal.

**Conclusions**: The study concludes that inscribing Wadi El-Natroun Monasteries on the World Heritage List would significantly increase international and local tourism interest in the site, preserve it, and attract a greater number of visitors. This would contribute to the development of the local community by improving the area and increasing the number of tourists.

**Keywords**: Wadi el Natroun, Nitria, Scetis, St. Macarius, red lake, flash floods, religious tourism.

# تقييم الإدراج المحتمل لأديرة وادي النطرون في قائمة التراث العالمي وإمكانيات تطوير السياحة الدينية والتر اثية

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#### ملخّص

الأهداف: من هذه الدراسة هو تقييم الإمكانات السياحية لموقع أديرة وادي النطرون في مصر، ذي الأهمية الدينية والتاريخية. حاليًا لم يبق سوى أربعة أديرة على حالها، وهي القديس مقاربوس والأنبا بيشوي والبراموس والسوريان. تعود جميعها إلى القرنين الرابع والخامس الميلاديين حينما بدأت الرهبنة في مصر. تضم كنوزًا فنية قيمة مثل الأيقونات والجداريات والمخطوطات والكتب الفريدة وغيرها، فضلاً عن أهمية المنطقة فتشكل صحراء الإسقيط بوادي النطرون جزءًا من رحلة العائلة المقدسة في مصر. وقد سعت وزارة الآثار المصربة عدة مرات لترشيح الموقع للإدراج على قائمة اليونسكو للتراث العالمي.

المنهجية اتخدت الدراسة عددًا من المناهج أهمها التاريخيى والوصف التحليلى بالإضافة إلى الدراسة الميدانية، فضلًا عن تقييم التراث الثقافي لأديرة وادي النطرون وفقًا لمعايير اليونسكو.

النتائج كشفّت دراسة كلَّ من الأديرة والمناطق المجاورة أن لها قيمة عالمية بارزة لكن هناك بعض التهديدات التي تعرّض الموقع للخطر؛ حيث جفت بعض البحيرات نتيجة التلوث والتخلص من النفايات.

الخاتمة خلصت الدراسة إلى أن إدراج أديرة وادي النطرون في قائمة التراث العالمي سيزيد على نحو كبير من الاهتمام السياحي الدولي والمحلي بالموقع والحفاظ عليه ويزيد عدد الزائرين. وبالتالي تحقيق تنمية للمجتمع المحلي من خلال تحسين المنطقة وزيادة أعداد السائحين.

**الكلمات الدالة:** وادى النطرون، نيتريا، الإسقيط، القديس مقاربوس، البحيرة الحمراء، سيول فجائية، السياحة الدينية.

#### 1. Introduction

Several studies have focused on World Heritage Site, heritage tourism and managing tourism at world heritage sites (Keitumetse, 2013; Conway, 2014; Boz, 2018). Cultural heritage is an expression of the ways of living developed by a community and passed from generation to generation, including customs, practices, places, objects, artistic expressions and values (Culture in Development, 2020). In addition, the Cultural heritage is a wide concept, either intangible or tangible.

Noting that the cultural heritage and the natural heritage are increasingly threatened with destruction not only by the Natural causes of decay, but also by rapid change of social and economic surroundings. The relationship between heritage and tourism is frequently characterized by contradictions and conflicts whereby conservationists perceive heritage tourism as compromising conservation goals for profit (Aas et al., 2005, cross-referenced from Nuryanti, 1996). So decided the General Conference of the United Nations Educational, Scientific and Cultural Organization meeting in Paris from 17 October to 21 November 1972, at its seventeenth session, adopts a convention concerning the protection of the World Cultural and Natural Heritage. For the purposes of this Convention, the following shall be considered as "cultural heritage" (ICOMOS, 2004):

**Monuments**: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, ancient cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science.

**Groups of buildings**: groups of separate or connected buildings, which, because of their unique architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science.

**Sites**: works of man or the combined works of nature and man, and areas including archaeological sites that are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.

There are seven World Heritage sites in Egypt, divided into six cultural sites, as follows; Abu Mena registered a heritage site in (1979), Ancient Thebes with its Necropolis (1979), Historic Cairo (1979), Memphis and its Necropolis, the Pyramid Fields from Giza to Dahshur (1979), Nubian Monuments from Abu Simbel to Philae (1979), Saint Catherine Area (1979). In addition to a sole natural site, which is Wadi Al-Hitan "Whale Valley" (2005) (UNESCO, 2020) https://whc.unesco.org/en/list/.

It is possible to register all of the four monasteries of Wadi el-Natrona's collectively as one cultural heritage site <sup>(1)</sup>, for their exceptional religious, cultural and heritage features. They constitute one of the most prominent cultural, religious and heritage tourism sites in Egypt; furthermore, their architecture and collections of unique icons and manuscripts reflect the traditions of seventeen centuries of history of Christianity.

Cultural heritage tourism can be further segmented into smaller, more specific sub-categories defined by specific types of attractions and events; among these is pilgrimage/religious tourism. Religiously motivated travel is perhaps the oldest and most widespread type of travel in human history (Simone & Boyd, 2010). Religious tourism is part of a broader cultural tourism; it means not only visiting sites, shrines and structures with religious significance but also attending religious conferences, different cultural-religious events, exhibition of Cultic objects, as well as concerts of sacred music.

There has been recently a significant growth in religious tourism. UNWTO estimates that 300 to 330 million tourists visit the world's key religious sites every year, with approximately 600 million national and international religious journeys in the world, 40% of which took place in Europe (Boz, 2018). Murphy (1985) defines tourism as a sociocultural event for both the guest and host (Brunt & Courtney, 1999). Tourism revenue has become an influence on the financial returns of most countries in the world. In 2018, according to the World Tourism Organization, the number of international tourist arrivals worldwide reached 1.4 billion (world economic forum, 2019). It estimates that the number of tourists in 2019 reached 1.5 billion tourists in the world, and the revenues of the tourism and aviation sectors around the world elevated to \$ 2 trillion.

(1) This term did not identify with precision by Arab and foreign Authors (Wadi, N Natrun- Wadi el Natroun-Wadi al Natroun-El Natrun - Al Natrun), Therefore has been used the agreed by the ministries and government departments Egyptian.

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#### 2- Materials and Methods

Data and information were gathered from primary and secondary sources such as: official government documents and articles, local archives, books, internet websites- official and non-official, brochures, as well as topographic maps (Scale 1,250,000), satellite images processing, and direct observation. This was followed by site visits; furthermore, interviews were conducted with some monks of monasteries and a stratified random sample of citizens living in Wadi el Natroun.

## 3- The history of the site

This area has a long history, dating back to Pharaonic times. In the past the Wadi el-Natroun desert was part of the Libyan desert, enjoyed a special political entity and was inhabited by the Libyans who were at dispute with the Egyptians (Toussoun,1931). The names of Wadi el- Natroun differed during historical periods. In the Ptolemaic period, it was called "sekhet hamat or sekhet hamam" it means the salt field (Fakhry, 1942); due to the presence of nitron salt. In the Greco-Roman period, it was called Scetis, the form of "Scetis "with variations such as Scytis, Scythis, common in Latin", it is Sometimes supposed that "Scetis" is derived from Greek and an Arabic synonym for Scetis "El Askit" (White,1930).

From the Byzantine to Islamic Period, it was called "Shiet or Shihet" means balance of the hearts. In the Islamic period, according to what El-Makrizi mentioned, the place was called "Wadi Habib" It derives its name from Habib Ibn Muhammad, Ibn Moghfal, Ibn El Wakia, Ibn Hazzam, El Gheffari, who was one of the companions of the Prophet Mohammad "PBUH", and who was present at the conquest of Mecca. At the time of the troubles aroused against Caliph Osman, he retired to this valley, which was referred to by his name (Toussoun, 1931). Finally appeared the name Wādī el-Natroun, a current name nowadays, which means "the valley of the Natroun" and was first employed by the Arab historian al-Makrīzī, who lived in the 15<sup>th</sup> centuryAD. Hamdan says (Hamden, 1994). That the name of valley is erroneous, as it is a closed depression, with no source, estuary, or tributaries.

The commencement of monasticism in Egypt established by St. Antonio in the Eastern Desert in 305 AD (Anba Matta, 1995). He was contemporary to St. Amon al-Masry, the first hermit in Wadi el Natroun and, who stayed in the northern part of Wadi el Natroun known at that time as Nitria (Habib, 1978). Many monks followed him, including Macarius the Great, founder of the monasticism of Shihet Later. The number of monks in Nitria raised significantly; consequently, some of them moved to the south, seeking peace and tranquility. Macarius of Alexandrian has founded cells south of Nitria, which were single caves dug in the mountains or silos from palm leaf. As for Macarius the Great, he migrated from Nitria to the south of cells and founded the monks' congregations in the area of Shihet or "Scété" in 340 AD and remained there until his death (White, 1930).

With each group of cells, a church was built to hold prayers; this new building eventually developed into a monastery. Each monk lived separately and relatively far from the other, but the sporadic Berber' invasions of the Libyans elements forced the vulnerable monks to join each other to protect themselves, yet each group have their own separate monastery (Toussoun, 1931). In the 4<sup>th</sup> century, the number of hermits - monks - reached 5,000, but the last monks withdrew from Nitria in the 6<sup>th</sup> century to cells and Shihet, and they merged into one place, which called "Scetis" (Anba Matta, 1995). According to White, the proximity of Nitria to overpopulation areas and Alexandria was the reason for the monks 'migration to the south (White, 1930).

In their early stage's monasteries were mere scattered buildings of a group of cells, a sole church and a water well, mostly with no surrounding walls; later the monks gradually turned their hermit complex to a protected site, building towers and forts to protect them.

The church complex, and possibly some other structures (such as a tower, a kitchen, a bakery and so on) would form an architectural nucleus for the groups of scattered cells. During the period from the 4<sup>th</sup>. to 18<sup>th</sup>.centuries AD, the number of monasteries fluctuated, some of them extinct for several reasons: Berbers' invasions, natural and biological factors such as flash floods and the white ant's attacks; furthermore, monks sometimes left their places and joined others resulting in fewer numbers of monasteries. Prince Omar Toussoun identified the ruined monasteries (the ruins) by placing a bronze plaque over a column on each of the ruins (Toussoun, 1930).

In the last decades, archaeologists conducted several excavations in the sites of monasteries' ruins. For example: in 1964

and 1965 Geumont and Douma from "Institut Français d'Archéologie Orientale" (IFAO), discovered a huge monastic density in the place and indicate the existence of between 3500 - 6000 monks in area in past (Anba Matta, 1995). and in 1994 a team from Leiden University under the direction of Dr. Karel C. Inneméehas conducted archaeological research at a site north of the present Monastery of the Virgin Mary of Baramus (Konstantinidou, 2013).

Quarters or cells of the monks have been discovered, around the site they discovered all kinds of different wares that the monks would have used which being made in the famous pottery production centers of the Mediterranean especially Cyprus and Phocaea, and dishes that painted in ceramic colors geometric decoration, and amphorae for oil or wine (Konstantinidou, 2013).

Human activity developed there around the group of permanent saline lakes that strung along the depression floor. The mineral natron that occurs as a solution in their water, as well as a layer of evaporates in their bottoms and around their boarders has been used in the manufacture of various elements and products (Konstantinidou, 2014).

Moreover, For a long time, Wādī el-Natroun was the source of mineral natron that used by ancient Egyptians as a preservative in mummification, bleaching of linen and fabrics as well as making soap, also for a small export trade. The product was transported, stored and evaluated in Ṭarrāna (Toussoun,1930), - a nearby tiny village- then transported by river boats through the Rashid branch, eventually carried from Alexandria to Europe. Commercial camel train (caravan) used to pass through the area to exchange salt with some agricultural products. Also, Wadi el-Natroun was the principal source of the natron used in glass production especially in the Roman period. Archaeological evidence for the use of natron in glass-making comes from large glass-making factories established before the first century AD just adjacent to several of the Wadi el-Natroun lakes (Shortland, et al.,2011).

#### 3-1-Site significance and values

The monasteries represent the most important historical, cultural and religious feature in Wadi el Natroun, having an extraordinary prestige in Christian monasticism that extends to 17 centuries, because of the presence of treasures of Christian history of the world in these monasteries.

The number of the monasteries of Wadi el-Natroun currently decreased from ten to four (Table 1): the Monastery of St. Macarius the Great, Monastery of St. Bishoi (Anbā Bishoi), Baramous and Surian; Those are the remains of a group of ancient monasteries, silo ruins and cells. The number fluctuated in each historical period of the area according to a process of transition from a group of silos to monasteries or later from a monastery to mere ruins. Apparently, the number of monasteries are ranging from 4 to 10 (Toussoun, 1931). Nowadays this site represents the principal place of monasticism in Egypt. The secondary headquarters for Pope of Alexandria and Patriarch of the See of St. Mark is annexed to the monastery of Anba Bishoi. (Saint Mark's Coptic Orthodox Cathedral in Abbassia area of Cairo represents the main headquarters), which provides the place a special, and formal religious status. Furthermore, the monasteries encompass several significant artistic treasures such as icons, murals and mosaic mural, some rare manuscripts and books; all contributed significantly in its vivid cultural prestige.

The Desert of Scété was a well-known transit point in the route of the Holy Family in Egypt (Fig.1). In mid of red lake (El-Hamra) a spring of fresh water emanates stunningly, and blessed the visitors. Reportedly, that spring burst amid the salt water miraculously when Virgin Mary was looking for water for quenching the thirst of her child "Jesus Christ". Therefore, this lake is considered sacred, sometimes called "the lake of heaven" (Picture 1-2).

Consequently, the Tourism Development Authority revived the route of the Holy Family in Egypt, thus making a unique experience for the tourists to follow one of the greatest spiritual stories in the history, along 3,500 km across 25-stop of the family in Egypt.

Inland saline lakes of Wadi El Natrun, for a long time, provided the community with valuable Natron salt, which used to extract. At the same time, some lakes are characterized by their high salinity and therapeutic properties, specifically for skin diseases and rheumatoid. Consequently, resorts were founded on the banks of red lake (El-Hamra); the most important of them "El-Hamra Eco Lodge Resort", which provides visitors with recreational and therapeutic services through sand baths and a salt cave, as well as the sulfur water.

There is at the bottom of the depression many types of freshwater swamp plants such as papyrus (Shata & El-Fayomy.1967). used in the ancient times for writing manuscripts. On the other hand, there were some plants that had medicinal benefits and some other crops. In addition to a vegetation of bushes and reeds that must have served as raw material for the preparation of mats and baskets by the monks, monks also grow some crops on farms of monasteries for subsistence and exchange them with the neighboring community. Therefore, the importance of the site is not only limited to its religious heritage, but it is part of the most comprehensive and important value which is culture. Today, cultural tourism, driven by developments in the world's mosaic of art forms, heritage sites, festivals, traditions and pilgrimages, is growing at an unprecedented rate (Boz, 2018).



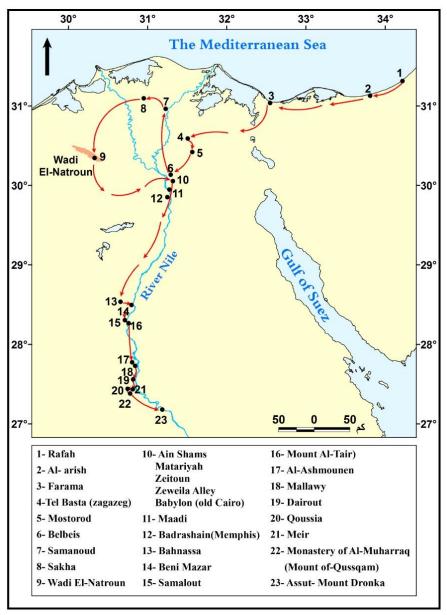


Picture (1) sulfur water in red lake Picture (2) a spring of fresh water in red lake https://wsalines90.wixsite.com/wsalines

Table (1) Number of Monasteries in Wādī el-Natroun Through various historical periods

Period	1	2	3	4	5	6	7	8	9	10	11
N AD	595- 605	859-881	1017	1209	1330	1374	1440	1482	1672	1710	2020
1	St. Macarius	St. Macarius	St. Macarius	St. Macarius	St Macarius	St. Macarius	St. Macarius	St. Macarius	St. Macarius	St. Macarius	St. Macarius
2	Anba Bishoi	Anba Bishoi	Anba Bishoi	Anba Bishoi	Anba Bishoi	Anba Bishoi	Anba Bishoi	Anba Bishoi	Anba Bishoi	Anba Bishoi	Anba Bishoi
3	St. John the little	Saint John the little	Saint John the little	Saint John the little	Saint John the little	Saint John the little	Saint John the little	Saint John the little	Saint John the little	the lady Baramus	Baramus
4	Baramus or Maxime & Domèce	Anba Moses (Baramus)	Anba Moses (Baramus)	Anba Moses (Baramus)	Baramus (Rum)	Baramus	Anba Moses (Baramus)	the lady Baramus	the lady Baramus	the lady Surian	Surian
5		the lady Baramus	the lady Baramus	the lady Baramus	the lady Baramus	the lady Baramus	the lady Baramus	Surian	Surian		
6		John Kama	John Kama	John Kama	John Kama	John Kama	John Kama	John Kama			
7		Surian	Surian	Surian	Surian	Surian	Surian				
8				Scetis or Saint Arsenius		Aba Noub	Aba Noub (Ruin)				
9						abyssinica	Elias or Abyssinica (Ruin)				
10						Armenians	Armenians (Ruin)				

Source: Toussoun (1931).



Source: The Tourism development Authority TDA; 2020.

Fig (1) the route of the Holy Family in Egypt

# 4- Description of the study area

## 4-1-Geographical characteristics of the study area

Wadi el Natroun is an elongated depression located approximately 100 km south of Alexandria and 110 km northwest of Cairo (Fig.2) between latitudes 30°, 15` - 30°,33 north and longitude 30°,00`- 30°, 30 east. Its average length is 60 Km and average width about is 8 K<sup>m</sup>. bottom of the depression reaches about 23 m below sea-level and 38 m below the water level of Rosetta branch (<u>Rashid</u> branch) in Nile delta (Toussoun,1930).

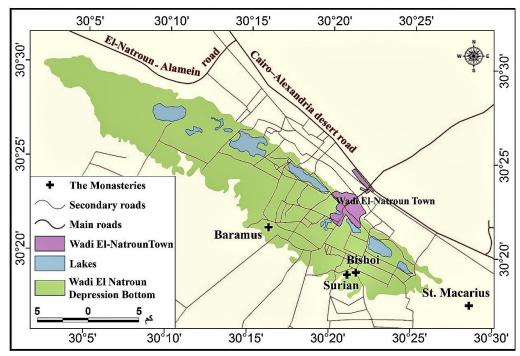
Depression represents a marked floor feature in the Area; it exhibits various morphological features, which reflect the local geologic and topographic settings. The depression floor comprising the areas occupied by marshy lands and sand dunes, as well as the present salt lakes, which extends from south to north as follows: Al Fasidah, Umm Rishah, Ruzita, Abu Jiyad, Al-Hamra, Abu Zaajij, Al-Bidah, Green, Al-Jaar, Al-Sabkha, (Fig.3). According to Hume (1925) groundwater flows to it from Rosetta branch in Nile delta, but the underground waters are transformed from fresh to saline as they interact with the lower ground formation of depression, of marine origin (Hamdan, 1994).



Source: ICOMOS (2017) & Satellite Images Processing

Fig (2) location of the study area

Wadi el Natroun depression is uniquely through situated between Alexandria and Cairo, almost at equal distance from both two major Egyptian cities, where uniquely a combination of remoteness and accessibility (Hamden, 1994). Thus, it connected to the Egyptian governorates through Cairo–Alexandria desert road, branches out from its Al-Alamein - northwestern coast road, also linked to nearby towns by secondary roads such as Khatatba road (See Figures 2 &3). Yet, the area maintains its primary function a headquarters of Monasticism in Egypt. Wadi el-Natroun has an area of 980 km², only of which 66 km² are inhabited. Population of Wadi el-Natroun reached 78,518 inhabitants in 2017 (CAPMAS, 2017).



Source: Egyptian General Survey Authority (2018) Topographical map of Wadi El Natroun, Scale 1.250,000. Satellite Images Processing, 2020.

Fig (3) Geographical features in the study area

The climate is characterized by a long hot summer and a short warm winter, low rainfall and high evaporation (Table 2). Albeit the concentration of large amounts of rainfall during short time periods constitutes flash floods, this among natural hazards frequently recorded in Egyptian deserts. By the November 2015 a severe flash flood hit the surrounding desert margin in Wadi el-Natroun depression. Despite the high temperature during summer, the tourism movement has been increasing that is in conformity with school holidays and peak tourist season.

Table (2) Climatic characteristics for Station of Wadi el Natroun Through1990-2018

Elements	average temperature	Temperature Variation	Wind speed,	Rain (mm)
Month				
January	13.6	12.1	2.9	5.0
February	14.2	13.3	3.3	3.1
March	17.5	14.4	3.9	2.1
April	21.9	15.3	4.2	0.1
May	25.5	17.5	4.2	0.1
June	28.6	15.3	4.5	0.1
July	29.9	14.5	3.9	0
August	29.9	14.8	3.6	0
September	27.8	13.3	4.1	0
October	19.2	18.6	3.7	0
November	19.7	12.5	3.1	2.9
December	15.3	11.2	2.7	4.3
average	21.9	14.4	3.7	1.5

Source; Egyptian Metrological Authority (E M A); Station of Wadi El Natroun, monthly weather report about period 1990-2018.

#### 5- The historical heritage and religious of Wadi El Natrun

The monasteries enjoyed an extraordinary prestige in Christian monasticism, especially the Monastery of St. Macarius. The four monasteries are closely contiguous with each other, and relatively close to the residential block of the town. Monastery of St. Macarius located in the southeast at a distance of 15 km of downtown, and 12 km of the Monastery of Anba Bishoi. At adjacent of Monastery of Anba Bishoi located the Monastery of Surian at a distance of 300 meters, after 10 km from them located the Monastery of Baramus. According to Toussoun, Monastery of Bishoi was the largest; considering several attached buildings - other than agricultural lands outside the monasteries- but the area were changed (Table 3).

Table (3) Area of the four Monasteries existing currently

Monasteries	Area 1931 (M <sup>2</sup> )	Area (M <sup>2)</sup> 2021 Approximately
St. Macarius	8000	43283
Anba Bishoi	11300	36000
Baramus	10700	11000
Surian	7000	7000

Source: Toussoun, 1931. & Satellite Images Processing, 2021.

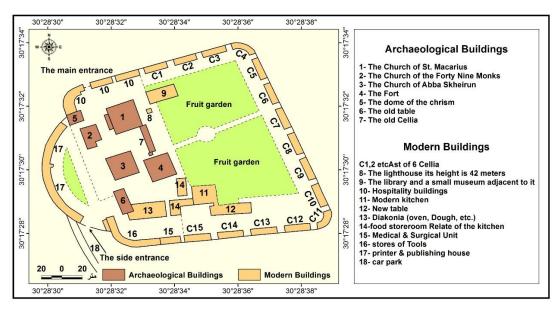
#### 5-1-Monastery of St. Macarius

This monastery is attributed to St. Macarius the Great (300-390 AD). It is considered the richest of the four monasteries, as it contains the remains of 16 Egyptian Coptic patriarchs, and the bodies of the 49 martyrs who were killed by the Berbers and are buried in a church in the monastery. It also encompasses a marble sarcophagus carrying the relics of St. Ellaria (Hilaria), the daughter of the Byzantine Emperor Zeno (425-491 AD), who disguised herself in men's cloths, whereby became a male monk in this monastery (Habib,1978). This monastery gains a further importance in ordination and sanctification of Pope of Alexandria and Patriarch of the See of St. Mark, after their election thus giving it a greater standing. Among the most important churches is St. Macarius monastery, a church that have five temples (Haikal). The Church of Abba Skheirun dedicated to the name of the martyr Abba Skheirun, and the Church of the Sheikhs"49 martyrs "(Fig.4), which was built in memory of these martyrs in 528AD. In addition to four other churches above the fortress, the history of their construction extends between the 14<sup>th</sup> - 19<sup>th</sup> centuries.

Monastery library is very rich, contains remaining Coptic, Arabic and Ethiopian books and manuscripts, of a presumably a larger collection, sadly were stolen by amateurs and thieves. Some manuscripts have been transferred to famous libraries around the world, including the Vatican Librar ,including the Manuscript of Pentateuch "five books of Moses" and the Book of Psalms from the 10<sup>th</sup> century, all currently are preserved in the Coptic Manuscripts Department. The Bodleian Library- in Oxford- also has a manuscript taken by Huntington (Anba Matta, 1995).

According to White (1926), the Bodleian Library holds the 13<sup>th</sup> century manuscript containing the Martyrdom of Saint George, with an Arabic note states that the volume (which may have been acquired by Huntington) once belonged to "the Church of Our Lady at Der Baramus. Another manuscript of the Psalms appears to have been brought to England from Baramus by Huntington, and is now at Oxford (White, 1926). Also, The Bishop of the Ashmonites, Sawiris Ibn al-Muqaffa, derive his sources to write the book "History of the Patriarchs" from documents and manuscript of the monastery library (Anba Samuel, 1999).

In the past, the monastery was famous for the presence of the most skilled scribes who copied Coptic and Arabic manuscripts and painted Coptic letters, decorating with shapes of beautiful, attractive birds (Illuminated manuscripts) and the makers of the colored ink used in the copies (Habib, 1978). The monastery also has a museum with many of column crowns and marble columns, the monastery issue monthly magazine called "St. Mark Monthly Review" to publish Christian ideas (Anba Matta, 1995), also provides some sort of medical services to the local community in its own hospital.



Source; Anba Matta, 1995). frelly.

Fig (4) Planned of St. Macarius Monastery

#### 5-2-Monastery of Baramus

This is the oldest of the Wadi el-Natroun four monasteries, located in the northwest of the St. Macarius monastery (Fig.2). The term Baramus means in Coptic language 'Pa-Romeos" namely attributed to the Romans. Seemingly, this "Roman" name after Maxime and Domèce, sons of the Roman-Byzantine- Emperor Valentinien I (364-375 AD). They left Syria to St.Macarius where they become monks. Upon their death, a monastery was erected on their tombs known as Baramous. Whilst White attributed the site to a Roman saint Arsianius (354-449,AD) the mentor of the sons of the Roman Emperor Theodosius I (347-395 AD) (White, 1930). Al-Makrizi mentioned that the monastery was called Abba Mosas the Black because he was the head of the monastery and was buried there (Habib, 1978).

Typically, the monastery is divided into two parts, the old: includes the fortress and it has four ancient churches, full of antique icons of an exceptional artistic character; these is the Church of the Virgin lady, which is the largest and allocated to perform the prayers. Among the important relics is the Arsenius column engraved on it the works of St. Arsainus. Furthermore, a Church dedicated to St. George and Prince Theodore located inside the Church of the Virgin lady in the northwest and north, with an area of 25 m<sup>2</sup> for both of them, the last church has the remains of Anba Moses the Black. As for Church of the Archangel Michael, constantly located at the top of the fortress since Michael is considered as a guardian angel.

The second, relatively modern section includes the church of John the Baptist, a new guesthouse to receive guests and visitors, was built in 1911, a bakery (oven), and the tombs of the monks (the tafos)<sup>(2)</sup>. While the library contains thousands of scientific and archaeological treasures of books and valuable manuscripts in several languages, including Arabic, Coptic, Greek, Abyssinian, Hebrew, English, French and Turkish. These books and manuscripts are classified into three sections between historical, theological and liturgical. Visitors need the patriarch's permission to access the library and browse its contents. The number of old books and manuscripts is estimated at 472 books and 289 manuscripts (Habib, 1978).

#### 5-3-Monastery of St. Bishoi (anba Bishoi)

This monastery was built at end of the 4<sup>th</sup> century, rebuilt again in 840 AD. It was built by Bishop Bishoi, who was one

<sup>(2)</sup> The Tafos is a Greek word that pronounces in Arabic the same Greek pronunciation meaning a tomb, a term commonly used in monasteries.

of the disciples of St. Macarius, Bishoi lived so long from 320 to 417 AD (Anba Matta, 1995). The monastery includes five churches, the most important of which is the Church of Anba Bishoi which the largest of the churches in Wadi el-Natroun today.

The church conforms to the basilica style, stucco decorations and stained glass were added in the 10<sup>th</sup> century, and other modifications were made in successive centuries. In addition to the churches of St. Benjamin (it is called virgin Lady) St. Gerges, Abba Skheirun and Archangel Michael. The monastery also encompasses ancient buildings such as a fortress dating back to the 5<sup>th</sup> century, antique table and the Martyrs well, as well as many old cells; as for modern buildings such as a guesthouse building, a spacious garden, and monks' colonies. In addition to a large number of engraved Coptic icons and fresco of decorating the walls. Further, there is a modern library holding a certain number of manuscripts, which once belonged to the Monastery of Bishoi. Though a certain number of MSS, which once belonged to the Monastery of Bishoi are still extant, the earliest dated MS, was written in 1357. Unfortunately, the white ants severely endangered the monastery in 1330, and devoured all the earlier MSS (White,1926).

The fame and status of the monastery of Anba Bishoi elevated swiftly after the recent burial of Pope Shenouda III "Pope of the Coptic Orthodox Church of Alexandria" in the monastery. Accordance with his testament he was buried in a coffin given to him by Pope Benedict XVI, which increased the number of visitors after his burial in the monastery. Pope Shenouda III used to retreat to this monastery occasionally for recreation and contemplation. The tomb contains the monastery's archaeological holdings since the first centuries, as well as the precious possessions of the Popes.

#### 5-4-Monastery of Surian

Sources differ on the date of the monastery's construction. According to White (1930), the first core of the monastery, especially the Church of the Virgin Lady dates back to the 9<sup>th</sup> century (p. 10). While Habib suggests that, the monastery was called Abu Kama al-Aswad where his church is located on the northeastern side of the monastery and was built at the time of his stay in it. He confirms that the Syrians did not build the monastery, but a group of them visited the area in 984 and settled there, after a while they built a church, so it was named after them. (Habib, 1978).

According to Father Samaan, the monastery was built in the 5<sup>th</sup> century (Al-Syriac, 1990). It is located on the distance of 500 meters from the monastery of Anba Bishoi, and separated by a common wall. It was built over the cave where Anba Bishoi used to worship. It is one of the most beautiful monasteries in from where of stucco decoration and has the most valuable manuscripts.

Moses stated that this monastery was built by monks from the neighboring Deir Anba Bishoi in the 6<sup>th</sup> century, later passed into the hands of Syrian monks, probably during the 8<sup>th</sup> or 9<sup>th</sup> century. Several Syrians visited Wadi El Natroun as pilgrims, merchants or as refugees in times of trouble (Moussa et al., 2009). Perhaps all of these differences to reconstruct it or parts of it.

This monastery, presumably, is the most beautiful monastery of all. It contains number of churches which beautifully carved doors inlaid with wood and ivory. It is one of the oldest and most magnificent monastery churches because of the unique icons and drawings it contains, and frescoes. The most important of these churches, the Virgin Lady and Church of the Grotto, which is dedicated to the Virgin Lady (Al-Syriac, 1990).

The library itself was founded in the 9<sup>th</sup> century by two Syrian monks, Matthew and Abraham. In the 18<sup>th</sup> and 19<sup>th</sup> century great number of Deir al-Syrian manuscripts were taken to Europe and are in several important collections including the British Library and the Vatican. The large number of manuscripts and fragments that remained in the monastery represent an inheritance of inestimable scholarly value and an essential part of the heritage of the entire Christian world.

The Levantine Foundation to preserve cultural heritage, have conservation and catalogued of the manuscripts in the Deir al-Surian Library. This collection comprise of Coptic, Arabic, Copto-Arabic, Christian Arabic, Ethiopic and Syriac manuscripts (Fig.5). Over one hundred codices and over three two hundred fragments /singular manuscripts have been stabilized, and/or fully conserved and placed in protective housing. One of the most important of these is the earliest version of the Four Gospels dated to the 5<sup>th</sup> century, and conservation of the 10<sup>th</sup> century Syriac manuscript 'Jacob of Sarug'. One of the greatest poets of the Syrian-Orthodox tradition (The Levantine Foundation <a href="https://www.thelevantinefoundation.co.uk/page/home">https://www.thelevantinefoundation.co.uk/page/home</a>).

A new library has been built with modern facilities for storage, up-to-date technology and reading rooms for scholars and lay visitors. A new conservation center has been opened in the new library, opening of the new library May 2013, on 2014 in the boardroom of the British Library in London; the Levantine Foundation launched the Catalogue of the Syriac Manuscripts and Fragments in the Library of Deir al-Surian, in addition to Other Conservation Field Campaign in April – May 2019.

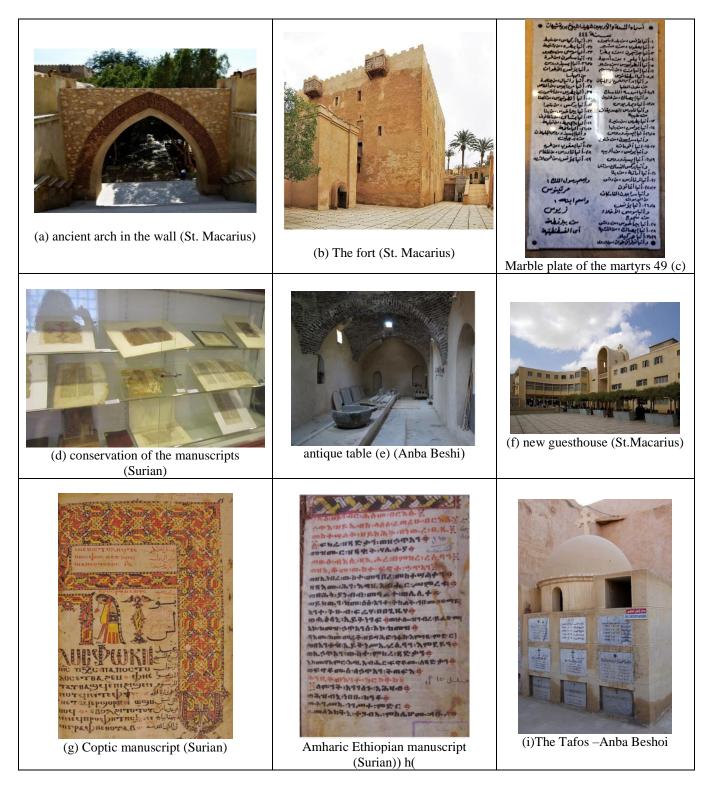


Figure (5) some properties of Wadi el-Natroun monasteries

#### 6- Visit and visitors

Wadi el-Natroun has great importance in the history of Christianity where monasticism in Egypt emerged and was spread to the world, considered as a blessed area due to the passage the Holy Family through it, during their flee from Palestine to Egypt (according to Christian beliefs). This attracts many visitors (international and domestic tourists), of all religions and nationalities. Since the 4<sup>th</sup> century, the area become famous in the whole world, consequently attracted visitors and monks from different parts of Christian world, there were foreign monks from Europe Countries Were in the Roman Empire, as well as, Libya, Syria, Palestine and Galatia (Anba Matta, 1995). As well as the Ethiopians, so the monasteries were called by their names, such as Baramus, Syrian.

Tourists come for blessings, seclusion, or a regular visit to interest in heritage and culture. Recently, started investment for medical tourism based on the sulfur water in the salty lakes, which has increased the tourism movement in the Area, but it is difficult to differentiate those tourists who are visiting these sites strictly for their religious values from those who are rather interested in these sites. Anba Bishoi,-Baramous, and Surian monasteries providing services to visitors through the Retreat house and the guesthouse.

The site receives visitors in the form of individuals or groups from all over the world, the most important group of visits are students and researchers, from all religions, so the visit is not limited to just Christians, (Picture 3) everyone can visit monasteries without prior permission, except Monastery of St.Macarius. Other than the visit, there are places for seclusion or for stay hospitality (convent guesthouses) for Christians. In 2017, Pope Francis presented Egyptian Tourism Minister with an icon depicting the Holy Family in Egypt to revive international Christian pilgrimage to Egypt in the global religious tourism map beginning on 2018 (Ahram Online, 2017).

this encouraged a large number of Catholic worldwide (about 1,2 billion.) to visit Egypt. In January 2018, an Italian delegation of 50 tourists came to wadi el Natroun.



Picture (3) Visit of some academics and different educational groups to Monastery of Baramus

The visits to monasteries are not allowed in the time of lent, or in case of dangerous environmental risks such as flash floods or pandemics like corona virus. Egyptian tourism, a main pillar of the country's economy and a key source of hard currency, has been hit hard by years of political turmoil since the 2011 revolution. Therefore, the tourist movement of Wadi el-Natroun decreased sharply, but surged again as a result of security stability, especially in year 2012 after the burial of Pope Shenouda III in the monastery of Anba Bishoi. The average of Egyptian visitors reaches 60%, while foreigners 31%, Arabs and Muslims 9%, (Table 4) and (Fig.6&7).

Table (4) the number of visitors to Wadi el- Natroun Monasteries (\*)

Visitors	foreigners	%	Egyptians	%	Arabs & Muslims	%	total	%
Years								
2010	11060	37.4	14020	47.4	4490	15.2	29570	100
2011	3733	65	1620	28	376	7	5729	100
2012	8923	20	34250	76	1953	4	45126	100
2013	5387	24.5	14850	67.5	1760	8	21997	100
2014	4296	15	21500	76	2563	9	28359	100
2015	8894	27	20830	64	2799	9	32523	100
2016	11960	28	26050	61	4539	11	42549	100
2017	13952	29	29840	63	3620	8	47412	100
2018	14210	29	31531	64	3288	7	49029	100
2019	17120	34	29300	59	3577	7	49897	100
The average	-	31	-	60.5	-	8.5	-	100

Source; Beheira Governorate (2020) Unpublished statement.

Tourism movement is related to Coptic holidays and occasion, such as The Feasts of Our Lady and St. Macarius death. etc., so it is distributed over all the months of the Coptic calendar. Month of Pashons (May 9 and June 7 of the Gregorian calendar) the most months of the tourist movement, Then Baramhat (March 10 and April 8). While months of summer witness increased movement of visitors due to holidays and Coptic occasion of Abib and Mesori (July, August and September), as well as their related of conformity with school holidays and peak tourist season.

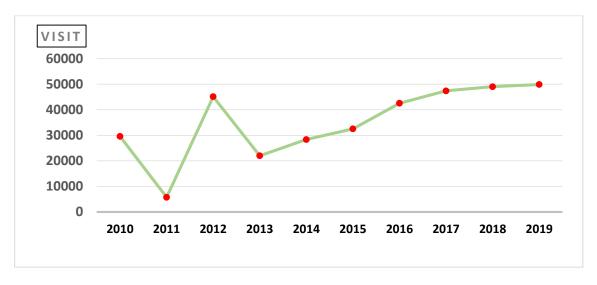


Fig (6) Number of visitors to the monasteries, 2010-2019.

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<sup>\* -</sup> The figures regarding the tourist movement are conflicting, but this almost true.

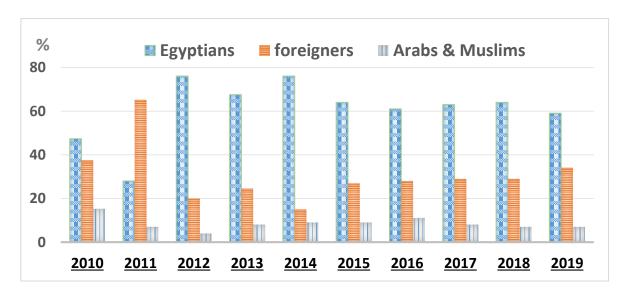


Fig (7) Percentage of Visitors to Wadi El- Natroun Monasteries

#### 7- Result and discussion

Studying both monasteries and contiguous area revealed outstanding universal value. Undoubtedly, these monasteries deserve global attention, for the last 17 centuries, the Wadi el Natroun was a heaven for monasticism. Further, the Monasteries are rich in works of religious art and in ancient manuscripts, the region relies on the historical and cultural significance of the monasteries to document it a world heritage site.

There are some the threats jeopardize the site: some lakes have dried up a result of pollution and waste disposal. In addition, it suffered pollution from domestic sewage, septic tanks, and fertilizers. Since the evaporation rate is high and the lakes lie in closed basins without outlet, the water in the lakes has a high salt concentration and it becomes susceptible to the shallow aquifers in the depression (El-shamy et al., 2016).

The process of urbanization expanded to the east towards of Cairo / Alexandria road, and South-west towards the Monasteries. Simultaneously, when the population increased, the village was turned into a town in 1963. In 1966, El-Natroun administration center (Markaz) had been transferred to El-Beheira governorate, instead of Matrouh Governorate.

Flash floods caused enormous damage, for example, November 2015 damage was recorded the monastery of Baramhat buildings, farms and power generators, damage along the Baramhat road it occupies the central part of the floor of el-Natroun Depression and crossed by some shallow Wadis, such as Wadi Al-Adhra (Saleem, 2017). Currently, the area is being replacement and maintenance to raise efficiency and pavement of roads, and connect all facilities to the route of the Holy Family's journey in Wadi el Natroun.

Currently, the site's presence on the World Heritage List (cultural) would guarantees protection by limiting the means of pollution in neighboring lakes and urban expansion; furthermore, setting engineering controls for the risk of flooding. So, Engineering measures are required to reduce the harmful impacts of flash flood hazards as a combination of obstacle dams and artificial lakes downstream. Also, for the importance of bringing funds to protect the manuscript collection. Being out of the world heritage list might jeopardize the site future stability.

To be included on the World Heritage List, sites must be of outstanding universal value and meet at least one out of ten selection criteria (UNESCO, 2020 <a href="https://whc.unesco.org/en/criteria/">https://whc.unesco.org/en/criteria/</a> (World Heritage sites were selected on the basis of six cultural and four natural criteria) By analysis of the conclusions resulting from the processing of data and the information we can have delimited the following criteria:

According to Criterion (ii) (to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design) Wadi El-Natroun Monasteries is a cultural site of outstanding value that illustrates a traditional way of life that has

existed for 17 centuries and continues to play an important socio-economic role in the life of the community.

As for Criterion (iv) (to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history) wadi el Natron's Monasteries are one of the earliest of monastic communities that survived intact, being used for its initial function without interruption since the 4<sup>th</sup> century, having an extraordinary prestige in Christian monasticism that extends to 17 centuries.

According to Criterion, (v) (to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change) wadi el-Natron's Monasteries is a remarkable cultural landscape created by human endeavour over the centuries in a rugged and dramatic natural environment. It represents the harmonious interaction between people and nature.

According to Criterion (vi) (to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria) For 17 centuries Wadi el Natroun has been monasticism centre, and has also been directly associated with the history of the Christian faith since its origins in Egypt, and remains today, a symbol of Christians and one of the most venerable goals of pilgrimages in the future, thanks to the Tombs of the Saints and Martyrs. In addition, wadi el- Natroun area is directly associated with most important religious personalities in Christian history such as Virgin lady and Jesus Christ.

#### \*Potential benefits of registering Wadi El-Natroun Monasteries as a world heritage

In sum, Wadi El-Natroun site enjoyed abundant tourist features, and potentials. These, undoubtedly, can bring many outstanding benefits to the overall tourism industry (Fig.8). Registering Wadi El-Natroun monasteries on the world heritage list would certainly convey a wide range of financial and social benefits for the local community adjacent the Monasteries, as well as for Egypt generally. One may hypothesize that this registration would certainly lead to tourism developments in Wadi el- Natroun thereby conveying these various benefits:

- 1- Sharing of tourism benefits by encouraging the consuming and marketing of local products and activities. Therefore enhancing the wellbeing of the local communities contiguous with the Monasteries.
- 2- Maximizing the economic benefits for the local tourism industry and drive the economic development for area of Wadi el- Natroun, by providing and increasing the chances of work for the local people.
- 3- Protecting and sustaining the heritage in Wadi el- Natroun. Excessive or poorly managed tourism and related development could threaten their physical nature, integrity and significant characteristics. Therefore, a primary objective for managing heritage is to communicate its significance and need for its conservation to its host community and to visitors (ICOMOS, 2004).
- 4- It can promote the knowledge and education, and enhancing the environmental awareness. Such knowledge can help in enhancing the efforts to preserve and sustain the natural resources and raising the awareness about the values of the resources. Therefore, it is possible to commence reproduction glass production from the modern burkeite-rich deposits of Lakes of the Wadi el- Natroun after a period of recuperation from threats pollution and waste disposal.
- 5- It also can strengthen the relationship between the local communities and visitors. The expansion of international tourism has increased the contact among different societies and cultures (Brunt & Courtney, 1999).
  - 6-It can contribute in the diversifications of tourism products such as Medical Tourism in Red Lake.



Fig (8) Potential benefits of Potential registering Wadi El-Natroun Monasteries as a world heritage

The procession of tourism development in Wadi el- Natroun should coincided closely with the development of tourism supply. Generally, it includes geomorphological features, infrastructure, superstructure, planning, and management, since tourism rely mainly on various facilities and services, such as tourism management, geomorphological attractions, vital and efficient interpretation, flexible planning and a wide bundle of interesting activities.

Generally, tourism in Wadi el- Natroun should not be limited to mere religious visits, and sporadic trips of some academics and different educational groups who travel to geo-sites to broaden their knowledge and acquaintance about the values of such sites. However, it can be argued that the potential tourist groups in Wadi el- Natroun would largely include special interest tourists who had specific concern in heritage tourism sites, tourists who have interest of the gaining of knowledge, landscape photographer, artists, and historians, etc. While several other types of tourism are potentially possible, such as leisure, adventure, environmental tourism.

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