THE PELUSIAC BRANCH AND ITS CANAL TO THE RED SEA DURING THE PTOLEMAIC PERIOD

AHMED ELSAYED HAFEZ
HIGHER INSTITUTE OF TOURISM AND HOTELS IN HURGHADA, EGYPT

ABSTRACT

The Pelusiac branch of the Nile was one of the most important branches during the Ptolemaic period, playing a crucial strategic and economic role. This branch, along with the canal that extended from it to the Bitter Lakes, ran through the eastern part of the Delta and emptied into the Mediterranean Sea near the city of Pelusium. This location made it a vital route for trade and communication with the outside world. The Ptolemies capitalized on this strategic position by developing the port of Pelusium, turning it into an important hub for maritime trade and cultural exchange between Egypt and Mediterranean countries. Moreover, the Pelusiac branch and its canal contributed significantly to the growth of agriculture in the Nile Delta by supplying water to the surrounding farmland. This, in turn, boosted agricultural production, particularly in crops essential to the Egyptian economy, helping the Ptolemies secure food supplies and export surplus goods to other nations. The Pelusiac branch and its canal were also crucial for the commercial and settlement activities during the Ptolemaic period. They played a key role in promoting trade and encouraging settlement in the eastern Delta region, supporting the economic vitality of the area.

KEYWORDS: Ptolemaic period ,The Pelusiac , branch,The canal ,Agriculture ,Trade .

INTRODUCTION

The Pelusiac branch of the Nile was one of the most important branches of the Nile in the Nile Delta during the Ptolemaic period (323-30 BC), distinguished by its strategic geographical location extending from the Nile to the Mediterranean Sea via the city of Pelusium located in the eastern Delta. This location made the Pelusiac branch of the Nile and the canal connecting it to the Red Sea a vital bridge linking Egypt to the outside world,

providing it with unique commercial and economic opportunities (1). This branch and the canal played a pivotal role in facilitating foreign trade, as it was the main route for exporting Egyptian products and importing goods from Mediterranean countries (2). In addition, the area surrounding the Pelusiac branch of the Nile and the canal witnessed a settlement boom. Thus, the Pelusiac branch of the Nile represents part of the Ptolemaic strategy to strengthen the Egyptian economy and develop its infrastructure, which contributed to the country's prosperity and its close connection to global trade centers at the time (3).

IMPORTANCE OF THE STUDY

The Pelusiac branch and the canal connecting it to the Red Sea played an important role in commercial and agricultural activity in ancient times, especially in the Ptolemaic period, as the branch and the canal affected the economy, trade and agriculture, as well as political relations with the surrounding areas. The study of this branch and its canal is part of the study of the development of life in Egypt in the Ptolemaic period and the influence of external powers on that region. In the Ptolemaic era, the importance of the Pelusiac branch increased as an important trade route and a main canal for transporting goods.

OBJECTIVES OF THE STUDY

The study of the Pelusiac branch of the Nile and its attached canal in the Ptolemaic period aims to:

1- DETERMINE STRATEGIC IMPORTANCE

Understand how the location of the branch and the canal contributed to strengthening Egypt's position as a center for international trade and linking it to the Mediterranean and Red Sea countries, as well as its role in the Ptolemaic policies to strengthen the Egyptian economy.

---

[1] Sidebotham, S. E (2011), *Berenike and the Ancient Maritime Spice Route*. University of California Press, 37- 39.

[2] Hölbl, G (2001), *A History of the Ptolemaic Empire*. Translated by Tina Saavedra. Routledge, 85, 86.

[3] Manning, J.G (2010), *The Last Pharaohs: Egypt under the Ptolemies, 305–30 BC*. Princeton University Press, 56- 58.

2-TRADE

Study the movement of trade exchange through the Pelusiac branch and its attached canal, with a focus on the role of the branch and the canal as a main corridor for Egyptian imports and exports.

3-STUDY THE ROLE OF THE BRANCH AND THE CANAL IN AGRICULTURE AND ECONOMIC DEVELOPMENT

Studying the contribution of the branch and the canal to irrigation and agricultural production in the Nile Delta, this contributed to securing important food resources for the Egyptian economy.

4- IMPACT ON HUMAN SETTLEMENTS

Study the extent of the impact of the Pelusiac branch and the canal on the formation of the population fabric in the eastern Delta region and identifying the settlements and cities that arose around the branch and the canal.

5-EXTINCTION OF THE PELUSIAC BRANCH AND CANAL

Study the factors that led to the decline in the importance of the Pelusiac branch and the canal and their disappearance over time.

PROBLEM OF THE STUDY

The research problem stems from the insufficient and unclear information available about the Pelusiac branch and the associated canal during the Ptolemaic period. Significant gaps remain in the historical and geographical records of this era, partly due to the loss or destruction of many ancient sources. Moreover, existing modern studies often address only specific aspects, lacking a comprehensive view of the geographical and historical significance of this Nile branch. Reconstructing the events, as well as the economic and political conditions that influenced this branch, necessitates consulting a wide range of sources, and it is likely that important facts have yet to be uncovered. The core issue lies in the scarcity of focused research on the Pelusiac branch itself, as most scholarly work tends to examine the Nile in its entirety without dedicating detailed studies to its individual branches. Additionally, natural changes in the Nile Delta over time have led to the disappearance of many features of the Pelusiac branch, making it even more challenging to trace its historical development and accurately determine its geographical course.

ANCIENT BRANCHES OF THE NILE

Herodotus mentioned that the Nile River flows in one channel and then divides into three branches at the city of Carcassurus (Al Warraq) the Pelusiac branch that flows east, the Canopic branch that flows west, and the Spinetic branch that flows in the middle of the delta. There are also two branches branching off from the Spinetic branch to the sea, namely the Sais branch and the Mendes branch, and there are two industrial branches, namely the Polpit branch and the Bukoli branch. Diodorus also determined that the Nile River flows into the sea through seven outlets, the first of which begins from the east and is called the Pelusiac branch, the second is the Tanaisian branch, then the Mendesian, the Vatenitian, the Spinetic, then the Polpit, and finally the Canopic. While Strabo mentions that there are two branches of the Nile River, one called the Pelusiac and the other the Canopic, and between them there are five other branches (Map.1) [(1)].

PELUSIAC BRANCH

The Nile River has been the main lifeline of Egypt since the dawn of history, it greatly influenced the growth and development of ancient Egyptian civilization, The Nile River is the longest river in the world, linking northeastern Africa from its sources near Lake Victoria to the Mediterranean Sea [(2)], Among the branches of the Nile that were of great importance in the Egyptian Delta, the Pelusiac branch stands out, Which extended east of the Nile Delta and flowed into the Mediterranean Sea[(3)], this branch had great strategic and economic importance during ancient times, especially in the Ptolemaic and Roman period, it played a vital role in trade, agriculture and international relations.

The name of the Pelusiac branch refers to the city of Pelusium (Farma) which was located at the mouth of the Pelusiac branch in the far east of the Nile Delta, Pelusium was a vital port for trade and communications between Egypt and the Levant, the name of the city of Pelusium is derived from the

1 Herodot II, 17, 113; Diodorus, 1. 33, 5- 8; Strabo. 17. 1. 4, 17, 18; Ball, J (1942), Egypt in the Classical Geographers, Cairo, 25- 28; Thonemann, P (2015), The Hellenistic World: Using Coins as Sources. Cambridge University Press, 119; Fraser, P. M (1972), Ptolemaic Alexandria, Vol. I. Oxford, 36.

2 Bunbury, J and Cooper, J. P. (ed.) (2023), "The Egyptian Nile: Human Transformation of an Ancient River", in: River Culture: Life as a Dance to the Rhythm of the Waters, Paris: UNESCO, 43; Bard, K. (2015), An Introduction to the Archaeology of Ancient Egypt. Wiley-Blackwell, 24

3 Quintanar, J and Shuhab, D. K (ed.) (2013), "Remote Sensing, Planform, and Facies Analysis of the Plain of Tineh, Egypt for the Remains of the Defunct Pelusiac River", in Sedimentary Geology vol. 297, 16

Greek word "pylos"(, a name appropriate to the nature "clay", which means [1)] of the environment there, the Pelusiac branch was mentioned in ancient Egyptian monuments as (the waters of the sun - the waters of Ra) [(2)].

THE ROAD OF THE PELUSIAC BRANCH

The Pelusiac branch started from the Damietta branch north of Cairo "Leontopolis", and followed the El-Sharqawia irrigation channel, the Bahr Faqus passing by Faqus channel, it then followed the Daidamun channel passing the ruins of Tell El Dab'a, on the left side of Tell Qirqafait then followed the Sama'na channel north of Qantir and passed by Tel Rara'un, it continued in the ridge of Sama'na channel to its tail and followed the old Bahr El Bahr El Baqar to Tell El Fadda then Tell El Luli and Tell El Farma " Pelusium (Map. 2)" [(3)].

The canal connecting the Pelusiac branch to the Red Sea

In ancient times, trade communications between the Indian Ocean and the Mediterranean followed various land and sea routes. Since the establishment of the Suez Canal in the modern era, this canal has connected the Red Sea to the Mediterranean Sea. Most ships have passed through the Suez Canal on their way from east to west. In ancient times, sailing around the African continent was not possible; As a result, goods had to be transported overland from the Mediterranean coast to the Red Sea ports or vice versa. The overland journey was shortened by the Nile River, which connected the two seas with its branches [(4)] .

The idea of linking the Nile to the Red Sea had attracted the attention of Egyptian rulers throughout the ages, as Aristotle mentioned that King Senusret III, one of the kings of the Twelfth Dynasty, was the one who planned this project, but he abandoned the project for fear that the river water

1 Stanley, J. Bernasconi, M, and Jorstad, T (2008), "Pelusium, an Ancient Port Fortress on Egypt's Nile Delta Coast: Its Evolving Environmental Setting from Foundation to Demise", in: Coastal Research Vol. 24, No. 2, 452, 453, 455; Liddell, H.G., and Scott, R (1996), A Greek-English Lexicon, revised and augmented by H.S. Jones. Oxford: Clarendon Press, 1455.

2 Torab, M. (2007) "Paleogeomorphology and Evolution of the Ancient Pelusiac Branch of the Nile Delta", in: Geographical Phorum – Eographical Studies and Environment Protection Research, Year 6, No. 6, 28.

3 Ibid, 28, 29.

(4) Aubert, J (2015), "Trajan's Canal: River Navigation from the Nile to the Red Sea?" in: Across the Ocean: Nine Essays on Indo-Mediterranean Trade, Brill, 33.

would be spoiled by mixing with sea water[1]. There was an ancient canal that was probably dug in the New Kingdom, but it was neglected until it disappeared. Herodotus also mentions that this canal was revived in the era of the Twenty-sixth Dynasty by Pharaoh Necho II and was completed by King Darius in the era of the Twenty-seventh Dynasty [2].
But Diodorus mentioned that Darius left the work on it unfinished for fear of Egypt being drowned because the water level of the Red Sea is higher than the level of the land of Egypt [3], During the Ptolemaic period, it was completed by Ptolemy II, and the canal was named the Ptolemy Canal [4].

Canal Road

The Ptolemy Canal started from the Pelusiac branch of the Nile near Bubastis, Strabo stated that the Ptolemaic canal was connected to the Pelusiac branch at Phacosa (modern Phacos) near Bubastis; the Ptolemaic Canal reached the Bitter Lakes at Lake of Temsah, and then the Red Sea at Suez [5].

The importance of the Pelusiac branch in the Ptolemaic period

The Pelusiac branch of the Nile was more than just a waterway; it was part of the heart of the Egyptian economy and the defense of the delta, and a hub of trade and civilization, the importance of the Pelusiac branch is explained through the following points:

1-Protecting the Eastern Borders

The Pelusiac branch played an important role in protecting Egypt's eastern borders, as it formed a natural barrier against invasions that might come from the east, the branch contributed to enhancing security and stability in that region, this became clear before the beginning of the Ptolemaic period when Alexander entered Egypt through Pelusium (Farma), which is considered the

1 Cooper, J.B (2009), "Egypt's Nile-Red Sea Canals: Chronology, Location, Seasonality and Function", in: Blue, L. Cooper, J. P. Thomas. R. and Whitewright, J (eds.), Connected Hinterlands: Proceedings of Red Sea Project IV, Held at the University of Southampton, September 2008, Society for Arabian Studies Monographs 8, British Archaeological Reports, Oxford, 195.

2 Herodot. II, 158.

أبو اليسر فرح (2004)، النيل في المصادر الإغريقية، عين للدراسات والبحوث الإنسانية والإجتماعية، 161.

3 Cooper, J.B (2009), Egypt's Nile-Red Sea canals: chronology, 197.

4.162 أبو اليسر فرح (2004)، النيل في المصادر الإغريقية،

5 Cooper, J.B (2009), Egypt's Nile-Red Sea canals: chronology, 198, 199.

eastern gate of Egypt, then he sailed up the Pelusiac branch of the Nile to enter the inland cities of Egypt [(1)],thus, the Pelusiac branch formed an important gateway to Egypt, Alexander the Great or anyone who wanted to reach any area in the Nile Valley and Delta from the eastern side of Egypt could enter from the Pelusiac branch and then reach the place he wanted by moving from one branch to another of the Nile River.

Pelusium, located at the mouth of the Pelusiac branch in the Far East near Port Said, was an important defensive city. The Pelusium area served as a barrier against enemies entering the Nile from Palestine [(2)]. Any army coming from the east had to pass through the city of Pelusium, so Pelusium and the Pelusiac branch were an important defensive position in the east.

Thus the Pelusiac branch served as a natural water barrier to Egypt's entry from the east, this hinders the movement of any invader into Egypt from the east, and also, the width of the Pelusiac branch, which is 200 meters, makes the distance between the two banks very difficult to cross, the bottom of the branch is also 11 meters deep, making it a bit difficult to fill in to build a bridge that armies can cross [(3)] .

The presence of the Pelusiac branch to the east ensured the supply of food and drinking water [(4)] to soldiers stationed in remote areas, as well as the supply of water and food to armies in times of war and other difficult times.

Greek geographers believed that the Pelusiac branch formed a continental boundary, and that the whole world consisted of three continents: Europe, Asia, and Libya (Africa), the Pelusiac branch was the dividing line between the continents of Asia and Africa during the Ptolemaic period, but Herodotus rejected this idea advocated by some when they made the Nile a dividing line between the continents of Asia and Africa, he believed that the whole world was made up of four continents: Europe, Asia, Libya (Africa), and the Delta, he believed that the Delta was neither part of Asia nor part of Africa, which

---

1 أبو اليسر فرح (2002)، تاريخ مصر في عصرى البطالمة والرومان، عين للدراسات والبحوث الإنسانية والإجتماعية، 23، 27.

Bowman, A.K (1996), *Egypt after the Pharaohs: 332 BC–AD 642*. Revised Edition. University of California Press, 42, 43.

2 Margaret, R.B (2002), "Encyclopedia of Ancient Egypt", Facts On File, Inc. New York, 298,

3 Tronchère, H and Goiran, J. (eds.) (2009), "Geoarchaeology of an Ancient Fluvial Harbour: Avaris and the Pelusiac Branch (Nile River, Egypt)", in: Geoarchaeology of Avaris, First Results, Egypt and the Levant, Vol. XVIII, Austrian Academy of Sciences Press, Vienna, 334.

4 Woźniak, M.A and Sidebotham, S. E (eds.) (2021), "Ptolemaic Berenike: Resources, Logistics, and Daily Life in a Hellenistic Fortress on the Red Sea Coast of Egypt", in American Journal of Archaeology Vol. 125, No. 2, 248.

means that the Nile Delta is a fourth continent [(1)], thus, the Pelusiac branch is the dividing line between the continent of Asia and the continent of the Delta, from the point of view of Herodotus.

The canal, which flows out of the Pelusiac branch into the Bitter Lakes, helped increase Egypt's security from the eastern side, and acted as a barrier and an obstacle to the enemies, the Pelusiac branch and this canal also helped the early Ptolemaic government explore the African Red Sea coast for political, military, commercial and scientific, there is no better evidence of the Ptolemies' interest in the Red Sea than their sending a series of exploratory missions to explore the Red Sea coast, its people and its resources, and the Indian Ocean region. Ptolemy I began the exploration movement in the Red Sea, and Ptolemy II followed in his father's footsteps and sent Ariston around 280 BC to explore the coasts of the Arabian countries from Sinai to the Strait of Bab el-Mandeb [(2)], one result of this was the creation of a series of ports, including Berenice [(3)], which could be reached through the Pelusiac branch and the canal connecting it to the Red Sea.

2-Agriculture

As in Ancient Egypt agriculture remained the most important element in the economic structure of the Egyptian society in the Ptolemaic period. The Ptolemies gave a great interest in gigging canals and building dams. The most important crops were grains, such as wheat and barley, followed by the cultivation of orchards, such as vines and olives, in which the Greeks excelled, and crops were introduced to Egypt that it had not known before, and the Ptolemaic kings worked to increase agricultural production and thus increase their financial resources, and they also worked to increase the agricultural area by reclaiming large areas of land in many regions [(4)], the Pelusiac branch of the Nile participated in this role during the Ptolemaic period, the lands surrounding the branch were considered fertile areas in the Nile Delta, which helped produce many agricultural crops that contributed to supporting the local economy and supporting exports, also, the canal that comes out of the Pelusiac branch helped increase the agricultural area and produce more crops.

Agricultural lands were diverse in the Ptolemaic period, and among these lands were the sacred lands of the temples or the lands of the military

---

1 أبو اليسر فرح (2004)، النيل في المصادر الإغريقية، 54، 55.

2 ابراهيم نصحى (1959)، دراسات في تاريخ مصر في عهد البطالمة، مكتبة الأنجلو المصرية، 121.

3 Woźniak, M.A and Sidebotham, S. E (eds.) (2021), "Ptolemaic Berenike", 248.

4 حسين الشيخ (1997)، مصر تحت حكم اليونان والرومان، دار المعرفة الجامعية، 35، 36

fiefdoms [1], the Pelusiac branch supported both types of lands, the lands of the temples were located around the Pelusiac branch, where there were many religious centers associated with the Pelusiac branch or close to it, as there was the city of Tanis, the city of Perbastet, the city of Leontopolis, and other cities, these cities contained temples to different gods, and these temples had their own agricultural lands, which were irrigated by the Pelusiac branch, The Pelusiac branch also supported the lands of the military fiefdoms, as the Pelusiac branch and the canal that emerged from it provided much good and new land that may have been distributed to the soldiers.

3-Providing water and food

The Pelusiac branch supplies water to the areas in the eastern Delta, whether desert or semi-desert, thus, the Pelusiac branch contributed to the reclamation of new lands and the increase of agricultural areas in remote areas, the branch also contributed to the creation of an environment rich in plant and animal life on its banks, which supported a distinctive environmental diversity in semi-desert areas[2] .

The canal, which extends from the Pelusiac branch, also helped provide water to many areas in the eastern Delta. Before the canal was dug, there were places where fresh water was difficult to obtain; this is evident at the site of Cleopatra (Arsinoe/Klysma), which lies on a dry, treeless sandy plain. The main source of drinking water was the oasis of Oyun Musa in Sinai, a few miles southeast of the city, but after the construction of the canal, the site was provided with permanent fresh water [3] .

The Pelusiac branch, as a branch of the Nile River in the Egyptian Delta, contained many species of fish, because the Nile River and its branches were a rich source of marine life, the Pelusiac branch was rich in fish, which were

1 The sacred lands are the lands that the kings granted to the temples, a tradition that the kings of Egypt followed since ancient times, as they used to allocate their income to spending on the affairs of worship, and the temples enjoyed great agricultural wealth.

The lands of the military fiefdoms were for soldiers, as the Ptolemies relied on Greek mercenary soldiers to form their armies and gave them areas of land as a salary. The state wanted this system to achieve several goals, the first of which was to encourage these soldiers to stay in Egypt, and the second was to exploit their efforts in cultivating new areas of land.

أبو اليسر فرح (2002)، تاريخ مصر في عصرى البطالمة والرومان، 94.

2 Butzer, K.W (1976), Early Hydraulic Civilization in Egypt: A Study in Cultural Ecology. University of Chicago Press, 90- 92.

3 Mayerson, P (1995), "Aelius Gallus at Cleopatris (Suez) and on the Red Sea", in Greek, Roman and Byzantine Studies; Cambridge Vol. 36, Iss. 1, 19.

an important source of food, Diodorus mentioned the fish of the Nile and confirmed the existence of different types of fish in unimaginable numbers, which provide the people of the country with abundant food, Diodorus confirmed that the Nile and its branches surpass all the rivers of the world in their blessings to humanity, Strabo mentioned about 14 types of fish, while other sources mention that there are 52 types of fish in the Nile [(1)].
The waters of the Oak Branch had a great impact on increasing Egypt's fish production, through the canal that connects the branch to the Bitter Lakes. Strabo spoke about the effect of this canal on the Bitter Lakes. As a result of the mixing of the waters of the Bitter Lakes with the waters of the Pelusiac Branch, the nature of the Bitter Lakes changed and they became full of fish and water birds [(2)].

The Ptolemies were also interested in raising animals, and they were helped in this by the abundance of pastures in the country [(3)], the Pelusiac branch played a major role in raising animals in ancient Egypt through its abundant waters that provided irrigation for pastoral lands, which contributed to the stability of pastoral activity on its banks.

4-Internal movement

The Pelusiac branch was part of the Nile network that connected villages and cities to each other, facilitating the movement of people and goods between different regions. River transport was the primary means of transporting goods in ancient Egypt, which contributed to supporting the cities on the banks of the Nile, which led to enhancing economic activity and attracting workers to them [(4)].

The Pelusiac branch and the canal helped facilitate communication between the major cities in the Delta and the interior cities, which enhanced the cohesion of the state and its ease of administration and contributed to facilitating the movement of people between the cities along the branch [(5)].

---

1 Diodorus. 1. 36, 1,2

أبو اليسر فرح (2004)، النيل في المصادر الإغريقية، 150، 157، 159.

2 المرجع نفسه، 162.

3 حسين الشيخ (1997)، مصر تحت حكم اليونان والرومان، 36.

4 Kemp, B.J (2006), Ancient Egypt: Anatomy of a Civilization. 2nd ed., Routledge, 270- 272; Bard, K.A (2015), An Introduction to the Archaeology of Ancient Egypt, 145, 146.

5 Wilkinson, T (2010), The Rise and Fall of Ancient Egypt. Random House, 163-165; Kemp, B.J (2006), Ancient Egypt: Anatomy of a Civilization, 252- 254.

5-Trade

Trade flourished during the reign of the early Ptolemaic kings due to the prosperity of agriculture and industry and the expansion of the Egyptian Empire at that time, and thus Egypt had strong trade relations with the countries under the control of the Ptolemies and others as well, whether in the eastern part of the Mediterranean or the western part of it, in addition to Africa and India, Egypt was the largest grain producing center in the eastern Mediterranean, and had a monopoly on the papyrus industry. Egypt was also famous for its luxurious linen textiles. In return, Egypt imported wood, wine, olive oil, spices, perfumes, cotton, and other goods that were not available in its own country [(1)], the Pelusiac branch played a crucial role in facilitating this trade, as it was used to transport goods from within Egypt to the Mediterranean ports, especially the port of Pelusium, and from there they were transported to Europe and Asia Minor.

The Pelusiac branch was 200 meters wide [(2)], allowing ships to move easily and safely. The Pelusiac branch ends in the city of Pelusium.

The Ptolemies' interest in the Red Sea trade was also evident in their interest in the routes linking the Nile Valley to the Red Sea. Ptolemy II re-dug the canal linking the Pelusiac branch to the Red Sea. It was natural for the Ptolemies to turn their attention not only to the trade routes of the Aegean Sea, but also to the trade routes coming from Africa, the Arab countries and India, as a result, Egypt's exports to the northern kingdoms were not limited to its own products, but also included products from China, India, the Arab countries and Central Africa, thus, Egypt played the role of a commercial intermediary between East and West. The width of the canal was one hundred cubits, and its depth was sufficient to float a ship of large cargo [(3)]. The depth of the canal was sufficient to float a ship with a large load, which helped Egypt to perform this role.

6-Impact on human settlements

The Pelusiac branch ensured the availability of food supplies and drinking water [(4)],which was an important factor in attracting population and

---

1 حسين الشيخ (1997)، *مصر تحت حكم اليونان والرومان*، 37.

2 Tronchère, H and Goiran, J (eds.) (2009), "Geoarchaeology of an Ancient Fluvial harbor", 334.

3 ابراهيم نصحى (1959)، دراسات في تاريخ مصر في عهد البطالمة، 120، 124

4Morriss, C. (2012), Islands in the Nile Sea: The maritime cultural landscape of the eastern Nile Delta (Master's thesis, Texas A&M University). Texas A&M University Repository, 49- 52; Baines, J. & Málek, J. (2000), Atlas of Ancient Egypt. Oxford, 156.

establishing cities, such as the city of Pelusium, which was a cultural and commercial center in ancient Egyptian times. The Pelusiac branch also formed a natural barrier that protected population centers from attacks by enemies and invaders, so settlement next to the branch provided relative security.

Pelusium, located at the northeastern edge of the Nile Delta near the Mediterranean Sea, was a strategically significant city in ancient Egypt. The Pelusiac branch of the Nile played a crucial role in its development, providing a steady supply of water essential for both agriculture and domestic use. The fertile lands along this branch supported the cultivation of various crops, ensuring food supplies for the growing population. Additionally, the river facilitated trade, helping Pelusium become a vital center of commerce with Mediterranean cultures like Phoenicia, Cyprus, and Anatolia [(1)].

The Pelusiac branch also served as a natural defensive barrier for Pelusium, protecting it from eastern invasions. Its location at the mouth of the branch gave the city strategic military significance. Historical accounts from the Ptolemaic and Roman periods reveal that Pelusium played a crucial role in defending Egypt from foreign threats, acting as a fortress against invasions [(2)].

Extinction of the Pelusiac branch and canal

The disappearance of the Pelusiac branch of the Nile River is due to natural and human changes that affected the course of the branch over time, as this branch gradually disappeared from the Egyptian Delta. The accumulation of silt over time led to the blockage of parts of the Pelusiac branch, which led to a decrease in the flow of water in it. The continuous accumulation of silt also affected the flow of water in the branch and reduced its flow.

Over the ages, the ancient Egyptians carried out engineering works to direct water and use it for irrigation and agriculture. Some of the Nile's courses were diverted to new irrigation canals, which led to a decline in the importance of some branches, such as the Balm branch. With the decline of cities such as Balm, Tanis and Mendes for economic and political reasons, the Balm branch lost its primary role as a commercial and military passage [(3)].

1 Woźniak, M.A and Sidebotham, S. E (eds.) (2021), "Ptolemaic Berenike", 248.

2 Sidebotham, S. E (2011), Berenike and the Ancient Maritime Spice Route, 18.

3 لمزيد من المعلومات عن اندثار الفرع البيلوزي أنظر:

محمد مجدى تراب (1988)، أسباب اندثار الفرع البيلوزي والأخطار البيئية التى تواجه ترعة السلام بسهل الطينة، مجلة كلية الآداب - جامعة الاسكندرية، العدد الثاني.

No one knows exactly when the Ptolemaic canal ceased to function, but it does not appear to have continued until the first decades of Roman rule [(1)]. In 26 BC, the Ptolemaic canal became silted up and unnavigable. Although the canal is no longer navigable, it did provide some areas with fresh water [(2)].

CONCLUSION

- The Pelusiac branch of the Nile is one of the ancient branches of the Nile that played a vital role in the Ptolemaic period, as it had major economic impacts. This branch connects the Nile Delta regions with the Mediterranean Sea and the Red Sea, which contributed to strengthening trade relations and developing transportation networks between Egypt and the rest of the regions in the Mediterranean and the Red Sea.
- The Ptolemies used the Pelusiac branch and the canal as a major transit point for exporting agricultural products, such as grain, and importing rare goods, such as wood and metals.
- River transport was the primary means of transporting goods in ancient Egypt, as the use of the Pelusiac branch and the canal facilitated movement between the inland and coastal cities and contributed to supporting the cities located on its banks, which led to enhancing economic activity in them and attracting labor to them. It also facilitated communication between the major cities in the Delta, such as Pelusium, and the inland cities, which strengthened the cohesion of the state and ease of its administration.
- The Pelusiac branch and the canal contributed to irrigating large areas of agricultural land in the Nile Delta, which led to increasing the productivity of the land and providing a food surplus. With the abundance of water thanks to this branch, the Egyptians were able to grow various crops that met the needs of the population and increased exports. The branch and the canal also contributed to providing many types of fish that were essential to the Egyptians' food, and their waters contributed to providing fertile pastures for domestic animals.
- The location of the Pelusiac branch and Canal made them a strategic center for defending Egypt's eastern borders from any potential threats. The Pelusiac branch and Canal represented the first line of defense for Egypt's eastern borders, and they also helped in the rapid transfer of soldiers and equipment to the east, which enhanced the effectiveness of

1 Cooper, J.B (2009), "Egypt's Nile-Red Sea canals", 197.

[2] Mayerson, P (1995*), "Aelius Gallus at Cleopatris (Suez) and on the Red Sea"*, 19, 20

the Ptolemaic army in moving to confront dangers. They also ensured the flow of supplies and provisions to soldiers in the border areas, which preserved their combat capability and the continuity of military operations.

SOURCES

Diodorus Siculus. (1933–1967). Library of history (C. H. Oldfather, Trans.; Vols. 1–12). Loeb Classical Library. Harvard University Press.

Herodotus. (1920–1925). The histories (A. D. Godley, Trans.; Vols. 1–4). Loeb Classical Library. Harvard University Press.

Strabo. (1917–1932). Geography (H. L. Jones, Trans.; Vols. 1–8). Loeb Classical Library. Harvard University Press.

REFERENCES

Aubert, J (2015), "Trajan's Canal: River Navigation from the Nile to the Red Sea?" in: Across the Ocean: Nine Essays on Indo-Mediterranean Trade, Brill, (33- 42).

Baines, J. & Málek, J. (2000), Atlas of Ancient Egypt. Oxford.

Ball, J (1942), Egypt in the Classical Geographers, Cairo.

Bard, K. (2015), An Introduction to the Archaeology of Ancient Egypt. Wiley-Blackwell.

Bowman, A.K (1996), Egypt after the Pharaohs: 332 BC–AD 642. Revised Edition. University of California Press.

Bunbury. J. and Cooper. J. P. (ed.) (2023), "The Egyptian Nile: Human Transformation of an Ancient River", in: River Culture: Life as a Dance to the Rhythm of the Waters, Paris: UNESCO, (43-77).

Butzer, K.W (1976), Early Hydraulic Civilization in Egypt: A Study in Cultural Ecology. University of Chicago Press.

Cooper, J.B (2009), "Egypt's Nile-Red Sea Canals: Chronology, Location, Seasonality and Function", in: Blue, L. Cooper, J. P. Thomas. R. and Whitewright, J (eds.), Connected Hinterlands: Proceedings of Red Sea Project IV, Held at the University of Southampton, September 2008, Society for Arabian Studies Monographs 8, British Archaeological Reports, Oxford, (195 – 209).

Fraser, P. M (1972), Ptolemaic Alexandria, Vol. I. Oxford.

Hölbl, G (2001), A History of the Ptolemaic Empire. Translated by Tina Saavedra. Routledge.

Kemp, B.J (2006), Ancient Egypt: Anatomy of a Civilization. 2nd ed., Routledge.

Khalil, E (2010), "The Sea, the River and the Lake: All the Waterways Lead to Alexandria" in: Bollettino di Archeologia on line I, (33-48).

Liddell, H.G., and Scott, R (1996), A Greek-English Lexicon, revised and augmented by H.S. Jones. Oxford: Clarendon Press.

Manning, J.G (2010), The Last Pharaohs: Egypt under the Ptolemies, 305–30 BC. Princeton University Press.

Margaret, R.B (2002), Encyclopedia of Ancient Egypt, Facts On File, Inc. New York.

Mayerson, P (1995), "Aelius Gallus at Cleopatris (Suez) and on the Red Sea", in Greek, Roman and Byzantine Studies; Cambridge Vol. 36, Iss. 1, (17-24).

Morriss, C. (2012), Islands in the Nile Sea: The maritime cultural landscape of the eastern Nile Delta (Master's thesis, Texas A&M University). Texas A&M University Repository.

Quintanar, J and Shuhab, D. K (ed.) (2013), "Remote Sensing, Planform, and Facies Analysis of the Plain of Tineh, Egypt for the Remains of the Defunct Pelusiac River", in Sedimentary Geology vol. 297, (16–30).

Sidebotham, S. E (2011), Berenike and the Ancient Maritime Spice Route. University of California Press, 37- 39.

Stanley, J. Bernasconi, M, and Jorstad, T (2008), "Pelusium, an Ancient Port Fortress on Egypt's Nile Delta Coast: Its Evolving Environmental Setting from Foundation to Demise", in: Coastal Research Vol. 24, No. 2, (451-462).

Thonemann, P (2015), The Hellenistic World: Using Coins as Sources. Cambridge University Press.

Torab, M. (2007) "Paleogeomorphology and Evolution of the Ancient Pelusiac Branch of the Nile Delta", in: Geographical Phorum – Eographical Studies and Environment Protection Research, Year 6, No. 6, (28-33).

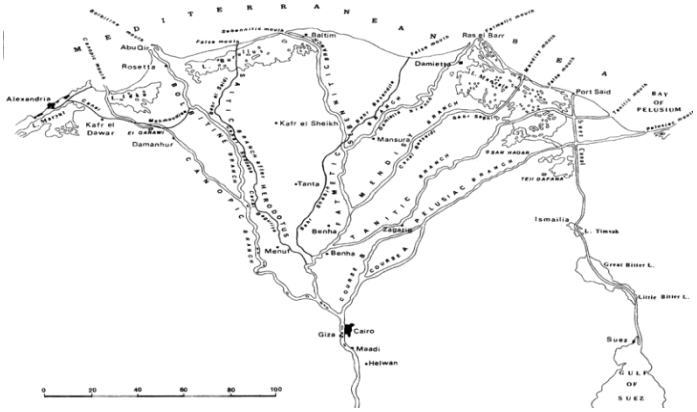
Tronchère, H and Goiran, J. (eds.) (2009), "Geoarchaeology of an Ancient Fluvial Harbour: Avaris and the Pelusiac Branch (Nile River, Egypt)", in: Geoarchaeology of Avaris, First Results, Egypt and the Levant, Vol. XVIII, Austrian Academy of Sciences Press, Vienna, (327-340).

Woźniak, M.A and Sidebotham, S. E (eds.) (2021), "Ptolemaic Berenike: Resources, Logistics, and Daily Life in a Hellenistic Fortress on the Red Sea Coast of Egypt", in American Journal of Archaeology Vol. 125, No. 2, (247–281).

المراجع العربية

ابراهيم نصحى (1959) ، دراسات في تاريخ مصر في عهد البطالمة، مكتبة الأنجلو المصرية.
أبو اليسر فرح (2004)، النيل في المصادر الإغريقية، عين للدراسات والبحوث الإنسانية والإجتماعية.
أبو اليسر فرح (2002)، تاريخ مصر في عصرى البطالمة والرومان، عين للدراسات والبحوث الإنسانية والإجتماعية.
حسين الشيخ (1997)، مصر تحت حكم اليونان والرومان، دار المعرفة الجامعية.
محمد مجدى تراب (1988)، أسباب اندثار الفرع البيلوزي والأخطار البيئية التى تواجه ترعة السلام بسهل الطينة، مجلة كلية الآداب - جامعة الاسكندرية، العدد الثاني.

MAPS



Map. 1: The Nile Delta and branches (**Source**: Khalil, E (2010), "The Sea, the River and the Lake: All the Waterways Lead to Alexandria" in: Bollettino di Archeologia on line I, Fig. 1.)

Map. 2: The Pelusiac branch (**Source**: Cooper, J.B (2009), *"Egypt's Nile-Red Sea Canals: Chronology, Location, Seasonality and Function"*, Fig. 20.)